Improving Case Management for People with Substance Use Disorders

Senior Thesis

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Abstract

This study aimed to build on the knowledge base of what aspects of care coordination and case management are conducive to ensuring positive health outcomes for clients with substance use disorders (SUDs), with a specific focus on clients with low incomes. Twenty people with low incomes and SUDs who received case management services that were, at least in part, aimed to help participants recover from SUDs sometime between 2015 and 2017 were interviewed using a qualitative interview guide. The interviews were coded for themes and a framework analysis organized these themes into broader categories.

In this study, the author conducted a theoretical analysis of case management to examine determine how clients perceived specific features of case management programs in relation to their well-being. The lack of understanding of how specific services and definitions of case management influence health outcomes is a knowledge gap identified by the literature (Rapp et. al., 2014). The author of this study sought to begin to fill this knowledge gap.

Results generally suggest that case management initiatives will be better able to help clients if case managers are specifically and effectively educated to increase their understanding and familiarity with SUDs, mental health issues, trauma awareness, and homelessness; if case management implementations include more robust and specific regulations regarding administrative procedures within case management services and regarding availability and access to case management services; if a wide variety of various stakeholders communicate with each other to ensure mutual understanding of all resources and services available to potential clients; and if case management program directors re-evaluate case management initiatives to assess how success is measured and whether available resources are realistically conducive to helping clients meet these objectives.
Introduction and Research Aims

Ten percent of American adults are affected by substance use disorders (SUD) at some point in their lives according to a 2015 nationwide survey (SAMHSA, 2015). In developing a holistic plan to address the problems of so many Americans affected by SUDs, policymakers should consider how social determinants of health interplay with an individual’s tendency towards SUDs. Determinative social and ecological factors, like the safety of one’s neighborhood, educational attainment, and community cohesiveness, have a profound effect on a person’s behavior and choices, especially in the context of developing SUDs (Office of Disease Prevention and Health Promotion, 2017). These extra-medical factors have more influence on one’s health than do medical factors (Schroeder, 2007).

Low-income people with SUDs live in stressful environments where many people struggle to make a living and survive in contexts like high poverty and unemployment levels and low supplies of affordable housing. Although researchers are still grappling to understand the complex pathways through which SUDs develop, the literature suggests that extended, repeated trauma and stresses associated with the types of environments low-income people often live in make people susceptible to developing SUDs (Spooner & Hetherington, 2004). Figure 1 shows how various factors related to policies, communities, organizations, and interpersonal relationships may shape individuals’ circumstances. This ‘socio-ecological model’ for accounting for various influences on one’s health is known as the socio-ecological model. When multiple determinants on various levels of the system manifest themselves unfavorably and cause individuals to experience significant repeated stress, they are much more likely to develop SUDs (Dube et al., 2003). This relationship is most direct when the stress happens to a person while they are young. These types of stressful events are known as Adverse Childhood Experiences,
which have negative associations not only with SUDs but also with many other signs of poor health throughout an individual’s lifetime, along a dose-response relationship (Felitti et al., 1998).

Figure 1. Socio-Ecological Determinants of SUDs (Melchior Maetzener, 2017; Adapted from (Centers for Disease Control and Prevention, 2015)

Fortunately, although many, diverse social determinants of health play a significant role in why people develop and maintain SUDs, modern clinical and medical treatments are relatively effective at helping people overcome many of the adverse health effects people with SUDs experience. Some of the most effective of these treatments fall under the category of drug replacement therapies or maintenance treatments (Connery, 2015). However, while these treatments are widely acknowledged as effective for many SUDs, especially for treating opioid and alcohol dependence, in 2015 only 11% of people with SUDs received any treatment for their SUD at a facility specially meant for treatment of SUDs (Lipari, Park-Lee & Van Horn, 2015).
Access to clinical and medical treatment is also highly inequitable along axes of income and race/ethnicity (Cummings, Wen, & Ko, 2016).

The fragmentation of the healthcare and social service systems adds to the inequitable barriers people with SUDs in recovery face (Stange, 2009). Fragmentation in this context means that the healthcare system focuses almost exclusively on caring for individual health problems, but does not do a good job of evaluating how different health problems and environmental or social influences interact with each other to affect an individual's overall wellbeing. As the socio-ecological model elaborated on above implies, the current lack of attention to factors outside specific clinical specialties has particularly salient implications for the health of people with low incomes in need of a wide array of services and resources. This is a symptom of an inefficient healthcare system characterized by incredibly high per person expenditures but with poor outcomes due to asymmetric and unaligned incentives and policies (Berwick, Nolan, & Whittington, 2008).

Society benefits when people with SUDs have access to services that help them recover from SUDs. On a psychological and physiological level, treatment for SUDs helps the individual. Further, from a health care payer’s perspective, better SUD treatment improves the bottom line. Recent estimates suggest that opioid abusers enrolled in employer or individual private insurance plans cost about $15,000 more per year than comparable patients without SUDs (Kirson et al., 2017). The cost of treating a single opioid overdose averages over $90,000, and is increasing (Kaiser Health News, 2017).

Untreated SUDs also generate costs that do not directly impact the health care system, but still affect society in general. People with SUDs are more likely to be involved in the criminal justice system - about 50% of prisoners in State and Federal prisoners are affected by
SUDs (SAMHSA, 2012). SUDs also negatively impact workforce productivity (Bush & Lipari, 2015). More indirect, but equally important, are the stressful and traumatic impacts that SUDs have on an affected person’s family, which potentially persist intergenerationally (SAMHSA, 2015).

To mitigate the adverse effects of SUDs on both society and individuals, many stakeholders, like health care providers, apply an intervention called care coordination. Care coordination has the central aim of coordinating medical care or other services a client receives to reduce fragmentation within the healthcare and social services systems. McDonald et al presents the following definition of care coordination:

"Care coordination is the deliberate organization of patient care activities between two or more participants (including the patient) involved in a patient's care to facilitate the appropriate delivery of health care services. Organizing care involves the marshalling of personnel and other resources needed to carry out all required patient care activities and is often managed by the exchange of information among participants responsible for different aspects of care" (McDonald et al., 2007, p. 5).

Care coordination initiatives take many shapes and forms depending on the organization providing the services and on the population served. The scientific literature generally supports the efficacy of case management services improving health outcomes for patients with SUDs and other behavioral health disorders (Kumar and Klein, 2013; Perry et. al., 2016).

However, recent evaluations of care coordination programs have found that the systems and services responsible for coordinating care do not have sufficient support to address the massive levels of fragmentation clients with SUDs routinely experience, especially with regard
to accessing social supports outside the medical system (Clark, Gurewich, Cabral, Griffith, & Muhr, 2016). In response, this thesis aims to:

- Describe the nature of care coordination services that low-income clients with SUDs in Massachusetts routinely receive, and
- Propose adjustments to these services that will enable care coordination services to better help clients access medical and social supports.

The broader effort to reform the US healthcare system is often framed as a ‘triple aim’ involving a focus on population health, mediating policies, and integrators to facilitate coordination between stakeholders in the healthcare and social services spheres (Berwick, Nolan, & Whittington, 2008). The findings from this thesis may help establish specific guidelines, sometimes referred to as process measures, that will standardize coordination between stakeholders including case managers, physicians, and other personnel in social services positions and other community organizations. This, in turn, can help improve population health (Berwick, Nolan, & Whittington, 2008).
Background and Significance

In this section, I consolidate the scientific literature about treatment for people with SUDs and identifies what questions must be asked to determine how the healthcare system can better serve these individuals. I aim to determine the most promising and feasible route to improve health outcomes for individuals with SUDs, and what additional research is needed to make this goal a reality. My analysis identifies reducing fragmentation within and across healthcare systems as an area that can best help low-income people with SUDs.

This study is focused on low-income populations whose environments predispose them to SUDs due to disadvantages along various axes of the socio-ecological model including poverty, unemployment, lack of access to housing, and low educational status (Eric et al., 2014). As such, I evaluate the efficacy of the health care system for treating SUDs from the perspective of the needs of this population. I first briefly discuss effective clinical and medicinal treatments, and then discuss how fragmentation within the health care and social service sectors prevents the study population from accessing effective clinical treatments. After this, I proceed to discuss two of the three major ‘domains’ of efforts aimed at reducing fragmentation in the healthcare system and the negative effect of fragmentations on patients’ health (Croft and Parish, 2013). This includes Medicaid qualification criteria and policies under the Affordable Care Act (ACA) and incentives under the ACA to provide treatment for SUDs in new settings. I consider the limitations of these efforts for helping the study population.

I then focus on care coordination as a specific solution to healthcare and social services fragmentation, how it can help increase access to SUD treatment not only within innovative and experimental delivery systems, but also within the general healthcare and social services systems. Best practices in one specific type of care coordination initiative, case management, are
summarized, and then current implementations of care coordination services in Massachusetts are evaluated for how accurately they reflect best practices. After this, the potential effects of case management programs in perpetuating stigmatization of SUDs is discussed. Based on this analysis, I conclude that more research is necessary to understand how to translate best practices in care coordination to effectively inform current care coordination programs.

**Clinical Treatment for Substance Use Disorders**

Clinical treatments are a highly visible category of services for individuals with SUDs and encompass the delivery of psychological and pharmacological therapies aimed at remedying mental, behavioral, and physiological processes associated with SUDs. While debate surrounds the optimal mix of different clinical treatments for any given substance, the literature supports the efficacy of many types of treatments for SUDs, including both pharmacological and psychosocial treatments (Thomas et al., 2014; Prendergast, Podus, Finney, Greenwell, & Roll, 2006). From a population health perspective, it is important to highlight that although effective treatments are available, many people are not able to access these treatments. In 2014, for example, only 7.5% of adults who experienced SUDs during that year received treatment for their SUD in the past year (Lipari & Van Horn, 2017).

**Implications of Healthcare Fragmentation for Individuals with SUDs**

Lack of access to any form of treatment for SUDs is an especially salient problem for the study population of individuals with low incomes (SAMHSA, 2014; Cummings, Wen, and Ko, 2016). While many clinical treatments for SUDs are already well-established and accepted as effective, other aspects of the treatment system have significant potential for improvement. The scientific literature suggests that improvements in the clinical process of treating SUDs will yield relatively marginal improvements in population’s health in comparison to increased access to
established therapies (Davidson et. al., 2006). For low-income, disadvantaged populations affected by SUDs, the more important question is how to ensure that they can gain initial access to effective treatments and be retained in these treatments (Padwa et. al., 2016).

One of the biggest challenges in resolving this concern is the fragmentation between different types of health care providers, social service agencies, and community agencies, and any other organization that addresses medical or socio-ecological determinants of health. Fragmentation in this context means that health organizations tend to specialize in a few limited domains of service. In the US health care system, health care providers; social service providers, such as housing agencies or transitional assistance providers; and other care organizations with the goal of improving a specific population’s health generally do not communicate well with each other. This under-emphasis on communication between different domains of care is called a structural hole (Spear, 2014). Populations in poor health and with low incomes, like the study population, may experience especially severe forms of fragmentation because they often require a wide array of services from a diverse set of providers. Low-income individuals with SUDs are particularly adversely affected by this disorganization, because fragmentation between healthcare providers and social service providers is even greater than fragmentation between providers in general health and behavioral health care settings (Miller, Talen and Patel, 2013).

Many patients, especially those with SUDs, face challenges in managing these complex systems and understanding the roles and relationships between, or lack of relationships between, different health care and social service providers (Gurewich, Prottas, and Sirkin, 2014). As a result, when patients seek treatment for their disorders, they often do not know what treatment options are available to them, have no assistance in choosing the treatment plan that best fits their particular needs, and understand even less about how to best ensure they are able to access
these treatments. In addition, in fragmented health care systems, the often complex process of applying for and scheduling these services is the patient’s responsibility, which further increases barriers to accessing care. Not only does this make accessing treatment difficult in the first place, but it also makes continued engagement in treatment difficult. Fragmentation puts the burden of being aware of available treatments and services, identifying which service best fits the patient's need, and ensuring retention in services entirely on the patient. This complicates access and, consequently, decreases health outcomes. In addition, many patients also struggle with stigma against substance use disorders and the possible presence of other co-occurring mental health issues that may also pose barriers for themselves to feel ready and willing to access treatment.

**Increased Coverage for SUD-Related Treatment**

The ACA works towards more equitable access to behavioral health services for the study population in two ways. First is by increasing the number of people who are covered by Medicaid. States that took full advantage of federal funding under the ACA in 2014 and 2015 expanded Medicaid coverage to an additional 15% of low-income individuals who were not previously eligible for Medicaid (Miller & Wherry, 2017). In addition, the legislation expanded Medicaid eligibility for certain populations. In many cases, expansion of eligibility benefits not only newly eligible people, but also people who are covered, such as for families where children might have already had healthcare coverage under CHIP. Before this expansion of Medicaid coverage, many people relied on either expensive out-of-pocket fees, bought expensive insurance that covered behavioral health services, or were admitted to an acute inpatient treatment center for a SUD-related issue in order to receive treatment for behavioral health issues related to SUDs. With the ACA’s expansion in Medicaid coverage, more people with incomes under 138% of the federal poverty level can receive behavioral health services without paying expensive out-
of-pocket fees for these services or waiting until their health problem becomes an emergency. This coverage expansion significantly augments sources of reimbursement for SUD prevention and treatment services states receive through block grants administered by SAMHSA, decreasing the out of pocket costs for people seeking these services, and thereby expands access to these services.

Second, for people who buy new insurance plans in the individual and small group markets, the ACA ensures that every plan must cover ‘Essential Health Benefits’ at parity to coverage of physical disorders (Croft & Parish, 2013). SUDs are considered essential health benefits under the ACA. This decreases the cost of behavioral treatments for people who do not qualify for Medicaid but may receive significant subsidies from the federal government for buying health insurance.

**Reducing Fragmentation**

Merely increasing the number of people who are covered under Medicaid does not address the issue of fragmented healthcare systems. With this awareness, the authors of the ACA included separate measures in the legislation to ensure that more people with health coverage receive help with navigating fragmented health care and social service systems.

One way the ACA works to reduce fragmentation is to authorize the Centers for Medicare and Medicaid Services (CMS) to encourage the adoption of experimental service delivery models that bridge the divide between physical health services, behavioral health services, and social services. CMS is currently experimenting with many initiatives that provide behavioral health in health care settings people do not usually perceive as providing behavioral health services, such as primary care practices and community health centers. Behavioral health integration aims to reduce the difficulty of locating and accessing behavioral health care
clinicians by providing behavioral health care services in the same location where patients receive routine care for physical disorders. CMS incentivizes providers to join these initiatives (Croft & Parish, 2013). Various Patient-Centered Medical Home initiatives run by the Center for Medicare and Medicaid Innovation within CMS provide prominent examples of behavioral health integration projects.

Various types of best practices within behavioral health initiatives are currently being refined and evaluated. One example of an emerging best practice involves ‘warm handoffs’, where staff at primary care practices personally introduce patients to behavioral health clinicians directly after a physician refers a patient to a behavioral health clinician (Saitz, 2015). Evidence suggests that patients are more likely to follow through with referrals if they are physically introduced to the behavioral health clinician in this way, although the effectiveness of warm handoffs is limited if the patients are not inclined to want treatment, for example due to a mental health issue leading to motivational impairment. Large healthcare systems, especially Accountable Care Organizations, are increasingly considering similar interventions focused on better integrating behavioral health care with medical health care (Gordon, 2016).

Behavioral health integration projects on their own, however, do not promote increased access to primary care practices and community health centers. This is important because many low-income individuals do not have consistent, regular access to primary care (Bodenheimer & Pham, 2010). People without regular access to primary care will not gain access to behavioral health care under behavioral health integration projects unless these projects also expand access to primary care, and unless primary care physicians correctly identify and refer patients who would benefit from SUD treatment services.
Another concern is that behavioral health integration projects are expensive to implement, especially in primary care settings (Sligo et. al., 2016), and may not significantly reduce healthcare costs in the short term (Peikes et. al., 2016). Crucial in this discussion is an understanding that about 50% of the US primary care infrastructure is currently made up of solo physician practices (Bodenheimer and Pham, 2010; Mossialos and Wenzl, 2015; Bauer et. al., 2013). These small practices do not have capacity to make big investments in behavioral health integration programs, and unless there are significant changes to the way government and private payers support small physician practices in complying with complicated administrative requirements and invest in infrastructure and personnel, these practices will suffer under complicated administrative burdens (Mostashari, 2016). Behavioral health integration efforts need to be more cost effective if they are to be adopted widely. This is especially relevant now, since it is possible that federal funding for healthcare reform initiatives may significantly decrease under the Trump administration. Threats to the ACA have caused many large healthcare stakeholders to take risk-averse stances (Ku et. al., 2017, p. 6). Given their risk-adverse stance on risk, these large stakeholders may not want to set up entirely new infrastructures to integrate behavioral health services.

Although the costs of integrating behavioral health with primary care are not insignificant, healthcare systems will likely be pressed to increase funding for programs that coordinate treatment for patients with SUD as a result of the US opioid epidemic. This epidemic continues to grow, especially in southern states that only recently tightened regulations on opioid prescriptions (Potee, 2016). As a result, payers will continue to confront expensive emergency department visits for overdoses and other health issues related to SUDs. The cost of responding to and treating an opioid overdose averages over $90,000, and is increasing (Kaiser Health
News, 2017). For payers and providers of emergency medical services, increasing access to treatment that prevents expensive resource utilization by individuals affected by SUD in cases like overdoses makes economic sense, even if preventative initiatives have high upfront costs associated with hiring and training new staff. As such, there should be a high demand for initiatives that reduce health care system fragmentation and improve health outcomes for people with SUDs.

Care coordination offers another way to reduce fragmentation. Care coordination is a separate concept from behavioral health integration that does not necessarily require the development of comprehensive new infrastructures but can be used to better utilize existing infrastructures. This makes care coordination appealing in our strained funding environment.

Care coordination initiatives aimed at connecting individuals with SUDs to SUD-specific treatment exist as standalone interventions, as regular and routine services provided by health care providers serving individuals with SUDs, and as elements of larger initiatives like Patient-Centered Medical Homes. The following diagram contextualizes care coordination within various other approaches like behavioral health integration aimed at reducing healthcare fragmentation for individuals with SUDs.
Care coordination, like Patient-Centered Medical Homes, facilitates communication between the patient and various types of providers. In contrast, terms like Integrated Care and Collaborative Care imply the existence of discrete structural and operational program characteristics, which care coordination does not necessarily imply. Care coordination is not implicitly tied to any operational or structural features of initiatives aimed at reducing healthcare fragmentation for individuals with SUDs, and may take shape in a variety of iterations (Center for Medicare and Medicaid Innovation, 2014). Care coordination directly addresses the ‘structural hole’ created by health care fragmentation (Spear, 2014). Importantly, different kinds of people have different needs, thus, experience different kinds of health care fragmentation.

Care coordination, especially for patients with severe health problems and a multitude of needs,
should provide a flexible, adaptive solution to fill the structural hole in a personalized way for each client.

Care coordination services usually involve personnel who formally dedicate at least a portion of their time to provide services to patients that help to bridge gaps between the patient and services that will ameliorate their health. In addition, more and more personnel involved in care coordination have an applied understanding of how to address factors influencing health that are outside of the sphere of clinical medicine, like socioeconomic inequities in access to treatment for SUDs. Such factors, known as social determinants of health, have a significant impact on the risk and severity of health conditions associated with SUDs (Patel et al., 2016).

Many care coordination personnel address these extra-medical factors by helping clients to access appropriate clinical care, and sometimes do social work like helping clients find housing and employment. To do so, care coordination personnel often offer ancillary services that physicians and other clinical staff are not specifically trained to provide, especially providing an extensive understanding of social service systems and community resources. Care coordination personnel determine what health care services, and sometimes social services, and other community resources are most appropriate for a patient through discussion with the patient and their care providers. Care coordination personnel also work with the patient to help him/her learn how to access these services. As such, care coordination has a unique capacity to not only address the medical and behavioral concerns of patients, but also to address the formative environmental and social conditions conducive to chronic episodes of SUD, like unemployment, lack of housing, and low educational attainment (Eric et al., 2014).

CMS’s Financial Alignment Initiative, which started in 2011, incentivizes health plans to reduce fragmentation for people dually eligible for Medicare and Medicaid. This provides one
example of a current care coordination initiative (Wiener, Griffin, & Bayer, 2017). This initiative centers around payment reforms that help states and health plans establish Integrated Care Teams that coordinate care for dually eligible patients. The initiative rewards stakeholders by either sharing savings from reduced health care utilization or by entirely restructuring payments for enrollees to a capitated model. Importantly, this is different from behavioral health integrations as described above because the Integrated Care Team often consists of case managers who are not permanently assigned to work at any particular physical location where healthcare is provided, but may travel to patients in their communities or their homes.

**Types of Care Coordination and Case Management**

Care coordination takes different forms in initiatives relevant to individuals with SUDs, and terminology is usually specific to individual interventions. However, most interventions make a distinction between different types of care coordination based on the level of fragmentation the service aims to remedy. Care coordination services may focus on reducing fragmentation within a specific service, program, or institution, or may involve reducing fragmentation, not only within an organization, but also between different providers and different service systems (Wiener, Griffin, & Bayer, 2017). Patients who receive the latter type of care coordination tend to have more complex cases or more severe health conditions (Petzel, 2013).

For the remainder of this thesis, the role care coordinators perform to help clients identify appropriate treatments and services and access these treatments and services is referred to as ‘case management’. Case management in this context focuses on more intensive care coordination, i.e., assisting patients across a diverse range of services, not only within one service provider. Specific duties of case managers include facilitating discussions with patients and clinical personnel to determine whether a specific therapy is appropriate for a patient,
working with a patient to schedule appointments, ensuring that the patient is physically able to get to appointments, and assisting patients in applying to social services like subsidized housing. This broad set of roles reflects the diverse needs of the study population, who often need assistance not only with accessing and coordinating treatment for SUD and other health conditions, but also with housing, employment, and other social services.

Case management interventions are often classified by the frequency and duration of services provided. Although many case management program characteristics are implementation-specific, the literature generally recognizes four major types of case management as detailed in the table below (Rapp et. al., 2014; SAMHSA 2015):

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<th>Case Management Model</th>
<th>Defining Characteristics</th>
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| Brokerage             | -Brief duration (usually not more than 2 sessions)  
                        | -case manager works with client to determine needs and refers client to essential treatment and services  
                        | -Does not provide any therapy to client  
                        | -Limited follow-up |
| Generalist            | -Similar services provided as in Brokerage model  
                        | -More frequent and extended contact between client and case manager than Brokerage model |
| Strengths-Based       | -Case manager provides informal therapeutic services to help client identify most appropriate services and treatment for him/herself  
                        | -Many frequent meetings and strong relationship between case manager and client  
                        | -Fosters and engages with informal support systems in the client’s community  
                        | -Emphasis on outreach |
| Assertive Community Treatment | -Many frequent meetings and strong relationship between case manager and client  
-Case management is provided alongside a wide variety of therapeutic treatments provided by a multidisciplinary team in the same program  
-Geared towards patients with dual SUD and mental health diagnoses |

**Functions of Higher-Intensity Case Management**

To date, there is no universally accepted standardized mix of services that should be provided through high-intensity case management for individuals with SUDs. Program characteristics are often unique to specific implementations. Broadly, case management interventions that focus on working with patients on developing motivation and characteristics such as commitment to treatment (Carroll et. al., 2006), independent planning skills, and an ability to manage impulsive behavior (Fisher et. al., 2017) are associated with improved patient outcomes. The question that becomes apparent is how case management can help clients manage impulsive behaviors, develop planning skills, and generally have a positive mindset about treatment and other services they receive.

Clues might be taken from evaluations of programs to monetarily incentivize positive behaviors such as abstinence and engagement in treatment services among people with SUDs in contingency management scenarios. These material incentives on their own have some positive effects on outcomes for substance users (Davis et al., 2016; Rash, Alessi, and Petry, 2017). Importantly, the increase in the patient’s sense of self-efficacy and empowerment appears to be strengthened when ‘brokers’ trained in person-centered planning and to some extent in case management help facilitate these programs (Croft and Parish, 2016).

**Functions of Strengths-Based Case Management.**
The importance of building self-efficacy is increasingly reflected in studies of experimental case management programs. One example is the ‘strengths-based’ case management model. This model proposes that case management that ‘does all the work for the client’ and in a manner that merely links clients to services is not enough to motivate clients to enter recovery treatment in the first place in the context of SUDs (Kisthardt, 2006). Rather, case managers should find ways to help clients be cognizant of and realize their own strengths, because this will help clients gain hope and enthusiasm about their recovery. If these case management programs work, they would not only help clients to enjoy the same benefits of clinical treatments with respect to health outcomes as do individuals without need for intensive case management, but also enable clients to improve their lives in other areas including access to housing and employment.

Strengths-based case management avoids focusing only on a client’s problems and disorders but incorporates his/her strengths. Proponents of the model hypothesize that case management with a focus on only negative aspects of a client’s life does not help clients decide what services or treatments best suit their needs at a specific point in time. Instead, the strengths-based model is designed to help clients build the skills they need to assess what treatments and services they feel they would benefit from. It is thought that strengths-based practices produce promising results in experimental trials because clients set their own goals and understand how to reach them, and therefore show more resiliency in achieving them (Rapp, Saleebey, & Sullivan, 2005).

A consolidation of widely used strengths-based case management guides and manuals found the essential, defining principles and practices of strengths-based case management were diluted to two distinct programmatic features (St. Vincent’s Hospital, 2014; Rapp & Goscha,
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First, organizationally and structurally, case managers should be positioned to develop meaningful and extended relationships with clients. Second, case managers should repeatedly conduct quasi-therapeutic ‘strengths assessments’ with clients, and case managers should receive specific training in providing these strengths assessments and in connecting clients with relevant services. These assessments involve discussing with clients their short-term and long-term goals, helping clients understand how they used personal characteristics and community resources to achieve similar goals in the past, and guiding clients to use these resources to achieve current goals.

Proponents of strength-based case management acknowledge that these programmatic features can be perceived as being subjective and difficult to define (Rapp, Saleebey, & Sullivan, 2005). Roles are outlined below in a format that can be more easily operationalized. From a structural perspective, strengths-based case management programs have case managers who:

- Meet with clients frequently and over an extended period of time,
- Meet with clients in various settings within the client’s community,
- Stay with a client throughout the duration of the client’s service, and
- Have a holistic understanding of the client’s case.

At the level of individual procedures, case managers should:

- Understand somewhat the client’s past/general history, including the role their family or friends play in their lives;
- Enable the client to identify his/her needs and opportunities; and
- Understand how to teach the client self-management skills.

**Efficacy of Case Management Programs**

An evaluation of the efficacy of case management programs on the whole is subject to
some imprecision because case management initiatives take many different forms, and the intensity of client needs varies significantly between individual programs. However, the literature generally suggests that case management initiatives perform well on process measures related to patients receiving clinical treatment for SUDs. Case management is significantly correlated with an increase in patients with SUDs accessing SUD-specific treatment if clients are connected to primary care practices (Peikes et. al., 2016), and even if clients are former prisoners (Hunter et. al., 2015). Further, case management also increases treatment retention for this population. Recent evaluations of initiatives involving care coordination for individuals with SUDs have not concluded that case management services produce net cost savings for providers and payers, although case management is proven to improve quality of care as measured by process measures (Peikes et. al., 2016; Hunter et. al., 2015).

Examining the performance of case management programs based on patient health outcomes reveals that these programs are somewhat effective for populations with behavioral health disorders and SUDs (Kumar and Klein, 2013; Perry et. al., 2016). A recent meta analysis of 21 randomized clinical trials where the exposure was some kind of case management (some case management interventions were defined as strengths-based but the majority were not) suggested that case management had a statistically significant, but small, positive effect on health outcomes for participants, although the health outcomes were not consistently defined and varied widely. This conclusion holds even for the most intensive models of case management services providing patients with around-the-clock access, and in fact these programs did not perform significantly better than the least intense models of case management, which were labeled as “Brokerage” (Rapp et. al., 2014).

More promisingly, evidence suggests that even brief strengths-based case management
interventions designed to motivate patients are effective at improving patient retention in
treatment for SUDs (Carroll et al., 2006). Further evidence shows that these interventions are
correlated with an increase in patients with SUDs entering and staying in treatment, (Shwartz et.
al., 1997; Carroll et. al., 2006; Fisher et. al., 2017). Some research even suggests that strengths-
based case management is effective at improving health outcomes for people affected by SUDs
(Prendergast et. al., 2011). This encouraging evidence strongly suggests that more case
management initiatives should implement intensive and strength-based strategies.

This review of case management programs implies two things. First, low-intensity case
management that focuses only on administrative services to facilitate access to treatment is not
enough to sustain recovery for people with SUDs. Low-intensity case management programs
perform fairly well on process measures, but do not perform well on outcome measures
(Prendergast et. al., 2011). Second, high intensity case management programs are also effective
at improving the quality of care patients receive, however, evidence is not conclusive regarding
their effectiveness at on improving health outcomes for people with SUDs. It is also important to
note that these interventions are very costly.

The literature suggests that to better understand the extent to which intensive case
management improves health outcomes, more research is necessary to understand exactly what
kinds of case management services result in positive health outcomes (Rapp et. al., 2014). This
study later involves research about case management services received by clients in order to
enhance this understanding. However, in order to judge what kinds of best practices are currently
implemented and how these best practices are perceived by clients, it is necessary to develop a
clear picture of how policymakers envision and outline case management programs, and how
regulations include best practices. Thus, it is necessary to better understand what precise aspects
of case management programs are currently implemented in large-scale case management programs.

**Best Practices in Case Management Reflected in Policy**

In order to fully study how well case management programs address not only medical care but also socio-ecological determinants of health, it is prudent to study the nature of case management programs delivered to clients with co-occurring homelessness. As such, this review heavily focuses on case management programs delivered to clients who receive health care coverage through Medicaid and Medicare.

To determine how well widely implemented case management programs in Massachusetts aimed at helping clients with SUDs and other significant socio-ecological problems such as homelessness reflect best practices in case management, current guidelines for the structure and functioning of widely implemented case management programs were reviewed. Since the research in this thesis focuses on case management provided to low-income individuals affected by SUDs using health care and social service systems in Massachusetts, this review has a specific focus on Massachusetts, especially with regard to Medicaid reimbursement policies. In addition, this review focuses on places people with very significant problems like homelessness and co-occurring mental health disorders receive case management. This focus on Massachusetts means that the qualitative research presented in this thesis is directly reflective of these reviewed policies and guidelines. The analysis of participants’ experiences with case management programs were analyzed using the framework of these policies and guidelines.

A broad definition of case management was applied in determining which guidelines were relevant to this review. Any service provided by a healthcare provider aimed at helping patients handle non-medical problems, including scheduling, identifying what medical and non-
medical services would be appropriate for patients, and issues related to the patient’s social context were considered in this review.

The reviewed guidelines include: standards and guidelines relevant to case management for people with SUDs in Massachusetts and reimbursement policies for case management services in Massachusetts. An example of the first category are licensing requirements for facilities providing case management to people with SUDs. An example of the second category are requirements that need to be met for reimbursement for case management services under Medicare or Medicaid.

The reviewed standards and guidelines are outlined as follows:

- Practice Guidelines, Best Practices, and Licensure Requirements;
  - Case Management Society of America (CMSA) Standards of Practice for Case Management;
  - “My Shared Care Plan” (Best Practices Guideline);
  - National Committee for Quality Assurance Case (NCQA) Management Standards;
  - Joint Commission Standards for Behavioral Health Care;
  - Massachusetts Bureau of Substance Abuse Services Guidelines;
  - Comprehensive Case Management for Substance Abuse Treatment (SAMHSA);
  - Comprehensive Primary Care initiative Care Management Guidelines (CMMI/CMS);
  - VA Case Management Standards of Practice;
- 105 Code of Mass. Regulations (CMR) about the Commonwealth of Massachusetts Department of Public Health. Guidelines about case management programs for individuals with SUDs exist within the following regulations:
  - 105 CMR 130 (Hospital Licensure), and
  - 105 CMR 168 (Licensure of Alcohol and Drug Counselors);
- 104 CMR: Regulations about the Commonwealth’s Department of Mental Health (DMH). Guidelines about case management programs for individuals with SUDs exist within:
  - 104 CMR 29 (case management)
- OneCare Regulations: Massachusetts’ Capitated Dual Medicare Medicaid Enrollee Care Alignment Demonstration.

Applicable Reimbursement Guidelines include:
- Medicare Chronic Care Management (CCM) (Fee For Service (FFS) Medicare);
- Psychiatric Collaborative Care Services (CoCM) (FFS Medicare);
- General Behavioral Health Integration (BHI) (FFS Medicare); and
- 130 CMR: Regulations about the Commonwealth’s Division of Medical Assistance, the statutory name of the Massachusetts Medicaid program. Guidelines about case management programs for individuals with SUDs exist within:
  - 130 CMR 429 (Mental Health Center Services),
  - 130 CMR 415 (Acute Inpatient Hospital Services),
  - 130 CMR 403 (Home Health Agencies),
  - 130 CMR 417 (Psychiatric Day Treatment),
- 130 CMR 418 (Substance Abuse Treatment Services), and
- 130 CMR 425 (Inpatient Psychiatric Care).

A more comprehensive description of the reviewed standards and guidelines, and links to documents, can be found in Appendix A.

The review of standards and practices was based on whether the case management programs included features of more intensive case management models such as strengths-based case management. The analysis was broken into two components. First, the operational and structural features of the case management program were examined to determine if case managers, clients, and their families are enabled to develop a meaningful relationship. The following characteristics were examined for each case management program:

- Case managers involved in developing care/discharge plan;
- Client involved in developing care/discharge plan;
- If applicable to or appropriate for client’s case, family involved in developing care/discharge plan;
- Client has regular access to case management over long duration of time (at least for one month);
- Programs should ensure that clients receive the same case manager throughout the duration of their services, to the extent possible; and
- Case managers communicate with a client’s physicians and other clinical staff.

In addition, the protocols for individual case management sessions were examined. The following characteristics were examined for each case management program:

- Case manager should ask about client’s history and health background;
- Client is enabled to identify needs and opportunities him/herself;
- Case managers teaches client self-management skills;
- The presence of any guidelines specific to individuals with SUD; and
- ‘Psychological competency’: the presence of any strength-based terminology such as ‘client strengths’ or requirement that the case manager has training in providing psychosocial interventions. This measure indicates whether the case manager has the capacity to discuss the client’s situation beyond a simple discussion of what the client needs.

**Results for Case Management Program Characteristic Review**

Case management program guidelines were separated into two categories for this review. The first category encompasses relevant best practices, licensure requirements, and quality certification guidelines, and the second category encompasses Medicaid and MassHealth (the name for Medicaid in Massachusetts) reimbursement policies for case management in settings where individuals with SUDs commonly access health care services. A complete list of reviewed documents is found in Appendix A. The first category is phrased ‘practice guidelines’, and the second ‘applicable reimbursement guidelines’. The results of the review are displayed in two parts. First, in table 1 the characteristics of operational and organizational structures of case management programs are summarized, and second, in table 2 the characteristics of case management session protocols are summarized. Since MassHealth reimbursement policies do not specifically define required characteristics of case management session protocols, deferring to other regulations for these requirements, they were not considered in this part of the review.
### Table 1

<table>
<thead>
<tr>
<th>Practice Guidelines</th>
<th>Total Applicable Guidelines Reviewed</th>
<th>% Yes</th>
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<tbody>
<tr>
<td>Patient involved in developing care/discharge plan</td>
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<tr>
<td>Case managers involved in developing care/discharge plan</td>
<td>11</td>
<td>91%</td>
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<tr>
<td>Family involved in developing care/discharge plan</td>
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<td>83%</td>
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<td>Patient has access to case management over long duration of time (&gt;1 month)</td>
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<td>Provider should ensure continuity of case managers</td>
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<td>18%</td>
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<tr>
<td>Out-of-office case management provision (e.g. phone consultation)</td>
<td>11</td>
<td>55%</td>
</tr>
<tr>
<td>Communicating between managers physically</td>
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<td>100%</td>
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<td>Patient involved in developing care/discharge plan</td>
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<td>55%</td>
</tr>
<tr>
<td>Case managers involved in developing care/discharge plan</td>
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<tr>
<td>Family involved in developing care/discharge plan</td>
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<td>Patient has access to case management over long duration of time (&gt;1 month)</td>
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<td>Provider should ensure continuity of case managers</td>
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<tr>
<td>Out-of-office case management provision (e.g. phone consultation)</td>
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<td>Communicating between managers physically</td>
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### Table 2

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<tr>
<td>Client identifies needs/opportunities</td>
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<td>75%</td>
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<td>Case managers teach clients self-management skills</td>
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<tr>
<td>SUD-specific guidelines</td>
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<td>45%</td>
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<tr>
<td>Psychological competence</td>
<td>12</td>
<td>67%</td>
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<tr>
<th>Cumulative</th>
<th>Total Applicable Guidelines Reviewed</th>
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<tbody>
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<td>Case manager should ask about client's history and health background</td>
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<tr>
<td>Client identifies needs/opportunities</td>
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<td>60%</td>
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<tr>
<td>Case managers teach clients self-management skills</td>
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<td>53%</td>
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<tr>
<td>SUD-specific guidelines</td>
<td>14</td>
<td>36%</td>
</tr>
<tr>
<td>Psychological competence</td>
<td>15</td>
<td>67%</td>
</tr>
</tbody>
</table>
The complete reviewed data by individual guideline can be found in Appendix B.

This review suggests that many currently implemented case management initiatives are informed to some extent by strength-based principles. However, implementation of every measure, except for communication between case managers and physicians, is not widespread. The quantitative portion of the review identifies three functions of case management that regulators and certifiers are especially unlikely to prioritize when shaping case management services: continuity of case managers, out-of-office case management services, and guidelines specifically relevant to individuals with SUDs.

A qualitative analysis of guidelines and policies suggests that while many high-level policymakers responsible for designing case management programs are aware of best practices, such as the strengths-based model, program designers leave program implementers significant room for interpretation of guidelines. Regulators and certifiers clearly identify the importance of introducing strengths-based case management techniques, but guidelines lack specific, standardized protocols to help providers implement these techniques.

For example, some regulations like 105 CMR 164 involving Licensure of Substance Abuse Treatment Programs accept a client’s signature on a care plan as documentation that the client was integrally involved in the care plan’s development. More precise guidelines might consist of a completed worksheet about a client’s goals similar to those in manuals for strengths-based case management guidelines (St. Vincent’s Hospital, 2014), since research in neuroscience strongly suggests people need to practice adapting neural processes in order to create positive associations with new concepts (Bassett and Mattar, 2017). The same concept is reinforced in the self-care literature (Hurley and Shea, 1992).
The NCQA case management standards present a second example of how guidelines could be more precise with regard to the implementation of strengths-based case management methods (“Contract Between US HHS CMS in partnership with the Commonwealth of Massachusetts and Commonwealth Care Alliance, Inc., Tufts Health Public Plans, Inc.”, 2015). The discussion of a strengths-based assessment in the NCQA case management standards, one of the standard/guidelines reviewed with the most specificity about strengths-based case management, is provided here as an example of how guidelines for strengths-based techniques are presented:

‘Person-centered planning involves viewing, listening to and supporting individuals, based on their strengths, abilities, aspirations and preferences, to make decisions for maintaining a life that is meaningful to them. The resulting care plan reflects the goals and interests of the individual. Individuals should be involved in the care planning process to the extent they prefer. (NCQA, 2017, p. 120)

The NCQA guidelines supplement this requirement with a list of examples of goals, preferences, barriers, and life-planning activities that patients might identify as relevant to their cases. In addition, the guidelines direct providers to consult the national guidelines clearinghouse at “guidelines.gov”, and MCG Chronic Care Guidelines (“Chronic Care 20th Edition Guidelines,” n.d.). While review of these resources did identify guidelines relating to clinicians performing psychosocial assessments and interventions for individuals with SUDs, no procedures were identified specific to these functions being implemented as part of intensive case management models.

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1 MCG is a healthcare consulting and healthcare information technology firm based in Seattle.
One case management program provided through a Medicare financial alignment initiative in Massachusetts that federal and state regulators require be certified by NCQA offers additional clarification with regard to specific procedures case managers must follow ("Contract Between US HHS CMS in partnership with the Commonwealth of Massachusetts and Commonwealth Care Alliance, Inc., Tufts Health Public Plans, Inc.,” 2015). Among the regulations reviewed, these standards provided the most specificity regarding case management session protocols. As part of the OneCare enrollment process, every client is subject to a lengthy comprehensive assessment that outlines 21 aspects of the client’s life and health issues. The questions reflect strengths-based principles, for example outlining that case managers should ask clients about what their goals are and about whether they have any social or community support systems. However, regulators provide no specific assessment tool, and the way these questions are asked and documented is under the jurisdiction of the health plan or of a third party the health plan contracts with to conduct assessments (Walsh, 2016). As such, it is unclear to what level of fidelity practitioners would replicate the strengths-based best practices outlined by regulators.

**Review of standards and guidelines - conclusion.**

This review of case management guidelines and standards suggests that while guidelines and regulations state that case managers should help patients apply strengths-based and other intensive case management practices, they generally leave interpretation of these practices to program directors or to case managers themselves. Although not focused on SUDs, these guidelines offer valuable information on what models regulators and licensors refer to when designing case management models. Based on the guidelines and standards, it is unclear whether program implementers loyally follow best practices as determined by intensive case management
models, and whether implementers appropriately adjust practices to the population they work with, when adopted.

In the context of these loose guidelines, it is possible that many case management programs do not closely follow best practices as determined by intensive case management models like strengths-based case management. While average caseloads are difficult to define and vary greatly from organization to organization, the caseload (up to 20 clients) of case managers in the strengths-based case management study is on the low end of average caseloads for the average case manager (Pardasani, 2014).

As a result, is unclear to what extent intensive case management protocols are regularly replicated in the real world, where case managers often deal with much higher caseloads. Many case managers are often pressed for time and spend a large proportion of their working hours addressing basic care coordination needs and responding to emergencies. Many reviews of real-world case management programs find that case managers often do not have the time to provide any services not strictly outlined as necessary, such as specific strengths-based case management methods and protocols (Pardasani, 2014; Blancett & Flarey, 1996; Krakauer, 2013). In addition, many case management programs do not specifically define and outline specific assessments and procedures to be implemented in certain cases, leading to a scenario where services any given client may receive will likely be “variegated” not only between two different programs but also within one program (Talisman et al., 2015). As such, it is possible that without specific guidance and incentives to closely follow strength-based best practices, case managers may skirt over these methods in day-to-day operations.

It should be noted that the Massachusetts guidelines reviewed here, specifically the guidelines of the OneCare dual Medicare-Medicaid enrollee administration, are some of the most
precise, specific guidelines of similar demonstrations nationwide (Philip & Soper, 2016). Many healthcare providers validly argue that rigid guidelines prevent them from personalizing services that they provide, necessary when working with individuals with dual Medicare-Medicaid enrollees with significant comorbid health problems. In this thesis, I acknowledge this claim, but suggest that payers and providers could agree on guidelines that are specific to a group of diagnoses and other patient characteristics. The guidelines that might be informed by the research in this thesis would be specific to the study population, low-income individuals with SUDs who experience homelessness, and would not necessarily be generalizable to populations with very different health and social problems.

In summary, the reviewed guidelines suggest that most case management programs in Massachusetts available to low-income people with SUDs aim to incorporate features of intensive case management frameworks like strengths-based assessments. However, since specific implementations have significant jurisdiction with regard to the precise nature of how they provide features of intensive case management, it is unclear how well the implementations reflect proven intensive case management models. As such, this thesis’s contribution to the understanding of what features of case management may be helpful and/or unhelpful for clients will be framed based on specific, discrete aspects of both brokerage/administrative and intensive case management programs, rather than a comprehensive evaluation of either brokerage/administrative or intensive case management frameworks as a whole.

The Chronic Model of Substance Use Disorders

A separate issue for people with SUDs is that treatment services engage with SUD from the perspective that SUD is a chronic disease. Characterizing SUD as a chronic disease is used as an alternative to characterizations of substance use as being a choice made by the individual,
with the intention of helping patients accept that they have a disease and not a moral failing. Chronic models of disease are, in this way, clearly a better alternative to blaming the patient for his/her use, which may cause the patient to resort to more substance use out of shame.

However, it is increasingly apparent that chronicity implies an expectation of relapse and recurring encounters with law enforcement, SUD treatment, and substances themselves (Garcia, 2010). Both the justice system and the medical system often frame SUDs as a difficult-to-control physiological disorder, and often patients do not have access to sufficient health care services in order to control their SUD. This whirlwind of ambiguity impresses upon patients a sense that, whether they are in or out of treatment, they will suffer. Case management as an empirical enterprise to connect patients with treatment may, thus, be a catalyzer of this endless cycle if there are no available extended, long-term treatment services that enable extended management of SUDs from the perspective that SUDs are a chronic disorder (McLellan, Lewis, O’Brien, & Kleber, 2000). As such, in addition to studying the efficacy of current best practices in case management, this thesis evaluates participants’ responses to understand how participants experience case management as exacerbating this cycle, and uses this information to inform strengths-based case management about how to avoid perpetuating clients feeling helpless with regard to the fragmented and disorganized health care system.

**Implications for Research in this Thesis**

In this literature review, I focused on identifying the best way to improve access to SUD treatment. Healthcare system fragmentation creates a significant barrier to accessing this care, and various initiatives under the umbrella of care coordination seek to remedy this problem. A review of the case management literature reveals that case management, which is a specific implementation of care coordination, effectively places clients in services, but more research is
needed to determine precisely what aspects of case management are necessary to ensure that clients are able to take full advantage of the resources available to them.

Innovative case management models like strength-based case management suggest that case management has the ability to improve health outcomes for clients. However, translating these best practices into tangible recommendations for case managers dealing with high client loads and varying levels of supervision and guidance is difficult, and there are no standardized best practices for implementing specific strengths-based case management protocols in everyday scenarios. More research is also needed to understand whether case management programs may reinforce social structures that reflect stigma and expectations that individuals with SUDs will inevitably relapse.

**Research Question**

A thorough understanding of what aspects of case management patients see as most helpful, as well as what aspects patients see as detrimental, is essential in the process of optimizing case management services and in shaping and re-shaping policies about case management programs. Intensive case management methods need to be implemented in ways that align with patients’ understandings of how case management can be most helpful for them. If these practices are successfully implemented, case management programs may better help patients overcome addiction and experience more favorable health outcomes. This will decrease healthcare costs, making the expansion of case management programs more attractive. In turn, more people SUDs will have access to case management, and accordingly will have access to SUD treatment.

Specific research questions I focus on in this study include:
• What kinds of strengths, gaps and shortcomings currently exist in the case management services that people who have low incomes and are affected by SUDs and homelessness receive?

• How can various stakeholders address identified gaps and shortcomings?

Research Aims

In this study, I interviewed low-income individuals with SUDs and other socio-ecological needs to determine how case management services are provided to clients, characteristics of case managers clients interact with, and structural and organizational characteristics of case management programs accessible to low-income people with SUDs in Massachusetts. A special focus is placed on clients who experience homelessness and often also experience co-occurring mental illnesses in order to study how case management addresses socio-ecological determinants of health. I identified aspects of case management that participants found helpful and detrimental, and reconcile this data with the literature about case management. In conclusion, I suggest tangible ways case management providers and other relevant stakeholders can better help clients with SUDs and who experience homelessness improve their lives.
Theoretical Framework and Hypotheses

Theoretical Framework

Case management is currently provided by a workforce characterized by low pay and high turnover (Rollins, Salyers, Tsai, & Lydick, 2010). As a result, case managers are often relatively inexperienced, especially with respect to understanding how to navigate health care fragmentation. For example, many case managers are often registered nurses (RNs), whose education is respectably rigorous but is not necessarily relevant to understanding details about fragmented health care and social service systems and how to bridge gaps in care (Park & Huber, 2009). Recent research supports the high concentration of RNs in the case management workforce and identifies a lack of knowledge and understanding of the constantly evolving health care system, especially with regard to insurance reimbursement policies, as a barrier case managers commonly experience in providing effective care and services to clients (Tahan, Watson, & Sminkey, 2016). This lack of experience and knowledge is complicated by the underfunded and disorganized publicly subsidized SUD treatment system (Padwa et al., 2016).

Promisingly, certain techniques and strategies in case management, like strengths-based frameworks, help patients with SUDs navigate fragmented treatment infrastructures, although the literature currently suggests this effect is relatively small. However, the obstacles outlined above impose substantial barriers to implementing these strategies and best practices for case managers. A diffusion of innovations curve is relevant here to visualize the resulting problem. ‘Innovators’ and ‘early adopters’ with significant financial resources and high educational levels are able to implement best practices. In the context of case management for individuals with SUDs, innovators and early adopters might be private, high-end hospitals and treatment clinics. It is more difficult for publicly funded SUD treatment centers to implement best practices in case
management, because these programs face external barriers like lack of funding for training case managers and not being able to reimburse for many different case management sessions.

The following image visualizes this concept: the x-axis is time at which individual people adopt the innovation, like strengths-based case management (Berwick, 2003). The curve represents the number of people who adopt an innovation at any specific point in time. The area under the curve between any two given points is divided into five categories: innovators, early adopters, early majority, late majority, and laggards. The diagram suggests the proportion of providers adopting innovations at each stage.

![Innovation Adoption Curve](image-source: Berwick, 2003)

**Hypotheses**

In this thesis, I hypothesize that it is possible to elucidate discrete processes and guidelines that help underfunded case management programs implement best practices in case
management, especially for case management programs tasked with assisting especially disadvantaged populations such as people experiencing homelessness.

In the status quo, diffusion of innovations in case management takes a long time to reach case managers in publicly funded SUD treatment centers, who are likely represented by the late majority/laggard groups in the diffusion of innovations curve due to their limited resources and need for experience and knowledge regarding how to bridge fragmented healthcare infrastructures (Padwa et al., 2001; Park & Huber, 2009). Fortunately, peer-reviewed research supports the efficacy of specific steps that can be taken to more effectively disseminate best practices in the context of care for people with SUDs. Specifically, health care providers are more likely to implement best practices if they are provided specific guidelines about how to implement best practices, especially if these guidelines are informed by “identification of environmental, organizational, and individual barriers to change” (Kaner, Lock, McAvoy, Heather, & Gilvarry, 1999). According to the above-cited research, health care providers, like case managers, are more likely to adopt best practices if they receive interpersonal training on these guidelines. In addition, encouraging communication between ‘peers’ having a stake in preventative initiatives related to SUDs is recognized as an effective way of disseminating innovations aimed at preventing people with SUDs from developing adverse health outcomes (Rogers, 2002).

As such, this thesis aims to build on the knowledge base of what aspects of care coordination and case management are conducive to ensuring positive health outcomes for clients with SUDs. A specific focus is placed on identifying issues that often arise in often under-funded case management services available to low-income individuals. The thesis aims to identify problems that arise during the delivery of these services that prevent clients from
achieving positive health outcomes, to identify aspects of case management services clients currently receive that are conducive to positive health outcomes, and to identify tangible ways that case management services can be improved. These barriers and opportunities will be analyzed and summarized to recommend guidelines and training resources that stakeholders can tailor to suit individual interests. In addition, the thesis aims to identify necessary and productive topics for peer communication aimed at generally ameliorating and remedying the fragmented SUD treatment system.
Methods

Study Population and Study Setting

The study population consisted of guests at the “Community Day Center of Waltham” (Day Center), a nonprofit institution in Waltham, MA that provides case management as well as other services such as meals and clothing to people with low incomes and with SUDs. The Day Center serves Waltham’s homeless population, which is ill-studied but numbers around at least 700 based on internal data collected by the Day Center. Waltham’s homeless population is also served by the Bristol Lodge, which consists of a men’s night shelter with a capacity of 45 and a women’s night shelter with a capacity of 12, both operated by the Middlesex Human Services Agency, a nonprofit organization. Apart from the Bristol Lodge, McDonalds, the Salvation Army soup kitchen, and the Waltham Public Library, there are few establishments in Waltham that welcome individuals experiencing homelessness. The Day Center was established to provide the homeless community a welcoming space and services to allow guests to structure their time during the hours when shelters are closed.

Most guests at the Day Center are individuals without consistent access to housing who live in and around Waltham. While some guests have housing and come to the center mainly for its community, about 91% of guests do not have stable housing and 34% of guests often sleep outside (Whelan, 2016). Because the Day Center is the only resource of its kind in the MetroWest region around Boston, many guests also come from further away.

The Day Center is open from 12:30pm to 4:30pm Monday through Friday, and guests may enter and leave the Day Center as they desire during this time period. The Day Center provides lunch every day in a large indoor space where guests can also relax, watch TV, and use computers for any appropriate purpose. Upon request, and dependent on availability, guests can
receive donated items like clothing and toiletries, as well as vouchers to various establishments like thrift stores and barber shops. In addition, the Day Center offers case management and an addiction support group to guests. All services are provided at no cost and with no conditions other than for guests to refrain from verbal and physical aggression against guests or staff.

The student researcher for this thesis has worked as a Case Management Intern at the Day Center for almost two years. The researcher was supervised by the full time case manager at the Day Center, and the researcher’s duties as an intern encompassed providing a brokerage model of case management to clients. Although at the beginning of this student researcher’s time at the Day Center some guests were wary of him and considered him an outsider, many guests generously and graciously told the researcher about their stories and struggles, recognizing the researcher’s interest and an opportunity for him to learn from their experiences and mistakes. Over the following year, the student researcher got to know many guests at the Day Center and spent many hours both working one-on-one with guests and informally talking with guests. The researcher worked with guests for one hour sessions usually once per week. The researcher worked with a case load of approximately 20 clients.

The student researcher is perceived not as a figure of authority, but on the side of the guests. This presented an invaluable opportunity to understand and describe the experiences of Day Center guests with the health care system and with fragmentation thereof, because the guests described their experiences and opinions of the health care system with very little restraint and reporting bias. In addition, when the student researcher began to introduce his research proposal to Day Center staff, the staff were very receptive, encouraging, and eager to help. Guests recognized the staff’s interest in the student researcher’s project, further reducing the
possibility that guests would restrain themselves during interviews and introduce reporting bias to the study.

In addition, because of the student researcher’s positive relationship with the full time case manager and the director of the day center, these senior figures were willing to introduce the research project to eligible participants to ensure that participants understood their participation was voluntary and not tied to receiving case management services or any other services at the Day Center. Together with senior figures, the researcher explained to participants that they did not need to participate to receive services to continue receiving services or to get better services. These precautions avoided making clients feel like they were being coerced to participate in the study and to comply with IRB protocol.

**Case Management Services Received by Participants**

All participants received some form of case management through the Day Center. The Day Center provides case management to clients at no cost. Case management at the Day Center is not formally structured and serves to meet individualized client needs. Case management at the Day Center ranges in intensity from a purely administrative, brokerage model of case management, to discussions about problems clients face and how to use their strengths to overcome their problems, based on the client’s preferences. These quasi-clinical interventions are provided by case managers on an informal basis, and usually the full time case manager leads discussions about more sensitive information.

In addition, almost every client at the Day Center receives or has received some form of case management from an external institution such as a hospital or a detoxification facility. Many clients have received case management services through a wide variety of organizations. Although many clients have mental health disorders, most often clients receive case management
for issues relating to SUDs, since SUDs more often are the direct cause leading clients to acute situations where they receive case management through a healthcare institution or correctional institution. During interviews, the student researcher asked about and documented the organizations through which participants received case management, and the nature of these case management services.

Because clients at the Day Center almost universally have low incomes and receive a variety of case management services, the Day Center was chosen as a useful organization through which to gather a general sense of case management services received by clients with low incomes and who experience homelessness and often experience other types of mental health disorders. Importantly, this methodology means that the thesis is not a comprehensive evaluation of services provided by any specific organization. Instead, the thesis is an exploratory investigation aimed at focusing discussions about how to improve case management by revealing programmatic features that work well or need improvement, and to direct future evaluation research.

**Participant Characteristics**

The study population consisted of low-income and extremely low-income current or recent adult substance users. All participants received some form of case management related to their SUD in the past three years. The participants were all living in Massachusetts at the time of the study. Participants were excluded from the study if they did not receive case management services related to their SUD in the past three years. Participants were also excluded if they did not speak English. The student researcher determined whether participants were eligible to participate in the study by asking them whether they met inclusion criteria in a private room where the interviews were conducted.
Due to the qualitative, time-intensive nature of data collection for this research, the sample size of the study population was relatively small (n=20). To get input from a variety of participants, the student researcher strove to include participants from the following categories:

- Opioid user
- Alcohol user
- Other substance user
- Homeless: not having a stable home of their own in the past six months
- Receiving case management through the Massachusetts Department of Children and Families
- Frequently visiting Emergency Rooms: at least two visits to emergency rooms in the past year
- Frequent case management utilization: participant was involved with at least two different case management programs in the past year
- Employed
- Ever incarcerated
- Male
- Female
- >40 years old
- <40 years old
- White (not including hispanic/latino)
- Not white (including hispanic/latino)

**Interview Guide**

The interviews were conducted by the student researcher using a semi-structured interview guide (Appendix E). At the beginning of each interview, clients were asked about their histories with case management and the organizations through which they received case management services. The ordering of this question at the beginning of the interview served two purposes. First, the interviews began with open-ended questions, rather than questions with discrete answers like age and gender, to avoid participants developing the habit of answering in short phrases, but encourage them to elaborate on their ideas and views. In addition, as the interview process progressed, it became clear that while most guests understood the researcher’s explanations of what case management is, some were unable grasp the term as being a service provided independent and distinct from clinical, therapeutic treatment. For those in the latter
group, the interview questions were tailored towards understanding how much exposure these guests had with case management and why they were not able to distinguish between case management and clinical treatment services.

The interview guide aimed to determine participants’ experiences with case management services, and to elucidate from this information to what extent participants received intensive case management services that reflected best practices, such as strengths-based methods. The questions also aimed to determine whether participants thought they would benefit from improvements in case management services, and to get their input on whether or not they thought case management standards and guidelines should incorporate more specific process measures to facilitate adoption of best practices, and if so what these process measures might consist of. As such, the interview guide asked whether clients found that the case management services they received were helpful or unhelpful, and whether clients proposed any specific improvements.

This thesis proposes that intensive case management can be summarized by the following two defining characteristics:

1. An organizational and operational structure that allows for close relationships between case managers and clients, and

2. The use of an approach where case managers provide quasi-therapeutic interventions such as strengths assessment worksheets.

The interview guide revolved around understanding to what extent participants received case management services that resembled strengths-based case management as defined by the above two characteristics. Accordingly, the questions fell into two groups. The first group of questions concerned case management services on an operational level. These questions included:
1. Scheduling, frequency of meetings with case managers, and accessibility of case managers (e.g. whether case managers met with clients in their community); and

2. Use of technology to schedule appointments, to send reminders, and for follow-up.

The second category concerned topics case managers asked about and talked about with clients during individual sessions. These questions included:

1. Whether and how case managers asked about participants’ lives and histories;

2. Whether and how case managers talked about strategies to recover from SUDs;

3. What kinds of services case managers helped guests access and who came up with the idea of accessing these services; and

4. What tasks case managers delegated to guests (like phone calls to schedule appointments).

As the interviews progressed, some participants mentioned that they might benefit from knowing estimated wait times to receive services. As such, the following question was added later in the research process:

5. Whether rough forecasts of wait times for receiving services like housing might be helpful.

All questions first focused on guests’ experiences with a certain aspect of case management, and then continued with individualized probes to determine what guests found positive or negative about their experiences and what recommendations they had for improvements.

After completing the above two categories of questioning, the interviews continued with further probes about any outstanding questions the researcher had and allowed for the guests to talk about anything they felt the researcher did not address. The most common question the
researcher asked clients during this time was about whether personal characteristics of case managers had significance for guests, specifically whether guests thought differently about case managers with a history with SUDs than they thought about case managers without this experience.

The interviews concluded with questions about the age, ethnicity, current living situation, and current employment status of the participants. Gender was observed by the student researcher. The questionnaire did not ask participants whether they received health care coverage through a public payer, such as MassHealth or Medicare, or through a private insurer. The researcher decided not to ask this question because almost every person in the sample population at the Day Center from which participants were selected received healthcare coverage through a public payer. This information was based on the student researcher’s significant experience working with the study population’s health insurance in the capacity of Case Manager. In addition, the student researcher probed about experiences clients had outside of the day center and did not ask about services the student researcher himself provided.

**Timing, Scheduling, and Setting of Interviews**

Interviews were conducted between May and October 2017 at the Day Center. The student researcher spent approximately fourteen days in total at the Day Center exclusively for the purpose of conducting interviews. Guests were asked to participate in interviews on an individual basis, and were offered the chance to conduct the interview on that day or to schedule the interview for the following day. Most (70%) guests were willing to conduct the interview the day they were asked to participate. After the first study day, when recruitment techniques were being tested, all of the guests who were asked to be interviewed and who qualified for the study
completed an interview. No interviews were unusable and all were analyzed for this study. The duration of interviews ranged from 20 minutes to 1.5 hours.

Interviews were conducted in private rooms with only the participant and student researcher present. The student researcher conducted all the interviews.

**Participant Recruitment**

Initially, the plan was for Day Center leadership to announce the purpose of the research project and request if any guests would participate in an interview. This approach was used on the first study day, but no guests volunteered. Instead, the student researcher personally asked guests to participate, which yielded more positive responses.

To avoid unconscious selection bias, the researcher started his request for interviews at the beginning of the central room at the Day Center and worked his way one by one through the guests until someone agreed. As many guests were asked to participate as possible, and every guest who agreed to participate was interviewed. In addition, two participants volunteered to participate after being encouraged to do so by another participant.

**Analysis of Interviews**

With permission from interviewees, every interview was audio-recorded and later transcribed. The transcriptions were loaded into Atlas.ti qualitative analysis software. In Atlas.ti the interviews were reviewed and tagged for themes, which were then exported to excel for further analysis.

The qualitative analysis methodology used in this thesis followed a framework analysis approach, which is recognized as effective in exploratory qualitative research aimed at informing policies (Jane & Liz, 2002). Using this methodology, the interviews were first read and analyzed based on a predetermined coding schema based on the interview guide. After each interview was
conducted the interview was coded both for pre-existing themes and for new or emerging
themes. During this process the coding scheme was continually adjusted based on the themes
that emerged from the interviews. The final coding schema used three broad levels of codes, as
some codes were grouped together under broader frameworks (see below). Prior to summarizing
into three categories, the coding schema used many categories with sub-codes as presented here.

Coding Schema:

- **Positive Experiences**
  - Helping clients prioritize needs is one of the most helpful things case managers do
  - Appropriateness of strengths-based approach for ‘veteran’ clients.
  - Warm handoffs under OneCare.
  - Familiarity and knowledge of substance use patterns.
  - Understanding stresses case managers face.
  - Making calls along with the case manager.
  - Participants value personal continuity of case managers.

- **Negative Experiences**
  - Case managers imparting stigma or otherwise coming off as insensitive.
    - Insensitively talking about SUDs, mental health disorders, homelessness, and other aspects of a client’s identity.
    - Overtly disrespecting clients.
    - Case managers comparing clients and sharing information about a client with other clients.
  - Case managers are inexperienced and are not knowledgeable.
    - Case managers do not identify signs of a client using or relapsing.
    - Case managers have a poor understanding of applications for services and resources.
    - Case managers lack knowledge about resources in non-local regions.
    - Case managers lack knowledge related to health insurance coverage policies.
  - Case managers do not appropriately provide therapeutic services characteristic of high-intensity case management
    - Scheduling of case management sessions is haphazard.
      - Finding available case managers in inpatient facilities.
    - Restricted access to case management.
      - Case managers do not enable clients to follow up on their own case.
      - No post-discharge follow-up.
    - Lack of coordination of case management services.
      - Redundancy of case management services.
      - No continuity of case managers in inpatient settings.
  - Case managers do a poor job of explaining who they are and what organization they work for.
- Care Teams.
- Outreach settings.
- Case managers promise things they do not do.

Suggestions for Improvements
- Asking about a client’s history or family situation.
- Using data to forecast wait times, waiting lists for case management.
- Case managers should have personal experience with SUDs.
- Text message communication.
- Access to phones and the internet in inpatient settings.

After all the interviews were read through and coded, the coding scheme was condensed into a more digestible, condensed framework for analysis. The coding scheme was organized in this way using inductive and deductive reasoning. The framework was condensed into the following super-categories:

- Positive experiences with case management
- Negative experiences with case management
  - Interpersonal (Inexperienced case managers, case managers who stigmatize etc.)
  - Process-based (scheduling, availability of case managers etc.)
- Suggestions for improvements
Findings

Participant Characteristics

Of the 20 participants interviewed for this study, all were homeless (not having a stable home of their own in the past six months), all classified themselves as being personally affected by SUDs, and all had some exposure to case management in a healthcare setting related to their SUD. Eight participants described opioids as their primary substance of use and nine participants described alcohol as their primary substance of use. Two participants described themselves as primarily using a variety of different psychoactive substances and one participant reported crack cocaine as his/her primary substance of use. To avoid pressuring participants into talking about unnecessary sensitive topics, the interviewer did not directly probe whether the participants were currently using substances. However, many participants were interviewed shortly after they were discharged from an inpatient treatment facility or correctional facility where they were not using substances.

The student researcher did not explicitly probe to determine whether participants were diagnosed with mental health disorders during the interview process. However, the student researcher felt that participants were significantly less likely than the average client at the Community Day Center to be affected by an unmanaged mental illness. The student researcher conferred with the full time case manager at the day center, who agreed that the clients interviewed were less likely to have severe mental illness. This may be because although the student researcher set out to recruit participants randomly, the student researcher was familiar with many of the clients at the day center and with the general state of mental health of many clients. As such, the student researcher was likely subject to a certain amount of unconscious bias that led him to gravitate towards clients with less severe histories of mental illness. This
may have been because the student researcher perceived participants with less severe histories of mental illness as being able to provide a more accurate account of case management related to the treatment of SUDs than participants with co-occurring severe mental illness.

The interviews suggest that many participants were frequent utilizers of public resources including (see table 2 below):

- Receiving case management through the Massachusetts Department of Children and Families (DCF);
- Frequently visiting Emergency Rooms (Frequent ER Utilization): At least two visits to emergency rooms in the past year;
- Frequent case management utilization (Frequent CM Utilization): Participant was involved with at least two different case management programs in the past year;
- Unemployed;
- Ever incarcerated (Jail/Prison).

Additionally, most participants were white males older than forty years. Four females were interviewed, four non-white people were interviewed, and six people younger than forty were interviewed. All participants who identified as non-white identified as Hispanic/Latino. This is representative of the population at the Day Center based on internally collected data. No participants identified as any other ethnicity such as Black or Asian. The summary of participants’ characteristics is outlined in table 2.

Table 2:

<table>
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<th>Client Characteristics</th>
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<tbody>
<tr>
<td>White</td>
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<tr>
<td>&gt;40 years old</td>
<td>14</td>
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<tr>
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<tr>
<td>----------------------</td>
<td>------</td>
</tr>
<tr>
<td>Female</td>
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<tr>
<td>Opioid Use</td>
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<tr>
<td>Alcohol Use</td>
<td>9</td>
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<tr>
<td>Crack Cocaine Use</td>
<td>1</td>
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<tr>
<td>Frequent ER Utilization</td>
<td>10</td>
</tr>
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<td>Frequent CM Utilization</td>
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<td>DCF</td>
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<tr>
<td>Unemployed</td>
<td>18</td>
</tr>
<tr>
<td>Jail/Prison</td>
<td>5</td>
</tr>
</tbody>
</table>

**Roadmap of Findings Section**

The themes that arose from the interviews are organized into three categories: participants’ positive experiences with case management, negative experiences with case management, and suggestions for improving case management.

**Positive Experiences Participants Experience in Case Management**

On the whole, participants respected that almost all case managers would not be in the profession if they did not mean well and want to help people.

**Helping clients prioritize needs is one of the most helpful things case managers do.**

Participants stressed that they often do not understand bureaucratic processes and requirements they need to complete and satisfy in order to receive services. Most participants reported that case managers often impart basic knowledge of how to triage a client’s needs. For example, a client may wish to apply for transfer payments like supplemental security income, but lacks documents necessary to verify his/her identity. Case managers often point out that the first step in this process is to ensure the clients are able to verify his/her identities, which participants commented often was not evident to them. Participants noted that not only does this support prevent clients from experiencing stress as a result of an application being turned away, but it
also makes clients feel like they are accumulating an ever-increasing portfolio of small successes.

**Appropriateness of strengths-based approach for ‘veteran’ clients.**

Participants commented that strengths-based case management approaches that involve clients in goal setting and planning are especially appropriate for clients who have many encounters with case management and understand the ways in which case managers can help them. One participant noted:

“I’ve had a lot of experience, and I know when I have to take control too. I have to say ‘look this is what I need, can you help me with it?’ I try to think about what that is before I even meet with [case managers]. Sometimes you don’t have that opportunity so you have to think on your feet.”

Participants with significant experience navigating resources and social services in their local communities suggested that strengths-based techniques allow the client to efficiently direct case management services to the areas and tasks the clients feel are most necessary.

**Familiarity with and knowledge of substance use patterns.**

Participants also thought that it was very helpful when case managers had an intuitive understanding of SUDs, especially as substance use relates to other mental health problems. One participant described how he felt lucky that his case manager noticed that while fighting cancer, the participant was planning on intentionally committing suicide by overdosing on opiates in case of an adverse prognosis:

“And I had it all planned, if they told me that I was gonna get the killer dope, the fentanyl, I know where they got it, and I know where to go and where to shoot it and just go to sleep, because I wasn’t going through the chemo and radiation - I saw my father go through it. And on
the way back [from the hospital where the client received his diagnosis, the participant’s case manager] says to me - You had a plan, didn’t you. I couldn’t lie to her.”

This quotation highlights how many clients’ problems lie at the intersection of SUDs, mental health issues, and physiological health. Participants found case managers who are familiar with how SUDs interplay with other mental health disorders and with physiological health to be extremely helpful.

**Warm handoffs under OneCare.**

One participant who was enrolled in OneCare, the Massachusetts Medicare and Medicaid financial alignment initiative, praised his OneCare case manager for helping him navigate a geographical relocation he underwent upon discharge from a rehabilitation facility. The participant cited his OneCare case manager as being most helpful when she actively went out of her way to travel to the participant’s new region and meet his new case manager in this region, even though this new case manager was at a homeless shelter and was not associated with OneCare. The participant thought this was very helpful because his case manager could better explain the participant’s health status and what services would best benefit the participant, and simply because he felt more comfortable meeting his new case manager with his old one “by his side”.

**Understanding stresses case managers face.**

Participants explicitly recognized that case managers are often overworked and underpaid, and participants valued the attention and assistance they received from case managers. If participants had an experience with a case manager who failed to provide substantive assistance, they almost always provided a comment along the lines of “the case manager’s hands were tied” due to underfunded programs and overworked staff. As a result,
participants generally approached new initiations of case management services with a positive attitude. Despite occasional challenges, participants were not disillusioned; they still felt that case managers could help them.

**Making calls along with the case manager.**

Many participants said that they think it is extremely valuable when case managers make phone calls to resources and services along with the clients, especially at the beginning of a client’s road to recovery. Participants reported that case managers could more formally and succinctly introduce clients and their situations to intake administrators. In addition, participants reported that they often felt that once their case manager articulated that the participant would be a good fit for the service in question, the participant felt more confident talking with the personnel in charge of coordinating the service in question.

**Participants value personal continuity of case managers.**

Many participants expressed that they trusted case managers they worked with over an extended period of time. Participants emphasized that an important way this trust is built is when case managers see clients overcome substance use dependency and see clients make positive improvements:

“The hospital and the programs, they don’t see the people enough. They see them for five to seven days and then they’re gone, so they don’t get a chance to get to know the person and to get to see the person try to change. After 14 days, then you can see the change, the desperate ‘I need this chance,’ instead of after five days they’re just starting to get their brain back.”

Some participants with case managers who were present when they were making major changes in their lives did not want to begin receiving new and unfamiliar case management services, even
when these services offered opportunities to them. The participants felt more comfortable with case managers they previously knew, and trusted that the case managers with whom they had an established relationship had the participants’ best interest in mind.

**Negative Experiences**

Although, as described above, participants understood that case managers mostly mean well and are limited and stressed due to a broader societal lack of attention to substance use disorder treatment, the majority of identified themes from their comments fall under the ‘negative experiences’ category. All participants had some negative experience with case management that fell into one of the subcategories below, and many had experiences that fell into multiple categories. The categories of negative experiences elaborated on below comprehensively describe the ways that participants reported case managers as not providing them with adequate help in accessing health care and other services, as well as ways case managers actively damaged their mental and/or physical wellbeing.

**Case managers imparting stigma or otherwise coming off as insensitive.**

Many participants complained that case managers often do not demonstrate sensitivity towards their situations, and that case managers exacerbate stigmatization of their conditions with SUDs and other possible mental health issues and housing status that clients already suffer under in other areas of their lives. This kind of insensitivity manifested itself in the following three ways.

*Insensitively talking about SUDs, mental health disorders, homelessness, and other aspects of a client’s identity.*

All participants reported that they had at least one case manager who lacked a
basic understanding and respect of what it is like to experience a SUD, a mental health disorder, or to be homeless. A clear way this lack of understanding presents itself to participants is when case managers talk about problems like SUDs in a forthright manner without appreciating that talking about these topics may be difficult for clients and should not be treated lightly.

Participants reported that case managers sometimes discussed their health issues in extremely insensitive and unhelpful ways that enraged and demoralized them:

“They’re telling me how they got all these apartments that they pay for, and when you get into one of those apartments you won’t have to pay anything, cause I said I don’t have any money, oh we’ll get you everything, microwave, bed, this and that, and then somebody that was there at the meeting said that she was worried about my many attempts at suicide. Which pissed me off cause it’s not fucking true. The person was there to help me but all it did was fucking fuck me...You know I’m not that stupid, I know how to kill myself.”

The above quotation is in reference to a meeting the participant had with an Integrated Care Management Team led by a clinical social worker through a large state-wide private regional social services organization. This comment reveals how many case managers and other care coordination personnel currently lack adequate training of how to talk about sensitive, personal issues like SUDs and mental health issues. This insensitive behavior may offend or otherwise harm a client by discussing his/her problem in a manner that seems to the client to be off-handed and dismissive.

Discussions about a client’s history provide a helpful context through which to better understand how clients perceive case managers to be insensitive to their problems and health disorders. However, participants noted that they most often experienced case managers as having
a lack of understanding about SUDs and other problems that they face during such discussions about their history. Participants reported that case managers, as well as clinicians, including psychiatrists, ask about a client’s history, childhood, upbringing, or family dynamics in an intrusive manner and do not acknowledge that talking about his/her history in this way is difficult for the client:

“some [case managers], I didn’t really feel comfortable with. Because every time I go into the hospital...I gotta bring everything up again. And my head gets screwed up for about a month because I have to talk about what happened and it just brings it all back fresh into my head. Because I was pushing it down with alcohol and drugs and now I have to deal with it straight.”

This participant’s experience demonstrates how being asked highly specific and targeted questions about one’s history should not be treated lightly. It seems that often case managers do not have substantive professional mental health knowledge and training, and as a result may not know how to talk about uncomfortable and potentially triggering subjects in a way that protects the client from feeling unnecessary distress. In addition, it may not be strictly necessary to know about a client’s past for case management needs, and talking about their past may in some cases be harmful for the clients.

Overtly disrespecting clients.

Some participants complained that they worked with case managers who blatantly disrespected and degraded them:

“Another thing she said was you’re Irish, because when people are Irish they tend to be drinkers and alcoholics. That bothered me, stereotyping me...they’re being a jerk to me first and then they’re suggesting something I should do.”
Such experiences can be psychologically damaging for the client. In addition, the participant’s quotation suggests that these experiences demotivate clients from continuing to work with case managers who make these kinds of comments.

Some participants similarly reported that case managers blatantly said they did not care whether the clients used substances:

“When the [case manager] didn’t do what he was supposed to do, I left angry. Then I was angry enough to where I was going to use, and he didn’t care, he said go ahead and use…[The case manager] said go ahead and use, it’s your choice. I’m not the one that’s putting the stuff in the pipe, you are.”

The last thing people in the study population need is someone telling them they should use substances to cope with their problem, even if it is meant to be sarcastic. Case managers who are rude and overtly disrespectful to a client’s SUD probably do more harm than they do good, both towards the client’s psychological well-being and with regard to the client’s disposition towards case management.

*Case managers comparing clients and sharing information about a client with other clients.*

Some participants reported that case managers sometimes openly discuss their cases in comparison to that of other clients. Participants said that this type of information sharing happened in front of clients during case management sessions. No participant found these kinds of discussion helpful. Further, these types of discussions were concerning because they potentially violate the client’s rights to confidentiality. In addition, participants reported that during these conversations, case managers often made degrading comments about other cases, which made participants feel like the case managers felt similarly about their own cases. These
examples highlight that experiencing insensitivity or stigmatization from a case manager can result in the client developing negative perceptions of case managers and case management.

**Case managers are inexperienced and are not knowledgeable.**

Another broader category of concern participants had with case managers is that many case managers seem to lack basic experience and knowledge necessary to do their jobs well. Participants emphasized the following areas as being of specific concern: inability to recognize the signs of substance use, a lack of understanding of resources and services to help clients, a lack of knowledge about non-local services and resources, and a lack of knowledge about health insurance coverage policies.

**Case managers do not identify signs of a client using or relapsing.**

Participants stressed that many case managers do not have an adequate knowledge of the signs of substance use. Specifically, participants suggested that there are clear signs of substance use that case managers should be able to recognize, but most case managers do not have the knowledge necessary to do this:

“When I relapsed, right away my face got sunken in, I started losing weight, people were like “Not again, what’re you doing?”... [Did your PO notice the change in you?] No, actually, she didn’t... She never noticed anything.”

As Parole Officers (PO) often supervise and direct the case management services provided to former offenders, the PO in this example is considered a type of case manager (Healey, 1999).

Although the interviews did not reveal a similar example of case managers who are not a PO not realizing a client was slipping back into substance use, data collected for this research highlights the importance of case managers understanding signs of substance use.
Overall, the interview data emphasizes the importance of case managers understanding when clients are slipping deeper into addiction (refer to the positive findings section under “Familiarity with and knowledge of substance use patterns”). However, the fact that many case managers demonstrated insensitivity, either through active speech or through a passive lack of speech or action, most participants perceived that many case managers were not very knowledgeable about how to talk about SUDs. This suggests that case managers would not necessarily recognize subtle signs a client might display when their substance use habits intensify.

**Case managers have a poor understanding of applications for services and resources.**

In many participants’ opinions, case managers often are not well-versed in the specifics of applying to and receiving relevant services and resources. The following quotation is an example of how a case manager’s lack of knowledge in this regard can pose significant impediments on a client’s progress:

“The other day I asked [my case manager] to print up a notice letter saying between May and August 15 that I could not prove where I was, I wasn’t in a shelter and all that, and she specifically typed it up to Boston Housing. I wanted it to fill in the name each time.”

This participant needed to send the letter not only to Boston Housing Authority, but to all the other housing authorities and housing programs he was applying to at the same time. However, the case manager did not understand that the client needed to send this letter to all the housing programs and only gave him one letter. This administrative inconvenience burdened the participant, because the participant needed to make another appointment with the case manager and go out and see the case manager to get more letters to send to other housing authorities. This
participant’s experience resonates with many other participants’ perceptions that many case managers are not well-versed in the process of applying to and receiving relevant services.

*Case managers lack knowledge about resources in non-local regions.*

Participants reported that lack of knowledge by case managers regarding services and resources is even more significant when clients transfer between geographic regions. A particularly disconcerting category of examples in this regard concerns discharges from inpatient mental health treatment facilities. These facilities are often outside the areas in which clients reside. Many participants said that when they were discharged from these facilities they wished to return to areas with which they were familiar. However, every participant with experience in such a facility reported that the case managers there only linked the clients with homeless shelters, and provided no additional assistance. One participant who was in MCI Framingham, the correctional facility where women in Massachusetts are sent when they are committed under MGL Chapter 123 Section 35, similarly noted that her case manager there did not know of any resources in her home town other than a homeless shelter. These accounts are especially disconcerting in the context of Massachusetts state regulations 130 CMR 425, and 104 CMR 27, which expressly indicate that case managers at inpatient mental health treatment facilities should avoid discharging patients to homeless shelters.

Participants understood that opportunities to enter more structured, substantive programs were limited for low-income people like them. However, they unilaterally expressed aggravation that the case managers located outside the areas where they lived did not “get the ball rolling,” at the very least to give them information about how to apply for relevant state-wide resources, like DMH case management.
Due to the retrospective, participant-based nature of this research, it is not possible to verify this information and the extent to which case managers at these facilities connected participants with continuing services. However, the fact that all eight participants who reported stays in inpatient mental health centers reported that the case managers at these facilities did not provide them with any resources other than homeless shelters suggests that in at least some cases there is significant room for improvement with regard to service transitions during client geographic relocation.

*Case managers lack knowledge related to health insurance coverage policies.*

Other areas where case managers lack understanding are related to health insurance coverage and access to health care. An especially alarming example, given the study population, many of whom who use opioids in part as a way to cope with chronic pain, was one participant’s experience at the Massachusetts Alcohol and Substance Abuse Center. The participant reported that his/her case manager at this state-run inpatient treatment facility did not know that MassHealth covers acupuncture for pain management without prior authorization, which was not a new benefit. The participant learned this fact from a lower-level staff member, and reported that after trying acupuncture he/she found it to be very helpful. This example suggests that case managers often do not have a comprehensive knowledge of health insurance coverage policies relevant to people with substance use disorders. This problem may prevent case managers from assisting clients to receive potentially helpful services.

*Case managers do not appropriately provide therapeutic services characteristic of high-intensity case management.*

Participants held a wide diversity of opinions in respect to whether case managers should provide psychotherapeutic services, such as Motivational Interviewing or other clinical
interventions. Some participants found that the therapeutic services case managers provided were of no use, especially if they felt the case managers were simultaneously not able to help with other administrative aspects of the client’s case.

In contrast, however, some participants thought that case managers were too curt. These comments came from participants who were in inpatient treatment centers. These participants claimed they had no ability to talk about their situations in a therapeutic context in these treatment centers, and thought they would have benefited from being able to talk with someone in a therapeutic context. Participants thought this person should be qualified in some form of psychotherapy.

**Scheduling of case management sessions is haphazard.**

Almost every participant noted that there was significant room for improvement with regard to scheduling meetings with case managers. The problems participants faced with scheduling case management sessions, as described below, constitute a useful lens through which to understand the effects of overworked case managers on service reception from clients’ perspectives.

**Scheduling concerns in outpatient case management.**

In this subsection, outpatient case management refers to settings where clients either travel to the case manager’s office or where the case manager travels to the client for meetings. In these settings, participants complained that they wish they had more advance notice of appointments. Often, case managers will schedule appointments the day of the appointment or reschedule appointments at the last minute. Participants traveling to case managers said that they were often forced to miss appointments because they could not plan ahead and arrange transportation. Participants whom case managers come to visit said that because case managers
often do not reschedule postponed appointments until the last minute, sometimes not until after 
the scheduled appointment time, participants are often forced to wait uselessly around at pre-
arranged meeting sites for extended periods of time.

In both outpatient contexts, participants separately noted that these scheduling 
inconsistencies often forced them to either cancel case management meetings or cancel other 
important commitments. Not only do these experiences constitute significant barriers to 
receiving case management services, but when case management is mandatory (such as it may be 
when a client is trying to overcome a SUD to regain custody of his/her children from the 
Department of Children and Families), participants reported that these scheduling inconsistencies 
prevented them from advancing in important areas of their lives.

Finding available case managers in inpatient facilities.

Participants reported that in inpatient facilities, like detoxification centers and mental 
health treatment facilities, case managers often seemed to show up to work with the clients ‘out 
of the blue,’ with no advance notice. Further, if the case managers did not meet with the clients 
for any reason (for example if the case manager did not have any time or if they forgot about 
client), the client had no way of getting in touch with the case manager. As a result, participants 
often left these facilities feeling like they did not have significant opportunities to meet with their 
case managers. In addition, because case managers rarely and spontaneously visited participants 
and left participants no alternative route to contact them, participants expressed that they felt 
they were not able to advocate for themselves so that they could receive more time with the case 
managers.

Restricted access to case management.
In both inpatient and outpatient settings, as well as in correctional settings, participants usually felt like they did not have enough meetings with case managers. During visits to the emergency room, participants noted that they rarely, if ever, had access to any form of case management at all. Further, participants claimed that across a wide variety of inpatient and outpatient settings, case management sessions were often very brief, sometimes as short as five minutes. This section goes into detail about what kinds of services participants described as lacking as a result of restricted access to case management meetings. Separately, the interviews revealed that not only do participants desire more administrative case management services, especially in inpatient settings, but participants also desire more time to simply talk about their lives and situations, in individual, group, therapeutic, and non-therapeutic settings.

*Case managers do not enable clients to follow up on their own case.*

In these brief sessions, participants reported that case managers had no time other than to present clients with some forms participants had to sign in order to apply to receive services or resources. Importantly, case managers often did not give participants enough information about these services and where they were located, especially in a written format participants could carry with them to consult themselves. In addition, participants reported that they were often unsure whether case managers called, sent, or faxed applications for post-discharge services like sober houses. Some participants complained that case managers never gave this information to participants so that participants could follow up on their applications. This means that upon discharge, participants did not have the information they needed to follow up on any existing applications, or even know what application processes had been initiated at all.

*No post-discharge follow-up.*
In addition, participants reported that they rarely received any post-discharge follow-up, either in the form of in-person meetings or phone calls, or upon discharge from treatment centers. Even when case managers were unsuccessful in placing a participant in a program that would continue necessary services at the time of discharge from an inpatient program, no follow-up or continuing services were offered to participants. One participant said that upon being discharged from a detox program, he was driven to another agency that may have been able to help him, but he was given no information about what programs he was already in the process of applying to. This information was not given to the new agency either. This meant that the participant would have had to start the entire process of searching for services all over and apply to them from the beginning.

Participants expressed significant frustration towards the lack of access to case management as outlined above. Participants noted that when they feel hopeless and have no help accessing necessary services, they often relapse to substance use as a coping mechanism. Participants felt that “short-changing” on behalf of case managers is especially damaging upon discharge from detoxification settings, because they felt they were wasting their time while they could have been looking for arrangements after discharge. Some participants cited this feeling of wasted time as extremely uncomfortable and as a strong deterrent to ever returning to a detoxification facility center.

Lack of coordination of case management services.

Redundancy of case management services.

Some participants expressed that they received redundant case management services. This means that participants applied to the same resources multiple times in different case management settings. Since many applications can be very time consuming, if case managers
and participants filled out multiple applications for the same resource, both the case manager’s and the participant’s time was wasted. One participant nicely phrased how he dealt with this problem:

“It gets a little confusing as far as did I already fill out this form over here, or am I duplicating stuff. But I’ve actually come up with a fairly good system. One of them: I write everything down. The other one, I just say, let it flow. If it’s on this list, don’t do it over here.”

This participant took the initiative to keep track of the resources he already applied to, but most participants did not. However, participants recognized that since case managers were often so pressed for time, duplicating time-intensive services like filling out long applications was a significant waste of resources for both parties.

No continuity of case managers in inpatient settings.

Many participants reported that inpatient facilities often assigned them to different case managers both within a single visitation episode, and between different visitation episodes. Participants found this to be a problem because, as noted in the positive findings section, participants placed significant value on case managers with whom they developed a relationship and who saw participants make positive changes in their lives. Participants receiving case management in outpatient settings noted that they were often able to work with the same case manager and did not note lack of case manager continuity as a problem.

Case managers do a poor job of explaining who they are and what organization they work for.

Care Teams.
Many participants claimed that case managers often do not adequately explain their roles to clients. This problem is especially salient in the context of case management teams, where multiple personnel were each in charge of various aspects of the patient’s clinical and case management services:

“Everywhere else, I was kind of the one who let the ball drop, because… no one really explained to me what these ‘[care] teams’ were? You know when I [got discharged from the hospital, I got out] and this [care] team, no one explained it to me [and what they were supposed to help with].”

Upon discharge, this participant did not know what to ask the care team to help with and did not know how to clearly explain what problems he needed the care team to help him with, reducing the effectiveness of the care team.

Explaining the ways case managers can help clients is important so clients can communicate to case managers what they need help with. In addition, clients may feel embarrassed or ashamed that they do not understand what the people around them are there to do. Clients should not feel like they are the ones ‘letting the ball drop’ because they do not know how to utilize case managers.

*Outreach settings.*

Separately, special considerations may be necessary regarding explanations of case management in the context of outreach settings where case managers travel to visit clients:

“I used to have this woman, she was my case manager...I met her on a train to Wakefield. That’s where I used to see her. I don’t know what organization she worked through...she just came out of nowhere. I think my brother introduced me to her, saying “hey there’s a
woman looking for you.” I never met her at her house. We met on the streets at coffee shops and stuff like that.”

In outreach settings, if case managers do not ensure clients understand through which organization they work, clients can run into trouble when they lose contact for some reason. When clients do not know what organization their case manager worked with, they have no way of reaching out to see if they can re-establish contact with their old case manager, or get another case manager.

**Case managers promise things they do not do.**

To conclude this broader section covering negative experiences clients have with case management, it is important to note that many participants reported that at the beginning of a relationship with case managers, those case managers often made grand claims to help them but never followed through on these promises. Participants noted that when case managers promised to help the participants but failed to deliver on that promise, they felt demoralized. In some cases, this demoralization may have been enough to tempt clients to turn to substance use as relief. Ensuring that case managers are able to fulfill promises, and ensuring that case managers do not promise things they are not able to do, would likely help more clients to receive necessary services. At the very least, reducing participants’ complaints could prevent clients from descending ever deeper into their substance use disorder and could encourage clients to use case management services more.

**Suggestions for Improvements**

**Asking about a client’s history or family situation.**

Various participants said that case managers should not ask very direct questions, but should keep questions broad. Participants implied that the case manager should leave the level of
detail discussed with regard to a client’s history up to the client. An example one participant provided was that instead of the case manager asking whether any of the client’s family members are deceased, the case manager should ask whether the client has any family members.

**Using data to forecast wait times, waiting lists for case management.**

One participant suggested that case managers should give clients a general estimate of the wait time to receive a service. One participant stressed that:

“I have no idea when I’m out, what my status is, no idea what I’m looking forward to. I have nothing to look forward to at this point in life, besides getting off of probation.”

Giving clients even vague wait times would give them something to look forward to, and may motivate some clients to make or maintain improvements in other areas of their lives. In a similar vein, another client suggested that they would even be willing to be placed on a waiting list for case management services themselves, if it meant having increased access to case management sessions.

**Case managers should have personal experience with SUDs.**

Almost every participant mentioned that case managers with personal SUD experience can relate better to clients than case managers without personal SUD experience. Participants stressed that case managers without SUD experience could never really understand how their brain worked and how difficult it is to overcome addiction. Case managers without SUD experience could immediately be identified when they asked a question about why a client developed or continued to suffer from a SUD, or when case managers did not recognize when a client was not sober.

**Text message communication.**
One participant suggested that case managers could remind clients about appointments or other commitments they had over text messages. Another participant noted that sometimes the most important service case managers provide is simply asking whether a client needs any help on a given day, because clients may feel discouraged or otherwise disinclined from asking for help without being prompted to do so. This participant thought that being asked whether they needed any help over text message would in many cases be just as effective as being asked in person. These suggestions reflect most participants’ positive attitudes towards communication over cell phones. Almost all participants had cell phones and were willing to use them in the context of case management.

**Access to phones and the internet in inpatient settings.**

Some participants reported that when they were in inpatient settings like detoxes, they often did not have access to their phones. This was often a result of facility and program policies. If they were in an inpatient facility, like a detox, there may have been pay phones, but often participants reported that they did not have quarters to make any calls. Participants reported that they wished they had phones or computers to communicate with family members and with services and resources they wished to access after discharge from these inpatient settings, because they had a lot of time they could have used more productively.
Discussion

This section reflects on how results outlined in the findings section fit into the larger analytic categories used in the framework analysis. For each subsection, the findings are compared to the review of relevant guidelines and regulations to generate a better understanding of how closely participant responses reflect actual service provision within case management programs. The findings are then reviewed in the context of literature relevant to case management theory and best practices to determine the implications of the findings both for policy recommendations and guidelines and for how the findings fit into the broader knowledge base of what programmatic aspects of case management are conducive, or not conducive, to promoting positive health outcomes among clients.

The broader themes outlined in this discussion section are organized as follows:

- Case Manager Insensitivity
- Case Managers Lack Adequate Understanding and Knowledge of Relevant Services
- Performance on Administrative Process Measures

**Case Manager Insensitivity**

Participants generally had positive perceptions of case managers, as evidenced by participants’ understanding that case managers were overburdened and stressed. However, participants also reported that case managers sometimes inflict significant emotional and psychological damage on clients. Many participants discussed how they often perceive case managers as being insensitive towards participant’s SUDs and other mental health issues, as well as towards other aspects of participants’ situations like their homelessness. Participants clearly suggested that insensitivity in this way was not conducive to positive health outcomes for clients both because clients were less likely to engage with case management, and in some cases...
because clients might turn to substance use or other undesirable behaviors as a coping mechanism.

**Relevant traumatic backgrounds of clients.**

Participants stressed that they thought that case managers were particularly likely to treat a client’s personal situation and issues in an inconsiderate manner during a discussion of a client’s history and past. Crucial to consider in this context is that many clients affected by SUDs are likely to be survivors of trauma (Mills, Teesson, Ross, & Peters, 2006). Separately, people burdened under other social disadvantages like low incomes and homelessness are likely to be survivors of trauma (Kim, Ford, Howard, & Bradford, 2010; Deck & Platt, 2015). Further, some evidence suggests that the longer very low-income people with unstable housing situations grapple with navigating fragmented social service systems, the more likely these people are to experience significant trauma at some point in time (Deck & Platt, 2015). Research is beginning to demonstrate that in many cases not only do these traumatic experiences co-occur with SUDs, but that traumatic experiences are integrally related to SUDs and may play a role in the development of SUDs, especially if traumatic experiences took place during childhood (Khoury, Tang, Bradley, Cubells, & Ressler, 2010).

The above cited research is important for case managers and case management program administrators to keep in mind in the context of intensive case management. It is extremely likely that people similar to the study participants have experienced SUDs and other socio-ecological difficulties that are integrally related to traumatic experiences suffered earlier in their lives. Research suggests that in-depth discussions, if led insensitively, may reinforce past traumatization. This is especially true when considering socially stigmatized disorders like SUDs (Stewart, 1996). It is possible that pathways of re-traumatization are more likely to be activated
when discussing such stigmatized topics, because clients are generally very likely to feel some kind of discomfort simply because the topic is stigmatizing.

**Trauma insensitivity of case managers.**

As such, it is appropriate to approach the problem of case manager insensitivity from the lens of trauma-awareness, especially if case managers provide intensive case management services like strengths-based assessments that may touch on traumatic events clients may have experienced. For clients, stigmatization is much more than a feeling of discomfort, but it is a powerful pathway through which they may experience uncomfortable memories of past traumas or even experience re-traumatization. The fact that many participants specifically pointed out case managers as being disrespectful during discussions of their past history and/or upbringing suggests that case managers currently do not have sufficient training about how to discuss traumatic situations with clients.

This finding must be reconciled with the results of the analysis of relevant guidelines and regulations in the background and significance section of this thesis. That analysis concluded that most of the relevant guidelines and regulations, around 70%, stipulate that case managers should have some training and guidance in providing psychological support to clients. However, a closer review reveals that many relatively thorough guidelines, like NCQA’s Case Management Accreditation Standards, do not specifically require that case managers should have training in supporting clients who have significant traumatic experience. The Massachusetts Bureau of Substance Abuse Services (BSAS) Standards of Care is the only reviewed guideline with substantial discussion that case management providers should ensure that their treatment staff are aware that many clients have experienced significant trauma and should take specific steps in response. However, even BSAS does not explicitly mandate that either case managers or
personnel in supervisory capacities receive specialized training in appropriately dealing and responding to clients with traumatic histories (Massachusetts Department of Public Health Bureau of Substance Abuse Services, p. 40-42).

The absence of supports and checks to ensure that case managers are competent in reacting and responding to significant traumatic experiences of clients goes against best practices in the field of working with people with substance use disorders, especially if these people also have low incomes and experience unstable housing situations. Specifically, the case management literature stresses that according to best practices, case managers who do not have significant psychotherapeutic education, which represents a significant portion of case managers serving low-income people with substance use disorders, should be appropriately trained or have professional supervision from appropriately trained personnel (Rapp, 1998, p. 189).

The broader psychological literature supports the notion that providers should be specifically trained or supported in working with clients who have significant histories of trauma to avoid re-traumatizing clients by inadvertently being insensitive towards them. The notion of ‘Trauma-Informed Care’, for example, was developed to help health care and social service institutions and providers provide support to clients who experienced significant trauma. This framework aims to ensure that services aiding people with traumatic pasts are oriented to, at the very least, avoid continued “victimization and retraumatization” of clients (Hopper, Bassuk, & Olivet, 2010). Trauma-Informed care frameworks suggest that for intensive case management where clients discuss their pasts and histories, a strengths-based approach alone, without appropriate training in how to discuss trauma, is not enough to empower people to overcome their traumatic experiences. When clinicians and case managers are not trained in trauma-
awareness, clients may simply experience re-traumatization and insensitivity on behalf of case managers.

When service providers have training in trauma awareness and in how to talk with clients about traumatic experience, the literature suggests that clients tend to experience reductions in symptoms of trauma and substance use; and when service providers do not have this training, clients tend not to see significant reductions in these symptoms (Hopper, Bassuk, & Olivet, 2010). The fact that many case managers are not likely to be trained in trauma-awareness supports participants’ perceptions that case managers treated discussions about SUDs, and about other aspects of their past, too lightly and came off as insensitive. In addition, many Trauma-Informed Care initiatives stipulate that providers must explicitly ensure the confidentiality of clients (Hopper, Bassuk, & Olivet, 2010). This supports some participants’ complaints that case managers came off as insensitive when they shared information between cases.

If case managers do not have training in discussing and dealing with client’s traumatic experiences, two distinct problems may result. First, as participants expressed and the literature surrounding Trauma-Informed Care supports, participants may re-experience trauma during discussions with clinicians and providers, which harms clients psychologically in a non-insignificant capacity. Further, some participants reported that these types of uncomfortable discussions, especially when case managers were openly rude and disrespectful, may sour a person’s opinion of case management in general and make them less likely to use these services in the future. Although the literature is sparse in this area, some studies support the notion that when people have adverse relationships with providers in mental health contexts they are less likely to seek further care (Kerkorian, McKay, & Bannon, 2006). The implication is that when case managers are not professionally trained in talking about and responding to trauma, case
managers often may offend clients or make them otherwise uncomfortable, and may as a result discourage clients from continued engagement in case management and other clinical care aimed at helping them with their SUDs.

**Poor administrative performance ties in to insensitivity.**

Separately, poor performance on administrative case management functions, like scheduling or coordination of services, may imply to clients that case managers are not sensitive to their histories and/or present situations. This could happen for example if a client feels their case manager is “blowing them off” by never being available for appointments. This type of inadvertent insensitivity on behalf of case managers is plausibly more likely to occur in more case management frameworks where clients often know that case managers are extensively aware of the difficulties clients face, based on provision of in-depth therapeutic and quasi-therapeutic services like strengths-based assessments. It seems that case management programs may be asking too much of case managers if case managers are tasked to provide quasi-therapeutic services as well as administrative support.

**Case Managers Lack Adequate Understanding and Knowledge of Relevant Services**

Participants reported that case managers are often incompetent and unable to efficiently provide clients help with applying to and receiving necessary resources and services. For example, participants stressed that case managers often were not familiar with the process of applying to services and resources. This observation was reflected in some participants’ comments about how case managers often did not provide clients with information they needed to follow up on existing applications. In addition, participants stressed that case managers are unfamiliar with non-local services and with health insurance coverage policies.
The aggregation of the above data strongly suggests that some case managers do not have enough support in understanding the often evolving, fragmented landscape of services and resources available to clients with low incomes and SUDs. This problem may exponentially increase in magnitude when case managers are additionally responsible for different groups of clients with very different needs, such as in inpatient psychiatric facilities and in dual Medicare/Medicaid financial alignment initiatives. The high rates of turnover and relative lack of experience among case managers, especially in fields where case managers help clients with SUDs, add further complications (Rollins, Salyers, Tsai, & Lydick, 2010). This high turnover rate implies that case managers are often new to the profession, with many facing a relatively steep learning curve in gaining familiarity with details about relevant resources and services.

Adding to this problem is the lack of support for case managers in familiarizing themselves with available local service systems from an organizational standpoint. No reviewed guidelines or regulations dictate that program administrators should work with case managers to develop and maintain a substantial, easily accessible database of services and resources relevant to individuals with SUDs. Participants’ comments on the incompetency of many case managers with regard to their repertoire of relevant resources and services may be a result of this absence of structural supports to help case managers develop this repertoire. In light of the reviewed guidelines and regulations, participants’ comments are generally validated.

Further, participants’ comments that case managers’ scheduling habits, as elaborated on later in the discussion section, are often unreliable may suggest that case managers often spend more time than expected finding out through trial and error how the service and resource systems function. Case managers may often be overwhelmed with a specific client’s case, and as a result may not have enough time for other clients and cannot predict future appointment availability.
This in large part likely due to resource-constrained programs that do not provide case managers with enough time to thoroughly work with each client. This might partially explain why case managers often miss appointments, reschedule appointments at the last minute, and seemingly show up ‘out of the blue’.

The evidence reviewed in this thesis suggests that among the case managers who served participants in this study, there lacks a readily available, centralized knowledge base that is continually updated so that inexperienced case managers can better help clients, are less overwhelmed by situations individual clients face, and are able to be more reliable and accountable in terms of appointments and scheduling meetings with clients. The fact that ‘veteran’ clients with significant experience navigating fragmented service infrastructure place high value on case management services supports this conclusion. ‘Veteran’ clients bring knowledge to the table that case managers may not necessarily not possess due to a lack of above-mentioned support and educational structures.

**Performance on Administrative Process Measures**

Often case management programs are evaluated from the perspective of their administrative processes. In this context, administrative processes generally refer to the reliability and organization of the case management services that clients receive. This section is divided into two subsections: scheduling and availability, and coordination of case management services. The section broadly concludes that there is significant room for improvement on administrative process measures among evaluated case management programs. Importantly, these findings are not definitive due to the qualitative nature of data collection and should rather be interpreted as directions for future research, rather than suggestions for concrete performance measures for case management programs. The findings suggest, however, which aspects of case
management are helpful and which aspects are not helpful in improving performance on process and outcomes measures.

**Case management scheduling and availability.**

Many participants commented that they often did not have satisfactory access to case management in terms of the number of meetings and of meeting duration in both inpatient and outpatient case management contexts. Participants also stressed that case managers did not always reliably show up for meetings in both inpatient and outpatient contexts. This was often difficult for clients, and clients often did not know how to get in contact with their case managers if the case managers missed appointments, especially in inpatient contexts where many clients did not have regular access to phones.

These findings reflect reviewed guidelines and regulations with respect to mandated appointment frequency and appointment duration of case management initiatives for general populations with SUDs (except for children and pregnant women). The review of the guidelines and regulations saliently lack the following, which input from the interviews suggests may be necessary to ensure adequate access to case management services:

- No reviewed guidelines and regulations stipulate that clients are entitled to more than a relatively minimal amount of case management sessions, usually only one or two sessions. Further, many regulations and guidelines do not mandate a minimum number of case management appointments, nor do they mandate minimum appointment durations, delegating decisions regarding these program specifics to implementers (Philip & Soper, 2016).

- Many (about 50%) of reviewed guidelines and regulations do not mandate that clients receive case management over a period longer than one month.
- Less than 20% of reviewed reimbursement regulations specify that providers can be reimbursed for providing case management in out-of-office contexts such as phone conversations.

- Reviewed guidelines and regulations unilaterally do not specify how case management should coordinate the appointment scheduling process or specify a way clients can get in touch with case managers or with other personnel if case managers miss/do not show up for appointments.

Reconciling the review of relevant guidelines and regulations with participants’ testimonies suggests that case management initiatives meant to help the study population lack structure from an administrative perspective. Based on participants’ comments, this lack of administrative and organizational structure has significant, negative implications for the likelihood that any given client will have access to case management services in a substantive capacity.

It is relevant here to mention that almost all participants had access to cell phones. All participants had a positive attitude towards technology, and those without smartphones or a computer were eager to learn how to use smartphones and computers so they could apply for jobs and housing opportunities on their own. Many participants even volunteered suggestions to improve case management programs through increased integration of technology and increased technology education. In this context it seems that case management programs have significant potential to increase the extent to which they rely on technology for administrative purposes and to outsource many aspects of case management to technologies, and potentially through technology education initiatives to clients themselves.

*Access to therapeutic services as part of higher-intensity case management models.*
Various participants implied that faced with a decision between choosing a case manager who provides only brokerage/administrative case management services, and choosing a case manager who focuses much more heavily on therapeutic discussions and services as part of intensive case management frameworks such as the strengths-based model, the participants would choose case managers who provided less therapy and focused on placing them in housing and other programs.

However, these participants still valued ‘having someone to talk to’. In addition, other participants stressed that they thought they needed much more access to people with whom they could simply ‘talk with’. These comments reflect the value of discussing a client’s personal situation using clear, pre-defined therapeutic frameworks in intensive case management contexts (Rapp, 1998, p. 62). As such, the research conducted in this thesis contributes to the evidence base supporting the usefulness and appropriateness of these strategies and of intensive case management for clients with SUDs.

Still, participants suggested that these intensive case management services are more likely to be perceived positively by clients if the case manager also has time to help them with concrete, immediate problems such as accessing housing and detoxification facilities. This implies that high-intensity case management services are more likely to be of help to clients if case managers also have enough time and supervision to work closely with clients. This is supported by the literature, which emphasizes that with regard to case management implementation, people in management positions of organizations that fund case management services should work with case managers to understand what flexibility and resources they need to ensure positive health outcomes for clients, and avoid constraining case managers into providing regimented, pre-defined services. This is especially important with regard to intensive
case management services which are difficult to define in service-based contexts since the precise mix of services varies significantly between patients (Rapp 1998, p203).

Conversely, the evidence reviewed in this thesis suggests that high-intensity case management services are not likely to be of significant help to clients if healthcare payers and regulators force case managers to cram in features of strengths-based assessments and other intensive case management services into barebones, brokerage case management models. Unfortunately, the lack of mandated minimum appointment frequency and duration found in the review of relevant guidelines and regulations suggests that barebones, brokerage case management programs are more common approaches in the current financially constrained publicly funded SUD treatment system.

*Special considerations with regard to case management services in detoxification settings.*

Some participants stressed that they thought not having substantial access to case management while in intensive inpatient programs like detoxification facilities was a significant waste of potential time participants could have used to apply to necessary resources like housing. Participants stressed that they wished for more case management during detoxification, because they often relapsed upon discharge because they had no structured environment in which to stay.

However, interpreting these comments warrants caution due to the fact that when people are in withdrawal from substances like alcohol and opioids, their executive functioning is often temporarily limited or impaired (Lyvers & Yakimoff, 2003). In addition, powerful psychoactive medications are regularly prescribed to people detoxifying from substance use in inpatient treatment facilities, but the literature as of yet does not conclusively support any one particular pharmacological treatment regimen in detoxification settings, especially for stimulants (Diaper, Law, & Melichar, 2014). Because of the wide variety of mental states and cognitive capacities
patients may be in during detoxification, it is crucial for case management program administrators and regulators to consider whether clients undergoing detoxification are in a state where they can take full advantage of case management services.

While evaluative literature is sparse regarding the efficacy of case management services delivered during detoxification settings, some evidence suggests that these types of services perform favorably on process measures such as decreases in the number of patients who leave early against medical advice and increases in those who complete detoxification programs (McLellan, Weinstein, Shen, Kendig, & Levine, 2005). However, it is plausible that case management services that clients receive after detoxification, and when clients are not in acute withdrawal, are more effective than case management received only during detoxification. Clients are likely to be better suited to evaluate their options and make more rational decisions when they are not in acute withdrawal. Further, it is more respectful to clients if they receive case management services when they are more likely to be fully competent rather than in an altered mental state as they may be in during acute withdrawal.

This is not to say that clients in detoxification settings should not receive any therapeutic interventions at all. Important in this context are many participants’ comments that they strongly desired more time to talk about their situation and why they ended up in detoxification. From the evidence reviewed in this thesis, it seems that the problem of clients exiting detoxification only to immediately relapse is not necessarily something that administrative case management has significant leverage to ameliorate, due to the limited supply of and long wait lists for structured living arrangements. This implies that it may be more appropriate to provide clients undergoing detoxification with psychological, therapeutic support while in detoxification, and slowly integrate administrative case management once the clients are out of withdrawal and not heavily
medicated. In simpler terms, low-intensity case management provided during detoxification without follow-up services consisting of more intensive case management simply may not work for clients who have nowhere to stay upon discharge.

It is important to note that these findings imply that the state and the federal government, who have exposure to financial risk through repeated emergency room utilization or through the correctional facilities after patients with SUDs are discharged from inpatient facilities, may financially benefit over the long run through increased financial support for transitional housing and other types of support upon discharge from detoxification. While a quick fix (only providing low-intensity case management during detoxification) may be less expensive in the short term, it may be more expensive in the long run if clients chronically relapse and re-enter detoxification and other inpatient medical facilities due to their SUDs. Clearly, case management services received during detoxification that have been shown not to perform well on administrative process measures will not have a significant positive influence on health outcomes.

**Coordination of case management services.**

When case management is executed effectively and efficiently, participants perceive case management services positively and report that they are able to move forward with their lives in terms of applying to receive, and receiving, services and resources. As such, from the perspective of performance on process measures, this thesis supports the notion that case management does increase the ability of clients to enter and stay in services and treatment related to addressing problems associated with SUDs. These findings reinforce evidence from the literature regarding the efficacy of well-organized and cohesive case management services in helping people with SUDs and other severe mental health disorders make improvements in their lives (Rapp & Goscha, 2012).
However, participants also reported that case management services they received were often disorganized and uncoordinated. Specifically, participants emphasized that they do not receive follow up from case managers or information clients can use to follow up on their case themselves, and that there is little coordination within individual case management programs and between different programs.

The review of relevant guidelines and regulations reveals that programmatic and organizational aspects related to the above aspects of case management programs are not addressed by regulators or payers. For example, although some guidelines, like the Joint Commission Behavioral Health Care standards, stipulate that organizations providing vocational rehabilitation services “develop a written employment plan that is specific to the individual served”, the standard does not require that the organization provide this written plan to the client in an easily understandable and accessible manner (Joint Commission Resources (JCR), 2017, p. CTS - 78). Regulators and payers delegate decisions about these types of programmatic characteristics to program implementers and case management providers. In addition, coordination between different case management programs, for example to ensure reduction of redundant services or to provide clients with case management in emergent situations, would require some centralized authority, which does not exist. As such, it is likely that participant concerns as described above are reflective of problems they actually experienced while receiving case management services.

The scientific literature identifies many of the above outlined structural features of case management programs as crucial to effective service provision. For example, access to 24-hour emergency and crisis case management and continuity of case managers are identified as important in one consolidation of best practices in case management (Rapp, 1998, p189).
Interestingly, however, the literature reviewed as part of this thesis does not identify any existing best practices related to the provision of information to clients so that clients can follow up on information themselves. The lack of literature surrounding this topic is likely a result of the fact that case management initiatives usually assume that clients are placed into services, but does not reflect the reality that often clients do not have access to case management for a long enough duration of time for this placement to occur.

A distinct aspect of disorganization of case management identified by this thesis is reported by participants as case managers not being clear with clients about the nature of the case management services the client is receiving. Reviewed regulations and guidelines do not specify that case managers should explain their roles and professions as outlined above. The literature, especially with regard to strengths-based case management programs, suggests that case managers should work with clients to define the role of the case manager for the client. It is clear from reviewed evidence that there is significant room for improvement with regard to clients being able to understand how to take full advantage of case management services.

These concerns and comments suggest that the fragmentation of case management services leads to ineffective and inefficient provision of care coordination services. For example, when a case manager in a detoxification facility sends in an application for a client to a program that may help the client after he/she is discharged, but upon discharge from detox the client has no way of following up on his/her application or following up with his/her case manager, the case manager’s time and efforts were wasted. Further inefficiencies will arise if the client reapplies to the same program with a different case manager.

Not only are these inefficiencies a waste of funding available to help the people with SUDs navigate fragmented service infrastructures, but this type of fragmentation within case
management itself may also reinforce poor self-management habits for clients. Support for this claim comes from evidence and literature suggesting that investments in ensuring “basic, seemingly simpler levels of care” (in the context of care coordination) function properly is a prerequisite to helping patients effectively navigate fragmented social services and healthcare systems (Bolen & Stange, 2017) in ways that ensure patients are surrounded by positive determinants of health.
Limitations

A major limitation of this study is its relatively small sample size. In addition, the population interviewed was very homogenous: most participants were white males older than 40 years old. These limitations imply that the results of this study are not necessarily generalizable to the broader population. Of specific concern are experiences of insensitive case managers related to race and/or gender which may not have been experienced by the participants surveyed in this study as often as for populations that may be more socially marginalized.

In addition, the interview format of data collection means that all data are self-reported. Similarly, the study reviewed no personal health information related to participants. Further, the interview format collects data on a retrospective basis, which invites the possibility of recall bias. Recall bias might also be the result of certain aspects of many clients’ identities, such as substance use status or the presence of co-occurring mental health disorders at the time of case management. This means that it is possible that many of the experiences and comments reported by participants may not be completely accurate.

To address some of these concerns, the author grounded observations in the literature, but findings may still be imprecise. In addition, because many participants received case management in organizations where they were likely not using substances (such as detoxification clinics) and where they were likely to receive some form of treatment for mental health disorders (such as if they were an inpatient psychiatric hospital), many participants may have been in situations where substance use and mental health disorders did not significantly interfere with how they perceived case management services. Further, many participants’ comments and concerns are consistent across various participants, reinforcing their validity.
Policy Implications and Future Research

Making Intensive Case Management Work for Clients

The review of relevant standards and guidelines suggests that case management programs use the intensive case management model where case managers implement therapeutic and quasi-therapeutic services like strengths-based assessments. However, participant accounts evaluated by this thesis suggest that clients often do not have sufficient access to case managers through these programs, or that case management programs are not as intensive in practice as the regulations suggest. Based on participant responses, this leads to a situation where case managers are overwhelmed to the point where they must choose between providing the core, basic administrative functions of brokerage case management and providing therapeutic and quasi-therapeutic services, and are not able to provide wrap-around intensive case management services.

In this context, all relevant stakeholders, including regulators, healthcare payers, and healthcare providers, should re-evaluate regulations and guidelines, to avoid being overly ambitious in aspirations for case management. Similarly, stakeholders must be more clear, and realistic, in defining the specific goals of what case management should help clients achieve. Specifically, when stipulating and reviewing regulations regarding intensive case management, regulators and payers must consciously and carefully evaluate whether case managers have enough training and administrative knowledge, and small enough client case loads, to effectively provide intensive case management.

If funding is not available to ensure that case managers can adequately provide intensive case management services, regulators and payers should consciously and carefully evaluate whether it would be more effective to limit the scope of case management. The literature
supports the efficacy of low-intensity case management at improving the number of clients who receive services. Further, participants interviewed in this study implied that they would rather receive straightforward, low-intensity case management than receive therapeutic aspects of intensive case management without the administrative features at the core of lower-intensity, brokerage case management models.

**Coordinating Case Management**

The research conducted in this thesis identifies significant opportunities for increasing the coordination of case management services. To address these concerns, regulators, healthcare payers, and healthcare providers should work together to ensure that the following easily-implementable and minimally cost-intensive processes become standard throughout all case management implementations:

- Case managers coordinating ‘warm handoffs’ where clients are physically introduced to healthcare providers and providers of other social services;
- Continuity of case managers within individual case management implementations
- Case managers triaging client needs;
- Case managers making calls together with clients;
- Case managers providing clients with simple, easily-understandable documentation of their case and applications clients have ‘in the pipeline’;
- Case managers providing clients with contact information for services and resources to which they are applying;
- Case managers working exclusively in outpatient contexts should explain to clients who they work for and where their organization is located; and
- Programs providing no-cost phones or computers clients can use while in inpatient treatment centers like detoxification programs.

The above processes are aimed at mitigating the adverse types of information fragmentation that occur when case managers are overwhelmed and do not have enough time to consistently, intensively work with clients. As such, it is most important for regulators, payers, and providers to ensure that the above processes become standard in case management programs where case managers are the most overworked or where turnover is especially high.

**Continuity of case management.**

More broadly, regulators and payers should evaluate the effectiveness of providing case management in discrete doses within individual treatment programs like detoxification centers in comparison to the effectiveness of providing case management throughout the continuum of a client’s environment. This is especially important in the context of severe and overwhelming system fragmentation regularly and repetitively experienced by the population of low-income individuals with SUDs.

While the Commonwealth of Massachusetts is already implementing experimental initiatives like this through aligning case management for Medicaid and Medicare enrollees, this thesis identifies the population of low-income individuals with SUDs as a population that may similarly benefit significantly from cohesive and continuous case management. Most salient in this respect are reports by many participants in this study of frequent transition between detoxification facilities, emergency rooms, homeless shelters, correctional facilities, and inpatient mental health treatment facilities. Because clients do not have access to continuous case management, in each discrete dose of case management they never get far in the process of applying for resources and services. Further, all of this work goes to waste the next time the
client ends up in a case management program, because there is no information transfer between different case management programs. The Massachusetts Executive Office of Health and Human Services, the Massachusetts Office of Correction, public healthcare institutions like Boston Medical Center, and local police agencies are organizations who stand to financially gain from funding and investing in cohesive and continuous case management.

Although cohesive case management may be expensive to implement, it has significant potential to improve client well being and to reduce expensive costs throughout the continuum of care. This is relevant, for example, in the context of high expenses related to responding to opioid overdoses. In this context, financial incentives are most directly aligned at the state level, since the state has financial exposure not only through publicly funded healthcare treatment systems, but also through law enforcement and correctional systems with which low-income people with SUDs often engage.

**Recruiting participants for coordinated case management implementations.**

In implementing more comprehensive and cohesive case management programs, it is important how to risk-stratify the target population and enroll people who stand to significantly gain from such interventions. Project Outreach, a multi-stakeholder program run in Plymouth County, identifies clients by evaluating people who enter emergency rooms repeatedly due to opioid overdoses (Harbert, 2017). However, there are significant concerns related to sharing health care-related information. Stakeholders must be aware of these barriers and agree on a coordinated strategy to recruit clients.

One possible way stakeholders may be able to identify and recruit suitable clients is through the implementation of a centralized health information sharing scheme located on a protected, tamper-proof network such as a blockchain (Zyskind, Nathan, & Pentland, 2015).
Importantly, protected health information (PHI), as defined by relevant legislation like HIPAA, cannot be securely stored on these types of networks (Buterin, 2016). However, it may be legally permissible to record and track information related to social services and community resource utilization on these types of networks. This is useful in identifying people who are high utilizers of public and private services and funding because a central agent could track people who repeatedly apply to social services through information available on such a network. Further prioritization could be achieved if this central agent also had access to PHI, such as emergency department admissions for overdoses. The agent could cross-reference the non-PHI information with PHI information. This process would foster a more comprehensive understanding of an individual’s utilization of public services. Flagging high utilizers in this way could provide a methodology for identifying potential candidates for coordinated case management programs.

Targeting individuals in this precise manner would require significant buy-in by a wide variety of stakeholders and a significant effort to integrate required data infrastructure, but if implemented it has the potential to identify, with high precision and high confidentiality, individuals who stand to gain the most from case management services. In addition, this type of data-tracking could be helpful to a wide variety of public and private funders of social services not only concerned with SUDs by immensely increasing the ease with which funders could identify the performance of individual service providers, and in response appropriately adjust funding to places where funders decide it is needed the most.

**Training and Assisting Case Managers to Prevent Insensitivity**

In this thesis, the author highlighted that case managers often inadvertently, and in some cases purposefully, are insensitive towards SUDs and other issues, like homelessness, that clients face. Evidence supports a relationship between traumatic events and mental health disorders,
SUDs, and homelessness. This thesis identifies trauma awareness as a tangible, operable framework through which case management program administrators can approach the problem of insensitivity within case management.

Insensitivity on behalf of case managers has a significant negative effect on the benefit clients receive from case management. However, there are specific ways that stakeholders can mitigate insensitive words and acts such as stigmatization and retraumatization as part of the case management process. This is especially important in the context of intensive case management where clients are more likely to discuss their past and potentially their past traumatic experiences. Regulators and case management providers should identify and implement relevant:

- **Trauma-informed training** programs like the Trauma Informed Care Project (Gladys, n.d.);

- Mental health awareness training such as Mental Health First Aid (“About Mental Health First Aid,” n.d.);

- Opportunities for case managers to visit or volunteer in places where they have first-hand exposure to the environments clients live in, like homeless shelters; and

- Opportunities to recruit and train new case management staff in extended recovery from SUDs.

Importantly, the scientific literature suggests that interpersonal training programs are more effective than virtual or paper-based training programs in disseminating best-practices like trauma informed care to health care providers (Kaner, Lock, McAvoy, Heather, & Gilvarry, 1999). In addition, the literature suggests that structured, interpersonal contact with people suffering from mental illness may reduce stigmatization of mental illness (Couture & Penn,
102

Health care payers and government payers also may have a responsibility to, in part, fund these educational and training programs.

Secondary trauma.

In addition, the literature suggests that healthcare providers who work with clients who often have very traumatic histories are at risk for experiencing ‘secondary trauma’ (Elwood, Mott, Lohr, & Galovski, 2011). This literature provides evidence that traumatic experiences among clients are transferred to case managers or other healthcare providers. In this way, case managers experience what is called secondary trauma. Although more research is necessary about the effects of secondary trauma among case managers on the quality of service provision, it is evident that this phenomenon contributes to provider burnout, which has negative implications for workforce retention (Sprang, Clark, & Whitt-Woosley, 2007). The participant accounts reviewed in this study plausibly suggest that part of the reason they often receive curtailed and insubstantial case management services may, in some way, be related to secondary trauma among case managers.

Case managers who frequently engage with clients who are likely to have traumatic pasts accordingly should have access to appropriate resources to cope with the traumatic experiences of clients. This is important for a wide variety of reasons, including to ensure the wellbeing of case managers, to ensure continuity of case managers by preventing case managers from leaving the profession or organization prematurely, and to ensure that case managers do not distance themselves from clients’ trauma in a way that clients feel is disrespectful.

Stronger Regulations Regarding Scheduling and Availability of Case Management Services

This thesis identifies significant opportunities for case management in terms of the scheduling processes and availability of case management programs. The lack of consistent,
predictable access to case management services was identified by participants of this study as significantly hindering their ability to access treatment, social services, and community resources. To increase reliable, regular access to case management, regulators should coordinate with healthcare providers to formally promulgate, and in the case that stakeholders determine that binding regulations are justified to mandate:

- Increased appointment duration of case management sessions, and
- Increased access to case management in inpatient settings like detoxification facilities (for example, at least once a day, even if case management is provided over the phone).

In addition, the research conducted in this study suggests that clients view technology, like smart phones and computers, positively. This is helpful in light of this study’s findings that case management programs could significantly benefit from a more formally regimented and coordinated scheduling process. Clients on the whole are open to integrating technology to increase the client’s own control over access to case management services. Specific areas identified as having potential for the integration of technology include:

- Areas relating to scheduling where case management programs can increase efficient communication to clients using cell phones and other technology, and
- ‘Outsourcing’ case management tasks to competent clients through teaching them how to use cell phones, email, and computers in order to track and engage with their own applications for services.

**Assisting Case Managers in Understanding Relevant Resources and Services**

This thesis reveals a need for case managers to be more aware of relevant resources and services that may be useful for clients, both on a local and regional scale. As such, this thesis identifies the necessity of regular, continuing meetings between stakeholders on a local level.
These meetings should be aimed at consolidating and documenting knowledge and experience with services on a local level. The focus of these meetings should be on both social determinants of health such as low-cost housing, as well as on clinical care, such as local physicians accepting Mass Health. As such, relevant stakeholders would include a wide variety of people and organizations including government social service providers; nonprofit social service providers like homeless shelters, public housing agencies and other low-income housing providers such as landlords of rooming houses; health care providers from community clinics and emergency rooms; and law enforcement/corrections personnel. In addition, a consumer representative who has received case management services could be represented at these meetings. Ideally, to accurately represent the current state of healthcare and social service systems, this consumer representative should be currently receiving case management services or have received case management services in the recent past (e.g. in the last year).

The literature suggests that the direction of such large-scale knowledge-sharing initiatives should be formally regimented and led by a discrete actor to ensure that the knowledge shared is understandable to all parties (Boh, 2007). In addition, to ensure that all stakeholders have a voice and to ensure comprehensive understanding of each stakeholder’s role, these meetings might be more effective if they were limited to a relatively small scale. It would be appropriate, for example, for a county government to identify one or a couple of social services agencies, such as Middlesex Human Service Agency Incorporated, to lead these meetings, since leadership in these organizations are likely familiar with all relevant stakeholders. An example stakeholders might look towards is a collaboration between healthcare providers and police departments in Plymouth County aimed at reducing opioid overdoses called Project Outreach (Harbert, 2017).
The knowledge consolidated about resources and services in these meetings should be made readily accessible in an electronic format that is easily updated to reflect changes or additions in service availability, and should be made available to case managers, clinicians, and other staff. The database should be published in a central regional location so that case managers who are less familiar with a client’s local area can connect clients with relevant local services. The responsibility of publishing this database likely would lie at the level of state government.

Not only would such a database be helpful for people with SUDs, but would also be helpful for low-income people who do not necessarily have SUDs, as well as for other types of people seeking health care.

**Summary of Policy Recommendations for Relevant Stakeholders**

The matrix below outlines which policy recommendations are relevant for which stakeholders. The categories across the top are defined as follows:

- **Community Resources/Social Services** broadly includes any privately funded and/or nonprofit services available to clients in their local communities. This may include homeless shelters, community centers or other similar institutions that may provide case management or other types of assistance to people with SUDs.

- **Treatment Centers, Healthcare Providers** refers to people and organizations that provide clinical health services or clinically oriented case management to people with SUDs.

- **Healthcare Payers** refers to institutions that reimburse healthcare providers for providing clinical healthcare services and case management. Some healthcare payers may provide case management services. The most important healthcare payer for low-income individuals with SUDs is the Commonwealth of
Massachusetts, and for certain subsections of this population the federal Medicare program.

- Regulators and Certifiers include the following two groups:

  - Regulators: Government institutions, mostly at the state level like the Massachusetts Bureau of Substance Abuse Services, that require case management programs helping people with SUDs to meet certain pre-defined standards.

  - Certifiers: Any institutions and groups that publish best practices for case management programs or institutions. This includes professional societies as well as independent certifiers like NCQA.
<table>
<thead>
<tr>
<th>Activity</th>
<th>Community Resources / Social Services (Homeless Shelters, Community Centers, etc)</th>
<th>Treatment Centers, Healthcare Providers</th>
<th>Healthcare Payers</th>
<th>Regulators and Certifiers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcoming case managers and other clinical staff in training and competency contexts</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engaging case managers and clinicians in training</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Addressing secondary trauma among case managers</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Organizing local meetings to disseminate knowledge about relevant resources and services</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attending local meetings to disseminate knowledge about relevant resources and services</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Addressing case management scheduling issues</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Supporting training of case managers</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Reviewing financial strains on intensive case management programs, redefine goals to make the best of case management given funding constraints</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Increasing adherence to care coordination process measures identified as helpful and important by this thesis</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Negotiating to ensure more substantial access to case management in inpatient contexts</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Working towards coordination of service utilization data infrastructure</td>
<td>✓</td>
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</tr>
<tr>
<td>Coordinating centralized service utilization data infrastructure</td>
<td>✓</td>
<td>✓</td>
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</tbody>
</table>
Conclusion

This study evaluates case management services received by people with low incomes and SUDs living in Massachusetts using semi-structured interviews. The interviews were analyzed using framework analysis. This analysis led to the identification of various, discrete programmatic aspects of case management that clients perceived as helpful and aspects that clients perceived as detrimental. Recommendations are made to relevant stakeholders on how to incorporate the findings of this study to improve case management services for the study population.

The findings of this thesis build on the knowledge base surrounding what kinds of services delivered in case management programs are conducive to positive performance on process and outcomes measures. Broadly, the findings suggest that poor performance on administrative case management processes as identified by the results of this study may be associated with poor performance on intensive case management services. A hypothetical pathway for this relationship could be that intensive case management programs may not have enough organizational capacity to comprehensively provide both administrative and more intensive services. This implies that for intensive case management programs, performance on process-based measures may be lacking in comparison to counterfactual scenarios where the case management program only provides administrative support along the framework of a brokerage case management program.

This suggests that in implementations of intensive case management programs, program directors must pay more attention to basic operational features and ensure proper administrative functioning of the program. This finding is pertinent in the context of publicly funded case management programs, which often may not have enough resources to ensure that case
management clients receive both brokerage and intensive case management services. The study suggests that not only may many case management programs perform poorly because they simply do not link clients with necessary services and resources due to administrative inefficiencies, but that these administrative inefficiencies themselves in some cases may adversely affect clients psychologically in ways that may prevent them from achieving extended recovery and positive health outcomes. These findings suggest that intensive case management programs may have an unrealized capacity to improve healthcare outcomes, if their performance on measures of administrative case management processes improves.
Appendices

Appendix A: Case Management Program Standards, Guidelines, and Regulations

Reviewed Standards and Guidelines for Case Management Programs Relevant to Individuals with SUDs

Section 1 - Practice Guidelines, Best Practices, and Licensure Requirements

- **Case Management Society of America (CMSA) Standards of Practice for Case Management**: CMSA is a nonprofit professional organization. A core function of this organization is to consolidate and disseminate evidence and best practices about Case Management. The organization's most recent practice guidelines, published in 2010, were reviewed.

- **Massachusetts Department of Public Health Bureau of Substance Abuse Services (BSAS) Standards of Care**: BSAS is a state agency that administers and regulates treatment services throughout the state of Massachusetts. The reviewed regulations are standards that every substance use treatment facility in the state of Massachusetts must meet in order to be certified by the state.

- **My Shared Care Plan**: This is a tool to help Case Managers and patients in planning care. The tool was developed through the Pursuing Perfection Initiative, a demonstration program aimed at determining concrete ways for healthcare providers to increase the quality of services they provide. Funded by the Robert Wood Johnson Foundation, the Program was implemented between 2001 to 2008 (“The Pursuing Perfection Initiative: Lessons on Transforming Health Care,” 2010). The tool is listed as a resource in the Medicare Chronic Care Management program (elaborated on below) fact sheet.
- **Joint Commission Comprehensive Accreditation Manual Behavioral Health Care (CAMBHC):** This document is not publicly available online. These guidelines determine the types and varieties of services that must be provided by case management programs in order to be certified by the Joint Commission. The Joint Commission certification is a requirement that various healthcare payers, such as Medicare and Medicaid Alignment initiatives, defer to (refer below).

- **National Committee for Quality Assurance Case (NCQA) Management Standards:** This document is not publicly available online. Massachusetts requires that OneCare health plans, the commonwealth’s experimental capitated managed care plan for MassHealth and Medicare dual enrollees be certified by NCQA. A central feature of OneCare plans is intensive Case Management. These Case Management programs must be certified by organizations like NCQA or the Joint Commission. (“Contract Between US HHS CMS in partnership with the Commonwealth of Massachusetts and Commonwealth Care Alliance, Inc., Tufts Health Public Plans, Inc.,” 2015).

- **Comprehensive Case Management for Substance Abuse Treatment,** an informational document published by SAMHSA to disseminate best practices in Case Management for individuals with Substance Use Disorders (“Comprehensive Case Management for Substance Abuse Treatment,” 2015). This publication is meant to serve as a manual for healthcare providers, social service providers, and any other organizations aiming to establish or improve case management programs.

- **CPC Care Management Guidelines:** The Comprehensive Primary Care Plus (CPC) initiative administered by the Centers for Medicare and Medicaid Innovation (CMMI) is a demonstration primary care medical home model aiming to determine best practices for
aligning financial incentives between large health providers, primary care practices, and health plans. Care Coordination is a service provided to high-need individuals in CPC implementations. CPC publishes guidelines for Case Management programs based off examples of successful Case Management implementations in various demonstrations.

- **VA Case Management Standards of Practice:** Guidelines describing essential elements of Case Management programs within the VA’s health care delivery system.

- **105 CMR:** Code of Mass. Regulations (CMR) about the Commonwealth’s Department of Public Health. Guidelines about Case Management programs for individuals with SUDs exist within the following regulations: [105 CMR 130](#) (Hospital Licensure), [105 CMR 168](#) (Licensure of Alcohol and Drug Counselors). Note: for [105 CMR 168](#) (Licensure of Alcohol and Drug Counselors), the kinds of skills Case Managers learn during their education may include principles that facilitate a strengths-based assessment, but this is not an explicit curriculum requirement by the licensure standards.

- **104 CMR:** Regulations about the Commonwealth’s Department of Mental Health (DMH). Guidelines about Case Management programs for individuals with SUDs exist within [104 CMR 29](#) (Case Management).

### Section 2 - Applicable Reimbursement Guidelines

This section covers reimbursement guidelines applicable to the study population of low-income individuals with SUDs living in Massachusetts. Commercial health plan policies were not reviewed since few low-income individuals receive health coverage through commercial plans.

- **Medicare Chronic Care Management (CCM):** Fact sheet about Case Management service codes under FFS Medicare. In order to qualify for CCM, a Medicare beneficiary...
must have multiple chronic conditions, which is the case for many individuals in the study population.

- **Psychiatric Collaborative Care Services (CoCM)**. This is a model of behavioral health care provision under FFS Medicare that includes Primary Care Physicians, Case Managers specialized in behavioral health, a Psychiatrist, and the patient in a care team that continuously communicates. All Services provided under this program are billed by the Primary Care Physician. (“Medicare Behavioral Health Integration Services,” 2017; 81 FR 80233, 80227). This initiative is being developed by CMS to incentivize physicians to provide Case Management and Care Coordination services to patients by reimbursing physicians and their staff for providing these services in FFS Medicare payment structures.

- **General Behavioral Health Integration (BHI)**. This is also a model of behavioral health care provision under FFS Medicare that must include the physician and the patient, and may include additional staff to perform Case Management roles. (“Medicare Behavioral Health Integration Services,” 2017; 81 FR 80233, 80236). This initiative is also being developed by CMS to incentivize the provision of Case Management services in FFS Medicare.

- **130 CMR**: Regulations about the Commonwealth’s Division of Medical Assistance, the statutory name of the Massachusetts Medicaid program. These regulations outline requirements health care providers must satisfy in order to receive reimbursement for providing services to people receiving health coverage through MassHealth. Guidelines about Case Management programs for individuals with SUDs exist within **130 CMR 429** (Mental Health Center Services), **130 CMR 415** (Acute Inpatient Hospital Services), **130**
CMR 403 (Home Health Agencies), 130 CMR 417 (Psychiatric Day Treatment), 130 CMR 418 (Substance Abuse Treatment Services), and 130 CMR 425 (Inpatient Psychiatric Care). Because 130 CMR 418 has unique policies for MassHealth members who are pregnant, this regulation was split between members who are pregnant and members who are not pregnant. Note: no regulations under 130 CMR specifically outline specific guidelines for the structure of individual Case Management sessions, so these regulations were not considered for session protocol characteristics.
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<th>105 CMR 190 (Provider Licensing)</th>
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<th>COC Case Management Standards of Practice</th>
<th>NOAA Ol Standards</th>
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<td>Provider Standards</td>
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<td>Case Management Program Participation</td>
<td>Yes</td>
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<td>Case Management Program Participation</td>
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<td>Applicable Reimbursement Guidelines</td>
<td>Review of Organizational and Operational Features</td>
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<td></td>
<td>Patient Involved in Developing Care/Discharge Plan</td>
<td>Case Managers Involved in Developing Care/Discharge Plan</td>
<td>Family Involved in Developing Care/Discharge Plan</td>
<td>Patient Has Access to Case Management Over Long Duration of Time (&gt;1 month)</td>
<td>Provider Should Ensure Continuity of Case Managers</td>
<td>Out-of-Office Case Management Provision (e.g., Phone Consultation)</td>
<td>Communication Between Case Managers and Physicians</td>
<td></td>
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<td>Medicare Chronic Care Management</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
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<td>Psychiatric Collaborative Care Services (CoCM)</td>
<td>Yes</td>
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<td>General Behavioral Health Integration</td>
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<td>130 CMR 405 (Community Health Center Services)</td>
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<td>130 CMR 418 (Substance Abuse Treatment Services) - Non-Pregnant Patients</td>
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<td>Yes</td>
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<td>130 CMR 416 (Substance Abuse Treatment Services) - Pregnant Patients</td>
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<td>practice guidelines</td>
<td>case manager should ask about client's history and health background</td>
<td>client identifies needs/opportunities</td>
<td>case managers teach clients self-management skills</td>
<td>SUD-specific guidelines</td>
<td>psychological competency</td>
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<td>cmsa standards of practice</td>
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<td>no</td>
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<td>no</td>
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<td>My Shared Care Plan</td>
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<td>SAHMSA CM for SUD Manual</td>
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<td>CPC+ Care Management Guidelines</td>
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<td>VA Case Management Standards of Practice</td>
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<td>105 CMR 164 (Licensure of Substance Abuse Treatment Programs)</td>
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<td>OneCare Regulations</td>
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**applicable reimbursement guidelines**

| General Behavioral Health Integration    | no                                                                  | no                                   | no                                               | no                      | yes                       |
| Psychiatric Collaborative Care Services (CoCM) | no                                                                  | no                                   | no                                               | no                      | yes                       |
| Medicare Chronic Care Management         | yes                                                                 | no                                   | yes                                              | no                      | no                       |
Appendix C – IRB Protocol

### Initial Application Form

**Project Title:** Patient-Centered Case Management for Individuals With Substance Use Disorders

**Principal Investigator:** Mary Brown

**Student Researchers:**
- Melina Mefter
- Status: Undergraduate

**Estimated Level of Risk:** Low

**Anticipated Start Date:** 4/17

**Anticipated End Analysis Date:** 12/15/17

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**1. Study Purpose**
- Class Assignment Only
- Presentation
- Evaluation/Assessment
- Paper
- Other

**2. Study Location**
- Yes
- No

This study will be conducted solely at the investigator’s home institution. If no, describe below:
The study will be conducted at the Community Department of Health and Human Services.

**3. Collaborations**
- Yes
- No

This study involves a collaboration or subcontract with an outside institution or vendor. If yes, describe below:
The study is being conducted at the Community Department of Health and Human Services.

**4. Existing Data**
- Yes
- No

This study involves the use of existing data, documents, pathological specimens, or diagnostic specimens. If yes:
- Data is publically available
- Authorization to access the data is available
- Other

**5. Participants to be Recruited**
- Adults (≥18+)
- Minors (<18)
- African American
- Older (≥75)
- Other

**6. Number of Participants to be enrolled**
- 20

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**7. Identifiers to be Collected**
- Name (First)
- Date of Birth
- Gender
- Social Security# (if applicable)
- Medical Record# (if applicable)
- License/Certificate# (if applicable)
- Biometric Identifiers
- Other

**8. Data Recording Methods**
- Handwritten Notes
- Video Recording
- Computer
- Photograph
- Audio Recording
- Other

**9. Collection Tools/Study Instruments**
- Online Survey
- Paper Survey
- Standardized Test
- Interview Guide
- Behavioral Measure(s)
- Other

**10. Administration Methods**
- In person (1-on-1)
- Online
- Telephone/Skype
- Other

**11. Deception**
- Yes
- No

Participants will be involved in deception.

**12. Additional Committee Approvals**
- Yes
- No

This study involves human blood, fluids, tissues, or cell lines; infectious agents; select agents; or rDNA. If yes, IBC Protocol # Approval Date

**13. Potential Risks**
- Social
- Psychological/Emotional
- Physical
- Other

**14. Compensation**
- Yes
- No

Compensation will be offered to participants. If yes, describe the nature (cash, gift card, etc.) of the compensation below:

**15. Informed Consent** (select all that apply)
- This protocol will follow standard procedures for obtaining documented informed consent.
- This protocol seeks an alteration to documented informed consent procedures.
- This protocol seeks a waiver of informed consent.
- This protocol involves parental consent/child assent.
- This protocol seeks a waiver of parental consent/child assent.

---

**Attached Documents**
- Assurance (signed PI Assurance or Faculty/Student Assurance)
- Protocol (following the Initial Application Guide & Checklist)
- Consent Documents/Information Sheets/Consent Scripts
- Recruitment Materials (flyers, sample e-mails, postings, scripts, etc.)
- Study Instruments (surveys, questionnaires, interview guides, etc.)
- Translation Certifications
- Permissions (Letter(s), Data Use Agreement(s), MOUs, etc.)
- Grant proposal
- International Research Addendum

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415 South Street, MS 116 • Bernstein-Marcus, Room 121 • Waltham, MA 02454 • T: 781.736.8133 • F: 781.736.2123 • irbe@brandeis.edu
Student & Faculty Assurance

for student-initiated research

Project Title: Patent-Centered Care Management for Individuals With Substance Use Disorders

Principal Investigator: Mary Brolin
Department: Heller
Phone: 617-571-2737
E-mail: mbrolin@brandeis.edu

Student Researcher: Michael M. Martens
Status: Undergraduate
Phone: 914-319-5849
E-mail: mmartens@brandeis.edu

My signature below indicates I understand my responsibilities as a student researcher, as outlined:

- I acknowledge and accept the responsibility for protecting the rights and welfare of the human research subjects and for complying with all applicable provisions of the Brandeis University Federally Mandated Assurance.
- I will submit a protocol for research involving human subjects to the IRB to determine compliance with applicable Federal regulations or provisions of this Assurance.
- I will provide a copy of the IRB-approved informed consent document to each subject at the time of consent; however, the IRB has specifically waived this requirement. All signed consent documents are to be retained in a manner approved by the Office of Research Administration.
- I will request review by the IRB for any proposed changes in previously approved human subject research. The proposed changes will not be initiated without IRB review and approval, except where necessary to eliminate apparent immediate hazards to the subjects.
- I will report progress of approved research, as often as and in the manner prescribed by the IRB, but not less than once per year.
- I will promptly report to the IRB any injuries or other unanticipated problems involving risks to subjects or others.
- No research investigator who is obligated by the provisions of this Assurance, any associated Inter-Institutional Amendment, or Noninstitutional Investigator Agreement will seek to obtain research credit for, or use data from, patient interventions that constitute the provision of emergency medical care without prior IRB approval. A physician may provide emergency medical care to a patient without prior IRB approval and approval, to the extent permitted by law, however, such activities may not be counted as research nor the data used in support of research.
- I will advise the IRB, Office of Research Administration and the appropriate officials of other institutions of the intent to admit human subjects who are involved in research protocols for which this Assurance or any related Inter-Institutional Amendment or Noninstitutional Investigator Agreement applies. When such admission is planned or a frequent occurrence, those institutions must possess an applicable OHRP-approved Assurance prior to involvement of such persons as human subjects in those research protocols.

Student: [Signature]
Date: 2/16/17

PI: [Signature]
Date: 2/16/17

415 South Street, MS 116 • Bernstein-Marcus, Room 121 • Waltham, MA 02454 • T: 781.736.8133 • F: 781 736 2123 • irb@brandeis.edu
Title of Study
Patient-Centered Case Management for Individuals With Substance Use Disorders

Purpose of Study
The US healthcare and social service systems are highly fragmented. This means that organizations in this sector tend to be specialized in a few limited domains of service, and individual organizations do not communicate with each other in any significant capacity. Successfully navigating this system requires a complex understanding of each relevant stakeholder's roles and capacities.

Fragmentation creates significant barriers to care in ways that adversely affect health outcomes for virtually all demographics. Populations in poor health and with low incomes experience more severe fragmentation, because they require a wider array of services. As accessing health care becomes more difficult, maintaining fair health becomes more difficult as well. In addition, from an economic standpoint, this creates significantly inefficient distribution of resources, as these patients are forced to wait until their health is in a critical state and then seek care in cost-intensive formats like emergency rooms.

Case management is an intervention designed to help patients manage this fragmentation. Case managers are professionals educated in the responsibilities and capacities of different actors in the healthcare and social service sectors. They help their clients by assessing what services clients need and then arranging for clients to receive these services.

The motivation for this thesis comes from the fact that in the context of substance use disorders, often significant barriers exist to effective case management. This thesis is aimed at determining from a patient’s perspective why case management is not enough to improve their health outcomes, and also determine from a patient’s perspective case management practices that are likely to improve patients’ health outcomes.

The potential benefits of this study will be the proposed adjustments to structure of and practices in case management for individuals with substance use disorders to help them in recovery and accessing services related to recovery.

Sponsor of study & COI
None
This research is part of the Brandeis University Senior Honors Thesis for the undergraduate HSSP Program
Dr. Mary Brolin - Senior Honors Thesis Advisor

Principal investigator’s professional qualifications
The evaluation for the project will be led by Dr. Mary Brolin from Brandeis University’s Institute for Behavioral Health within the Schneider Institutes for Health Policy at the Heller School for Social Policy and Management. Dr. Brolin has worked in the substance abuse field for 25 years and specializes in research and evaluation with community-based programs using mixed methods. Her research interests focus on the intersection of substance abuse treatment services with other service systems, including the criminal justice system. Dr. Brolin is the PI for the Worcester Initiative for Supported Re-entry (WISR), a project funded by The Health Foundation of Central Massachusetts and conducted in collaboration with Advocates, Inc. This new BJA
project, the Wiser Men Initiative, is an expansion of WISR. Dr. Brolin is also the PI for a re-entry project funded by the Massachusetts Attorney General’s Office and conducted with Spectrum. The Spectrum project provides case management support to individuals leaving MA Department of Correction facilities who are in need of medication assisted treatment. Dr. Brolin also leads the evaluation of the Massachusetts Access to Recovery (CSAT) project, a voucher program that provides recovery support services to offenders re-entering the community; and the Ayer-Concord Drug Court Program. Dr. Brolin was the lead evaluator for a diversion program for young adults with opioid problems who were involved with the criminal justice system. She has also led evaluations of adult and juvenile treatment drug court programs. Dr. Brolin received a Ph.D. from the Heller School for Social Policy and Management, a Masters in Social Sciences from the University of Chicago, and a B.A. in sociology from Boston College.

Student Researcher’s Qualifications
CITI: Social & Behavioral Research Investigators (expires 04/06/2018)
Related coursework: Epidemiology; Child Health and Well Being; Managing Medicine; History of Public Health; American Health Care Reform; Bioethics; Health, Community, and Society,
- Case Management Intern at Community Center where study is being conducted for 1 year
- Co-Facilitator of SMART Recovery (an addiction support group) since September 2016.

Other Research Personnel
Nina Lordi - main Case Manager at the Community Day Center of Waltham for three years. Ms. Lordi will help announcing research to patient population.

Results of Previous Related Research
Many case management interventions focus on developing psychological resilience like commitment to treatment, impulse management, and independent planning skills among patients. Evidence shows that these interventions are correlated with an increase in SUD patients entering and staying in treatment. However, these interventions do not have a significant effect on health outcomes among substance using populations, especially for vulnerable and marginalized populations.

To understand why case management struggles to improve outcomes, a discussion of current best practices in case management is relevant. Case management theory suggests that the role of a case manager is to help patients recognize that the patient and their community harbor within them the strengths the patient needs to succeed. This idea is based on the notion that patients will not be confident and invested in recovery if case managers focus on patients’ weaknesses and needs, but will be more confident and invested in recovery if case managers elucidate and focus on patients’ strengths.

In this way, strengths-based case management for individuals with substance use disorders is not dissimilar from self-management and self-care principles. Research in the field of self-management may be key to understanding how to increase the efficacy of case management for substance use disorders. Self-management is similar to strengths-based case management in that self-management seeks to help patients understand how the care and services they receive fit in with their social and physical environments.

Self-management best practices emphasize explicitly teaching patients how to apply their strengths and skills to the context of managing their disease. Strikingly, strengths-based
management protocols do not call for this, suggesting that the role of case managers is only to help patients realize innate strengths and skills, and not that case managers have a role to help patients apply these skills to managing their disorder.

As such, the study proposed in this IRB application hypothesizes that to increase the efficacy of case management for substance users, case management is more effective when case managers work with patients to help patients refine and apply internal skills and strengths to overcome barriers to recovery.

Subject Characteristics & Inclusion/Exclusion Criteria

The study population will consist of low-income and extremely low-income current or recent substance users. The participants will have received some form of case management related to their substance use disorder in the past 3 years. The participants will be currently living in Massachusetts. The participants will be recruited at a nonprofit community center in Massachusetts that has a case management program.

Participants will be excluded if they have not recently received case management services related to their substance use disorder. Participants will be excluded if they do not speak English.

There will be approximately 20 participants: approximately 15 male and approximately 5 female.

Justification for Use of any Special/Vulnerable Subject Populations

This study will interview low-income and extremely low-income substance users because these populations are most severely affected by fragmented health care and social service systems. The purpose of interviewing this population is precisely to understand how case management can help these populations more effectively navigate these systems.

The potential benefits to these populations are significant. Better case management can help them have a higher quality of life, less chance of relapse, and less recidivism.

The research also potentially benefits taxpayers and the commonwealth by reducing healthcare costs, costs of providing social services, and criminal justice costs.

Recruitment Procedures

Senior staff at the community center where the study will take place will make an announcement (attached to this document) about the study. Individuals agreeing to the study will be invited to be interviewed on the same day, to accommodate unpredictable schedules and commitments. The number of participants will be approximately 20. The Brandeis researcher will review the attached consent form with participants individually at the beginning of the interview. Anyone who does not consent will not be interviewed. Those who do sign can participate in the interview.

Study Design

This study is the senior thesis of the student researcher initiating this project. The thesis is an optional part of the Health: Science, Society, and Policy undergraduate major at Brandeis University.

The research question is: How can case managers better help people with substance use disorders apply their skills strengths to overcome barriers preventing patients from recovering from their disorders?
The study design is a qualitative assessment at a single point in time. The assessment will be in the form of an interview. The interview will assess the positive and negative experiences participants have had in case management programs.

This qualitative research design is chosen because the study seeks to evaluate from a patient’s perspective the broad, open-ended question of how case management can more effectively help patients.

The Brandeis student researcher will interview the participants and evaluate the responses through a content analysis of the interviews.

The internal validity of the study will be relatively high. The Brandeis student researcher has worked with the population at the community center as a case manager where the study will take place for over a year. The student researcher has established a positive rapport with many of the potential participants, which should lead to sincerity and honesty during interviews. The external validity of the study may be somewhat lower, because the study population is sampled from just one community center where most participants have received some form of case management. However, virtually every potential participant has also received case management in other settings not connected to the community center, which means many of the study's conclusions may be valid for the wider population with substance use disorders.

Procedures to be Performed

To ensure trust, participation, and agreement, senior staff at the community center will make announcements (attached) that the study will take place over a two-month period in the spring of 2017. The announcements will be made by the senior staff at the community center to clients on an individual basis.

Participants agreeing to be interviewed will be interviewed on the same day they agree, to maximize retention. Before the interview begins, a consent form (attached) will be explained and handed to the participant. The participant will be notified that they can opt out whenever they want, without any consequences. The participants who do not sign the form will not be interviewed, and the participants who do sign the form will be interviewed.

The interviews will be conducted by the Brandeis student researcher. The interviews will be semi-structured and will be conducted using an interview guide (attached). The interviews will be around 30 minutes long, and will be conducted in a private room with an unlocked door, so the participant may leave if he/she wishes to leave. The participant will be seated so he/she has unobstructed access to the door. 15-20 interviews will be conducted, broken down between around 15 men and around 5 women. No more than three interviews will be conducted in any one day. The interviews will continue until we reach saturation. The researcher will show their gratitude to the participants by giving them a handwritten thank you note.

Ethnicity, age, gender, employment status, living status, substance use history, and history with case management will be recorded. The interviews will be recorded using a handheld voice recorder. The last name of the participant will not be on the recording. The consent forms will be kept in a locked file cabinet at Brandeis University in Dr. Brolin’s office.

The interviews will be transcribed within one week after they are conducted. The transcript will use only an identifying number and not contain any names.

The interviews will be analyzed using ATLAS.ti software. The interviews will be evaluated based on grounded theories, meaning that the validity of some theories established ahead of time will be tested. The evaluation will also look for themes and theories that arise from the data.
Anticipated Risks and Benefits to Subjects

A risk to participants may be psychological distress. Another risk is that other people overhear the conversation, which may compromise the comfort or safety of participants, and may cause embarrassment or shame.

A potential benefit to subjects is that they may learn more about how to make the most of case management services they receive, or also learn about what case management services do not work well for them. They may able to use this information going forward to tell case managers how they would like case management services to be structured.

Provisions to Managing Risk

It will be explained to the participant that he/she can skip any questions or leave the interview at any time without any penalty. The door of the private room where the interview will take place will be closed, so nobody overhears the conversation, but will be kept unlocked so the participant may leave at any time. The interviews will only take place when enough staff are at the community center to manage the rest of the population. To maintain confidentiality and privacy, if a participant discloses criminal activities during the interview, the following measures will be taken. The recording of the interview will not contain the participant’s last name, and the transcript of the recording will only use a number to represent the participant. The interview facilitator may probe and discuss involvement with the criminal justice system in the recording with the participant, but if the participant begins to discuss the perpetration of any crime, the interview facilitator will tell the participant that this topic does not need to be discussed further and will steer the conversation away from the topic.

Cost and Compensation to Subjects:

The main cost to subjects will be time. A potential cost to subjects may be choosing to stop case management services if they realize as a result of this study that these services are not effective for them. The compensation to subjects will be a handwritten note expressing the researcher’s gratitude for their participation.

Plans for Obtaining and Documenting Informed Consent

The Brandeis researcher conducting the interview will review the Interview consent form with each participant at the beginning of the interview. Anyone who does not consent will not take part in the interview. Those who do sign the consent will be able to take part in the interview. The Brandeis researcher will also sign each consent form and give a copy to each individual and retain a copy in a locked file cabinet at Brandeis University in Dr. Brolin’s office.

Plans for Data Storage

Identifying ID number and participant characteristics will be kept in locked file cabinet in Dr. Brolin’s Office. Audio recordings and field notes that are electronically summarized will be stored on a secure computer system, with access limited to the evaluator. Study data will be destroyed no more than 1-2 years after the completion of the study. Electronic files will be deleted and paper files will be shredded.

Bibliography


Informed Consent for Participant Interview

What is the purpose of this study?

Researchers at Brandeis University are conducting a study about case management for substance use disorders. The purpose of the evaluation is to find ways case management can better reflect the needs of patients and can better

Who is conducting the study?

This evaluation is being conducted by an undergraduate student at Brandeis University in collaboration with a faculty member at the Brandeis University Heller Graduate School for Social Policy and Management.

Is participation voluntary?

Your participation is completely voluntary. You decide if you want to take part in the interview or not. If you don’t participate, there are no consequences, and you can continue to receive re-entry services from everybody at the Community Day Center. If you do take part in the interview, you are free to stop at any time.

What is involved in participation?

If you agree to participate, a researcher from Brandeis will conduct a 30 minute interview with you at this time. The researcher will also ask to record the interview to be sure we capture your responses. The digital recordings will be kept on a computer at Brandeis in password protected files that can only be accessed by researchers on the study. Nobody else will have access to the recordings. Answers to the questions and comments will be summarized across all interviews. No one will be identified by name or what a specific individual has said. Study records will be confidential as stated by law. No names will appear in any reports or papers of the findings. Paper forms will be coded with a number instead of a name. Study records will be stored in locked files at Brandeis. Records will be destroyed within seven years after the end of the study.

What are the risks and benefits of the study?
There are very few risks in taking part in the interview. One risk is the potential loss of privacy and confidentiality if the researcher collecting the data discloses information you share. We will minimize this risk by requiring researchers to be trained on confidentiality. Further, you may be uncomfortable talking about aspects of the services. You can choose to skip any questions. You may end the interview at any time, without any penalty.

There are no direct benefits from taking part in the interview. The interview will help us learn more about the re-entry services and how to make them better.

Will I receive compensation for my time?

We expect to take about 30 of your time. You will receive a handwritten thank you note. No other compensation will be provided. If you would like, we can be sure to share copies of study findings with you since you are contributing to the study.

What if I have questions?

If you have questions about your rights as a research subject please contact the Brandeis Institutional Review Board at irb@brandeis.edu or 781-736-8133. If you have any other questions, you may contact the student evaluator, Melchior Maetzener by phone at 914-519-8749 or by email at maetzener@brandeis.edu or the faculty advisor, Mary Brolin by phone at 781-736-5737 or by e-mail at brolin@brandeis.edu; or the Project Director, Britt Berthiaume, WCSO Reintegration Specialist,

AGREEMENT TO PARTICIPATE:

My signature here indicates that:

• I understand the above information about the study;

• I have had an opportunity to ask questions about the study;

• I am voluntarily choosing to participate; and

• I understand that I may quit the interview at any time without any impact to my participation in or interaction with the program.

Please check if you agree to be tape recorded:

☐

__________________________________________ ____________________
Participant Signature Date

PRINT Participant Name ________________________________
Thank you for taking part in the interview!

Revisions to IRB Protocol:

**Description and justification of proposed modifications**
This study has been going on since April 2017 and will be completed by December 2017. The research in the study involves interviewing individuals with Substance Use Disorders who receive Case Management services. After the interviews are conducted, they are qualitatively analyzed to determine what aspects of Case Management services participants find helpful, to determine what aspects participants do not find helpful, and to evaluate any proposed changes to Case Management that participants make. The aim of the study is to put forward guidelines for how Case Management services can better serve people with Substance Use Disorders, and to identify areas for further research in this area.

Since the beginning of the study, I have done significant work on the project. So far, 13 interviews have been completed and analyzed. Based on what I learned from the literature and from analyzing the completed interviews, it is appropriate to ask participants more detailed questions to determine to what extent specific approaches and processes highlighted in the Case Management literature as best practices are regularly applied.

While the completed interviews contain much valuable information that will inform recommendations and guidelines that the study will propose, the interview guide approved by the IRB in the study’s initial protocol does not ask participants whether specific approaches and processes highlighted in the literature are applied. For this reason, I would like to revise the interview guide to more precisely ask participants about whether they received these Case Management services that are informed by the literature.

As a result of these added questions, it is necessary to interview more participants than the study initially proposed. For this reason, I request that the IRB approves an increase in the study’s sample size from the initially proposed 20 participants to 30 participants.

**Effects on the risks and benefits to the subjects and the procedures that will be taken to manage the risk(s)**
The additional questions are not expected to have any effect on the risks and benefits to the subjects as described in the accepted IRB protocol. As such, no additional procedures will be taken to manage any risks.
Memorandum of Agreement  
Community Day Center of Waltham  
And  
Brandeis University  

This document represents an agreement entered into by the Community Day Center of Waltham and Brandeis University. The objective of this document is to clarify each partner’s commitment to conduct the research study entitled “Patient-Centered Case Management for Substance Use Disorders”. The goal of this research is to use qualitative research methodology and analysis to find ways case management for patients with substance use disorders can better help these patients achieve recovery.

The Community Day Center of Waltham agrees to:

1. Assist the researcher in announcing the study and recruiting participants  
2. Provide access to clients at the Community Day Center who fit the criteria for the study

Brandeis University agrees to:

1. Conduct an evaluation of the findings of the research  
2. To ensure complete confidentiality and privacy of the study participants

We, the undersigned, agree with the contents of this Memorandum of Agreement

Pamela Montalvo  
Name

Executive Director  
Community Day Center of Waltham

Title

Signature  
2/3/17

Melchior Maetzner  
Name

Student Researcher  
Title

Signature  
2/3/17
Appendix D – IRB Approval Documentation

IRB Approval

Institutional Review Board <marissah@brandeis.edu>  

Wednesday, April 05, 2017
To: Mary Brolin, Heller School
Student Researcher: Mei Meetzener
From: Marissa Hamilton, IRB Administrator
Re: IRB Protocol #1707B Brolin (Meetzener): Patient-Centered Case Management for Individuals with Substance Use Disorders

The Brandeis Committee for Protection of Human Subjects, operating under Federawide Assurance #FWA00004408, has approved the above-referenced human subjects protocol by expedited review in accordance with 45 CFR §46.110 under category (7).

This approval is valid for one year: April 5, 2017 - April 4, 2018.

If your research, including data analysis, will continue beyond the approval period, you must submit a Continuation Form in time to receive a new approval date before the previous one expires. You must submit this form at least 30 days in advance of your approval expiration.

If you wish to request modifications to your approved protocol, please submit a Modification Request to the Committee for review.

Upon completion of your work, you must submit the Final Report and Termination Form to the IRB office in a timely fashion.

Forms and procedures for Continuing Review Requests, Terminations, and Modification Requests are available at http://www.brandeis.edu/ora/compliance/irb/forms.html.

Please contact IRB Administration at irb@brandeis.edu or 781 736 8133 should you have any questions or require official notification to an outside agency.

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Friday, September 08, 2017
To: Mary Brolin, Heller School
From: Marissa Hamilton, IRB Administrator
Re: IRB Protocol #1707B Brolin (Meetzener) - Modification #1: Patient-Centered Case Management for Individuals with Substance Use Disorders

The Brandeis Committee for Protection of Human Subjects, operating under Federawide Assurance #FWA00004408, has approved Modification #1 to the above-referenced human subjects protocol by expedited review in accordance with 45 CFR §46.110 under category (7). This action is effective September 7, 2017. This action is not a continuation and does not alter the protocol approval expiration date of April 4, 2018.

With this action, the following modifications are approved:

1. Increase participant numbers from 20 to 30

2. Additional interview questions added

If your research, including data analysis, will continue beyond the approval period, you must submit a Continuing Review form in time to receive a new approval date before the previous one expires. You must submit this form at least 30 days in advance of your approval expiration.

If you wish to request modifications to your approved protocol, please submit a Modification Request to the Committee for review.

Upon completion of your work, you must submit the Final Report and Termination Form to the IRB office in a timely fashion.

Forms and procedures for continuing review requests, terminations, and modification requests are available at: http://www.brandeis.edu/ora/compliance/irb/forms.html.

Please contact IRB Administration at irb@brandeis.edu or 781 736 8133 should you have any questions or require official notification to an outside agency.
Appendix E — Interview Guide

Introduction
Thank you for taking the time to participate in this research study. I am a fourth year undergraduate student at Brandeis University, studying health policy and public health. I am doing this study as part of my final project at Brandeis. In this study I am trying to figure out how to make case management programs more helpful for people with substance use disorders.

1. Background on Case Management
I’m really interested in hearing the stories of your experiences with case management. I’d like you to walk me through your experiences over the last two or three years.

- Can you briefly describe to me the approximate times when you have received case management over the last 2-3 years?
- Through which organizations did you receive this case management?

(Researcher will bring a blank calendar to help participants remember times and durations of case management)

Ask these questions for every case management experience

At [place the participant received case management], how many different case managers did you have?

About how often did you meet with your case manager?

- Did you have appointments with your case manager over a period time longer than one month?
- Did you ever call your case manager on the phone, or did your case manager ever come to meet you in your community?
- Did your case manager ask you about your history and background?
- Did your case manager work with you to help you understand your strengths and abilities?
  - How so? Did your case manager fill out a specific worksheet with you?
- Did the case manager teach you specific skills to help you manage any problems or difficulties you have on your own?
  - What kinds of solutions did your case manager work on with you?
- What was positive or negative about meeting with the case manager on this schedule?
- Would you have changed the schedule if you could have? Why?
- Did you ever have to wait for the case manager or have to reschedule, or was the case manager always on time? Can you tell me about how this influenced your attitude about the case manager?

How would you characterize this case manager’s interest in your individual situation?

- How involved were you in making decisions about your plan of action?
- How involved was your case manager in making decisions about your plan of action?
- Did your case manager ask you if you wanted your family to be involved in your plan of action?
- Do you ever meet with your case manager and with your physician together?
- How did he/she signal their interest? What made you aware of his/her interest?
In what ways did the case manager ask you about your past? Your upbringing? Your community? Your friends and family?

Can you tell me about how useful these conversations were?
- Did you feel the case manager was helping you see how you could use these connections in recovery?
- If not, can you think of a way that you have used these connections to overcome a barrier to recovery?

In what ways did the case manager ask you about the challenges you face in recovery? Did you start these conversations?
- Did the case manager suggest to you how you could use your friends/family/community etc. to overcome these barriers? What kinds of suggestions did they make? If they did not, what kinds of suggestions do you think

What services did you and your case manager identify that you need?
- Tell me about your experience accessing these services with the help of the case manager

Can you tell me about what tasks relating to recovery the case manager showed you how to do on your own?
- Probes: schedule appts, research for services
- Did the case manager show you where to go and whom to ask when you need help doing these things?
- Do you think doing these things by yourself was helpful?

2. Final Case Management Questions

In what ways, if any, do you think differently about case managers that have personal experience with substance use?
- Do they provide a different quality of care than case managers without this personal experience?
- If they were a former user, how much did they share? Was this helpful? Did they share strategies to achieve recovery with you?

Have you ever had two or more case managers at the same time? Can you tell me about how this has been helpful or unhelpful?

How have you benefited the most from case management services?
- What improvements would have made case management services better?

3. Background Information on Participant
Age:
Ethnicity:
Gender:
Substance use history:
Current living situation:
Current employment status:
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