Mobilizing ACT Client Participation in Physical Activity Programs: Provider Perspectives using Qualitative Methods

by

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Supervisory Committee

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Abstract

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Background: Individuals with severe mental illness (SMI) have higher rates of physical comorbidities, such as cardiovascular disease and diabetes, which contribute to reduced life expectancy compared to the general population. Regular physical activity (PA) has proven efficacy at improving both physical and mental health outcomes in all persons. There is evidence that regular PA can also reduce the severity of psychiatric symptoms in individuals with SMI, including improvement of negative and neurocognitive symptoms in schizophrenia spectrum disorders. While currently available psychotropic medication is effective in managing positive symptoms, they have little or no effect on negative and neurocognitive symptoms, making regular PA a promising adjunctive treatment to pharmacological interventions. Despite the benefits of regular PA, individuals with SMI engage in PA at lower levels than the general population. Assertive Community Treatment (ACT) teams provide robust community-based support to individuals with SMI and are thus in a unique position to be able to provide support with PA engagement also.

Purpose: To explore ACT team member perspectives and experiences with positive PA program implementation and visions for future program design and delivery for this population.

Methods: A qualitative pragmatic a priori framework and implementation approach were used. Semi-structured interviews were conducted with ACT team members of various professional and paraprofessional designations. Interview questions were created using an appreciative inquiry lens and based on the Consolidated Framework for Implementation Research (CFIR) and focused on the CFIR domains of individuals involved, intervention characteristics, inner and outer settings. All interviews were recorded, and transcribed

verbatim, and thematic analysis was conducted using QSR International's Nvivo12® software. The CFIR was used to guide theming.

Results: Eight participants with an average ACT experience of 6 years were interviewed. All participants believed PA to be important for physical and mental health, and all expressed enthusiasm and willingness to be involved in the development, implementation, and ongoing delivery of PA programs for ACT clients. However, most participants felt only somewhat or not at all confident in their own ability to deliver PA programming effectively and safely. Regarding intervention characteristics, participants unanimously identified adaptability and flexibility as necessary. Participants unanimously believed that the organizational culture was supportive of PA, but that few if any tangible supports existed. Interview questions related to the CFIHR outer setting revealed three main themes: necessary resources, organizational culture, and an expectation of implementation. Only two participants identified resources available within Island Health, and no participants were aware of any resources currently available within the ACT teams. However, all participants were able to identify some community resources available.

Discussion: There was high motivation to deliver a PA program for ACT clients and positive beliefs about the benefits, but poor self-efficacy. To achieve successful implementation, additional training or supports, such as addition of a PA professional to the teams, should be considered. Participants resoundingly identified adaptability and flexibility as intervention characteristics necessary for implementation of a PA program in this setting. Fun, social connection, autonomy and incentive were identified as intervention characteristics that may improve client satisfaction. Some suggestions made by participants were the delivery of PA programming in a group format, and provision of choice in type of PA. In terms of inner setting, the structural characteristics of Island Health and the ACT teams include both strength and challenges to implementing new interventions. Island Health is a large organization with diverse knowledge, immense resources, longstanding and stable leadership structure, and organizational values of person-centred care and psychosocial rehabilitation that are congruent with implementation of a PA program for ACT clients. However, some participants believed the large size of the organization may create challenges to change and recommended a

bottom-up team-based approach to implementation of a PA program. Resoundingly, participants in this study identified the need for dedicated time, space, funding, and staff to provide PA programs to ACT clients, and that including PA in program mandates would support the implementation of this. Greater connection with external organizations such as recreation centres, through personal connections or planned partnerships, was identified as an additional way to support implementation of PA programs. In terms of process, a dedicated group of staff or special committee may be a necessary part of the planning process in this setting, and planning should include consideration for the requisite time and staffing. As identified by one participant in this study, a "champion" can be a critical part of the engaging stage. A formalized execution plan may be most efficacious in this setting. Ongoing reflection and evaluation will be necessary to ensure the sustainability and quality of a newly implemented PA program. This study, by using an appreciative inquiry approach, has already initiated the process of engaging individuals. Island Health leadership can further engage individuals by continuing the conversations started in this study, providing education, and training, and supporting the importance of PA for ACT clients.

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CHAPTER 1: INTRODUCTION

The physical and mental health benefits of regular physical activity (PA) are well established. Regular PA is effective in reducing the incidence of a plethora of physical ailments including coronary heart disease, type 2 diabetes, hypertension, and colon cancer, and it is effective in improving mental health outcomes (Lewis & Hennekens, 2016).

Despite the proven physical and mental health benefits to regular PA, most people do not engage in PA to the extent that would be necessary to realize these benefits. According to the 2013 report of the Chief Public Health Officer, only 35% of males and 30% of females aged 18-39 met the Canadian Physical Activity guidelines, and these percentages dropped in older age groups. In total, only 20% of Canadians were engaging in levels of PA adequate to realize the health benefits (Public Health Agency of Canada, 2016).

Individuals diagnosed with a SMI engage in regular PA at lower rates than the general population. For example, a comparison of individuals diagnosed with schizophrenia and individuals without a psychiatric condition showed a substantial difference (30% compared to 63% of the general population) in regular PA (Lindamer et al., 2008). Another study found that only 25% of individuals prescribed clozapine for treatment of a psychotic illness achieved the recommended 150 minutes of moderate to high intensity PA per week (Faulkner, Cohn, & Remington, 2006). Additionally, individuals who suffer from depression tend to be less physically active than non-depressed individuals, and reduced PA increases the risk of depression (De Moor et al.,

2006). The low baseline PA levels, although detrimental, also mean there is greater opportunity to increase PA in this population.

Individuals with a SMI also have increased rates of physical comorbidities and decreased life expectancy compared to the general population (Harris & Barraclough, 1998; Joukamaa et al., 2001). Some sobering examples of increased mortality compared to the general population include the association between schizophrenia and 15.14 years of potential life lost (Hjorthøj et al., 2017), and the correlation between severe depression and a 10-year reduction in life expectancy (Laursen et al., 2016). Cardiovascular and metabolic disease are significant contributors to premature mortality among this population (Charlson et al., 2013; Alberti, Zimmet, & Shaw, 2005). All of the aforementioned examples of increased risk of mortality have the potential to be mitigated through regular PA (Connolly & Kelly, 2005; Harris & Barraclough, 1998; Jochems et al., 2014)

Aside from the improved physical health outcomes associated with regular PA, there is evidence for its efficacy in improving mental health outcomes. Not only is regular PA correlated with improved mental health, but there is growing evidence that PA effectively reduces the severity of psychiatric symptoms in SMI (Connolly & Kelly, 2005), while reduced PA worsens psychiatric outcomes such as depression (Mammen & Faulkner, 2013).

The bidirectional relationship between PA and depression is just one of the challenges facing individuals with SMI (De Moor et al., 2006). Other commonly identified barriers to PA include lack of support and amotivation (Mittal, et al., 2017; Firth et al., 2016). While someone without a SMI may struggle to become and remain

motivated to change behaviour, an individual with a psychotic illness such as schizophrenia may be experiencing additional challenges due to the nature of their illness. Common negative symptoms of schizophrenia include amotivation and anhedonia, which may exacerbate the struggle to initiate and maintain a regular PA schedule. In fact, lack of motivation is one of the most identified barriers to PA engagement among individuals with SMI. One study found 45% of respondents claimed motivation as a personal barrier for PA engagement (Soundy et al., 2014).

Motivating engagement in PA in this population remains a challenge for healthcare providers, yet care providers who regularly interact with this population may be a crucial part of mobilizing PA initiatives. These professionals and paraprofessionals are in a unique position wherein they have regular interactions with clients that provide the opportunity to build rapport and support ongoing lifestyle changes, a robust understanding of the complexity of mental illness, and an opportunity to educate, motivate and facilitate PA.

Assertive Community Treatment (ACT) teams provide robust community-based support to individuals with severe and persistent mental illness (Davis, 2013; Island Health, 2021). Through this experience, ACT team care providers may have unique perspectives on and insights into what makes PA programs accessible for this population. Furthermore, ACT team care providers could be directly involved in PA program development, implementation, and ongoing delivery, and therefore may be an essential catalyst for successful health behaviours in this population. At present, the ACT teams in Victoria have no formal PA program or individualized supports for PA for the clients they serve.

As most new health care interventions are not efficaciously implemented on a large enough scale to significantly impact population health, this research placed emphasis on the implementation process (Milat et al., 2011). There are more than 60 frameworks for implementation research, one of the most commonly referenced being the Consolidated Framework for Implementation Research (CFIR) (McKay et al., 2019) The CFIR was used to structure this research and is discussed in greater detail in the following section. In brief, the CFIR consists of five domains: the intervention, inner setting, outer setting, individuals involved in the change, and the process of change (Damschroder et al., 2009). All five domains are interrelated and affect to what extent change is implemented. In the context of this research, all five domains will be directly affected by the ACT team members involved in eventual PA program development and delivery, and the CFIR therefore was a suitable choice.

Purpose Statement

The purpose of this study was to explore potential ways in which ACT client participation in PA programs could be optimized, through a qualitative examination of provider perspectives through an appreciative inquiry lens and implementation science approach using the CFIR. Participants will be asked their perspectives and opinions on the value of PA, necessary factors for successful implementation, program features to improve client satisfaction, currently available resources and supports, and resources and supports necessary for successful implementation of a PA program for ACT.

Research questions

The research questions I am seeking to answer with this study are as follows:

1. How important do ACT team members rate PA in this population?
2. How competent do ACT team members feel in delivering PA programs?
3. What PA program characteristics result in positive client experience?
4. In what ways can the organization (Vancouver Island Health Authority) better support PA programs?

Assumptions

There were several assumptions made in this study. First, it was assumed that the population of interest (ACT clients) was sufficiently homogenous for generalizable results. Second it was assumed that provider perceptions of ACT client experiences were reasonably accurate, although it is likely that there are some differences in perspectives.

Third, it was assumed that appreciative inquiry is an appropriate framework for this study and that participants had sufficient positive experience to make an appreciative exploration of the topic feasible.

Fourth, it was assumed that participants were honest and accurate in their responses. This was potentially greatly influenced by the interviewer's ability to establish rapport and trust, and the efficacy of question design and delivery. Participants were assured of anonymity and confidentiality, and the interviewer was mindful to approach all questions and responses in a non-judgemental way, to create an environment of safety in which to share experiences honestly. There is no feasible way to verify accuracy or honesty of interview responses, so good will on behalf of the participants will need to be assumed. It should be noted that we use the terms accuracy and honesty here to mean an accurate or honest account of the participant's perspective, not an ultimate truth. We

assume that participants will not misrepresent their perspectives due to social desirability or other influences.

Finally, it was assumed that personal biases toward PA would not significantly influence delivery of the interviews or interpretation of results. It is not possible for the interviewer to be a completely neutral observer because appreciative inquiry, by nature, requires interaction and exploration through a positive lens. Therefore, an extensive researcher statement has been included below to provide context to the reader, illuminate any potential personal biases, and enhance trustworthiness.

Limitations

There are some limitations that need to be addressed regarding this study. First, it should be emphasized that, this study focuses exclusively on provider perspectives. The perspectives of management, families, community partners and clients will not be considered within the scope of this study.

Another limitation comes from the heterogeneity of ACT clients. ACT teams provide services to individuals who meet three main criteria: 1) have a serious and persistent mental illness, 2) have functional impairments and 3) have a higher frequency of contact with services (Davis, 2013). However, clients vary greatly in every other aspect. This heterogeneity limits the generalizability of observations and findings. Ultimately, this is a population that requires robust and individualized support from service providers.

Additionally, appreciative inquiry in its entirety is a 5-component cycle: define, discover, dream, design, destiny (Davis, 2013) Cooperrider & Whitney, 2005). Due to limitations in time and resources, this study will be limited to the Discover and Dream

steps as it is purely exploratory. This study does not seek to develop or implement any changes. Further to this, application of the 5-D cycle requires whole-system inquiry or an appreciative inquiry summit, neither of which will occur within the scope of this study (Cooperrider & Whitney, 2005). Rather, this study will focus exclusively on the appreciative interview, taken from appreciative inquiry.

Appreciative inquiry also assumes that reality is created in the moment and that multiple realities exist. It emphasizes the importance of valuing differences and of being a generative process that engages all stakeholders (Hammond, 2013). Due to limitations in time and resources, this study only considers provider perspectives. Future studies with the capacity to facilitate change over a longer period should engage all stakeholders in the complete appreciative inquiry process.

Recall bias creates another limitation to this study. Participants were asked about their personal experiences with PA and PA program development and implementation in the context of their work. Personal recall is influenced by personal beliefs and perspectives, and can be inaccurate, however, there is no alternative means to collect this information for this research.

Finally, social desirability bias may have influenced results. Participants were asked about experiences and perspectives that relate to their career. It is likely that answers will be phrased in a way that reflects favorably on participants. Additionally, being physically active is valued in our culture, and the social desirability of PA engagement itself may influence responses. The interviewer was mindful and made every effort to develop good rapport and to emphasize that there are no right or wrong

responses. Responses were likely still influenced to some degree by social desirability bias, and it is important to keep this in mind when interpreting results.

Delimitations

The parameters I set for this study were to focus exclusively on provider perspectives from ACT teams in Victoria, British Columbia. All four ACT teams based in Victoria were included. Results cannot be generalized beyond this population. Further research will be required before making recommendations for ACT teams in different communities. Additionally, these results are only relevant in the context of ACT teams, they are not generalizable to other services as ACT is a highly specialized and unique service.

Researcher statement

To provide the reader with context for how I may be influencing results, I will outline my personal history with PA and mental health care, and my opinions thereof.

I grew up being physically active and spending most of my childhood outdoors. As an adolescent I became involved in competitive sports and, at age 23, I signed my first professional contract with a World Tour level road cycling team. I trained up to 30 hours per week and competed internationally. I retired from professional sport at age 28 following several serious injuries, but continued to be extremely physically active. I returned to Victoria, returned to school, and began working as a frontline staff for the Island Health Authority in Mental Health and Substance Use Services.

PA has become so entrenched in my lifestyle and my identity that I perceive it as a necessity. I notice an immediate positive effect when I exercise, and an immediate

negative effect when I am sedentary. My personal experiences with sport positively affecting my mental and physical health have led me to believe that PA is a vital component of overall wellbeing.

When I began working in Mental Health and Substance Use services several years ago, I was working at an outpatient clinic providing services to individuals that were minimally impacted by their illness. My average client thrived in community with minimal support, had a vocation, had functional interpersonal relationships, and was able to engage fully in their recovery. I witnessed the efficacy of psychosocial rehabilitation, including PA interventions such as yoga or walking groups, in a population that was able to participate in these programs with minimal challenges. I then began working on outreach services for individuals with severe mental illness and/or addictions, but still saw clients benefiting from PA interventions despite additional barriers to participation. I witnessed clients participating in yoga, going to the gym, going hiking and going bike riding despite social stigma, substance use, and overt symptoms of mental illness such as psychosis. Not only were they partaking, but they were also often reporting that they enjoyed PA and that they perceived mental and physical health benefits from it. These experiences have led me to believe that PA interventions are feasible and beneficial for individuals with mental illness and/or addictions.

My experience with sport and my experience in Mental Health and Substance Use services have undoubtedly given me a positive view of PA and a belief that anyone can participate in regular PA to improve both their mental and physical health. I was aware of how I presented myself during the interviews and surveys to minimize the potential influence of social desirability bias as well as my own personal bias on results.

Operational Definitions

For the sake of this study, physical activity is defined as any bodily movement produced by skeletal muscle that results in energy expenditure (Caspersen et al., 1985). The definition therefore encompasses a larger array of activities than exercise and is not related to health or skill measurements. PA includes exercise and sports, but also activities related to transport, daily living, and other tasks so long as these require movement and energy expenditure.

Severe mental illness (SMI), to date, lacks a global consensual definition (Zumstein & Riese, 2020). It is a concept that refers to a patient population rather than single disease or disorder, and includes the commonly accepted dimensions of diagnosis, disability, and duration. In this study, SMI is defined as psychotic disorders or bipolar disorders causing significant impairment, as this is the definition used for ACT program admission criteria (British Columbia & Ministry of Health Services, 2008).

CHAPTER 2: REVIEW OF LITERATURE

Impact of Mental Illness on Society

The prevalence of mental illness in Canada is shocking. Every year, 20% of Canadians will experience a mental illness or addiction and 50% of Canadian adults aged 40 and older have experienced mental illness or addiction in their lifetime (Smetanin et al., 2011). Not only is mental illness incredibly widespread, but it also has serious personal, social, and economic consequences. The Centre for Addiction and Mental Health (CMAH), Canada's largest teaching hospital and research center dedicated to mental health, currently cites the economic burden of mental illness in Canada at $51 billion per year and the leading cause of disability in Canada (Lim et al., 2008; *Mental Illness and Addiction*, 2021). This is a problem that will affect us all, either directly or indirectly, in our lifetimes.

There is a preponderance of evidence for the bilateral relationship between physical and mental health. There are significant associations between non-psychiatric medical diagnoses and major depressive disorder (Patten et al., 2005). Poor physical health can trigger or exacerbate mental illness, such as anxiety and depression, and mental illness is associated with worse physical health outcomes and decreased life expectancy (Hjorthøj et al., 2017; Laursen et al., 2016). An analysis using health-adjusted life years (HALY) to quantify the burden of mental illness in Ontario estimated that the burden of mental illness was greater than the total burden of the four most prevalent cancers combined. In Ontario, approximately 350,000 HALYs were lost due to all cancers and more than 600,000 HALYs were lost due to mental illness and addiction (Ratnasingham et al., 2013). Mental illness irrefutably decreases an individual's quality

of life, but also increases the disease burden on the health care system, not just with the mental illness but with the associated increase in other disease and mortality (Alberti et al., 2005; Charlson et al., 2013; Harris & Barraclough, 1998; Hjorthøj et al., 2017; Joukamaa et al., 2001).

There is also great economic impact from mental illness in addition to the cost of providing care for mental and concurrent physical disease. Mental illness is the leading cause of short-term and long-term disability (Lim et al., 2008). Not only does mental illness result in disability leave, the cost of disability leave for mental illness is approximately twice that of leave for disability claims related to physical illness or injury (Dewa et al., 2010). Analysis of a Canadian resource sector company found mental disorder to be the third most common disability episode and the most expensive, costing an average of $18000/episode, almost double the $9027 cost of average episode for all categories of claim (Dewa et al., 2010).

In addition to being a frequent reason for disability claims and being associated with more lengthy and costly disability leaves, individuals with mental illness are more likely to be unemployed, with up to 90% of individuals suffering from schizophrenia being unemployed (Marwaha & Johnson, 2004).

Prevalence of Severe Mental Illness and Typical Treatments

Schizophrenia is a severe mental illness affecting approximately 0.28% of the global population (Charlson et al., 2013). It is characterized by a triad of symptoms: positive, negative, and neurocognitive. Positive symptoms include hallucinations and delusions, negative symptoms include amotivation, anhedonia and flattened affect. Neurocognitive deficits include impaired perception, memory and attention (De Moor,

Beem, Stubbe, Boomsma, & De Geus, 2006). Antipsychotic medications are the primary treatment for schizophrenia. These medications can reduce positive symptoms but have minimal efficacy in treatment of negative symptoms or neurocognitive deficits (Gold, 2004; Reynolds, 2007).

Additionally, antipsychotic medication is notorious for a plurality of side effects that significantly impact individuals' overall health and quality of life. Typical antipsychotic (first generation) medications are associated with sexual dysfunction, extrapyramidal side effects, psychological side effects and sedation. These side effects are reported as distressing by patients and contribute to negative attitudes toward medications and reduced medication compliance in this population (Lambert et al., 2003).

In 1996, atypical (second generation) antipsychotic medications were first introduced in Japan, and eventually globally, with the hope of reducing the side effects associated with typical antipsychotic medications and improving quality of life (Miyamoto et al., 2006). However, atypical antipsychotic medications contribute to weight gain, obesity, cardiovascular disease and diabetes (Reynolds, 2007), and there is new evidence that these medications can cause insulin resistance and weight gain directly, independent of illness (Burghardt et al., 2018). This cluster of side effects, referred to as metabolic syndrome, further reduces the physical health and quality of life of an already at-risk population (Alberti et al., 2005).

Physical and Mental Health Outcomes among Individuals with Severe Mental Illness

Individuals with a SMI have increased rates of physical comorbidities, such as obesity, leading to a decrease in life expectancy compared to the general population (Harris & Barraclough, 1998; Jochems, et al., 2014; Joukamaa et al., 2001).

Cardiovascular and metabolic disease are significant contributors to premature mortality in this population (Charlson et al., 2013). Some sobering examples of increased mortality compared to the general population include the association between schizophrenia and 15.14 year reduction in life expectancy (Hjorthøj et al., 2017), and the correlation between severe depression and a 10-year reduction in life expectancy (Laursen et al., 2016).

Benefits of Regular Physical Activity

Ultimately, a plurality of factors results in increased morbidity and mortality among individuals with SMI, but poor physical health outcomes can be at least partially attributed to low levels of PA, which makes PA programs a potentially efficacious adjunctive treatment for this population. The Canadian Society for Exercise Physiology (CSEP) released the Canadian 24-hour movement guidelines that provide recommendations, based on age group, for the level of physical activity, sedentary behaviour and sleep are recommended (Ross et al., 2020). The official guide recommends 150min per week moderate to vigorous aerobic activity, muscle strengthening exercises at least twice per week, and several hours of daily light physical activity. Additionally, 7 to 9 hours sleep and no more than 8 hours sedentary time and no more than 3 hours recreational screen time are recommended. However, accelerometry data from 2016 and 2017 showed that only 16% of Canadians achieved the recommended 150 minutes in bouts of 10 minutes or more, only 46% of Canadians accumulated 150 minutes of total moderate to vigorous PA, and 3% engaged in no moderate to vigorous PA (Clarke et al., 2019). The document also states that following these guidelines “lower risk of mortality, cardiovascular disease, hypertension, type 2 diabetes, several cancers, anxiety,

depression, dementia, weight gain, adverse blood lipid profile; and improved bone health, cognition, quality of life and physical function" (Ross et al., 2020). There is an abundance of evidence supporting the link between physical activity and improved mental and physical health (Chimen et al., 2012; Harsha & Berenson, 1995; Warburton et al., 2006).

Physical Activity Prevalence and Benefits among Individuals with Severe Mental Illness

Despite the efficacy of PA in improving health outcomes, individuals with SMI engage in regular PA at lower rates than the general population (Faulkner, Cohn, & Remington, 2006; Lindamer et al., 2008). For example, a comparison of individuals diagnosed with schizophrenia and individuals without a psychiatric condition showed a substantial difference (30% compared to 63%) in proportion to those who engaged in regular PA (Lindamer et al., 2008). Another study found that a mere 25% of individuals prescribed clozapine for treatment of a psychotic illness achieved the recommended 150min of moderate to high intensity PA per week (Faulkner et al., 2006).

There is a complex relationship between PA and health outcomes, and motivating engagement in PA has been a challenge for health care providers. Individuals with SMI face unique barriers to PA engagement. For example, individuals who suffer from depression tend to be less physically active than non-depressed individuals, yet reduced PA increases the risk of depression (De Moor et al., 2006). The bidirectional relationship between PA and depression is just one of the challenges facing individuals with SMI. Other commonly identified barriers to PA include lack of support and amotivation (Mittal et al., 2017; Firth et al., 2016).

Physical Activity Promotion as a Potential Therapeutic Target

Ultimately, a plurality of factors culminate in increased morbidity and mortality among individuals with SMI, but poor physical health outcomes can be at least partially attributed to low levels of PA. The potential for regular PA to improve health outcomes and the challenges of engaging this population in PA has fueled interest in innovative PA program design. While there is an abundance of literature on PA and PA interventions for individuals experiencing mental illness, there is a paucity of literature on the effective implementation of PA programs on ACT teams, and no studies were found on PA program implementation for ACT teams in British Columbia. The geographic location of the service is relevant here as Mental Health Act legislation governing mental health interventions and program mandates are provincially regulated. Due to the highly specialized nature of ACT, wherein clients are experiencing SMI but remain in a community setting with the robust support of this specialized service, studies focusing on other outpatient mental health clients or inpatient settings were not referenced here (British Columbia & Ministry of Health Services, 2008; Davis, 2013; Island Health, 2021).

Of course, central themes and values, such as client centred care and client autonomy were considered. This is in line with Island Health values of client centred, trauma informed and culturally sensitive care (Island Health, 2021), and there is some evidence in the literature that client-centred approaches to PA interventions have been efficacious in other mental health and substance use services. For example, Graham et al., (2017) recently conducted study on client-led exercise programs in a community based

mental health service and concluded that this novel approach to PA in this setting empowered service users to experience increased autonomy in their recovery.

The purpose of this research was to expand the understanding of the specific needs, strengths and challenges faced by ACT teams in Victoria, BC, to move towards development and implementation of a PA program in this context. Without effective implementation strategies, the majority of novel health interventions are not implemented on a scale large enough to effect significant improvement in population health (McKay et al., 2019). The Consolidated Framework for Implementation Research (CFIR) was chosen as an appropriate tool and is discussed in greater detail below (Damschroder et al., 2009).

Assertive Community Treatment

The unique nature of Assertive Community Treatment (ACT) teams may make this service particularly effective at promoting PA initiatives for individuals with SMI. These interdisciplinary teams were first created to provide community-based support for individuals with mental illness severe enough to traditionally necessitate in-patient treatment, either in hospital or a residential facility. Following the deinstitutionalization of mental health care in the 1970s, these types of services evolved to support individuals failing to manage activities of daily living. The first version of ACT was developed in the United States in the 1970s and was known as the Training in Community Living Program (Davis, 2013).

ACT teams provide intensive community based support to individuals with severe and persistent mental illness (British Columbia & Ministry of Health Services, 2008; Davis, 2013). ACT teams are mandated to provide holistic support, including support

with recreational activities (British Columbia & Ministry of Health Services, 2008; Island Health, 2021). The current British Columbia ACT program criteria is for this service to provide support to individuals with severe and persistent mental illness causing significant disability, with priority given to psychotic and bipolar illnesses (British Columbia & Ministry of Health Services, 2008). Additionally, the ACT model recommends providers meet with clients more frequently than other services, at least several times per week (British Columbia & Ministry of Health Services, 2008; Davis, 2013). These unique characteristics make ACT conducive to exploring PA program design and implementation for individuals with SMI.

Consolidated Framework for Implementation Research

It is important to consider implementation of any proposed intervention, as most interventions fail at the implementation stage (Meaney & Pung, 2008). Without effective implementation into regular practice, the efficacy of a proposed intervention becomes irrelevant. There are more than 60 implementation frameworks available, the Consolidated Framework for Implementation Research (CFIR) being one of the most often cited and identified by an International Delphi Process as being one of the top implementation models in the physical activity domain (McKay et al., 2019).

Additionally, the CFIR has been used across a wide range of studies and research designs, including many studies aimed at the identification of barriers and facilitators of implementation rather than outcomes as is the case with this study (Kirk et al., 2015). One advantage of the CFIR is that it can be used to identify modifiable factors to promote adoption, implementation and maintenance, making it a pragmatic choice for this study (King et al., 2020). Finally, it has been used extensively in healthcare settings and to

develop PA interventions in schools and childcare settings and therefore has demonstrated utility. For example, the CFIR has been used in primary health care (Low et al., 2019), mental health care (Vest et al., 2020) and physical activity policies (Wolfenden et al., 2015).

The CFIR was created through the review and consolidation of existing models and theories where there was strong conceptual or evidential support in the literature for influencing implementation. CFIR includes five domains: the intervention, inner setting, outer setting, individuals involved in the change, and the process of change. All five domains are interrelated and affect to what extent change is implemented (Damschroder et al., 2009).

Intervention characteristics include the intervention source, whether it is internally or externally generated and the perceived legitimacy of the source. Also, the strength and quality of evidence in support of the proposed intervention and the perceived relative advantage. The adaptability, trialability, complexity and cost are additional aspects of intervention characteristics that will affect implementation. Finally, the perceived quality of the proposed intervention will also impact implementation success.

The outer setting refers to the economic, political, and social context within which the organization is embedded, while the inner setting refers to the structural, political and cultural context within the organization where the implementation process will occur. The inner and outer setting are overlapping and dynamic, dependent on the specifics of the implementation effort. Generally, the outer setting refers to the patient needs and resources, cosmopolitanism or the degree of networking between the organization and other organizations, peer pressure, and external policies and incentives. The inner setting

typically encompasses the structural characteristics of the organization, networks and communications within the organization, organizational culture, and implementation climate within the organization. The implementation climate of an organization refers to the tension for change, compatibility of the proposed intervention with the organization, how the proposed intervention is prioritized, organizational rewards and incentives for implementation and support of a learning climate.

The individuals involved in implementing a new intervention and the dynamics between individuals involved and the organization these individuals are a part of will also impact implementation success. Individuals' knowledge and beliefs about the intervention, individuals' self-efficacy as it relates to implementing the intervention, individuals' stage of change in relation to the intervention, individuals' identification with and relationship with the organization, and other personal attributes will all greatly impact the implementation process.

Finally, the fifth construct in the CFIR is process. This is the four essential activities to implementation of new interventions: planning, engaging, executing, and reflecting and evaluating. The goal of planning is to create local capacity for the intervention to be implemented, so consideration of stakeholder needs and perceptions is essential. Also, to create or adapt an intervention appropriate for the target demographic, which will be of particular importance when developing an intervention for ACT clients. The planning stage should also include appropriate communication and strategies to simplify execution. The activity of engaging will focus on using education, role modeling, training, and similar activities to attract and involve appropriate individuals. This may include opinion leaders, who have formal or informal influence on the attitudes

and beliefs of others within the organization, appointed implementation leaders, champions for the cause, or external change agents such as hired consultants. Following planning and engagement, the execution stage may be formal or informal and encompasses all activities related to the actual implementation of the intervention. Finally, sustained and successful implementation of high quality interventions will require ongoing reflection, evaluation and adjustments using both quantitative and qualitative feedback about the progress and experience of the new intervention (Damschroder et al., 2009).

It should be noted that 100% implementation is not a realistic goal. In fact, most studies show positive results from approximately 60% implementation and few studies achieve greater than 80% implementation (Durlak & DuPre, 2008). However, higher levels of implementation increase the probability of the intervention being successful and therefore increases the potential benefit to participants (Durlak & DuPre, 2008).

Appreciative Inquiry

Beyond implementation frameworks, other approaches have been utilized in organizational change initiatives. Appreciative inquiry is one approach that is unique in that it shifts the focus from a problem or deficit focus to a positive or strength focus and a review of appreciative inquiry in health care found high levels of participant enthusiasm and commitment, suggesting appreciative inquiry was positively perceived in this setting (Trajkovski et al., 2013). With the study situated in Island Health, an appreciative inquiry lens was adopted and used throughout this study as it aligned with the Island Health values of strength based and client centred care, and has demonstrated feasibility and acceptability in health care settings (Island Health, 2021; Trajkovski et al., 2013).

Furthermore, appreciative inquiry has demonstrated effectiveness in health care interventions. For example, an appreciative inquiry intervention in hypertension self-management found increased positive emotions and self-efficacy in chronic disease management, potentially increasing positive behaviour change (Olayinka et al., 2020). Appreciative inquiry has also been used with positive results in physical activity and weight loss interventions (Gray et al., 2019; Teevale & Kaholokula, 2018).

Appreciative inquiry emphasizes metaphor and narrative, therefore lending itself well to a qualitative study. However, appreciative inquiry differs from other approaches in that it focuses exclusively on the positive; it examines strengths, visions, and goals. Appreciative inquiry asks unconditionally positive questions based on the concept that the questions most asked shape the focus of an organization and drive the direction of growth. Rather than focusing on deficits, appreciative inquiry focuses on inherent positive attributes (Cooperrider & Whitney, 2005).

Appreciative inquiry is a philosophy of change based on the assumption that change can be most effectively catalyzed through the identification of existing strengths (Cooperrider & Whitney, 2005). Appreciative inquiry is a radically positive approach to change management, and this fundamentally strength based and inclusive approach creates commitment and confidence in stakeholders (Hammond, 2013). Central to appreciative inquiry is the appreciative interview, a semi-structured dialogue that utilizes positively phrased questions to explore highpoint experiences, values and visions of the future. This approach necessitates the selection of affirmative topics, requiring reframing of deficit issues, fundamentally shifting thinking and dialogue about the topic (Cooperrider & Whitney, 2005).

Appreciative inquiry is based on five main principles:

1. The Constructionist Principle – reality is the result of interaction between individuals and the environment. The language we use affects our social environment, and using positive language therefore leads to positive results (Cooperrider & Whitney, 2005). The questions in the study are carefully worded to explore participants' positive experiences.
2. The Simultaneity Principle – inquiry and change occur simultaneously. The process of inquiry itself evokes change in the subject of inquiry (Cooperrider & Whitney, 2005). In traditional research, it is assumed that the researcher discovers data, or ultimate truth, but in AI it is assumed that researchers create reality (Barrett &Fry, 2005; Cooperrider & Whitney, 2005).
3. The Poetic Principle – Life and human experience is expressed through stories and these stories can be interpreted in multiple ways (Cooperrider & Whitney, 2005).
4. The Anticipatory Principle – anticipation of future events influences current behaviour. Based on this, it follows that positive expectations fuel positive behaviours (Cooperrider & Whitney, 2005).
5. The Positive Principle – positive outcomes are fueled by positive attitudes and discourse (Cooperrider & Whitney, 2005). This is not to imply that AI disregards deficits or negative human experience, but rather that inquires about these in a positive and constructive manner (Barrett & Fry, 2005).

In addition to these principles, appreciative inquiry is based on 8 assumptions: every person, group and organization is doing something right; their focus becomes their reality; reality is created and multiple realities exist; questions influence answers; it is constructive to carry something known forward; differences in perspective and experience are valuable; language influences reality (Hammond, 2013).

Appreciative inquiry is an ongoing process of inquiry and change that can be conceptualized using a 4-D or 5-D model: define (not always included), discover, dream, design, delivery/destiny (Cooperrider & Whitney, 2005; Hammond, 2013). First, the topic of inquiry needs to be clearly defined so that effective questions can be formulated (Hammond, 2013). The discovery and dream phases utilize the appreciative interview to explore what has worked in the past, current strengths, and desired future outcomes. From here, convergent thinking is used to compose possibility statements for a mutually agreed upon future. The possibility statements composed in the design phase drive the ongoing process of change and learning of the delivery/destiny phase (Cooperrider & Whitney, 2005; Hammond, 2013).

This approach to change is based on the theory that human behaviour within groups is driven by the need to have a voice and be heard, to be seen as an integral part of the group, and to be seen as unique within that group (Cooperrider & Whitney, 2005). Appreciative inquiry works by creating 6 essential conditions that meet the aforementioned needs. First, appreciative inquiry seeks to explore individual perspectives and strengths. It values individual perspectives and is inclusive rather than grouping and thereby depersonalizing individuals by professional designation or some other shared trait. Second, appreciative inquiry provides the freedom to be heard by providing

opportunity for each person to speak free from external pressures such as group dynamics and power imbalances that would come into play in normal discourse. Third, appreciative inquiry creates the "freedom to dream in community" by bringing together diverse people within an organization to share goals and desires for future. Fourth, appreciative inquiry allows individuals to choose to contribute and the freedom of choice inherently increases commitment. Fifth, appreciative inquiry is a whole system approach to change, and this creates an environment of support. Finally, appreciative inquiry is inherently positive and this shift from deficit-based thinking to positive discourse and action energizes and excites people (Cooperrider & Whitney, 2005).

The interviews in this study are designed to facilitate the Discovery and Dream phases. The questions first explore the participant's strengths and experiences, and then moves on to an exploration of possible solutions, improvements, and strategies for positive change. The data will then be compiled and analysed for emergent themes that will support the Design phase wherein the researcher can begin to make recommendations for future development and implementation of PA programs for ACT clients in Victoria, BC. The Destiny phase begins to take place when the researcher communicates the conclusions made in the Design phase to Island Health leadership so that changes can begin to be made in practice.

Conclusion

Individuals with SMI have worse health outcomes and lower life expectancy than the general population. The causes of increased morbidity and mortality are complex, but can be at least partially contributed to low levels of PA. The potential for PA to improve health outcomes and the ongoing challenge with motivating engagement has fuelled interest in

innovative program designs such as client-led physical activity programs. Few if any implementation focused studies could be found in the literature but, as Durlak and Dupre highlight, implementation is essential to achieving outcomes. Ultimately, the effective implementation of efficacious interventions should improve the quality of life and health outcomes of individuals with SMI and thereby reduce the global disease burden. It appears that there is a paucity of evidence with no studies addressing implementation within clinical mental health PA programming nor any using an appreciative inquiry lens to explore potential provider perspectives on past successes in promoting PA engagement, or perspectives on potential means for future improvements in PA program participation.

CHAPTER 3: METHODOLOGY AND PROCEDURES

Design

This qualitative study utilized single semi-structured interviews and an a priori framework guided by an appreciative inquiry lens (Cooperrider & Whitney, 2005) and based on the Consolidated Framework for Implementation Research (Damschroder et al., 2009) to explore different provider perspectives on how PA programs for ACT clients could be designed and implemented on the Island Health ACT teams in Victoria, BC. Interview questions were created a priori based on the five domains of the CFIR in order to apply the CFIR throughout the research process as recommended (Damschroder et al., 2009; Kirk et al., 2015). The interview was organized into sections based on the CFIR domains and questions were framed in a way that was positive and strength-based, congruent with appreciative inquiry. Data collection was planned to continue until data saturation was achieved. There was high congruence in participant response and no new themes emerged after 6 interviews, so it was decided that data saturation had been reached and data collection was thus stopped after 8 interviews.

Research Instruments

The interview script and outline are included in Appendix A. The interview guide was used, in addition to probing questions where necessary, to gain rich descriptions of participants' experience and perspective on PA programs for ACT clients. The guide was used to keep the interview focused and minimize interviewer influence on responses, but the semi-structured format allowed for authentic development of conversation and exploration of participants' perspectives.

As the primary qualitative researcher and the interviewer, I was also a research instrument. My positive personal beliefs about PA, my physical appearance, and my identity as an athlete and a student of kinesiology undoubtedly influenced the interviews to some extent, both in the responses I elicited and the way I interpreted those responses. This effect was likely magnified as I have also been employed as a Social Program Officer on the Victoria ACT teams since 2016 and therefore had longstanding professional relationships with participants. I have included an extensive researcher statement to provide context for my potential influence, and to bring my attitudes and beliefs to my own awareness. Throughout the interviews I consciously maintained a neutral tone and avoided leading questions. Although appreciative inquiry is inherently a positive approach and questions were therefore designed to focus on strengths, the questions were open ended and participants were not led towards specific answers.

Recruitment and Sample Characteristics

Following ethics approval, participants were recruited through posters and email. Posters with study details and email/phone contact were displayed in team rooms and staff lounge and circulated to all staff via company email. To prevent any real or perceived coercion due to pre-existing professional relationships with the interviewer, the recruitment email was distributed by the ACT program assistant, who is not a stakeholder in this study, has access to the ACT mailing lists, and will not be involved in the study in any way beyond sending the recruitment email. Potential participants contacted the researcher directly to enroll in the study. The recruitment poster and email are included in Appendix B.

A recruitment email was sent to all ACT staff by the administrative assistant and recruitment posters were displayed throughout the office building beginning in November 2021. Individuals that were either male or female, employees (nurses, peer support workers, social program officers, and mental health support workers) or independent contractors (psychiatrists and nurse practitioners) on ACT teams in Victoria were approached. Inclusion criteria included having a professional or paraprofessional role on one of the Island Health ACT teams in the Victoria area involving direct client care, and a minimum of 2 years working experience in mental health and substance use service(s), although this experience did not need to be exclusively on ACT teams. I recruited and interviewed 8 participants, a number that represented 30% of total 27 regular full time ACT team members in downtown Victoria at the time of the study and allowed for data saturation.

Study criteria were broad, allowing for participants of any professional or paraprofessional background serving in direct client care on an ACT team in Victoria, B.C. This was done with the intent of obtaining thick, rich description and perspectives from care providers that may eventually be directly engaged in implementation of PA programming in this setting.

Ethical Considerations

There were some ethical considerations with this project. First, this study focused on individuals with SMI receiving services from the Vancouver Island Health Authority. Many of these individuals are being mandated to receive treatment for their mental illness under the Mental Health Act. Clearly this is a vulnerable population and extra care was taken to ensure that anonymity of individual clients is preserved. No questions were

asked about individual clients and study participants were reminded about client confidentiality and instructed to omit any identifying details about individual clients.

There was also potential perceived and/or real conflict of interest because I was the primary researcher and an employee of the Vancouver Island Health Authority working on all four of the ACT teams in Victoria. I disclosed my employment status and professional involvement in my ethics application. Additionally, I ensured that all participants were aware of this duality of roles. When conducting the interviews, I assured participants that their responses would be de-identified and confidential. I also promised them that all transcripts would be saved using participant codes; participant names would be completely omitted. Additionally, raw data would not be shared with the Vancouver Island Health Authority and all data would be presented in aggregate form to preserve participant confidentiality.

This study proposal was reviewed by the Vancouver Island Health Authority and University of Victoria joint ethics committee and all requested changes were made and approved prior to commencement of the study.

Risks and Benefits

There were no expected or foreseeable risks to participants in this study. Although as the principal investigator and a trained mental health clinician, I was prepared to assess risk and connect participants with support services such as counselling through the Employee Family Assistance Program available at no cost to all Vancouver Island Health employees if undue stress from the interview was an issue. No individuals needed support.

Data Collection

Due to the COVID-19 pandemic, all interviews were conducted by phone outside of the participants' paid working hours to minimize contact and eliminate operational impact during a time of increased demand on health care workers. All communication with participants was through the interviewer's Island Health email addresses (anika.todd@VIHA.ca) and participants' Island Health email addresses. This was approved by the ethics committee as a secure and appropriate medium for communicating with potential participants as it offered end-to-end encryption, and both researcher and participants had reliable access.

At the time of each interview, I reviewed the participant's right to withdraw from the study at any time, as well as confidentiality and other ethical issues and then obtained verbal informed consent. This initial interaction was also an opportunity to begin to build rapport prior to commencement of the interview. It was crucial that I established trust so that participants could feel safe to disclose an honest account of their perspectives and experiences. Member checking was conducted during the interview. If a participant's answer was not clear, I verbally clarified their answer.

Interviews were conducted using Vancouver Island Health Authority cell phones, assigned to each staff member, as these devices have enhanced security. The interview guide is included in Appendix A. The guide includes a scripted introduction including informed consent. The interview guide begins with some demographic questions and the remainder is organized in alignment with the Consolidated Framework for Implementation Research (Damschroder et al., 2009). The interview concludes with a

question about the participant's personal interest and motivation to participate in the development and implementation of a PA program for ACT clients.

A basic voice recorder was used to record the interview, so no data was stored in servers or clouds. All interviews were transcribed in a Word document on an encrypted and password protected Lenovo Touch Pad laptop (work computer) immediately after each interview. Interview recordings were permanently erased immediately after transcription and proof reading. The laptop used was stored in a locked, secure cabinet in a locked office when not in use. An alpha numerical coding system was used to ensure patient confidentiality and minimal participant personal identifiers were included in any recording or other files. No names were included in any recording or other files. The coding system is saved on an encrypted and password protected Lenovo Touch Pad laptop and will be retained for 5 years.

At the end of each interview, I stopped the audio recording. I thanked each participant for their time and reminded them that I would contact them soon to conduct member checking. I also checked in with each participant, answered any outstanding questions, and concluded the session.

Data Analysis

All interviews were transcribed verbatim and emailed to participants to conduct member verification. I listened to each interview in full prior to transcription, and then manually transcribed the entire interview using a Microsoft Word document. Each interview was played back again while reading the completed transcript to ensure accuracy.

Member verification was conducted using end-to-end encrypted Island Health Webmail. The transcripts were emailed to each participant and the participants were given 7 days to respond with any changes they wished to make. The participants were reminded that no response within 7 days indicated consent to use the original transcript, as outlined in the participant consent form.

A theoretical thematic analysis was conducted using the 6 phase process (Braun & Clarke, 2006). This process includes the following steps: familiarizing yourself with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report (Braun & Clarke, 2006). It is recommended to familiarize oneself with the data by reading the full data multiple times and noting initial ideas. Initial codes are to be generated systematically, by coding interesting features across the entire data set and then collating these into potential themes. The themes are to be reviewed in relation to the coded extracts and the entire data set. The authors then recommend ongoing analysis to refine each theme before selecting the most vivid and compelling extracts for the final report, which are to be related back to the research questions and literature. In this study, I familiarized myself with the data by transcribing each interview and reviewing each interview recording at least twice while checking for accuracy and noting initial ideas. All complete interview transcripts were then read by all authors for familiarization. Initial ideas were discussed with all authors and codes were agreed upon based on the initial ideas noted and the CFIR domains and research questions. Once consensus was reached, I coded all transcripts and collated these into potential themes and subthemes. These themes were compared and compiled between participants. Below is a sample table of how I organized the data:

Theme	Sub-themes	% Participants	Sample Quotes

Themes were reviewed again with all authors and consensus was reached. Themes were defined and organized based on the CFIR domains (Damschroder et al., 2009). I then chose the most vivid examples to present in the final report. These can be found in Tables 2-5 in the results section following. The full data set is included in Appendix C to increase transparency and enhance trustworthiness.

This was applied qualitative research and the focus of the analysis was the precipitation of information and themes with pragmatic value to the implementation of PA programs on ACT teams in Victoria. All interview transcripts were read by all authors and themes were agreed upon based on the CFIR domains. The first author coded all transcripts based on the agreed upon themes.

I chose to include the percentage of participants in this qualitative study because I suspected, from my years' experience as a provider, that there would be a lot of excitement among providers over a PA, and that lack of self-efficacy to provide PA programs without further direction or training as well as lack of resources would be prevalent perspectives. The use of theme frequency was not used to imply that lower frequency themes were of less importance, but rather to emphasize the pervasiveness of provider motivation and current lack of resources.

Dissemination

The results of this study will be shared with Island Health ACT leadership in Victoria to inform future program development. I will also disseminate my results through publications, Island Health professional development seminars, and academic presentations. It is my hope that this study will motivate and inform further research in PA intervention and programing for ACT clients.

CHAPTER 4: RESULTS

Participants

Participants were recruited until April 2021. Eight participants contacted me in response to the recruitment materials and participated in the study. All participants met inclusion criteria, and all completed the interview. Data saturation was reached after six interviews and data collection was stopped after eight interviews.

Participant characteristics are summarized in Table 1. The mean age of participants was 40.25 years, and gender distribution was 75% female, 25% male. No participants identified as non-binary. At the time of this study, there were 27 regular fulltime staff on the downtown Victoria ACT teams; 10 male and 17 female. Mental health workers, addiction recovery workers, social program officers, registered nurses and registered psychiatric nurses were interviewed. No team leads, nurse practitioners or psychiatrists were interviewed, as no one in one of these roles responded to the recruitment emails or poster. However, these professionals are involved in a much more limited and consultative way, with minimal client contact. For example, a mental health support worker may see a client daily and support the client with apartment hygiene, grocery shopping, recreational pursuits, and other activities, while a psychiatrist will see a client every few weeks or months with the emphasis of the encounter being on medication and certification under the Mental Health Act. It is unlikely that interviewing team leads, nurse practitioners or psychiatrists would have drastically changed the results. Average years of experience on ACT was 6 years, with experience level ranging from 3 months to 15 years. All participants had 2 or more years of experience in mental health and substance use services.

Table 1. Participant demographic and professional characteristics

Age	Gender	Position
39	Male	Mental Health Support Worker
32	Male	Social Program Officer
53	Female	Addiction Recovery Worker
44	Female	Mental Health Worker
35	Female	Social Program Officer
41	Female	Registered Nurse
46	Female	Registered Psychiatric Nurse
32	Female	Registered Psychiatric Nurse

Adverse Events

No adverse events were reported as a result of participation in this study. No participants stopped the interview prematurely or revoked consent to use their data.

Main Findings

This research sought to answer the following research questions:

1. How important do ACT team members rate PA in this population?
2. How competent do ACT team members feel in delivering PA programs?
3. What PA program characteristics result in positive client experience?
4. In what ways can the organization (Vancouver Island Health Authority) better support PA programs?

The first two questions were asked explicitly and are summarized below, the remainder were explored in greater depth using the CFIR to structure the interview and organize results. Participants were also asked explicitly about current resources available

for PA for ACT clients in Victoria, BC, to identify current gaps, and this data is summarized in Table 2.

Table 2. Provider perceptions and knowledge of existing resources to support PA for ACT clients in Victoria, B.C.

Theme	Sub-themes	% Participants	Sample Quotes
Existing resources	Within Island Health	25%	"The Mental Wellness Program is the big one that we have; the outpatient service at Victoria Mental Health Centre I can't think of any other resources available to us."
	Within the ACT teams	0%	"We used to have a very small account that we could access if we needed to get different things for people. We don't have any of that now."
			"I don't know that ACT has any, honestly."
	Within the community	100%	"I know that a lot of the public facilities provide the Life Pass, so we have the ability to get our clients those Life Passes. That's actually the number one way we encourage physical engagement, like physical exercise, which was awesome."

ACT Provider Perceptions of Importance of PA for ACT Clients

All participants stated that they believed that regular PA would improve ACT client mental health and that they personally would be willing to be involved in the development, implementation, and ongoing delivery of a PA program for ACT clients. Thematic analysis identified decreased medication, decreased obesity, and improved physical and mental health as specific expected benefits of regular PA. These results and sample quotations are summarized in Table 3.

Table 3. Summary of themes and sample quotes related to provider perceived importance of physical activity

Theme	Sub-themes	% Participants	Sample Quotes
Benefits of regular PA	Decrease medication	12.5%	"It might decrease the amount of medication that people need to take to manage symptoms, particularly depressive symptoms, but even feelings of anxiety can be addressed with exercise"
	Decrease obesity	62.5%	"For our clients, a lot of them are on medication that is weight positive medication, and we have the obesity epidemic, and we have people with metabolic disorders, so whatever we can do to help people fight back against that is absolutely necessary."
	Regular PA improves ACT client mental health	100%	"Exercise is really shown to be as beneficial as a lot of medications, especially for treating depression"
	Regular PA improves ACT client physical health	62.5%	"In terms of a physical health, exercise would help to alleviate a lot of like ailments and I think it would give them also an overall sense of wellbeing"
	Regular PA improves participant's mental health	100%	"The benefits of it on myself? I would say that it helps me in terms of alleviating any anxiety and depression, it helps me with concentration, it provides me with a sense of wellbeing, and it helps me feel more balanced overall"
	Regular PA improves participant's physical health	50%	"I definitely think that it is really important for my brain health and overall health and functioning"

ACT Provider Self-Rated Competence in Delivering PA Programming

Only 37.5% of participants felt confident in their current ability to deliver PA programming to ACT clients, 12.5% felt only adequately able to delivery PA programs and half did not currently feel competent to do so at all. There was a vast disparity in providers' confidence and competence in delivering PA programs to ACT clients based on their personal experience with and knowledge of PA. One participant rated their ability to deliver PA programming as high based on her personal and academic background in sport stating "I have a good ability because I have a degree in exercise physiology, I have been an athlete most of my life and I also coach people." Other participants felt less competent, makings statements such as "I would not feel comfortable doing that. I think I'd be worried that I might say something that they would hurt themselves or something because I'm not an athletic person or athletically trained in any way" or "My ability to do it was poor… I think I could probably create a fairly basic and helpful program. I would feel fairly confident doing that. Anything beyond kind of basic like exercises like walking, running, hiking, and stretching type things, I think it would be helpful to have more knowledgeable staff that can develop plans and other staff could follow through with them." This request for expert advice was repeated by multiple participants with statements such as "I think a lot of people don't want to take it on because they don't really know how to do it and how to do it in a physically safe way and a culturally safe way. If we gave staff those opportunities, then people would probably get excited by it" or "we don't actually have a physical activity specialist that's attached even as a float position between the teams, even as a consultative service to provide us with information on how to incorporate that [physical activity] more into work that we

do. Without that kind of direction, I don't know if I feel qualified to set up a fitness program."

Implementation

Interview questions and data analysis were based on the CFIR. Results in each domain are described in detail in the following sections and summarized in Table 5.

Characteristics of Individuals Involved

As summarized in Table 5, all participants believed PA was an important component to physical and mental health, both for themselves and for ACT clients. All participants stated they believed a PA program for ACT clients would be beneficial and that they would be personally willing and motivated to be involved in the development, implementation, and ongoing delivery of such a program. When asked about perceived importance of PA and personal willingness to engage, participants made statements such as "I think it's super important", "I think that would be amazing I think that would be really it sounds like it should be probably an essential part of our work it's just such a healthy thing to do", "I think it's really important, maybe as important as our daily contact kind of mandates" and "Heck yes!!".

Intervention characteristics

Analysis of the interview questions related to intervention characteristics unanimously identified adaptability and flexibility as paramount to successful implementation of a PA program for ACT clients. Of interest in this section of the interview, all participants explicitly stated that they believed PA improved mental health and 75% of participants stated that they believed PA improved physical health. The

remaining 25% simply did not comment on the impact of regular PA on physical health in this section. In terms of relative advantage, PA was ranked highly, with only crisis management and medication ranked as more important by some participants. These results are summarized in Table 4.

Table 4. Relative advantage of PA compared to other interventions on ACT Teams in Victoria, BC

Relative Advantage	**Sample Quotes**
As important as other interventions	"I think it's just as important as any other intervention or treatment, we just haven't grown enough to make it a part of the medical model in the way that other interventions have." "I would put it [physical activity] as one of the more important things that we could do."
Medication and/or crisis management ranked as more important	"We have to focus on very basic functioning and support such as just getting them shelter, ensuring their safety and trying to maintain or move them from an acute mental state or crises to a more stable mental state, which involves just making sure they're taking medication every day."

Inner Setting

Participants were asked about existing resources, their perception of the organization's support of PA, and about how the organization could support implementation of a PA program for ACT clients. Regarding existing resources for PA for ACT clients, only 25% of participants identified resources available within Island Health, and no participants were aware of any resources currently available within the ACT teams. However, all participants were able to identify some community resources available, such as the Life Pass for 52 free community recreation centre day passes per year.

Outer Setting

Interview questions related to the CFIR outer setting revealed three main themes: necessary resources, organizational culture, and an expectation of implementation.

All participants identified dedicated time and staff as key resources to implementation that were not presently available. Dedicated funding was another salient theme across participants that was often identified in conjunction with dedicated time and staff. When asked about how the organization could support implementation of PA programs on ACT teams in Victoria, participants made statements such as "hiring and giving actual time towards developing these programs", "hiring at least someone, a qualified clinician, to do some program development and spend time and resources to ensure that it actually can be utilized effectively and be easily delivered", and "probably just people, a qualified clinician, and time for that clinician and money to develop these programs".

Most participants perceived current organizational culture at Island Health to be supportive of PA initiatives, or at least not opposed to PA, although the lack of tangible supports for actual development and delivery of PA to this population was also repeatedly identified in answers to this interview question. Participants made statements such as “I don't think VIHA is opposed exercise, I just think it's not prioritized and as of right now there is no plan in place to make it part of what we do so it's just not and not given a lot of value or thought right now” and “I feel like a lot of people think it’s a good idea, I never hear a lot of resistance to the idea, but I also think it’s something people see as extra, as going “above and beyond”. So, I think while people support the idea, I don’t think much is being done to actively support it.”

When asked whether there was currently an organizational expectation of providing any kind of PA program for ACT clients, all participants stated that there was no current expectation or mandate. Half of participants made statements such as “making sure that [PA] is just a regular part of our schedule rather than an optional idea” or “[PA] would have to be an organizational requirement and written into policy to be a standard of care and practice”, stating that they believed that making PA an expectation or program mandate would support successful implementation of a PA program.

Process

Thematic analysis of interview questions about implementation process identified dedicated funding, dedicated time and space, education about the importance of PA, engagement of appropriate individuals, and inclusion of regular PA in the ACT program mandates as critical factors to successful implementation of regular PA programs for

ACT clients. All participants identified dedicated time and space, and engagement of appropriate individuals as critically important factors.

Table 5. Summary of themes and sample quotes encompassing the five domains of the CFIR

Theme	**Sub-themes**	**% Participants**	**Sample Quotes**
Individuals Involved	Positive staff attitude towards PA	100%	"I think it's really important, maybe as important as our daily contact kind of mandates"
	Staff competence in delivery of PA programs	100% responded 50% do not feel competent 12.5% adequate 37.5% feel competent	"Not good. I would not feel comfortable doing that. I think I'd be worried that I might say something that they would hurt themselves or something because I'm not an athletic person or athletically trained in any way" "I would say I have a pretty good ability to do that."
	Staff willingness and motivation to participate in motivation	100% willing and motivated to participate in implementation	"Heck yes!!" "So absolutely, I would actively engage in supporting a program across the ACT teams."
Intervention characteristics	Adaptability	100%	"I think flexibility, adaptability, keep it fun and with more of a social dynamic. It needs to non-intimidating because people struggle with anxiety and these types of things, so we want to create a safe space for people and make it accessible, simple."
	Accessibility	75%	
	Autonomy	25%	
	Flexibility	75%	
	Fun	50%	"Fun! Fun and social connection."
	Incentive	25%	
	Social	37.5%	
	Perception that PA improves mental health	100%	"With the clients that I have worked with in physical activity, it's been mostly great as far as their enthusiasm

			but also more importantly you know the effects it has on their mood. I'm a firm believer that it does reduce symptoms, decreases depression, increases motivation"
	Perception that PA improves physical health	75%	"Most of the psychiatric medications have huge metabolic side effects, including dyslipidemia, high blood pressure, and weight gain particularly around the midsection, diabetes, and hyperglycemia. Exercise, as we know, is often a good lifestyle modifier for any of those conditions alone and as that is one of the side effect profiles of psychiatric meds, it mitigates some of those risks."
Inner Setting	Barriers to Participation and Implementation	75% identified perceived barriers to implementation	"ACT clients seldom fit in with other populations and that can be an incredible barrier for some of them just given behavior on any given day or just the overall amotivational kind of things that lead to hygiene difficulties. Definitely all of those factors would factor into integrating ACT clients with "neurotypical" population of people working out so I think programs would be very helpful"
	Facilitators to Participation and implementation	87.5% identified possible solutions	"I think it would be more easily delivered if we had programs, tailored programs, that were very clear and could easily be replicated for different clients and that different levels of staff could also deliver consistently. I think that would be really helpful"
	Patient needs met by PA	Mental health 87.5% Physical health 87.5% Social connection 87.5% Structure and routine 50%	"I think in terms of just the influence of physical health on mental health and vice versa, it is so significant that I think it would really enhance and optimize their [the clients'] outcomes." "It also can be a social thing too, so a lot of the folks that we work with have significant social isolation and engaging in physical activity, even if

			it's just with a practitioner, let alone in a group setting. It benefits their mental well-being and decreases their social isolation and benefits them in lots of ways." "I think a lot of our clients lack structure to their day so it would be something to look forward to"
Outer Setting	Are necessary resources missing	Funding 75% Space 25% Staff 100% Time 100%	"I don't think there's extra funding for it so then it just falls to the wayside when things get busy." "Regular, anticipated, protected time to be able to deliver that so that there's some consistency for clients." "the importance of having or hiring or contracting staff to specifically work with organizations or some of the rec centers or agencies that promote physical activities and whatnot at the community level."
	Does organizational culture support PA	75%	"I feel like a lot of people think it's a good idea, I never hear a lot of resistance to the idea, but I also think it's something people see as extra, as going "above and beyond". So, I think while people support the idea, I don't think much is being done to actively support it." "I don't think VIHA is opposed exercise, I just think it's not prioritized and as of right now there is no plan in place to make it part of what we do so it's just not and not given a lot of value or thought right now because it doesn't seem imminent within ACT. I think in other areas maybe it does and there's more space for it, but within ACT, I think the clinicians are so busy that can feel less critical to implement any sort of exercise regime. There's lots of theoretical support, but no real-life support. We only have so much time and resources to do what we need

			to do to keep our clients out of hospital."
	Expectation of implementation	0% identified current expectation, 50% stated expectation would support implementation	"I think maybe direction from the team leads like that always works well sort of having it come up in our meeting where it's sort of like "hey, this is in the budget, or this is of interest to us because there's a large evidence-based kind of thing" and then seeing maybe what the team has to bring to the table Thursday"
			"It would have to be an organizational requirement and written into policy to be a standard of care and practice."
Implementation Process	Dedicated funding	75%	"I don't think there's extra funding for it so then it just falls to the wayside when things get busy."
	Dedicated Time and Space	100%	"I feel like it could work well having it regularly put into the calendar for each person [client] or groups of people [clients] every week, because then it wouldn't fall by the wayside it would just be part of our service plan."
	Education about importance of PA	50%	"Education about the importance of physical activity. Also, providing opportunities for staff to be trained in how to create physical activity programs. I think a lot of people don't want to take it on because they don't really know how to do it and how to do it in a physically safe way and a culturally safe way. If we gave staff those opportunities, then people would probably get excited by it."
	Engage appropriate individuals	100%	"I think it would be helpful to have more knowledgeable staff that can develop plans and other staff could follow through with them."
	Program mandate	62.5%	"It would have to be an organizational requirement and written into policy to be a standard of care and practice"

CHAPTER 5: DISCUSSION

Despite a preponderance of evidence for the mental and physical health benefits of regular physical activity, most Canadians do not achieve the weekly recommended levels of PA necessary to realize these benefits. Individuals with SMI engage in PA at even lower rates than the general population and suffer higher rates of physical comorbidities and premature mortality. PA may be an effective intervention for this population with potential to improve mental and physical health outcomes. This research sought to explore the specific context of ACT teams in Victoria from an implementation science perspective guided by the CFIR, with the purpose of moving towards successful development and implementation of a PA program on ACT teams in Victoria by detailing perceptions, confidence, and factors critical to implementation. This study is one of the first of its kind to identify PA program implementation issues in this sub-population using an established framework.

Perceptions and Confidence

All participants expressed a belief that PA had both mental and physical health benefits, especially for ACT clients, and that PA programs would be a hugely beneficial service for ACT clients. There was also great enthusiasm amongst participants wanting to be involved in the development and delivery of PA programs with all participants stating they would be motivated to be involved in the development and ongoing delivery of a PA program for ACT clients. However, many participants felt unqualified to deliver PA programming without any further education or training.

Implementation

The Consolidated Framework for Implementation Research (CFIR) was used in this study to identify ways in which to effectively implement PA programs on ACT teams. The CFIR consists of 5 constructs: characteristics of individuals involved, intervention characteristics, inner setting, outer setting and process (Damschroder et al., 2009).

Characteristics of Individuals Involved

Regarding characteristics of individuals, participants in this study reported high motivation to deliver a PA program for ACT clients as well as resoundingly positive beliefs about the benefits of regular PA in general and for ACT clients specifically. Participants reported a strong positive belief in the potential value and efficacy of a PA program developed for ACT clients and implemented as standard of care on ACT teams in Victoria. However, regarding their own self-efficacy, only half believed they were at least moderately competent to deliver a PA program to ACT clients, and several participants felt completely unable to deliver PA programming without further education or support from a qualified professional. To achieve successful implementation, additional training or supports in terms of a hiring a PA professional to lead a program should be considered. This would be in keeping with the ACT shared care model wherein there are several specialized roles, such as peer support and addiction recovery specialists, who work together to provide robust and multifaceted support to ACT clients.

The PA specialist could be dedicated to each team or shared amongst the teams similarly to the current integrated ministry worker and police officer.

Using Prochaska's transtheoretical model of change, participants in this study presented as contemplative in regards to implementation of a PA program for ACT clients (Prochaska & Velicer, 1997). It is likely that greater support from leadership, direction and the identified resources may need to be provided before the preparation and action phases may be realized. Similarly, this perceived lack of tangible support for PA programs, despite perceived theoretical support, is negatively impacting individual identification with the organization, and decreasing the degree of commitment and willingness to implement a PA program.

Intervention Characteristics

The CFIR construct of intervention characteristics as it relates to the implementation of PA programs for ACT clients is largely positive or yet undefined. There is strong and abundant evidence in support of the health benefits of regular PA, and stakeholder perceive the relative advantage of a PA program for ACT clients to be high. When asked about the relative advantage of PA, 50% ranked PA as equally important to all other interventions while the remaining participants ranked only medication and crisis intervention as more important. No participants believed PA was unimportant. Additionally, a PA program can be developed to be adaptable, simple, and low cost in nature, and could easily be trialled on the ACT teams given the nature of the service.

When asked about specific intervention characteristics necessary for a PA program to be appropriate, applicable, and actionable on the ACT teams in Victoria, participants resoundingly identified adaptability and flexibility as necessary. ACT clients

are individuals with severe and persistent mental illness, and often are experiencing concurrent addictions and/or physical health concerns. The physical and mental ability of clients varies tremendously, even for the same person, depending on the moment. A program that can accommodate these varied and fluctuating needs and remain accessible would likely be more successfully implemented than a rigid program. The need for adaptability and flexibility was also identified in a mixed-method case study examining a PA program implemented on an ACT team in Ottawa, Ontario (Guérin et al., 2019). Similarly, a systematic review of weight management interventions for individuals with severe mental illness, including PA interventions, identified 16 studies, 15 of which were "specifically designed or adapted for persons living with severe mental illness" (Galletly & Murray, 2009). This need for adaptability and flexibility was also identified in a study aimed at defining implementation strategies for integration of PA programs for individuals with SMI in various treatment settings. The authors use the term "individualisation" to refer to the need for PA programs to be tailored to individuals' needs and acknowledge the dynamic needs and unique barriers faced by individuals with SMI (Lederman et al., 2017). While adapting and tailoring a PA program to the participants' interests and needs is not unique to ACT clients, the complex and dynamic nature of the typical ACT clients' severe mental illness and possible concurrent physical ailments and/or substance use greatly magnifies the need to tailor a program to this population.

Additionally, client satisfaction is critical to increase client participation and retention. Participants in this study identified fun, social connection, autonomy and incentive as intervention characteristics that may improve client satisfaction. Similarly,

socialization, autonomy, feelings of competency, and respect for interests and abilities were identified as key characteristics to engaging ACT clients in a PA program in Ontario (Guérin et al., 2019).This is in line with current exercise psychology theories, particularly self-determination theory, which identifies competence, connection and autonomy as key psychological needs that must be met in order to build intrinsic motivation towards a behaviour (Ryan & Deci, 2000; Ryan, 2009). Further, self-determination theory takes a humanistic perspective, emphasizing fulfillment of a person's needs, self-actualization and realization of personal potential (Teixeira et al., 2012). Self-determination theory therefore mirrors the person-centred, strength based, trauma-informed and culturally sensitive approach that underlies modern health care.

In practice, some of the suggestions made by participants in this study included providing choice in PA activity and delivering PA programs in a group format. This is in keeping with other studies examining PA program implementation in this population. Guérin et al. (2019) identified providing options, respecting the interests and abilities of participants, and integrating autonomy as key program characteristics to engaging ACT clients in PA. From a theoretical perspective, this is once again congruent with the key psychological needs of competence, autonomy and connectedness in self-determination theory as critical in building intrinsic motivation (Ryan & Deci, 2000).

Some participants in this study also suggested the use of incentives, such as free beverages, to build extrinsic motivation towards PA program participation. This is congruent with operant theory (Skinner, 1965), but less clear in self-determination theory. There is evidence that extrinsic motivation can undermine intrinsic motivation as it shifts the locus of perceived control from internal to external and thereby diminishes autonomy.

However, extrinsic motivation does not necessarily undermine autonomy. If the individual internalizes and integrates a behaviour or regulation into their own (Ryan & Deci, 2000). At this time, it is unclear if the use of incentives would effectively increase motivation and long-term participation in PA programs in this population. Further exploration, including consideration of client perspectives on the matter, is warranted.

Inner Setting

The CFIR Inner Setting construct includes structural characteristics of the organization as affecting implementation. The structural characteristics of Island Health and the ACT teams include both strength and challenges to implementing new interventions. Island Health is a large organization with diverse knowledge, immense resources, longstanding and stable leadership structure, and organizational values of person-centred care and psychosocial rehabilitation that are congruent with implementation of a PA program for ACT clients.

Of interest, all participants believed that Island Health was supportive of PA for clients. This is not surprising, given that most adults are aware of the health benefits of regular PA and believe PA to be important. A classic survey of 2002 American adults aged 18 and older found that most participants believed PA to be very important (51.9%), important (36.9%), or at least somewhat important (7.9%). Only 3.4% of respondents in this survey did not believe that PA was of any importance (Martin et al., 2000). However, few resources to support PA were identified within Island Health and no current resources were identified within the Victoria ACT teams. There is also no current explicit expectation or mandate that PA be included in the services provided by ACT teams, although the program mandates do require ACT teams to provide holistic and robust

service with a focus on psychosocial rehabilitation (British Columbia & Ministry of Health Services, 2008). Resoundingly, participants in this study identified the need for dedicated time, space, funding, and staff to provide PA programs to ACT clients, and that including PA in program mandates would support the implementation of this.

However, the size of the organization may create a barrier to change as one participant identified with the statement that "because VIHA is so big and messy, it's hard to implement". This same participant also identified a possible solution with the statement "from a team standpoint, definitely there can be steps taken by the smaller units from a bottom-up approach".

Anecdotally, there was a high amount of turnover on the Victoria ACT teams at the time of this study as well as multiple vacant lines, creating additional challenges to implementation of new interventions due to increased demands on staff and reduced cohesiveness and familiarity on the teams. Furthermore, the culture of the Victoria ACT teams is largely reactive and focused on crisis management and critical tasks such as medication management, which is exacerbated by the staffing shortages. Several participants captured this with statements such as "we are already stretched on ACT to do the basic tasks that we are required to do and, without being compensated, to try to take that on extra to the work that we do" and "I feel like a lot of people think [PA] is a good idea, I never hear a lot of resistance to the idea, but I also think it's something people see as extra, as going 'above and beyond'. So, I think while people support the idea, I don't think much is being done to actively support it". The current culture on the ACT teams in Victoria appears to identify PA as "extra" and this is unlikely to change without support and direction from leadership, as well as the resources necessary.

Finally, the implementation climate on ACT may be conducive to implementation of a PA program as there is tension for change, it is compatible with the ACT model, and PA is viewed as at least relatively important by ACT team members (Damschroder et al., 2009). Island Health leadership could potentially further heighten the implementation climate by creating clear goals and feedback, and by providing the necessary resources identified by participants and supported by implementation research: funding, training, education, physical space and time (Damschroder et al., 2009).

Outer Setting

In terms of outer setting, a PA program would meet identified patient needs beyond the well-established health benefits. Participants in this study also identified structure, routine, increased therapeutic rapport with ACT team members, social connection and belonging, and a sense of purpose as additional needs that a PA program could meet.

One challenge identified by participants was the lack of connection with external organizations or cosmopolitanism as it relates to PA. Participants identified the Life Pass, which provides free but limited access to recreational centres, the Downtown Community Centre as key community resources, but further networking and collaboration with other organizations would be beneficial. This may be achieved at a frontline or leadership level, through personal connections or planned partnerships.

Finally, in terms of peer pressure and external policies, the importance of PA is well established and supported. For example, the Canadian guidelines for physical activity strongly recommend 150 min of moderate to vigorous activity in bouts of at least 10 minutes daily. The growing body of evidence for the importance of PA and the

increasing pressure to mitigate health risks by increasing PA can only further support implementation of PA initiatives, such as PA programs for ACT clients.

Process

The final CFIR construct, process, describes the four tasks required for successful implementation: planning, engaging, executing, and reflecting and evaluating. Participants in this study identified a "task force" or special committee as a necessary part of the planning process. The planning stage, in practice, should carefully consider local capacity for implementing a PA program for ACT clients, as lack of time and staff have been clearly identified as significant barriers. Any implementation plan should therefore account for the requisite time and staffing needed. As identified by one participant in this study, a "champion" can be a critical part of the engaging stage.

The next step, execution, can happen organically or formally. However, participants in this study repeatedly identified lack of time and resources as a barrier and stated that program mandate to include PA would support implementation. Therefore, a formalized execution plan may be most efficacious in this setting. The final step (reflection and evaluation) will be an important future step to ensure the sustainability and quality of a newly implemented PA program.

This study, by using an appreciative inquiry approach, has already initiated the process of engaging individuals. Island Health leadership can further engage individuals by continuing the conversations started in this study, providing education, and training, and supporting the importance of PA for ACT clients.

Impact of COVID-19

Since the declaration of a global pandemic on March 11, 2020, and the resultant emergency measures, the world has been profoundly impacted by COVID-19. Every aspect of the average person's life, from grocery shopping, to socializing to exercising, has changed. One study examining the potential of PA as a coping strategy for COVID-19 related increases in stress and mental health symptoms reported that only 48% of participants identified PA as a coping strategy. This study postulated that the global declines in PA following COVID-19 may be partially due new or increased barriers to engaging in PA resulting from pandemic related social distancing and isolation regulations (Faulkner et al., 2020).

However, while most activities were profoundly altered or restricted, ACT was immediately identified as a critical essential service. The ACT teams in Victoria briefly reduced client services to critically essential tasks, but quickly resumed full duties. The teams continue to work from the central office and provide all pre-pandemic services. Staff and clients are required to wear medical face masks and client transport has been reduced to essential trips only, with taxi services being heavily utilized to provide transport wherever possible, but otherwise no changes have been implemented. Furthermore, ACT clients on the Victoria teams typically do not have the financial means to access PA resources such as private gyms or yoga studios that were impacted by pandemic related restrictions and shutdowns. Given that the ACT teams have continued to serve clients in person, including providing support with clients' PA goals such as going for walks, it seems unlikely that the PA behaviours of this population were significantly impacted by COVID-19. Furthermore, the implementation of a PA program

for ACT clients, which will necessarily need to be cost-effective, simple and flexible, should be able to be implemented safely and effectively during COVID-19. Group sizes will necessarily be small due to the complex needs of typical ACT clients requiring a low client to staff ratio, and typical low cost, accessible and flexible activities such as walking can be engaged in outdoors and distanced.

Strengths and Limitations

One of the greatest strengths of this study was the diversity of the participant pool. The participants represented approximately 30% of total full-time staff at the time of the study, were varied in age, experience, and professional role, as well in previous professional experience. Despite this diversity, there was congruence in the answers given in the interview, increasing the validity of those results, and suggesting that interviewing further ACT team members may not have resulted in additional themes. It is possible that new themes may have emerged if more participants had been interviewed, which is a limitation of this study design.

Furthermore, as disclosed in the researcher statement, I was both the principal investigator in this study and a current ACT team member with over five years of experience on the Victoria ACT teams. This brought several strengths to the study: as a current ACT team member, I understand the challenges and barriers faced by the teams, the daily demands placed on staff, the general characteristics of typical ACT clients, and the overall culture within the organization as a whole and each of the teams individually. My longstanding professional relationship with participants, who were also her colleagues, likely improved rapport and may have generated richer, more detailed, and perhaps more honest responses than an outside person may have received.

Of course, my duality of roles may also have created some limitations. It is possible that a pre-existing relationship hampered results, particularly if participants felt pressure to respond in a certain way due to pre-existing relationship or fears of how their answers may influence my perception of them or my professional relationship with them in future. Furthermore, direct recruitment was not ethically feasible due to the duality of roles and may have contributed to a lower number of participants volunteering for the study. Although I had no supervisory or managerial position over any participant, recruitment was done by email and this email was sent out by an administrative assistant. In addition, it would have been ideal if recruitment included at least one participant from each professional and paraprofessional role on an ACT team. It is likely that the different experience, education, and perspective of each role would have resulted in differences in answers to the interview questions and valuable insights. Unfortunately, no peer support workers, nurse practitioners, psychiatrists, or team leads responded to the recruitment material and direct recruitment was not possible. Furthermore, there was significant staff turnover and shortages in lieu of several crises and tragedies on the teams, and exacerbated by the ongoing COVID-19, homelessness, and opiate crises. At the time that interviews were being conducted, there were up to three vacant lines on each team, which of course reduced the potential number of participants. It is possible that ACT team members were less likely to take on additional tasks, such as participation in this study, while the workload was unusually high.

The COVID-19 pandemic also necessitated a shift from the planned in-person interviews to phone interviews. This interface is less personal and may have limited the ability of the researcher to build rapport and to engage in as rich and dynamic of

discourse as is possible in person. More detailed data may have been obtained if the interviews had been conducted in person. Additionally, poor Bluetooth connection from one of the participants in conjunction with background noise resulted in the loss of a small amount of data from one participant as a part of the audio recording was unintelligible.

Finally, time was a limiting factor. The interviews had to be conducted outside of paid working hours. As most ACT team members are working extended 10.5hour shifts with frequent overtime shifts, it was difficult to find time to conduct the interview. Most interviews were conducted late at night, some over a Bluetooth while the participant was commuting home. It is possible that interviews may have generated more detailed and thorough responses if it had been possible to provide dedicated and paid time during the day.

Conclusions

There is an ever accumulating evidence base in support of the physical and mental benefits of regular PA, (Lewis & Hennekens, 2016), yet the majority of Canadians still do not obtain the minimum recommended amount of 150 minutes per week of moderate to vigorous physical activity in bouts of at least 10 minutes. Among individuals with SMI, there is an even greater prevalence of the cardiovascular and metabolic conditions that PA could mitigate (Burghardt et al., 2018; Charlson et al., 2013; Connolly & Kelly, 2005; Reynolds, 2007), and yet an even smaller percentage of this group engages in regular PA than the general population (Faulkner et al., 2006; Lindamer et al., 2008).

Individuals with severe mental illness, such as ACT clients, face additional barriers to engaging in PA and it is therefore not surprising that this population engages

in PA at lower rates than the general population (Firth et al., 2016; Rastad et al., 2014; Shor & Shalev, 2014). ACT teams provide robust, holistic, community-based support to individuals with severe mental illness (British Columbia & Ministry of Health Services, 2008; Davis, 2013; Island Health, 2021). The ACT service model is therefore uniquely suited to deliver PA programs to ACT clients.

This research used the CFIR (Damschroder et al., 2009) and an appreciative inquiry (Cooperrider & Whitney, 2005) lens to explore ACT provider perspectives on PA programs and the factors that were important to implementation of PA programs on ACT teams in Victoria, BC.

Regarding the CFIR domain of individuals involved, all participants expressed a belief that PA had both mental and physical health benefits, especially for ACT clients, and that PA programs would be a hugely beneficial service for ACT clients. There was also great enthusiasm amongst participants wanting to be involved in the development and delivery of PA programs with all participants stating they would like to be involved. However, many participants felt unqualified to deliver PA programming. Education and involvement of dedicated and specialized staff to support PA programs were repeatedly identified as key factors. While most staff were enthusiastic and willing to participate, a trained and qualified PA expert should be recruited to develop and lead PA programs in collaboration with the rest of the team.

This study has also provided some insights into the intervention characteristics necessary for successful implementation. Participants repeatedly identified adaptability, client autonomy, flexibility, social engagement, and fun as necessary elements. In practice, this may include providing choice in PA activity, or delivering PA programs in a

group format. Future studies should further explore client perspectives on program features that would meet these goals. Resoundingly, adaptability and flexibility were identified as necessary program characteristics for a successful PA program for ACT clients.

Exploration of the CFIR domain of inner setting showed that all participants believed Island Health was supportive, in theory, of PA for clients. However, few resources to support PA were identified within Island Health and no current resources were identified within the Victoria ACT teams. There was also no explicit expectation or mandate that PA be included in the services provided by ACT teams. Resoundingly, participants identified the need for dedicated time, space, funding, and staff to provide PA programs to ACT clients, and many participants stated that including PA in program mandates would support the implementation of this.

Related to outer setting, participants resoundingly identified community resources and supports, such as the Life Pass and Downtown Community Centre, but identified a need for the organization to build greater professional connections with community partners.

Regarding the final CFIR construct, process, participants in this study identified a "task force" or special committee as a necessary part of the planning process and one participant in this study, a "champion" can be a critical part of the engaging stage. Related the execution step of process, participants in this study repeatedly identified lack of time and resources as a barrier and stated that program mandate to include PA would support implementation. Therefore, a formalized execution plan taking into consideration necessary time and staffing resources may be most efficacious in this setting.

This study, by using an appreciative inquiry approach, has already initiated the process of engaging individuals. Island Health leadership can further engage individuals by continuing the conversations started in this study, providing education, and training, and supporting the importance of PA for ACT clients.

Practical Recommendations and Future Directions

Regarding program development, focus should be placed on client autonomy, and the program should be flexible and adaptable in nature to accommodate the varied and dynamic needs of typical ACT clients. This approach is in keeping with Island Health values of person-centred care and supported by self-determination theory, which identifies autonomy and competence as key psychological needs.

Education and involvement of dedicated and specialized staff to support PA programs were repeatedly identified as key factors. While most staff were enthusiastic and willing to participate, a trained and qualified PA expert should be recruited to develop and lead PA programs in collaboration with the rest of the team. This would be in keeping with the ACT shared care model wherein there are several specialized roles, such as peer support and addiction recovery specialists, who work together to provide robust and multifaceted support to ACT clients. The PA specialist could be dedicated to each team or shared amongst the teams similarly to the current integrated ministry worker and police officer.

Finally, the organization can support the successful implementation of a PA program for ACT clients by providing dedicated time and funding for this intervention, and by actively working towards creating partnerships with other organizations, such as recreation centres, in our community to support the engagement of ACT clients in PA.

This study is only the first step towards successful and enduring implementation of PA programs on ACT teams. It has identified challenges to be overcome but has also identified possible solutions, highlighted the eagerness of staff to participate in these initiatives and shown that there is a general belief that PA programs would be a positive and supported addition to our current service.

References

Alberti, K. G. M. M., Zimmet, P., & Shaw, J. (2005). The metabolic syndrome--a new worldwide definition. *Lancet (London, England)*, *366*(9491), 1059–1062.

American Psychiatric Association, & American Psychiatric Association (Eds.). (1994). *Diagnostic and statistical manual of mental disorders: DSM-IV* (4th ed). American Psychiatric Association.

Barrett, F., F., R. (2005). *Appreciative Inquiry: A Positive Approach to Building Cooperative Capacity*. Taos Institute.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

British Columbia, & Ministry of Health Services. (2008). *British Columbia program standards for assertive community treatment (ACT) teams.* Ministry of Health Services.

Burghardt, K. J., Seyoum, B., Mallisho, A., Burghardt, P. R., Kowluru, R. A., & Yi, Z. (2018). Atypical antipsychotics, insulin resistance and weight; a meta-analysis of healthy volunteer studies. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, *83*, 55–63. https://doi.org/10.1016/j.pnpbp.2018.01.004

Caspersen, C. J., Powell, K. E., & Christenson, G. M. (1985). Physical activity, exercise, and physical fitness: definitions and distinctions for health-related research. *Public Health Reports*, *100*(2), 126–131.

Charlson, F. J., Moran, A. E., Freedman, G., Norman, R. E., Stapelberg, N. J., Baxter, A. J., Vos, T., & Whiteford, H. A. (2013). The contribution of major depression to

the global burden of ischemic heart disease: a comparative risk assessment. *BMC Medicine*, *11*(1), 250. https://doi.org/10.1186/1741-7015-11-250

Chimen, M., Kennedy, A., Nirantharakumar, K., Pang, T. T., Andrews, R., & Narendran, P. (2012). What are the health benefits of physical activity in type 1 diabetes mellitus? A literature review. *Diabetologia*, *55*(3), 542–551. https://doi.org/10.1007/s00125-011-2403-2

Clarke, J., Colley, R., Janssen, I., & Tremblay, M. S. (2019). Accelerometer-measured moderate-to-vigorous physical activity of Canadian adults, 2007 to 2017. *Health Reports, 30*(8), 3–10. https://doi.org/10.25318/82-003-x201900800001-eng

Connolly, M., & Kelly, C. (2005). Lifestyle and physical health in schizophrenia. *Advances in Psychiatric Treatment, 11*(2), 125–132. https://doi.org/10.1192/apt.11.2.125

Cooperrider, D. L., & Whitney, D. (2005). *Appreciative Inquiry, A Positive Revolution in Change*. Berrett Koehler Publishers.

Damschroder, L. J., Aron, D. C., Keith, R. E., Kirsh, S. R., Alexander, J. A., & Lowery, J. C. (2009). Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science. *Implementation Science, 4*(1), 1–15. https://doi.org/10.1186/1748-5908-4-50

Davis, S. (2013). *Community mental health in Canada: theory, policy, and practice* (Revised and expanded edition). UBC Press.

De Moor, M. H. M., Beem, A. L., Stubbe, J. H., Boomsma, D. I., & De Geus, E. J. C. (2006). Regular exercise, anxiety, depression and personality: A population-based

study. *Preventive Medicine*, *42*(4), 273–279. https://doi.org/10.1016/j.ypmed.2005.12.002

Dewa, C. S., Chau, N., & Dermer, S. (2010). Examining the comparative incidence and costs of physical and mental health-related disabilities in an employed population. *Journal of Occupational and Environmental Medicine*, *52*(7), 758–762. https://doi.org/10.1097/JOM.0b013e3181e8cfb5

Durlak, J. A., & DuPre, E. P. (2008). Implementation matters: a review of research on the influence of implementation on program outcomes and the factors affecting implementation. *American Journal Of Community Psychology*, *41*(3–4), 327–350. https://doi.org/10.1007/s10464-008-9165-0

Faulkner, G., Cohn, T., & Remington, G. (2006). Validation of a physical activity assessment tool for individuals with schizophrenia. *Schizophrenia Research*, *82*(2), 225–231. https://doi.org/10.1016/j.schres.2005.10.020

Faulkner, G., Rhodes, R. E., Vanderloo, L. M., Chulak-Bozer, T., O'Reilly, N., Ferguson, L., & Spence, J. C. (2020). Physical Activity as a Coping Strategy for Mental Health Due to the COVID-19 Virus: A Potential Disconnect Among Canadian Adults? *Frontiers in Communication, 5*. https://doi.org/10.3389/fcomm.2020.571833

Firth, J., Rosenbaum, S., Stubbs, B., Gorczynski, P., Yung, A. R., & Vancampfort, D. (2016). Motivating factors and barriers towards exercise in severe mental illness: a systematic review and meta-analysis. *Psychological Medicine, 46*(14), 2869–2881. https://doi.org/10.1017/S0033291716001732

Galletly, C. L., & Murray, L. E. (2009). Managing Weight in Persons Living with Severe Mental Illness in Community Settings: A Review of Strategies Used in Community Interventions. *Issues in Mental Health Nursing*, *30*(11), 660–668. https://doi.org/10.1080/01612840903131784

Gold, J. M. (2004). Cognitive deficits as treatment targets in schizophrenia. *Schizophrenia Research*, *72*(1), 21–28. https://doi.org/10.1016/j.schres.2004.09.008

Graham, C. R., Larstone, R., Griffiths, B., de Leeuw, S., Anderson, L., Powell-Hellyer, S., & Long, N. (2017). Development and Evaluation of Innovative Peer-Led Physical Activity Programs for Mental Health Service Users. *The Journal of Nervous and Mental Disease*, *205*(11), 840–847. https://doi.org/10.1097/NMD.0000000000000746

Gray, S., Treacy, J., & Hall, E. T. (2019). Re-engaging disengaged pupils in physical education: an appreciative inquiry perspective. *Sport, Education and Society*, *24*(3), 241–255. https://doi.org/10.1080/13573322.2017.1374942

Guérin, E., Dupuis, J.-P., Jacob, J.-D., & Prud'homme, D. (2019). Incorporating a Physical Activity Program into an Assertive Community Treatment Team: Impact and Strategies. *Community Mental Health Journal*, *55*(8), 1293–1297. https://doi.org/10.1007/s10597-019-00440-6

Hammond, S. A. (2013). *The Thin Book of Appreciative Inquiry* (3rd ed.). Thin Book Publishing Co.

Harris, E. C., & Barraclough, B. (1998). Excess mortality of mental disorder. *British Journal of Psyciatry*, *173*(1), 11–53. https://doi.org/10.1192/bjp.173.1.11

Harsha, D. W., & Berenson, G. S. (1995). The Benefits of Physical Activity in Childhood. *The American Journal of the Medical Sciences*, *310*, S109–S113. https://doi.org/10.1097/00000441-199512000-00019

Hjorthøj, C., Stürup, A. E., McGrath, J., & Nordentoft, M. (2017). SA57. Life Expectancy and Years of Potential Life Lost in Schizophrenia: A Systematic Review and Meta-Analysis. *Schizophrenia Bulletin*, *43*(suppl_1), S133–S134. https://doi.org/10.1093/schbul/sbx023.056

Island Health. (2021). *Assertive Community Treatment (ACT)*. Assertive Community Treatment (ACT). http://www.islandhealth.ca/our-services/mental-health-substance-use-services/assertive-community-treatment

Jochems, E. C., Mulder, C. L., Duivenvoorden, H. J., van der Feltz-Cornelis, C. M., & van Dam, A. (2014). Measures of Motivation for Psychiatric Treatment Based on Self-Determination Theory. *Assessment*, *21*(4), 494–510. https://doi.org/10.1177/1073191113517928

Joukamaa, M., HeliöVaara, M., Knekt, P., Aromaa, A., Raitasalo, R., & Lehtinen, V. (2001). Mental disorders and cause-specific mortality. *British Journal of Psychiatry*, *179*(6), 498–502. https://doi.org/10.1192/bjp.179.6.498

King, D. K., Shoup, J. A., Raebel, M. A., Anderson, C. B., Wagner, N. M., Ritzwoller, D. P., & Bender, B. G. (2020). Planning for Implementation Success Using RE-AIM and CFIR Frameworks: A Qualitative Study. *Frontiers in Public Health*, *8*. https://doi.org/10.3389/fpubh.2020.00059

Kirk, M. A., Kelley, C., Yankey, N., Birken, S. A., Abadie, B., & Damschroder, L. (2015). A systematic review of the use of the Consolidated Framework for

Implementation Research. *Implementation Science*, *11*(1), 1–13. https://doi.org/10.1186/s13012-016-0437-z

Lambert, M., Conus, P., & Naber, D. (2003). Impact of present and past antipsychotic side-effects on attitude toward typical antipsychotic treatment and compliance. *Schizophrenia Research*, *60*(1, Supplement), 360. https://doi.org/10.1016/S0920-9964(03)80178-0

Laursen, T. M., Musliner, K. L., Benros, M. E., Vestergaard, M., & Munk-Olsen, T. (2016). Mortality and life expectancy in persons with severe unipolar depression. *Journal of Affective Disorders*, *193*, 203–207. https://doi.org/10.1016/j.jad.2015.12.067

Lederman, O., Suetani, S., Stanton, R., Chapman, J., Korman, N., Rosenbaum, S., Ward, P. B., & Siskind, D. (2017). Embedding exercise interventions as routine mental health care: implementation strategies in residential, inpatient and community settings. *Australasian Psychiatry*, *25*(5), 451–455. https://doi.org/10.1177/1039856217711054

Lewis, S. F., & Hennekens, C. H. (2016). Regular Physical Activity: Forgotten Benefits. *The American Journal of Medicine*, *129*(2), 137–138. https://doi.org/10.1016/j.amjmed.2015.07.016

Lim, K.-L., Jacobs, P., Ohinmaa, A., Schopflocher, D., & Dewa, C. S. (2008). A new population-based measure of the economic burden of mental illness in Canada. *Chronic Diseases in Canada*, *28*(3), 92–98.

Lindamer, L. A., McKibbin, C., Norman, G. J., Jordan, L., Harrison, K., Abeyesinhe, S., & Patrick, K. (2008). Assessment of physical activity in middle-aged and older

adults with schizophrenia. *Schizophrenia Research*, *104*(1), 294–301. https://doi.org/10.1016/j.schres.2008.04.040

Low, L. L., Ab Rahim, F. I., Johari, M. Z., Abdullah, Z., Abdul Aziz, S. H., Suhaimi, N. A., Jaafar, N., Mohd Hanafiah, A. N., Kong, Y. L., Mahmud, S. H., Zulkepli, M. Z., Perialathan, K., Muharam, N., Zainudin, N. H., Mohd Zin, Z., Mohd Roslan, N., Aris, T., & Murad, S. (2019). Assessing receptiveness to change among primary healthcare providers by adopting the consolidated framework for implementation research (CFIR). *BMC Health Services Research*, *19*(1), 497. https://doi.org/10.1186/s12913-019-4312-x

Mammen, G., & Faulkner, G. (2013). Physical Activity and the Prevention of Depression: A Systematic Review of Prospective Studies. *American Journal of Preventive Medicine*, *45*(5), 649–657. https://doi.org/10.1016/j.amepre.2013.08.001

Martin, S. B., Morrow, J. R., Jackson, A. W., & Dunn, A. L. (2000). Variables related to meeting the CDC/ACSM physical activity guidelines. *Medicine and Science in Sports and Exercise*, *32*(12), 2087–2092. https://doi.org/10.1097/00005768-200012000-00019

Marwaha, S., & Johnson, S. (2004). Schizophrenia and employment - a review. *Social Psychiatry and Psychiatric Epidemiology*, *39*(5), 337–349. https://doi.org/10.1007/s00127-004-0762-4

McKay, H., Naylor, P.-J., Lau, E., Gray, S. M., Wolfenden, L., Milat, A., Bauman, A., Race, D., Nettlefold, L., & Sims-Gould, J. (2019). Implementation and scale-up of physical activity and behavioural nutrition interventions: an evaluation roadmap.

International Journal of Behavioral Nutrition and Physical Activity, *16*(1), 1–12. https://doi.org/10.1186/s12966-019-0868-4

Meaney, M., & Pung, C. (2008). McKinsey global results: Creating organizational transformations. *The McKinsey Quarterly*, *7*(3).

Mental Illness and Addiction: Facts and Statistics. (2021). CAMH. https://www.camh.ca/en/driving-change/the-crisis-is-real/mental-health-statistics

Milat, A. J., Bauman, A. E., Redman, S., & Curac, N. (2011). Public health research outputs from efficacy to dissemination: a bibliometric analysis. *BMC Public Health*, *11*(1), 934. https://doi.org/10.1186/1471-2458-11-934

Mittal, V. A., Vargas, T., Juston Osborne, K., Dean, D., Gupta, T., Ristanovic, I., Hooker, C. I., & Shankman, S. A. (2017). Exercise Treatments for Psychosis: a Review. *Current Treatment Options in Psychiatry*, *4*(2), 152–166. https://doi.org/10.1007/s40501-017-0112-2

Miyamoto, A. a, Miyamae, Y. b, & Yanagi, Y. a. (2006). Switching from antipsychotic polypharmacy to risperidone monotherapy in chronic schizophrenic patients. [Abstract]. *International Clinical Psychopharmacology*, *21*(4).

Olayinka, O. D., Moore, S. M., & Stange, K. C. (2020). Pilot Test of an Appreciative Inquiry Intervention in Hypertension Self-management. *Western Journal of Nursing Research*, *42*(7), 543–553. https://doi.org/10.1177/0193945919897077

Patten, S. B., Beck, C. A., Kassam, A., Williams, J. V., Barbui, C., & Metz, L. M. (2005). Long-Term Medical Conditions and Major Depression: Strength of Association for Specific Conditions in the General Population. *The Canadian Journal of Psychiatry*, *50*(4), 195–202. https://doi.org/10.1177/070674370505000402

Prochaska, J. O., & Velicer, W. F. (1997). The transtheoretical model of health behavior change. *American Journal of Health Promotion: AJHP*, *12*(1), 38–48. https://doi.org/10.4278/0890-1171-12.1.38

Public Health Agency of Canada. (2016, December 15). *Health Status of Canadians 2016: Report of the Chief Public Health Officer - What is influencing our health? - Physical activity* [Transparency - other;education and awareness]. Aem. https://www.canada.ca/en/public-health/corporate/publications/chief-public-health-officer-reports-state-public-health-canada/2016-health-status-canadians/page-13-what-influencing-health-physical-activity.html

Rastad, C., Martin, C., & Asenlöf, P. (2014). Barriers, benefits, and strategies for physical activity in patients with schizophrenia. *Physical Therapy*, *94*(10), 1467–1479. mnh. https://doi.org/10.2522/ptj.20120443

Ratnasingham, S., Cairney, J., Manson, H., Rehm, J., Lin, E., & Kurdyak, P. (2013). The Burden of Mental Illness and Addiction in Ontario. *The Canadian Journal of Psychiatry*, *58*(9), 529–537. https://doi.org/10.1177/070674371305800908

Reynolds, G. P. (2007). Schizophrenia, antipsychotics and metabolic disease. *Journal of Psychopharmacology*, *21*(4), 355–356. https://doi.org/10.1177/0269881107080215

Ross, R., Chaput, J.-P., Giangregorio, L. M., Janssen, I., Saunders, T. J., Kho, M. E., Poitras, V. J., Tomasone, J. R., El-Kotob, R., McLaughlin, E. C., Duggan, M., Carrier, J., Carson, V., Chastin, S. F., Latimer-Cheung, A. E., Chulak-Bozzer, T., Faulkner, G., Flood, S. M., Gazendam, M. K., … Tremblay, M. S. (2020). Canadian 24-Hour Movement Guidelines for Adults aged 18-64 years and Adults

aged 65 years or older: an integration of physical activity, sedentary behaviour, and sleep. *Applied Physiology, Nutrition, and Metabolism = Physiologie Appliquee, Nutrition Et Metabolisme*, *45*(10 (Suppl. 2)), S57–S102. https://doi.org/10.1139/apnm-2020-0467

Ryan, R. M., & Deci, E. L. (2000). Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being. *American Psychologist*, 11.

Ryan, R. M., Williams, G. C. ,. Patrick, H. ,. &. Deci, E. L. (2009). Self-determination theory and physical activity: the dynamics of motivation in development and wellness. *Hellenic Journal of Psychology*, *6*, 107–124.

Shor, R., & Shalev, A. (2014). Barriers to involvement in physical activities of persons with mental illness: Table 1: *Health Promotion International*, *31*(1), dau078–dau078. https://doi.org/10.1093/heapro/dau078

Skinner, B. F. (1965). *Science And Human Behavior*. Simon and Schuster.

Soundy, A., Stubbs, B., Probst, M., Hemmings, L., & Vancampfort, D. (2014). Barriers to and Facilitators of Physical Activity Among Persons With Schizophrenia: A Survey of Physical Therapists. *Chiatric Services*, *65*, 693–696. https://doi.org/10.1176/appi.ps.201300276

Teevale, T., & Kaholokula, J. K. (2018). Using appreciative inquiry methodology to develop a weight management program for obese children in New Zealand. *Australian and New Zealand Journal of Public Health*, *42*(1), 7–11. https://doi.org/10.1111/1753-6405.12719

Teixeira, P. J., Carraça, E. V., Markland, D., Silva, M. N., & Ryan, R. M. (2012). Exercise, physical activity, and self-determination theory: A systematic review. *International Journal of Behavioral Nutrition and Physical Activity*, *9*(78). https://doi.org/10.1186/1479-5868-9-78

Trajkovski, S., Schmied, V., Vickers, M., & Jackson, D. (2013). Implementing the 4D cycle of appreciative inquiry in health care: a methodological review. *Journal of Advanced Nursing*, *69*(6), 1224–1234. https://doi.org/10.1111/jan.12086

Vest, B. M., Wray, L. O., Brady, L. A., Thase, M. E., Beehler, G. P., Chapman, S. R., Hull, L. E., & Oslin, D. W. (2020). Primary care and mental health providers' perceptions of implementation of pharmacogenetics testing for depression prescribing. *BMC Psychiatry*, *20*(1), 518. https://doi.org/10.1186/s12888-020-02919-z

Warburton, D. E. R., Nicol, C. W., & Bredin, S. S. D. (2006). Health benefits of physical activity: the evidence. *CMAJ*, *174*(6), 801–809. https://doi.org/10.1503/cmaj.051351

Wolfenden, L., Finch, M., Nathan, N., Weaver, N., Wiggers, J., Yoong, S. L., Jones, J., Dodds, P., Wyse, R., Sutherland, R., & Gillham, K. (2015). Factors associated with early childhood education and care service implementation of healthy eating and physical activity policies and practices in Australia: a cross-sectional study. *Translational Behavioral Medicine*, *5*(3), 327–334. https://doi.org/10.1007/s13142-015-0319-y

Zumstein, N., & Riese, F. (2020). Defining Severe and Persistent Mental Illness—A Pragmatic Utility Concept Analysis. *Frontiers in Psychiatry, 11*. https://doi.org/10.3389/fpsyt.2020.00648

Appendix A

What PA program characteristics have been positive or efficacious, and in what way would you like to see PA programs be developed, implemented, and delivered in future?

Interview Guide

Before we start, I would like to remind you of your rights as a participant: Your participation is entirely voluntary. You can skip any question, refuse to answer any question, or stop the interview at any time. You can withdraw from this study at any time. This interview will be audio recorded but your name will be replaced by a code to maintain your anonymity. No personal identifiers will be used in the final report. All data will be de-identified and presented in aggregate form. The final report may include direct quotes made by you, but these will not be linked to you or any identifying information about you. Do you consent to proceed with the interview? To begin, are you comfortable telling me your age, gender, position on the ACT team, and years of experience on ACT teams?

1) **Characteristics of Intervention**
    a) Do you believe that physical activity programs are feasible for ACT clients?
    b) What benefits do you think ACT clients could gain from PA programs?
    c) What would be some advantages of providing PA programs through ACT?
    d) What PA program characteristics do you think would make it adaptable and feasible for implementation on ACT?

2) **Inner Setting**

   a) What facilitators do you foresee for ACT clients participating in PA programs?

   b) Do you foresee any barriers to participation?

   c) How do you think these barriers could be overcome?

   d) What program characteristics do you think are critical for client satisfaction?

3) **Outer Setting**

   a) Do you perceive our organization as supportive of PA programs for ACT clients?

   b) What resources are available to support you in implementing a PA program?

   c) What resources could our organization provide to better support implementation of a PA program?

4) **Individuals involved in intervention and implementation**

   a) On a scale of 1-10, how greatly do you value regular PA?

   b) On a scale of 1-10, how important do you think physical activity is for ACT clients?

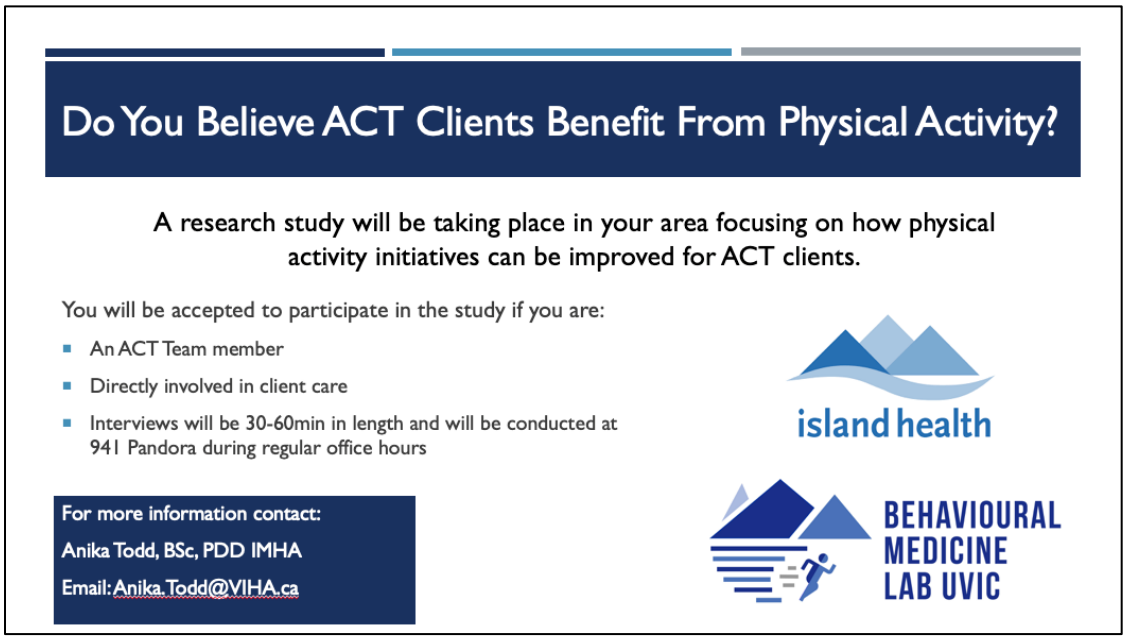
   c) On a scale of 1-10, how competent do you feel in delivering physical activity programs to ACT clients?

5) **Implementation process**

   a) Would you be interested in being involved in the development and implementation of a PA program for ACT clients?

Appendix B

Recruitment Poster



Recruitment Email

Dear ACT Team member,

I am sending you this on behalf of the Principal Investigator (PI), Anika Todd. I am acting as a neutral third party so that your confidentiality is protected and so you do not feel (unintentional) coercion by a recruitment email sent directly from the Principal Investigator.

Anika is conducting a study focusing on improving physical activity initiatives for ACT clients. Physical activity has many mental and physical health benefits, but individuals with severe mental illness engage in less physical activity than the general population. The goal of the study is to gain a better understanding of how to best support our clients in achieving regular physical activity in order to better inform future program development. Your experience, perspectives and ideas are an invaluable part of this endeavor.

Anika will be conducting semi-structured interviews using an appreciate inquiry approach. The goal is to reflect on what is working, how to build on the positive things we are already doing and explore ideas for future. The interview will be 30-60min in length and will be held by phone. Your participation will be confidential.

If you are interested in participating in this study, please contact Anika directly at anika.todd@viha.ca or 778-677-2348.

Thank you for your time,

[Program Assistant Name]
Program Assistant

Vancouver Island Health Authority
C•A•R•E | **Courage • Aspire • Respect • Empathy**

Appendix C

Coding

Benefits of Regular PA

Decrease medication
Reference 1 - 1.39% Coverage

it might decrease the amount of medication that people need to take to manage symptoms, particularly depressive symptoms, but even feelings of anxiety can be addressed with exercise

Decrease Obesity
<Files\\AZ Data> - § 1 reference coded [0.54% Coverage]

Reference 1 - 0.54% Coverage

being more active could help in weight loss

<Files\\KaTh Data> - § 1 reference coded [2.34% Coverage]

Reference 1 - 2.34% Coverage

> for our clients, a lot of them are on medication that is weight positive medication, and we have the obesity epidemic, and we have people with metabolic disorders, so whatever we can do to help people fight back against that is absolutely necessary.

<Files\\KT Data> - § 2 references coded [1.44% Coverage]

Reference 1 - 0.37% Coverage

> it can help with your weight,

Reference 2 - 1.08% Coverage

> for their weight, diabetes could decrease, nutrition could improve…a lot could change.

<Files\\MP Data> - § 3 references coded [4.65% Coverage]

Reference 1 - 2.93% Coverage

Most of the psychiatric medications have huge metabolic side effects, including dyslipidemia, high blood pressure, weight gain particularly around the midsection, diabetes, hyperglycemia. Exercise, as we know, is often a good lifestyle modifier for any of those conditions alone and as that is one of the side effect profiles of psychiatric meds, it mitigates some of those risks.

Reference 2 - 0.76% Coverage

mitigating some of those risks from the metabolic syndrome and metabolic impacts of the medications

Reference 3 - 0.96% Coverage

People being able to maintain a healthy body weight or even somewhat more of a healthy body weight through physical activity

<Files\\TB Data> - § 1 reference coded [2.45% Coverage]

Reference 1 - 2.45% Coverage

a) What client needs have been identified by your organization that exercise addresses?

Social isolation, cardiovascular and weight gain issues that come with a number of the meds that people are on

Regular PA Improves ACT Client Mental Health
<Files\\AZ Data> - § 2 references coded [5.53% Coverage]

Reference 1 - 1.65% Coverage

I would say increased overall health increased physical health for sure and probably mental health I would suspect with also improved

Reference 2 - 3.88% Coverage

I think there are a number of studies out there that talk about brain derived neurotropic factor and how increased exercise can increase erythropoetin which then increases the BNF and that is like excellent for the brain so I think there would probably be a pretty good functional effect on people overall functioning

<Files\\BM Data> - § 4 references coded [7.29% Coverage]

Reference 1 - 1.97% Coverage

a) What are your thoughts about the value of PA programs for ACT clients?

I also believe that it is imperative

Reference 2 - 1.39% Coverage

for wellness I know balanced physical activity must be a part of that equation

Reference 3 - 1.53% Coverage

wellness is an entire system, and we can't separate mental health from physical health

Reference 4 - 2.40% Coverage

physical exercise will benefit you in multiple ways towards your whole wellness. It is the most underutilized antidepressant I believe.

<Files\\CL Data> - § 3 references coded [9.32% Coverage]

Reference 1 - 3.24% Coverage

With the clients that I have worked with in physical activity, it's been mostly great as far as their enthusiasm but also more importantly you know the effects it has on their mood. I'm a firm believer that it does reduce symptoms, decreases depression, increases motivation, and of course it also builds rapport with them as well.

Reference 2 - 3.98% Coverage

b) What benefits do you think ACT clients could gain from PA programs?

As far as my own experience, just as far as mood, increased cognitive abilities skills and overall well-being, increasing motivation and as a social thing as well, especially if it's physical activities in a social setting I think that could also bring about the benefits of socialization and PSR (psychosocial rehabilitation) as well.

Reference 3 - 2.09% Coverage

Overall wellness, counseling, building therapeutic rapport, getting them more connected with the community through access to rec centres for instance… those kinds of things. But yeah, just overall improved wellness

<Files\\HG Data> - § 3 references coded [4.95% Coverage]

Reference 1 - 0.91% Coverage

exercise is really shown to be as beneficial as a lot of medications, especially for treating depression

Reference 2 - 1.67% Coverage

I think in terms of just the influence of physical health on mental health and vice versa, it is so significant that I think it would really enhance and optimize their [the clients'] outcomes

Reference 3 - 2.37% Coverage

It would help to ensure better client outcomes in terms of their mental health, but also improve their overall, holistic wellness. It would address their mental, physical and social well-being. Even their spiritual well-being, because it provides meaning to the client.

<Files\\KaTh Data> - § 4 references coded [9.39% Coverage]

Reference 1 - 3.77% Coverage

I think that we are really far behind in terms of realizing how important physical activity is to mental health and I feel like sometimes we make efforts to try to start something and obviously with our clients it's a little more challenging in terms of trying to find people and maintain a schedule for that kind of thing, but I do feel like not enough is being done to make it more of a priority

Reference 2 - 2.80% Coverage

a lot of our clients are suffering from things like depression, anxiety. Research shows exercise helps with all those things, not only with building self-confidence and providing social connections but also the way it can actually change your brain chemistry and act as a natural antidepressant.

Reference 3 - 1.42% Coverage

We're treating mental illness and exercise is a big piece in protecting against mental illness. It should be something that we do, not something extra

Reference 4 - 1.40% Coverage

I think we see exercise as something extra we do to be extra healthy, but we should look at exercise as a basic requirement for good mental health.

<Files\\KT Data> - § 3 references coded [8.54% Coverage]

Reference 1 - 4.57% Coverage

c) What are your thoughts about the value of PA programs for ACT clients?

We definitely need to do more of. I hold that in very, very high value. Whenever we brought people up to Serenity Garden, you could see their mood and their attitudes shift from sitting on the bus on the way there, anxious and tight, to coming back and they're all lit up. It's incredibly valuable.

Reference 2 - 2.15% Coverage

similar benefits that anyone would gain from a physical activity program: you can get out, it lifts your spirits, it can help with your weight, your mood, overall well-being.

Reference 3 - 1.81% Coverage

Overall mental health, getting them connected to a community, get them thinking about the importance of physical health for their overall wellbeing,

<Files\\MP Data> - § 5 references coded [5.98% Coverage]

Reference 1 - 0.91% Coverage

for physical activity with clients. Often, I found the therapeutic value, not just physically but mental health wise.

Reference 2 - 0.66% Coverage

the self-care benefit of getting out and doing things; it is mood boosting for people

Reference 3 - 1.60% Coverage

engaging in physical activity, even if it's just with a practitioner, let alone in a group setting. It benefits their mental well-being and decreases their social isolation and benefits them in lots of ways.

Reference 4 - 1.43% Coverage

A lot of our clients struggle with depression or other sorts of things that inherently impact their motivation to get up and get going and moving with their day so it would address that

Reference 5 - 1.39% Coverage

it might decrease the amount of medication that people need to take to manage symptoms, particularly depressive symptoms, but even feelings of anxiety can be addressed with exercise

<Files\\TB Data> - § 3 references coded [11.91% Coverage]

Reference 1 - 1.44% Coverage

d) What are your thoughts about the value of PA programs for ACT clients?

I believe it would have a positive impact.

Reference 2 - 5.62% Coverage

I think there would actually be a great deal of benefits. There would be the chance to meet new people. There is the being separated or moved out of ah there home and general routine. If it is a regular thing, it also gives them something to create a calendar schedule around. I think that overall physical activity is good for people, that help their mood overall is better. I think therapeutically, overall, it would have a positive impact in several ways

Reference 3 - 4.85% Coverage

Social isolation, cardiovascular and weight gain issues that oc me with a number of the meds that people are on, there is a reward to physical activity, and it is something that people have to schedule around, especially if they are expecting other people to show up so it has that extra….structure is one of the better things when implemented into a care plan to help someone with an addiction

Regular PA Improves ACT Client Physical Health

<Files\\AZ Data> - § 5 references coded [10.13% Coverage]

Reference 1 - 0.45% Coverage

it's just such a healthy thing to do

Reference 2 - 0.87% Coverage

I would say increased overall health increased physical health for sure

Reference 3 - 0.86% Coverage

exercise and vigorous exercise obviously has a lot of health benefits

Reference 4 - 4.08% Coverage

maybe a better ability for clients to help control their metabolic pathways given that most of the psychiatric medication has pretty devastating metabolic effects, lot of diabetes stuff, so being more active could help in weight loss and the risk of type 2 diabetes, which is something that is often a risk for that client population

Reference 5 - 3.88% Coverage

I think there are a number of studies out there that talk about brain derived neurotropic factor and how increased exercise can increase erythropoetin which then increases the BNF and that is like excellent for the brain so I think there would probably be a pretty good functional effect on people overall functioning

<Files\\BM Data> - § 3 references coded [5.76% Coverage]

Reference 1 - 1.97% Coverage

a) What are your thoughts about the value of PA programs for ACT clients?

I also believe that it is imperative

Reference 2 - 1.39% Coverage

for wellness I know balanced physical activity must be a part of that equation

Reference 3 - 2.40% Coverage

b) What client needs have been identified by your organization that exercise addresses?

Overall better wellness. Better physical health

<Files\\HG Data> - § 4 references coded [4.88% Coverage]

Reference 1 - 1.33% Coverage

in terms of a physical health, exercise would help to alleviate a lot of like ailments and I think it would give them also an overall sense of wellbeing

Reference 2 - 1.32% Coverage

There is so many benefits! Unlimited benefits! I think that it is one of the most important aspects of a person's life, movement and physical wellness.

Reference 3 - 1.67% Coverage

I think in terms of just the influence of physical health on mental health and vice versa, it is so significant that I think it would really enhance and optimize their [the clients'] outcomes

Reference 4 - 0.55% Coverage

It would address their mental, physical and social well-being.

<Files\\KT Data> - § 2 references coded [2.89% Coverage]

Reference 1 - 1.81% Coverage

Overall mental health, getting them connected to a community, get them thinking about the importance of physical health for their overall wellbeing,

Reference 2 - 1.08% Coverage

for their weight, diabetes could decrease, nutrition could improve…a lot could change.

<Files\\MP Data> - § 3 references coded [4.60% Coverage]

Reference 1 - 2.93% Coverage

Most of the psychiatric medications have huge metabolic side effects, including dyslipidemia, high blood pressure, weight gain particularly around the midsection, diabetes, hyperglycemia. Exercise, as we know, is often a good lifestyle modifier

for any of those conditions alone and as that is one of the side effect profiles of psychiatric meds, it mitigates some of those risks.

Reference 2 - 0.91% Coverage

for physical activity with clients. Often, I found the therapeutic value, not just physically but mental health wise.

Reference 3 - 0.76% Coverage

mitigating some of those risks from the metabolic syndrome and metabolic impacts of the medications

Regular PA Improves Personal Mental Health

<Files\\AZ Data> - § 1 reference coded [1.21% Coverage]

Reference 1 - 1.21% Coverage

I definitely think that it is really important for brain health and overall health and functioning

<Files\\BM Data> - § 1 reference coded [2.19% Coverage]

Reference 1 - 2.19% Coverage

a) What are your thoughts about the value of regular PA for your own mental and physical health?

I believe it's imperative

<Files\\CL Data> - § 1 reference coded [1.53% Coverage]

Reference 1 - 1.53% Coverage

I think it's definitely like an antidepressant and mood enhancing. As far as cognitive improvement, it gives me that kind of clarity, that kind of alertness

<Files\\HG Data> - § 1 reference coded [1.99% Coverage]

Reference 1 - 1.99% Coverage

The benefits of it on myself? I would say that it helps me in terms of alleviating any anxiety and depression, it helps me with concentration, it provides me with a sense of wellbeing, and it helps me feel more balanced overall

<Files\\KaTh Data> - § 2 references coded [1.50% Coverage]

Reference 1 - 0.86% Coverage

For me, I mean it's an absolute priority! I think it's how I deal with the deal with stress

Reference 2 - 0.64% Coverage

It helps me sleep better and to be more present when I am working.

<Files\\KT Data> - § 1 reference coded [4.12% Coverage]

Reference 1 - 4.12% Coverage

b) What are your thoughts about the value of regular PA for your own mental and physical health?

I don’t get as much as I should, however, I certainly hold it in high value when I do get an opportunity. Weekends I’m definitely always out in nature more so than the gym or anything like that, so walking, hiking pretty much every weekend.

<Files\\MP Data> - § 1 reference coded [2.40% Coverage]

Reference 1 - 2.40% Coverage

It is part of my selfcare. It is part of my selfcare for the stress of the job that I do and also, as someone who has a mental health concern, I find that it is, when I am doing well, enough to manage my mood disorder and I don’t have to take any medication. It is definitely really valuable for improving mood.

<Files\\TB Data> - § 1 reference coded [0.71% Coverage]

Reference 1 - 0.71% Coverage

I find the more I exercise, the better my mood is overall

Regular PA Improves Personal Physical Health

<Files\\AZ Data> - § 1 reference coded [1.21% Coverage]

Reference 1 - 1.21% Coverage

I definitely think that it is really important for brain health and overall health and functioning

<Files\\BM Data> - § 1 reference coded [2.19% Coverage]

Reference 1 - 2.19% Coverage

a) What are your thoughts about the value of regular PA for your own mental and physical health?

I believe it's imperative

<Files\\CL Data> - § 1 reference coded [1.24% Coverage]

Reference 1 - 1.24% Coverage

Sometimes I have headaches when I wake up in the morning and I go for a run and it just completely clears any kind of headaches

<Files\\KT Data> - § 1 reference coded [4.12% Coverage]

Reference 1 - 4.12% Coverage

b) What are your thoughts about the value of regular PA for your own mental and physical health?

I don't get as much as I should, however, I certainly hold it in high value when I do get an opportunity. Weekends I'm definitely always out in nature more so than the gym or anything like that, so walking, hiking pretty much every weekend.

Existing Resources
Within Island Health
<Files\\BM Data> - § 2 references coded [3.77% Coverage]

Reference 1 - 0.43% Coverage

It's almost nonexistent.

Reference 2 - 3.34% Coverage

I know there are through our organization. In the recovery program through stabilization, they get gym passes and clients can get passes to go there while they are involved in the program.

<Files\\HG Data> - § 2 references coded [4.44% Coverage]

Reference 1 - 1.81% Coverage

I think the day program at the Mental Wellness Program at Victoria Mental Health Centre has pretty good groups in place that they tried to deliver exercise and I think they have pretty good success with it

Reference 2 - 2.63% Coverage

a) What external resources are available to support you in implementing a PA program?

Currently? I would say, off the top of my head, the Mental Wellness Program is the big one that we have; the outpatient service at Victoria Mental Health Centre I can't think of any other resources available to us.

Within the ACT Teams

<Files\\HG Data> - § 1 reference coded [2.46% Coverage]

Reference 1 - 2.46% Coverage

> within ACT, I think the clinicians are so busy that can feel less critical to implement any sort of exercise regime. There's lots of theoretical support, but no real-life support. We only have so much time and resources to do what we need to do to keep our clients out of hospital.

<Files\\KT Data> - § 1 reference coded [1.69% Coverage]

Reference 1 - 1.69% Coverage

> We used to have a very small account that we could access if we needed to get different things for people. We don't have any of that now.

<Files\\MP Data> - § 1 reference coded [1.35% Coverage]

Reference 1 - 1.35% Coverage

a) How would you describe your organizations connections with other organizations that support health with physical activity/exercise?

> I don't know that ACT has any, honestly.

Within the Community

<Files\\AZ Data> - § 2 references coded [4.32% Coverage]

Reference 1 - 3.48% Coverage

a) How would you describe your organizations connections with other organizations that support health with physical activity/exercise?

Lacking, probably, actually well I mean they do have the what is it the 52 times a year what is it called the life pass that people with PWD can get.

Reference 2 - 0.84% Coverage

OK so yeah long story short we do not have super rigorous connections

<Files\\BM Data> - § 2 references coded [6.61% Coverage]

Reference 1 - 3.34% Coverage

> I know there are through our organization. In the recovery program through stabilization, they get gym passes and clients can get passes to go there while they are involved in the program.

Reference 2 - 3.27% Coverage

> It's not consistent. Parts of the organization have connections, like I said with different recreation centres, but it isn't something that's implemented or available across the board.

<Files\\CL Data> - § 2 references coded [4.90% Coverage]

Reference 1 - 3.20% Coverage

> I mean, aside from rec centres? For you CLBC clients certainly there is some collaboration with them in terms of providing more opportunities than just outings and things like that, but to be perfectly honest …yeah, I'm not too sure what other resources are available specifically for physical activity and wellness and whatnot

Reference 2 - 1.70% Coverage

b) How would you describe your organizations connections with other organizations that support health with physical activity/exercise?

> Oh, wow, not particularly high for sure

<Files\\HG Data> - § 1 reference coded [2.09% Coverage]

Reference 1 - 2.09% Coverage

I know that a lot of the public facilities provide the Life Pass, so we have the ability to get our clients those Life Passes. That's actually the number one way we encourage physical engagement, like physical exercise, which was awesome.

<Files\\KaTh Data> - § 3 references coded [4.87% Coverage]

Reference 1 - 1.18% Coverage

c) What external resources are available to support you in implementing a PA program?

I don't really know that there are any

Reference 2 - 2.27% Coverage

d) How would you describe your organizations connections with other organizations that support health with physical activity/exercise?

They are not strong. We could go out and seek some connections, but there is nothing ongoing and stable.

Reference 3 - 1.42% Coverage

Besides having a discounted community pass where I could take one client to the gym or the pool, I don't really know if we have any strong connections

<Files\\KT Data> - § 2 references coded [7.59% Coverage]

Reference 1 - 4.59% Coverage

The Downtown Community Center is fantastic! They do actually have some great programs for client. No necessarily for ACT to participate, but if you wanted to refer someone to go there, they do have some fun things for people. I don't know if it was through the CRD but I know they were doing baseball or soccer every Sunday but there is not a lot of crossover for ACT client.

Reference 2 - 3.01% Coverage

e) How would you describe your organizations connections with other organizations that support health with physical activity/exercise?

I would describe it as poor. I think we could do much better at creating those connections with the community.

<Files\\MP Data> - § 1 reference coded [2.65% Coverage]

Reference 1 - 2.65% Coverage

There's the life pass, so 52 visits a year, and I think we do have an assistant pass that we can use to accompany clients. That's all I can think of in terms of our external resources that are affordable and accessible for our clients aside from just the free things ….so we can go outside, we can hike, we can go to the beach, go for a walk.

<Files\\TB Data> - § 3 references coded [5.35% Coverage]

Reference 1 - 2.81% Coverage

So, there's the Life pass, which will also for a limited expense pay for a worker to with the client. But that's only one on one and it's only in a certain number of facilities, which are effectively not accessible due to COVID.

Reference 2 - 0.78% Coverage

There was Sober Sports, which is also closed down due to COVID.

Reference 3 - 1.77% Coverage

f) How would you describe your organizations connections with other organizations that support health with physical activity/exercise?

Uh, poor.

Implementation Process

Dedicated Funding

<Files\\AZ Data> - § 2 references coded [5.32% Coverage]

Reference 1 - 1.48% Coverage

a) What factors within our organization would support implementation of PA programs for ACT clients?

They could fund it!!

Reference 2 - 3.84% Coverage

maybe direction from the team leads like that always works well sort of having it come up in our meeting where it's sort of like "hey, this is in the budget or this is of interest to us because there's a large evidence based kind of thing" and then seeing maybe what the team has to bring to the table Thursday

<Files\\HG Data> - § 1 reference coded [0.32% Coverage]

Reference 1 - 0.32% Coverage

and money to develop these programs.

<Files\\KaTh Data> - § 3 references coded [4.47% Coverage]

Reference 1 - 1.00% Coverage

I don't think there's extra funding for it so then it just falls to the wayside when things get busy.

Reference 2 - 1.91% Coverage

Like now all the overdose stuff is getting highlighted so now that's getting funding. So if you can create more of an understanding of the need for something it will support the implementation of it.

Reference 3 - 1.57% Coverage

we are already stretched on ACT to do the basic tasks that we are required to do and, without being compensated, to try to take that on extra to the work that we do.

<Files\\KT Data> - § 6 references coded [9.97% Coverage]

Reference 1 - 0.56% Coverage

I can't see it being financed by Island Health

Reference 2 - 0.93% Coverage

I think there would need to be some sort of incentive for the client to go.

Reference 3 - 1.20% Coverage

There would need to be some kind of financial incentive for clients to attend, at least initially,

Reference 4 - 2.19% Coverage

Having finances set aside for this program that are not going to be affected by fiscal changes at the end of the year and budgets. Something financial that is not going anywhere.

Reference 5 - 3.37% Coverage

And money, then we can buy what we need to get – like shoes for people. I think one of the biggest barriers for people is not having the appropriate gear. We could get exercise equipment like a football or a basketball. We could get swimsuits if someone needed a swimsuit.

Reference 6 - 1.71% Coverage

We used to have a very small account that we could access if we needed to get different things for people. We don't have any of that now.

<Files\\MP Data> - § 2 references coded [1.70% Coverage]

Reference 1 - 0.47% Coverage

we should either fund or create or engage in this in some way

Reference 2 - 1.23% Coverage

funding in some way for us to even on a team-by-team basis decide what we're going to do in order to create this physical activity programming for our clients

<Files\\TB Data> - § 2 references coded [5.25% Coverage]

Reference 1 - 0.97% Coverage

If we had any kind of support that paid for workers or a specialized position.

Reference 2 - 4.28% Coverage

Not a lot of funds or resources get thrown towards any kind of real recovery. I think if we had hard evidence that this is a good way of moving people through services, getting them out of supported housing sites, less hospital stays and get hard evidence that, overall, it would cost the system less money we could probably get more resources.

Dedicated Time and Space

<Files\\AZ Data> - § 2 references coded [1.59% Coverage]

Reference 1 - 0.88% Coverage

I mean scheduling would be an important factor in how to implement that

Reference 2 - 0.71% Coverage

have dedicated time for staff to implement the program.

<Files\\BM Data> - § 2 references coded [2.52% Coverage]

Reference 1 - 1.94% Coverage

regular, anticipated, protected time to be able to deliver that so that there's some consistency for clients.

Reference 2 - 0.59% Coverage

It has to be part of our process.

<Files\\CL Data> - § 2 references coded [4.91% Coverage]

Reference 1 - 2.84% Coverage

Definitely a lot of collaboration with the team and having enough team members be involved so that it could be a regular thing. But also, something that is agreed on with the team as far as the frequency. Obviously at least once or twice a week, with an agreed scheduled to allow for that.

Reference 2 - 2.08% Coverage

it certainly would be able to work with the proper planning and collaboration around that so it's just a routine consistently done thing. Then clients have that in their schedule, so they know when to expect it.

<Files\\HG Data> - § 6 references coded [6.90% Coverage]

Reference 1 - 1.99% Coverage

I feel like it could work well having it regularly put into the calendar for each person [client] or groups of people [clients] every week, because then it wouldn't fall by the wayside it would just be part of our service plan.

Reference 2 - 0.80% Coverage

holding programs at certain sites or at ACT where the clients could come in and participate

Reference 3 - 0.78% Coverage

making sure that it's just a regular part of our schedule rather than an optional idea.

Reference 4 - 0.64% Coverage

Probably hiring and giving actual time towards developing these programs

Reference 5 - 1.82% Coverage

b) What resources could our organization provide to better support implementation of a PA program?

Probably just people, a qualified clinician, and time for that clinician and money to develop these programs.

Reference 6 - 0.87% Coverage

just based on the location of ACT, it might be good for VIHA to provide some sort of space to meet.

<Files\\KaTh Data> - § 1 reference coded [0.49% Coverage]

Reference 1 - 0.49% Coverage

it just falls to the wayside when things get busy.

<Files\\KT Data> - § 1 reference coded [3.83% Coverage]

Reference 1 - 3.83% Coverage

I think given some more space… sometimes you're limited to what the care plans are or limited to what they are asking you to do when you come in for work and it's a little different as a casual staff, but I often try to take people out to go for walks and get down to the beach, something to kind of get outside.

<Files\\MP Data> - § 3 references coded [6.53% Coverage]

Reference 1 - 1.72% Coverage

So, having something that we have specifically protected time in which to engage, I think probably would increase our ability to actually stick with it and an offer it as opposed to kind of triaging it out if crises arise.

Reference 2 - 3.13% Coverage

it may be motivating and add some kind of accountability for clients that there is a time, there's an expectation, they are signed up for it and…. it's like me with the gym, right? If I have that time slot and I've signed up for the class and I know I'm going to get a $12.00 charge if I don't show up, I'm less likely to wake up and make excuses because I'm expected there, other people are counting on me

Reference 3 - 1.69% Coverage

it does come up cyclically, right? Best intentions. “We need to do something!”… and then we all just don't do anything because there's not time or there's not expertise or the demands on our time just don't permit it.

<Files\\TB Data> - § 4 references coded [12.18% Coverage]

Reference 1 - 5.20% Coverage

you would have to run it in a group, distanced and a small group because of COVID, have it in a reminder a couple times a week and be quite assertive for the beginning. So, it would look like mental health workers, SPOs, nurses, going out in the morning, reminding, organizing for them to arrive to wherever the program takes place, have a facilitator there to help them engage in the physical activity whatever it may be.

Reference 2 - 3.26% Coverage

c) What factors within our organization would support implementation of PA programs for ACT clients?

If we had a place to do it if we had some form of transport for several different clients, like if we had a van that could go around and pick a bunch of people up.

Reference 3 - 2.42% Coverage

if we had a place to do it, if we had someone whose job it was to oversee it, if you had some form of transport. Similar to what we do with the garden program, if it was set up in a similar way.

Reference 4 - 1.29% Coverage

structure is one of the better things when implemented into a care plan to help someone with an addiction

Education about Importance of PA
<Files\\CL Data> - § 1 reference coded [2.67% Coverage]

Reference 1 - 2.67% Coverage

Also, doing a few workshops and raising awareness with staff; a reminder about this stuff. Maybe having a kind of short course on physical activity and the benefits; some kind of education and professional developments workshops based on that could probably be beneficial.

<Files\\KaTh Data> - § 4 references coded [12.21% Coverage]

Reference 1 - 2.20% Coverage

I think we'd have to have employees trained on what type of activities are appropriate for different clients. You might want to have an occupational health therapist, provide some basic training for people interested in taking it on

Reference 2 - 4.02% Coverage

If education was given to staff on how beneficial it (exercise it), that might motivate and have it better supported. Even providing education on a bigger scale,

incorporating it into our general education on mental health. Like now all the overdose stuff is getting highlighted so now that's getting funding. So if you can create more of an understanding of the need for something it will support the implementation of it.

Reference 3 - 2.21% Coverage

Again, education. I think there is just a lack of understanding that it is just as vital as medication and all the other treatment options. Once we know it is then there is no other option but to implement it into mental health care.

Reference 4 - 3.78% Coverage

Education about the importance of physical activity. Also, providing opportunities for staff to be trained in how to create physical activity programs. I think a lot of people don't want to take it on because they don't really know how to do it and how to do it in a physically safe way and a culturally safe way. If we gave staff those opportunities, then people would probably get excited by it.

<Files\\MP Data> - § 1 reference coded [1.99% Coverage]

Reference 1 - 1.99% Coverage

Someone needs to decide that that's going to be their cause, they need to take it on, and they need to go through the steps of stressing why it's important and why it would be beneficial and why we should either fund or create or engage in this in some way.

<Files\\TB Data> - § 1 reference coded [3.28% Coverage]

Reference 1 - 3.28% Coverage

I think if we had hard evidence that this is a good way of moving people through services, getting them out of supported housing sites, less hospital stays and get hard evidence that, overall, it would cost the system less money we could probably get more resources.

Engage appropriate Individuals
<Files\\AZ Data> - § 2 references coded [5.83% Coverage]

Reference 1 - 3.40% Coverage

> Yeah, I don't know, maybe some kind of a task force or something might be helpful 'cause it sounds like if it were to work it would be a lot of positive gains for ACT clients but also in order for something to be successful it would most likely take a high effort in planning.

Reference 2 - 2.42% Coverage

> a little task forces something work maybe check around with different team members to see if anybody would be interested in forming a kind of task force or planning committee to help something out.

<Files\\BM Data> - § 1 reference coded [2.93% Coverage]

Reference 1 - 2.93% Coverage

> Staff! Somebody that can guide them through calisthenics and stuff, that can do some kind of an assessment to find out what their individual program would look like

<Files\\CL Data> - § 4 references coded [7.02% Coverage]

Reference 1 - 2.12% Coverage

d) What would an exercise program have to look like to ensure its regular implementation?

> Definitely a lot of collaboration with the team and having enough team members be involved so that it could be a regular thing

Reference 2 - 0.78% Coverage

> Ensuring these are folks that are motivated and requesting this kind of service.

Reference 3 - 1.57% Coverage

I know in services like care homes, they have recreational workers so putting something like that in the budget. Hiring a person who's specialized in that role.

Reference 4 - 2.55% Coverage

Yeah, I think maybe what I alluded to before, just about the importance of having or hiring or contracting staff to specifically work with organizations or some of the rec centres or agencies that promote physical activities and whatnot at the community level.

<Files\\HG Data> - § 5 references coded [8.25% Coverage]

Reference 1 - 1.17% Coverage

I think it would be helpful to have more knowledgeable staff that can develop plans and other staff could follow through with them.

Reference 2 - 1.63% Coverage

Probably hiring and giving actual time towards developing these programs and hiring someone, maybe an Occupational Therapist, on the team that could develop programs and assess progress.

Reference 3 - 2.22% Coverage

Just hiring at least someone, a qualified clinician, to do some program development and spend time and resources to ensure that it actually can be utilized effectively and be easily delivered ensure that it could be used again and it will be consistent.

Reference 4 - 1.82% Coverage

e) What resources could our organization provide to better support implementation of a PA program?

Probably just people, a qualified clinician, and time for that clinician and money to develop these programs.

Reference 5 - 1.40% Coverage

Probably, at the very least, it would involve having a qualified person to develop the programs and create a unified, consistent approach for the ACT teams.

<Files\\KaTh Data> - § 1 reference coded [2.37% Coverage]

Reference 1 - 2.37% Coverage

You might want to have an occupational health therapist, provide some basic training for people interested in taking it on, and then everybody would have to be on board and buy into the fact that this is something we should be doing for our clients.

<Files\\KT Data> - § 1 reference coded [3.46% Coverage]

Reference 1 - 3.46% Coverage

Staffing, obviously. Having someone who is wanting to do that. It would be hard to have a program like that and assigning staff to it because different staff are at different levels. I think that would be one of the biggest challenges – the consistency with staff that want to do it.

<Files\\MP Data> - § 4 references coded [10.42% Coverage]

Reference 1 - 4.79% Coverage

I do think that that is an area that's lacking within the ACT model. We have all of these recovery focused things, like peer support and vocational rehabilitation and nursing, psychiatric nursing, social work, counseling, addictions workers… all of those components and we don't actually have a physical rehabilitation specialist that's attached even as a float position between the teams, even as a consultative service to provide us with information on how to incorporate that [physical activity] more into work that we do. Without that kind of direction, I don't know if I feel qualified to set up a fitness program.

Reference 2 - 1.99% Coverage

I think it would be ideal to have vocational rehab, to have someone that was able to provide information and develop those structured type programs, even on a consultative basis, where they set us up and they give us the resources and teach us how to do it.

Reference 3 - 3.07% Coverage

We probably need someone to champion the cause. Like with all change within our programming, someone needs to identify that there's a need. Someone needs to decide that that's going to be their cause, they need to take it on, and they need to go through the steps of stressing why it's important and why it would be beneficial and why we should either fund or create or engage in this in some way.

Reference 4 - 0.58% Coverage

I think there would just need to be a position created or people brought in

<Files\\TB Data> - § 1 reference coded [0.59% Coverage]

Reference 1 - 0.59% Coverage

if we had someone whose job it was to oversee it

Program Mandate

<Files\\BM Data> - § 1 reference coded [0.62% Coverage]

Reference 1 - 0.62% Coverage

It has to be part of our process.

<Files\\CL Data> - § 1 reference coded [0.86% Coverage]

Reference 1 - 0.86% Coverage

So budget, training and the expectation that physical activity be a part of our service.

<Files\\HG Data> - § 3 references coded [7.46% Coverage]

Reference 1 - 0.82% Coverage

Also, making sure that it's just a regular part of our schedule rather than an optional idea.

Reference 2 - 5.91% Coverage

I think the fact that ACT's mandate is psychosocial rehabilitation and that is all about the focus on recovery, which is in the enhancement of one's well-being and living with and beyond a mental illness rather than just treating the illness and not focusing on the other strengths in a person's life and building those strengths. I think just the fact that it's supposed to be PSR [psychosocial rehabilitation] and currently is not really treated as such. Having exercise regimes, which focuses on mental well-being, physical health, and more resilience in all of those. All of those positive benefits would really represent what PSR [psychosocial rehabilitation] is about.

Reference 3 - 0.72% Coverage

Also, ensuring that this would be more prioritized as one aspect of our treatment.

<Files\\KaTh Data> - § 2 references coded [3.52% Coverage]

Reference 1 - 2.46% Coverage

I do think if our priorities changed then we could incorporate some of that other stuff and for me it wouldn't be a problem. If it (physical activity) was an expectation of our job I do think that a lot of people would not know what that should look like.

Reference 2 - 1.06% Coverage

It would have to be an organizational requirement and written into policy to be a standard of care and practice

<Files\\TB Data> - § 1 reference coded [1.00% Coverage]

Reference 1 - 1.00% Coverage

But ACT teams are not focused on that and it's tough for them to find the time.

Individuals Involved
Staff Attitude towards PA
<Files\\AZ Data> - § 4 references coded [11.28% Coverage]

Reference 1 - 2.85% Coverage

I think it's super important even though I myself personally struggle with doing it in any kind of timely and consistent way but, yes, I definitely think that it is really important for brain health and overall health and functioning

Reference 2 - 2.88% Coverage

a) What are your thoughts about the value of PA programs for ACT clients?
I think that would be amazing I think that would be really it sounds like it should be probably an essential part of our work it's just such a healthy thing to do

Reference 3 - 1.09% Coverage

I think it's really important, maybe as important as our daily contact kind of mandates

Reference 4 - 4.47% Coverage

Oh, like so many basically the need for exercise and vigorous exercise obviously has a lot of health benefits and also a huge impact I think would be a social impact if there could be kind of clubs or groups or something where people on nature hikes

or do like a mini even kind of like boot camp type thing with basic physical literacy I think that would be so good

<Files\\BM Data> - § 3 references coded [8.44% Coverage]

Reference 1 - 2.19% Coverage

b) What are your thoughts about the value of regular PA for your own mental and physical health?

I believe it's imperative

Reference 2 - 1.42% Coverage

for wellness I know balanced physical activity must be a part of that equation

Reference 3 - 4.83% Coverage

I believe that wellness is an entire system, and we can't separate mental health from physical health. I mean, it's understood fact that physical exercise will benefit you in multiple ways towards your whole wellness. It is the most underutilized antidepressant I believe.

<Files\\CL Data> - § 6 references coded [22.88% Coverage]

Reference 1 - 5.90% Coverage

I think it's definitely like an antidepressant and mood enhancing. As far as cognitive improvement, it gives me that kind of clarity, that kind of alertness. I try to go for runs in the morning. Short runs, usually just 15-20 minutes, sometimes a half hour, and as far as just feeling fresh after that's probably one of the best feelings that I get, and it usually lasts throughout the day. Sometimes I have headaches when I wake up in the morning and I go for a run and it just completely clears any kind of headaches. So absolutely, it is definitely something I'm valuing more and more as I get older

Reference 2 - 0.75% Coverage

For clients who are interested in physical activity, it’s certainly valuable.

Reference 3 - 1.47% Coverage

I'm a firm believer that it does reduce symptoms, decreases depression, increases motivation, and of course it also builds rapport with them as well.

Reference 4 - 1.68% Coverage

Especially if it's physical activities in a social setting I think that could also bring about the benefits of socialization and PSR (psychosocial rehabilitation) as well.

Reference 5 - 6.02% Coverage

From a therapeutic standpoint, I think physical activity specifically is just like any other games I've played with clients; it's pretty valuable. I would say as far as my own experiences, playing basketball with clients for instance, which is primarily what I've done, that's pretty much my main physical activity with clients is one on one basketball or a game of 21 or something, and that's been I great as far as having conversations with clients about other things as well goals, PSR (psychosocial rehabilitation) stuff, counseling, therapeutics conversations, and it's been great for connecting with clients.

Reference 6 - 7.05% Coverage

I think it would be great! I know on other teams there's been talks about going on organized hikes with clients, which I haven't personally participated in yet, but that's something that I think as far as an activity idea that would be just huge. Not only providing the physical benefits of it, I think just having a program creates a routine, gives clients something to look forward to, and it allows them to connect and not feel alone by being in a group situation too. It’s so special with like social anxiety and things like that it would be again just building relationships with other clients I think it would be just fantastic and if it's something that's done regularly something that they can look forward to ….

<Files\\HG Data> - § 6 references coded [13.56% Coverage]

Reference 1 - 1.75% Coverage

> I would say that it helps me in terms of alleviating any anxiety and depression, it helps me with concentration, it provides me with a sense of wellbeing, and it helps me feel more balanced overall.

Reference 2 - 3.80% Coverage

> I think it would be very similar! In terms of treatment, exercise is really shown to be as beneficial as a lot of medications, especially for treating depression, but for our specific clients it would help contribute to the improvement in it very many areas of their lives. Just in terms of a physical health, exercise would help to alleviate a lot of like ailments and I think it would give them also an overall sense of wellbeing.

Reference 3 - 1.32% Coverage

> There is so many benefits! Unlimited benefits! I think that it is one of the most important aspects of a person's life, movement and physical wellness.

Reference 4 - 1.69% Coverage

> I think in terms of just the influence of physical health on mental health and vice versa, it is so significant that I think it would really enhance and optimize their [the clients'] outcomes.

Reference 5 - 2.63% Coverage

> So, in terms of long-term approaches, I think it rings up there with important things like finding work and some financial stability and insight and having social commitment like finding more meaningful social work and stuff like that. I think it's [physical activity] up there with those priorities.

Reference 6 - 2.37% Coverage

It would help to ensure better client outcomes in terms of their mental health, but also improve their overall, holistic wellness. It would address their mental, physical and social well-being. Even their spiritual well-being, because it provides meaning to the client.

<Files\\KaTh Data> - § 5 references coded [15.10% Coverage]

Reference 1 - 2.83% Coverage

For me, I mean it's an absolute priority! I think it's how I deal with the deal with stress and I think also just being on an ACT team you have to be pretty active, so I think having that level fitness and stamina is very helpful. It helps me sleep better and to be more present when I am working.

Reference 2 - 1.06% Coverage

I think that we are really far behind in terms of realizing how important physical activity is to mental health

Reference 3 - 3.23% Coverage

Then there's the whole science behind it, a lot of our clients are suffering from things like depression, anxiety. Research shows exercise helps with all those things, not only with building self-confidence and providing social connections but also the way it can actually change your brain chemistry and act as a natural antidepressant.

Reference 4 - 5.13% Coverage

c) How would you describe the importance of exercise as a therapeutic intervention compared to others that you implement? (relative advantage)

I think that it's just as important and I feel like we're starting to see that a holistic approach is much more beneficial. I think it's just as important as any other intervention or treatment, we just haven't grown enough to make it a part of the

medical model in the way that other interventions have. Hopefully now, with some of the research coming out, we can start to change that philosophy.

Reference 5 - 2.85% Coverage

We're treating mental illness and exercise is a big piece in protecting against mental illness. It should be something that we do, not something extra. I think we see exercise as something extra we do to be extra healthy, but we should look at exercise as a basic requirement for good mental health.

<Files\\KT Data> - § 4 references coded [13.72% Coverage]

Reference 1 - 2.93% Coverage

I don't get as much as I should, however, I certainly hold it in high value when I do get an opportunity. Weekends I'm definitely always out in nature more so than the gym or anything like that, so walking, hiking pretty much every weekend.

Reference 2 - 4.57% Coverage

d) What are your thoughts about the value of PA programs for ACT clients?

We definitely need to do more of. I hold that in very, very high value. Whenever we brought people up to Serenity Garden, you could see their mood and their attitudes shift from sitting on the bus on the way there, anxious and tight, to coming back and they're all lit up. It's incredibly valuable.

Reference 3 - 2.13% Coverage

You can get out, it lifts your spirits, it can help with your weight, your mood, overall well-being. I think a program would really make sense the way that we are structured.

Reference 4 - 4.08% Coverage

e) How would you describe the importance of exercise as a therapeutic intervention compared to others that you implement? (relative advantage)

I think I would have to see more of it in practice in order to properly rank it, but I think I would rank it quite high. That it is quite an important one that is underutilized at this point.

<Files\\MP Data> - § 4 references coded [12.72% Coverage]

Reference 1 - 2.40% Coverage

It is part of my selfcare. It is part of my selfcare for the stress of the job that I do and also, as someone who has a mental health concern, I find that it is, when I am doing well, enough to manage my mood disorder and I don't have to take any medication. It is definitely really valuable for improving mood.

Reference 2 - 1.96% Coverage

Often, I found the therapeutic value, not just physically but mental health wise. And having meaningful therapeutic conversations with people when you're out walking, they seem to just come easier than being in that kind of clinical confined environment.

Reference 3 - 4.85% Coverage

f) What benefits do you think ACT clients could gain from PA programs?

Multiple benefits! As I mentioned, mitigating some of those risks from the metabolic syndrome and metabolic impacts of the medications. Also, other the self-care benefit of getting out and doing things; it is mood boosting for people. It also can be a social thing too, so a lot of the folks that we work with have significant social isolation and engaging in physical activity, even if it's just with a practitioner, let alone in a group setting. It benefits their mental well-being and decreases their social isolation and benefits them in lots of ways.

Reference 4 - 3.51% Coverage

I don't think it's given enough focus. I think that a lot of times, in the work that I do in this environment, a lot of times the go-to is medications. There's a lot of emphasis placed on the pharmacological management of mental illness, but for people who don't have severe refractory illnesses like psychosis, I think exercise is potentially undervalued and underutilized as a means to address some of the less severe refractory mental health concerns.

<Files\\TB Data> - § 3 references coded [10.05% Coverage]

Reference 1 - 0.76% Coverage

So, I find the more I exercise, the better my mood is overall.

Reference 2 - 5.66% Coverage

I think there would actually be a great deal of benefits. There would be the chance to meet new people. There is the being separated or moved out of ah there home and general routine. If it is a regular thing, it also gives them something to create a calendar schedule around. I think that overall physical activity is good for people, that help their mood overall is better. I think therapeutically, overall, it would have a positive impact in several ways.

Reference 3 - 3.63% Coverage

g) How would you describe the importance of exercise as a therapeutic intervention compared to others that you implement? (relative advantage)

I think it would actually, were it something we were able to do more consistently, I would put it as one of the more important things that we could do.

Staff competence in delivery of PA programs
<Files\\AZ Data> - § 1 reference coded [3.84% Coverage]

Reference 1 - 3.84% Coverage

a) How would you describe your ability to deliver physical activity programs to ACT clients?

Not good. I would not feel comfortable doing that. I think I'd be worried that I might say something that they would hurt themselves or something because I'm not an athletic person or athletically trained in any way

<Files\\BM Data> - § 1 reference coded [3.77% Coverage]

Reference 1 - 3.77% Coverage

b) How would you describe your ability to deliver physical activity programs to ACT clients?

I'm confident in my own abilities but I don't feel that we have the room necessarily in our programming to offer it

<Files\\CL Data> - § 1 reference coded [6.16% Coverage]

Reference 1 - 6.16% Coverage

c) How would you describe your ability to deliver physical activity programs to ACT clients?

I would say maybe just competent, just adequate. I've probably only done physical activities with maybe less than half a dozen clients on two ACT teams that I've worked on! So, I mean, I'm always enthusiastic whenever clients suggest that and want to do activities. I'm very proactive and wanting to provide clients with those opportunities to do physical activities. I'm enthusiastic but I could probably improve as far as building rapport to be able to get to that level with clients where I'm able to provide those opportunities.

<Files\\HG Data> - § 1 reference coded [6.48% Coverage]

Reference 1 - 6.48% Coverage

> My ability to do it was poor. I would say that it was really challenging to actually focus on that area. I would say that, in terms of demands, I generally had to triage things in terms of urgency and so I would end up focusing more on immediate needs such as medications, food, shelter and sort of basic treatments, rather than creating exercise plans and focusing on the physical activity. I think I could probably create a fairly basic and helpful program. I would feel fairly confident doing that. Anything beyond kind of basic like exercises like walking, running, hiking and stretching type things, I think it would be helpful to have more knowledgeable staff that can develop plans and other staff could follow through with them.

<Files\\KaTh Data> - § 2 references coded [9.04% Coverage]

Reference 1 - 5.78% Coverage

> I have a good ability because I have a degree in exercise physiology, I have been an athlete most of my life and I also coach people. But I think there's also not a lot of time or space to do it within the context of ACT. Most of us are run off our feet just getting the basic tasks done so it's really hard to have much time to implement anything else. I do think if our priorities changed then we could incorporate some of that other stuff and for me it wouldn't be a problem. If it (physical activity) was an expectation of our job I do think that a lot of people would not know what that should look like.

Reference 2 - 3.26% Coverage

> Also, providing opportunities for staff to be trained in how to create physical activity programs. I think a lot of people don't want to take it on because they don't really know how to do it and how to do it in a physically safe way and a culturally safe way. If we gave staff those opportunities, then people would probably get excited by it.

<Files\\KT Data> - § 1 reference coded [1.80% Coverage]

Reference 1 - 1.80% Coverage

d) How would you describe your ability to deliver physical activity programs to ACT clients?

I would say I have a pretty good ability to do that.

<Files\\MP Data> - § 1 reference coded [6.21% Coverage]

Reference 1 - 6.21% Coverage

I don't have specialized training in terms of that, but you know I do think that that is an area that's lacking within the ACT model. We have all of these recovery focused things, like peer support and vocational rehabilitation and nursing, psychiatric nursing, social work, counseling, addictions workers… all of those components and we don't actually have a physical rehabilitation specialist that's attached even as a float position between the teams, even as a consultative service to provide us with information on how to incorporate that [physical activity] more into work that we do. Without that kind of direction, I don't know if I feel qualified to set up a fitness program. I know some of the other teams have done, just walking and gathering a number of clients together and going for walks.

<Files\\TB Data> - § 1 reference coded [1.49% Coverage]

Reference 1 - 1.49% Coverage

e) How would you describe your ability to deliver physical activity programs to ACT clients?

Uh, difficult ….so hampered

Staff Willingness and motivation to participate in implementation

<Files\\AZ Data> - § 2 references coded [2.25% Coverage]

Reference 1 - 0.70% Coverage

I would be like 9 out of 10 motivated too implement this

Reference 2 - 1.55% Coverage

a) Would you be interested in being involved in the development and implementation of a PA program for ACT clients?

heck yes

<Files\\BM Data> - § 2 references coded [5.51% Coverage]

Reference 1 - 3.23% Coverage

a) Describe your level of motivation to incorporate PA/exercise into your therapeutic practice

I'm very motivated to do that! I would like to have it implemented a lot more actually

Reference 2 - 2.27% Coverage

b) Would you be interested in being involved in the development and implementation of a PA program for ACT clients?

Absolutey!

<Files\\CL Data> - § 2 references coded [4.72% Coverage]

Reference 1 - 2.66% Coverage

a) Describe your level of motivation to incorporate PA/exercise into your therapeutic practice

I would say moderately, depending first and foremost their willingness to want to participate in physical activities as well as mobility or physical issues if that's a concern.

Reference 2 - 2.06% Coverage

c) Would you be interested in being involved in the development and implementation of a PA program for ACT clients?

Yeah, I mean, if it's something that can benefit those clients who are interested…absolutely!

<Files\\HG Data> - § 2 references coded [4.39% Coverage]

Reference 1 - 2.52% Coverage

I would say I regularly encourage exerciser in my practice. I want to encourage walking with the clients whenever possible. However, there are a lot of limitations in terms of what I can fit into just my daily schedule, but I do see it as a necessary and important aspect of my practice.

Reference 2 - 1.87% Coverage

d) Would you be interested in being involved in the development and implementation of a PA program for ACT clients?

Oh yeah! Of course!! It’s so important! Definitely, it's just a matter of time and resources.

<Files\\KaTh Data> - § 4 references coded [14.77% Coverage]

Reference 1 - 4.18% Coverage

I have a high level of motivation because it is something that I value so much and because I see it as one of those win-win situations. If you can get a client

to go out for a walk with you, I think it creates more space and time to build rapport, allow people to engage over a period of time, and I use that a lot. I find it allows things to more naturally unfold instead of having this very office-based medical feel to the appointment.

Reference 2 - 5.67% Coverage

We're supposed to be a team that promotes mental health so I just don't see how we can separate it (exercise) out, and also, I think we can incorporate it (exercise) into the ways that we treat people. We're in a pretty special position where we get to go out and do outreach, and help people engage in health-related services so if we could just take a little bit of the exercise piece on ourselves, there is no need to take a client to a community program. We could also maximize health care dollars if we could do it ourselves. It also eliminates barriers for clients, it's one less barrier.

Reference 3 - 3.64% Coverage

I feel like a lot of people think it's a good idea, I never hear a lot of resistance to the idea, but I also think it's something people see as extra, as going "above and beyond". So, I think while people support the idea, I don't think much is being done to actively support it. I don't think there's extra funding for it so then it just falls to the wayside when things get busy.

Reference 4 - 1.27% Coverage

e) Would you be interested in being involved in the development and implementation of a PA program for ACT clients?

Yes, very much so.

<Files\\KT Data> - § 2 references coded [3.89% Coverage]

Reference 1 - 2.04% Coverage

I often try to take people out to go for walks and get down to the beach, something to kind of get outside. If we have a planned one on one, it's generally outdoors.

Reference 2 - 1.85% Coverage

f) Would you be interested in being involved in the development and implementation of a PA program for ACT clients?

Yes, if I had more time I would.

<Files\\MP Data> - § 2 references coded [7.14% Coverage]

Reference 1 - 4.51% Coverage

In my utopian existence as an ACT nurse, I would have the time and ability to engage in that more than I do. Pre-COVID, I would say that I probably was seeing clients more and that included going for leisurely walks and things like that. As a nurse, I tend to do less of the physical activities, just because my time is often spent doing sort of like less fun tasks like injections and appointments and medications. But definitely, when I was prior to this working as a mental health worker, I had much more time and I do know that I had more time for physical activity with clients.

Reference 2 - 2.63% Coverage

Yeah, I think I have discussed it and it does come up cyclically, right? Best intentions. “We need to do something!”… and then we all just don't do anything because there's not time or there's not expertise or the demands on our time just don't permit it. So absolutely, I would actively engage in supporting a program across the ACT teams.

<Files\\TB Data> - § 2 references coded [3.11% Coverage]

Reference 1 - 1.46% Coverage

a) Describe your level of motivation to incorporate PA/exercise into your therapeutic practice

Uh, moderate? Moderate.

Reference 2 - 1.65% Coverage

g) Would you be interested in being involved in the development and implementation of a PA program for ACT clients?

I would be, yeah.

Inner Setting
Barriers to Participation and Implementation

<Files\\AZ Data> - § 2 references coded [9.09% Coverage]

Reference 1 - 3.78% Coverage

a) Describe your level of motivation to incorporate PA/exercise into your therapeutic practice

I would say oh this is a tough question 'cause I'm just thinking right now I don't seem to have I wouldn't have enough time to do this but in a perfect world I would be like 9 out of 10 motivated too implement this

Reference 2 - 5.31% Coverage

Oh, that would be huge mainly because ACT clients seldom fit in with other populations and that can be an incredible barrier for some of them just given behavior on any given day or just the overall amotivational kind of things that lead to hygiene difficulties. Definitely all of those factors would factor into integrating ACT clients with “neurotypical” population of people working out so I think programs would be very helpful

<Files\\HG Data> - § 3 references coded [5.97% Coverage]

Reference 1 - 1.35% Coverage

> there are a lot of limitations in terms of what I can fit into just my daily schedule, but I do see it as a necessary and important aspect of my practice.

Reference 2 - 3.17% Coverage

> I would say that it was really challenging to actually focus on that area. I would say that, in terms of demands, I generally had to triage things in terms of urgency and so I would end up focusing more on immediate needs such as medications, food, shelter and sort of basic treatments, rather than creating exercise plans and focusing on the physical activity.

Reference 3 - 1.45% Coverage

> There's lots of theoretical support, but no real-life support. We only have so much time and resources to do what we need to do to keep our clients out of hospital.

<Files\\KaTh Data> - § 2 references coded [4.89% Coverage]

Reference 1 - 1.90% Coverage

> I think while people support the idea, I don't think much is being done to actively support it. I don't think there's extra funding for it so then it just falls to the wayside when things get busy.

Reference 2 - 2.99% Coverage

> we are already stretched on ACT to do the basic tasks that we are required to do and, without being compensated, to try to take that on extra to the work that we do. We would need time and space and dedicated staff.… there hasn't been a lot of opportunities and resources over the years that I have been involved.

<Files\\KT Data> - § 2 references coded [4.68% Coverage]

Reference 1 - 1.94% Coverage

We have done a walking program and a gym program before, it was really hit or miss trying to get a consistent approach and consistent people coming every time

Reference 2 - 2.74% Coverage

It would be hard to have a program like that and assigning staff to it because different staff are at different levels. I think that would be one of the biggest challenges – the consistency with staff that want to do it.

<Files\\MP Data> - § 2 references coded [3.90% Coverage]

Reference 1 - 2.67% Coverage

As a nurse, I tend to do less of the physical activities, just because my time is often spent doing sort of like less fun tasks like injections and appointments and medications. But definitely, when I was prior to this working as a mental health worker, I had much more time and I do know that I had more time for physical activity with clients.

Reference 2 - 1.23% Coverage

A lot of our clients struggle with depression or other sorts of things that inherently impact their motivation to get up and get going and moving with their day

<Files\\TB Data> - § 2 references coded [2.05% Coverage]

Reference 1 - 1.13% Coverage

It is really tough to keep them sticking to that schedule and keep them motivated and going.

Reference 2 - 0.92% Coverage

ACT teams are not focused on that and it’s tough for them to find the time.

Facilitators to Participation

<Files\\AZ Data> - § 1 reference coded [0.76% Coverage]

Reference 1 - 0.76% Coverage

And to have dedicated time for staff to implement the program

<Files\\BM Data> - § 1 reference coded [2.56% Coverage]

Reference 1 - 2.56% Coverage

A better staff to client ratio and regular, anticipated, protected time to be able to deliver that so that there's some consistency for clients.

<Files\\CL Data> - § 1 reference coded [1.24% Coverage]

Reference 1 - 1.24% Coverage

Definitely a lot of collaboration with the team and having enough team members be involved so that it could be a regular thing.

<Files\\HG Data> - § 5 references coded [10.81% Coverage]

Reference 1 - 1.17% Coverage

I think it would be helpful to have more knowledgeable staff that can develop plans and other staff could follow through with them.

Reference 2 - 2.27% Coverage

I think it would be more easily delivered if we had programs, tailored programs, that were very clear and could easily be replicated for different clients and that different levels of staff could also deliver consistently. I think that would be really helpful

Reference 3 - 4.43% Coverage

I feel like it could work well having it regularly put into the calendar for each person [client] or groups of people [clients] every week, because then it wouldn't fall by

the wayside it would just be part of our service plan. Also, holding programs at certain sites or at ACT where the clients could come in and participate in something that was every week would be really cool. I think that might be helpful. Also, making sure that it's just a regular part of our schedule rather than an optional idea.

Reference 4 - 2.37% Coverage

Probably hiring and giving actual time towards developing these programs and hiring someone, maybe an Occupational Therapist, on the team that could develop programs and assess progress. Also, ensuring that this would be more prioritized as one aspect of our treatment.

Reference 5 - 0.58% Coverage

it might be good for VIHA to provide some sort of space to meet.

<Files\\KaTh Data> - § 1 reference coded [3.75% Coverage]

Reference 1 - 3.75% Coverage

We’re in a pretty special position where we get to go out and do outreach, and help people engage in health-related services so if we could just take a little bit of the exercise piece on ourselves, there is no need to take a client to a community program. We could also maximize health care dollars if we could do it ourselves. It also eliminates barriers for clients, it’s one less barrier.

<Files\\MP Data> - § 3 references coded [7.41% Coverage]

Reference 1 - 0.91% Coverage

Having a structured program in that sense would probably decrease the number of excuses that we make for not doing it

Reference 2 - 4.66% Coverage

it may be motivating and add some kind of accountability for clients that there is a time, there's an expectation, they are signed up for it and…. it's like me with

the gym, right? If I have that time slot and I've signed up for the class and I know I'm going to get a $12.00 charge if I don't show up, I'm less likely to wake up and make excuses because I'm expected there, other people are counting on me, I need to be there to not waste the spot. So I do think any initial early stages, before the physical activity itself becomes motivating enough, I think it increases people sticking to attending.

Reference 3 - 1.84% Coverage

I think there would just need to be a position created or people brought in or funding in some way for us to even on a team-by-team basis decide what we're going to do in order to create this physical activity programming for our clients.

<Files\\TB Data> - § 5 references coded [15.21% Coverage]

Reference 1 - 1.33% Coverage

It would have to be sustainable in whatever way we could do that, both for the client and the professional.

Reference 2 - 0.75% Coverage

if there was a dedicated position to that physical activation

Reference 3 - 5.60% Coverage

have it in a reminder a couple times a week and be quite assertive for the beginning. So, it would look like mental health workers, SPOs, nurses, going out in the morning, reminding, organizing for them to arrive to wherever the program takes place, have a facilitator there to help them engage in the physical activity whatever it may be. Have the equipment ready for them. Probably have to have a couple people there to deal with behavioural flare ups.

Reference 4 - 5.16% Coverage

If we had a place to do it if we had some form of transport for several different clients, like if we had a van that could go around and pick a bunch of people up. If we had any kind of support that paid for workers or a specialized position. Even if we just had one person for all the teams a couple times a week and then had a few support workers to give a hand here and there that would probably be all we needed.

Reference 5 - 2.37% Coverage

if we had a place to do it, if we had someone whose job it was to oversee it, if you had some form of transport. Similar to what we do with the garden program, if it was set up in a similar way

Factors for Client Satisfaction
Accessibility
<Files\\CL Data> - § 1 reference coded [0.62% Coverage]

Reference 1 - 0.62% Coverage

Also, something that works for their level of ability as well.

<Files\\HG Data> - § 1 reference coded [1.09% Coverage]

Reference 1 - 1.09% Coverage

I think it would have to be attainable goals and realistic for the client population in terms of delivery and strenuousness.

<Files\\KaTh Data> - § 3 references coded [6.65% Coverage]

Reference 1 - 2.00% Coverage

be nonthreatening and can look very different depending on what their abilities are. I also think for some people that have mobility issues you might have to get creative about what that would have to look like.

Reference 2 - 2.27% Coverage

It would have to be very flexible with low barriers. I think even basic things, like going for a walk, requires having proper footwear and we would have to take all that into consideration, so it was equally accessible to all our clients.

Reference 3 - 2.38% Coverage

I think flexibility, adaptability, keep it fun and with more of a social dynamic. It needs to non-intimidating because people struggle with anxiety and these types of things, so we want to create a safe space for people and make it accessible, simple.

<Files\\KT Data> - § 2 references coded [8.19% Coverage]

Reference 1 - 3.75% Coverage

It would have to be accessible in the sense of not needing transportation or a lot of finance because I can't see it being financed by Island Health. It would have to be something using your own body so something like going to the area behind Crystal Pool and having a game of soccer or something like that.

Reference 2 - 4.44% Coverage

a) If it was feasible to implement and you were motivated to do so - what program characteristics do you think are critical for client satisfaction?

One that has different tiers, different levels, so that we reach a lot of clients. There are ones that are physically able, but there are some people who have some limitations so making sure it is fun for them too.

<Files\\MP Data> - § 2 references coded [3.77% Coverage]

Reference 1 - 2.07% Coverage

I think it would have to be accessible, so it would have to be something, an activity, that is something that can be accessed and enjoyed by people of different physical capabilities, people at different stages of their recovery, and it wouldn't set people up to fail.

Reference 2 - 1.70% Coverage

Something that is enjoyable, so something that makes them feel good about themselves in terms of their personal fulfillment, their physical well-being, you know, make them feel good by exercising and moving their bodies.

<Files\\TB Data> - § 1 reference coded [1.18% Coverage]

Reference 1 - 1.18% Coverage

It would have to be long enough to be of benefit but short enough that they don't get too antsy

Autonomy
<Files\\CL Data> - § 4 references coded [7.60% Coverage]

Reference 1 - 0.75% Coverage

For clients who are interested in physical activity, it's certainly valuable.

Reference 2 - 2.08% Coverage

a) Describe your level of motivation to incorporate PA/exercise into your therapeutic practice

I would say moderately, depending first and foremost their willingness to want to participate in physical activities

Reference 3 - 2.03% Coverage

it would have to be clients who are engaged in and ready and motivated to participate, so that's also an important criterion! Ensuring these are folks that are motivated and requesting this kind of service.

Reference 4 - 2.74% Coverage

obviously a program that this is something that they've requested, that's kind of their own interest and likes first and foremost. If most of them are saying, “okay, we want to do yoga or we want to hike” then doing that activity so that it is very client centred in that regard.

<Files\\TB Data> - § 1 reference coded [4.66% Coverage]

Reference 1 - 4.66% Coverage

It would have to be selective, so people have different options. So have one where people exercise for 15min, have a smoke break, exercise for 15 min. One where they’re there for. A full hour going at it and maybe one where they just go for a run with someone for 15min and get dropped off at home because for some clients realistically that’s the only thing they can tolerate.

Flexibility

<Files\\AZ Data> - § 1 reference coded [1.91% Coverage]

Reference 1 - 1.91% Coverage

It would probably it would have to be flexible in terms of hours and number of participants just because of the nature of ACT client struggling with routine

<Files\\BM Data> - § 1 reference coded [2.38% Coverage]

Reference 1 - 2.38% Coverage

It would have to be like the ACT model and have to meet the client where they are at and based on their individual needs and interests

<Files\\HG Data> - § 2 references coded [2.34% Coverage]

Reference 1 - 1.09% Coverage

I think it would have to be attainable goals and realistic for the client population in terms of delivery and strenuousness.

Reference 2 - 1.25% Coverage

I think finding out what interests them [clients] and trying to tailor it to make it so that it's what they deem is reasonable and enjoyable.

<Files\\KaTh Data> - § 3 references coded [6.65% Coverage]

Reference 1 - 2.00% Coverage

be nonthreatening and can look very different depending on what their abilities are. I also think for some people that have mobility issues you might have to get creative about what that would have to look like.

Reference 2 - 2.27% Coverage

It would have to be very flexible with low barriers. I think even basic things, like going for a walk, requires having proper footwear and we would have to take all that into consideration, so it was equally accessible to all our clients.

Reference 3 - 2.38% Coverage

I think flexibility, adaptability, keep it fun and with more of a social dynamic. It needs to non-intimidating because people struggle with anxiety and these types of things, so we want to create a safe space for people and make it accessible, simple.

<Files\\KT Data> - § 1 reference coded [4.44% Coverage]

Reference 1 - 4.44% Coverage

a) If it was feasible to implement and you were motivated to do so - what program characteristics do you think are critical for client satisfaction?

One that has different tiers, different levels, so that we reach a lot of clients. There are ones that are physically able, but there are some people who have some limitations so making sure it is fun for them too.

<Files\\TB Data> - § 2 references coded [5.84% Coverage]

Reference 1 - 1.18% Coverage

It would have to be long enough to be of benefit but short enough that they don't get too antsy

Reference 2 - 4.66% Coverage

It would have to be selective, so people have different options. So have one where people exercise for 15min, have a smoke break, exercise for 15 min. One where they're there for. A full hour going at it and maybe one where they just go for a run with someone for 15min and get dropped off at home because for some clients realistically that's the only thing they can tolerate.

Fun

<Files\\AZ Data> - § 1 reference coded [2.52% Coverage]

Reference 1 - 2.52% Coverage

I think it would be great if it was like I'm pretty social in nature if there's a way that could make it something where they could come and just laugh and have fun and gains in physical literacy be good

<Files\\HG Data> - § 1 reference coded [1.25% Coverage]

Reference 1 - 1.25% Coverage

I think finding out what interests them [clients] and trying to tailor it to make it so that it's what they deem is reasonable and enjoyable.

<Files\\MP Data> - § 2 references coded [2.23% Coverage]

Reference 1 - 0.54% Coverage

Something non-competitive, just things to do to enjoy being active.

Reference 2 - 1.70% Coverage

Something that is enjoyable, so something that makes them feel good about themselves in terms of their personal fulfillment, their physical well-being, you know, make them feel good by exercising and moving their bodies.

<Files\\TB Data> - § 1 reference coded [0.38% Coverage]

Reference 1 - 0.38% Coverage

Fun! Fun and social connection.

Incentive

<Files\\HG Data> - § 1 reference coded [1.66% Coverage]

Reference 1 - 1.66% Coverage

I think also it would be helpful to have some incentive to maybe help motivate them [clients] maybe, even if it's just a coffee or something afterwards, I think that would be really helpful.

<Files\\KT Data> - § 2 references coded [3.68% Coverage]

Reference 1 - 3.01% Coverage

I think there would need to be some sort of incentive for the client to go. Unfortunately, it wouldn't be just "hey, we're going to go do this". There would need to be some kind of financial incentive for clients to attend, at least initially,

Reference 2 - 0.67% Coverage

Having some sort of financial gain or have food there.

Social

<Files\\AZ Data> - § 2 references coded [5.54% Coverage]

Reference 1 - 2.52% Coverage

I think it would be great if it was like I'm pretty social in nature if there's a way that could make it something where they could come and just laugh and have fun and gains in physical literacy be good

Reference 2 - 3.02% Coverage

a huge impact I think would be a social impact if there could be kind of clubs or groups or something where people on nature hikes or do like a mini even kind of like boot camp type thing with basic physical literacy I think that would be so good

<Files\\MP Data> - § 1 reference coded [2.07% Coverage]

Reference 1 - 2.07% Coverage

Having a sense of connection and belonging, and it's normalizing to go out and be with someone doing something like physical exercise, hiking, or like shooting hoops, or whatever it is where the person feels like the focus of the time spent isn't about them being ill.

<Files\\TB Data> - § 1 reference coded [3.13% Coverage]

Reference 1 - 3.13% Coverage

Fun! Fun and social connection. A lot of our clients know each other and have pre-set relationships. If we could get people together who are already friendly, already get along and just have a friendly game of whatever outside that would be incredible

Patient Needs met by PA
Mental Health
<Files\\AZ Data> - § 1 reference coded [1.65% Coverage]

Reference 1 - 1.65% Coverage

I would say increased overall health increased physical health for sure and probably mental health I would suspect with also improved

<Files\\BM Data> - § 2 references coded [4.43% Coverage]

Reference 1 - 3.04% Coverage

I mean, it's understood fact that physical exercise will benefit you in multiple ways towards your whole wellness. It is the most underutilized antidepressant I believe.

Reference 2 - 1.39% Coverage

Overall better wellness. Better physical health, improved mood and motivation

<Files\\CL Data> - § 3 references coded [7.78% Coverage]

Reference 1 - 1.47% Coverage

I'm a firm believer that it does reduce symptoms, decreases depression, increases motivation, and of course it also builds rapport with them as well.

Reference 2 - 3.99% Coverage

a) What benefits do you think ACT clients could gain from PA programs?

As far as my own experience, just as far as mood, increased cognitive abilities skills and overall well-being, increasing motivation and as a social thing as well, especially if it's physical activities in a social setting I think that could also bring about the benefits of socialization and PSR (psychosocial rehabilitation) as well.

Reference 3 - 2.32% Coverage

b) What client needs have been identified by your organization that exercise addresses?

Overall wellness, counseling, building therapeutic rapport, getting them more connected with the community through access to rec centres for instance

<Files\\HG Data> - § 2 references coded [4.07% Coverage]

Reference 1 - 1.69% Coverage

I think in terms of just the influence of physical health on mental health and vice versa, it is so significant that I think it would really enhance and optimize their [the clients'] outcomes.

Reference 2 - 2.37% Coverage

It would help to ensure better client outcomes in terms of their mental health, but also improve their overall, holistic wellness. It would address their mental, physical and social well-being. Even their spiritual well-being, because it provides meaning to the client.

<Files\\KaTh Data> - § 1 reference coded [3.17% Coverage]

Reference 1 - 3.17% Coverage

there's the whole science behind it, a lot of our clients are suffering from things like depression, anxiety. Research shows exercise helps with all those things, not only with building self-confidence and providing social connections but also the way it can actually change your brain chemistry and act as a natural antidepressant.

<Files\\KT Data> - § 1 reference coded [1.33% Coverage]

Reference 1 - 1.33% Coverage

c) What client needs have been identified by your organization that exercise addresses?

Overall mental health

<Files\\MP Data> - § 3 references coded [4.61% Coverage]

Reference 1 - 0.66% Coverage

the self-care benefit of getting out and doing things; it is mood boosting for people.

Reference 2 - 2.48% Coverage

It also can be a social thing too, so a lot of the folks that we work with have significant social isolation and engaging in physical activity, even if it's just with a practitioner, let alone in a group setting. It benefits their mental well-being and decreases their social isolation and benefits them in lots of ways.

Reference 3 - 1.46% Coverage

I think it might decrease the amount of medication that people need to take to manage symptoms, particularly depressive symptoms, but even feelings of anxiety can be addressed with exercise.

Physical Health
<Files\\AZ Data> - § 2 references coded [9.77% Coverage]

Reference 1 - 1.65% Coverage

I would say increased overall health increased physical health for sure and probably mental health I would suspect with also improved

Reference 2 - 8.11% Coverage

maybe a better ability for clients to help control their metabolic pathways given that most of the psychiatric medication has pretty devastating metabolic effects, lot of diabetes stuff, so being more active could help in weight loss and the risk of type 2 diabetes, which is something that is often a risk for that client population .
Also, I think there are a number of studies out there that talk about brain derived neurotropic factor and how increased exercise can increase erythropoetin which then increases the BNF and that is like excellent for the brain so I think there would probably be a pretty good functional effect on people overall functioning

<Files\\BM Data> - § 1 reference coded [1.39% Coverage]

Reference 1 - 1.39% Coverage

Overall better wellness. Better physical health, improved mood and motivation

<Files\\HG Data> - § 2 references coded [3.08% Coverage]

Reference 1 - 1.38% Coverage

Just in terms of a physical health, exercise would help to alleviate a lot of like ailments and I think it would give them also an overall sense of wellbeing.

Reference 2 - 1.69% Coverage

I think in terms of just the influence of physical health on mental health and vice versa, it is so significant that I think it would really enhance and optimize their [the clients'] outcomes.

<Files\\KaTh Data> - § 1 reference coded [2.42% Coverage]

Reference 1 - 2.42% Coverage

Also, for our clients, a lot of them are on medication that is weight positive medication and we have the obesity epidemic and we have people with metabolic disorders, so whatever we can do to help people fight back against that is absolutely necessary.

<Files\\KT Data> - § 1 reference coded [4.02% Coverage]

Reference 1 - 4.02% Coverage

a) What client needs have been identified by your organization that exercise addresses?

Overall mental health, getting them connected to a community, get them thinking about the importance of physical health for their overall wellbeing, are for their weight, diabetes could decrease, nutrition could improve…a lot could change.

<Files\\MP Data> - § 2 references coded [3.71% Coverage]

Reference 1 - 2.94% Coverage

Most of the psychiatric medications have huge metabolic side effects, including dyslipidemia, high blood pressure, weight gain particularly around the midsection, diabetes, hyperglycemia. Exercise, as we know, is often a good lifestyle modifier

for any of those conditions alone and as that is one of the side effect profiles of psychiatric meds, it mitigates some of those risks.

Reference 2 - 0.77% Coverage

mitigating some of those risks from the metabolic syndrome and metabolic impacts of the medications.

<Files\\TB Data> - § 1 reference coded [5.93% Coverage]

Reference 1 - 5.93% Coverage

b) What client needs have been identified by your organization that exercise addresses?

Social isolation, cardiovascular and weight gain issues that oc me with a number of the meds that people are on, there is a reward to physical activity, and it is something that people have to schedule around, especially if they are expecting other people to show up so it has that extra….structure is one of the better things when implemented into a care plan to help someone with an addiction

Social Connection/belonging
<Files\\AZ Data> - § 2 references coded [8.57% Coverage]

Reference 1 - 3.02% Coverage

a huge impact I think would be a social impact if there could be kind of clubs or groups or something where people on nature hikes or do like a mini even kind of like boot camp type thing with basic physical literacy I think that would be so good

Reference 2 - 5.54% Coverage

Definitely ,such as loneliness and isolation and just even the re-learning or the learning of social skills um the great thing would be if you had kind of 1 population then if a number of people get together and they notice that they are struggling with the same things that

could be a positive so maybe just like a social and like support around mental illness and also learning about maybe mental illness and physical activities and stuff go together.

<Files\\CL Data> - § 3 references coded [9.88% Coverage]

Reference 1 - 3.99% Coverage

a) What benefits do you think ACT clients could gain from PA programs?

As far as my own experience, just as far as mood, increased cognitive abilities skills and overall well-being, increasing motivation and as a social thing as well, especially if it's physical activities in a social setting I think that could also bring about the benefits of socialization and PSR (psychosocial rehabilitation) as well.

Reference 2 - 3.56% Coverage

it allows them to connect and not feel alone by being in a group situation too. It's so special with like social anxiety and things like that it would be again just building relationships with other clients I think it would be just fantastic and if it's something that's done regularly something that they can look forward to …. yeah, it would be a huge benefit.

Reference 3 - 2.32% Coverage

b) What client needs have been identified by your organization that exercise addresses?

Overall wellness, counseling, building therapeutic rapport, getting them more connected with the community through access to rec centres for instance

<Files\\HG Data> - § 1 reference coded [2.37% Coverage]

Reference 1 - 2.37% Coverage

It would help to ensure better client outcomes in terms of their mental health, but also improve their overall, holistic wellness. It would address their mental, physical

and social well-being. Even their spiritual well-being, because it provides meaning to the client.

<Files\\KaTh Data> - § 2 references coded [7.42% Coverage]

Reference 1 - 3.17% Coverage

there's the whole science behind it, a lot of our clients are suffering from things like depression, anxiety. Research shows exercise helps with all those things, not only with building self-confidence and providing social connections but also the way it can actually change your brain chemistry and act as a natural antidepressant.

Reference 2 - 4.25% Coverage

I think there's a lot of people who are isolating, they're staying inside due to low mood, anxiety. I think the pandemic has showed us our need for connection and people aren't connecting with each other and peoples' mental health is failing. I think through this pandemic we are seeing what our clients experience but in a global way. A lot of that can be addressed by creating opportunities to connect and by doing so in a physically healthy way.

<Files\\KT Data> - § 2 references coded [3.41% Coverage]

Reference 1 - 2.96% Coverage

I think that relationship would be a huge advantage, being able to build that connection with people. I think when you are doing things that are fun and activating that lifts your spirits, that that connection piece can actually grow quicker.

Reference 2 - 0.45% Coverage

getting them connected to a community

<Files\\MP Data> - § 2 references coded [3.48% Coverage]

Reference 1 - 2.48% Coverage

It also can be a social thing too, so a lot of the folks that we work with have significant social isolation and engaging in physical activity, even if it's just with a practitioner, let alone in a group setting. It benefits their mental well-being and decreases their social isolation and benefits them in lots of ways.

Reference 2 - 0.99% Coverage

c) What client needs have been identified by your organization that exercise addresses?

Like I said isolation, social isolation.

<Files\\TB Data> - § 3 references coded [10.54% Coverage]

Reference 1 - 0.57% Coverage

There would be the chance to meet new people.

Reference 2 - 4.05% Coverage

We use medications to help stabilize someone in community, get them housed and off the street and the next thing should be looking at employment, should be looking at volunteering, and should be looking at physical activity, things that get them activated working for something within their own community and working on stuff.

Reference 3 - 5.93% Coverage

d) What client needs have been identified by your organization that exercise addresses?

Social isolation, cardiovascular and weight gain issues that oc me with a number of the meds that people are on, there is a reward to physical activity, and it is something that people have to schedule around, especially if they are expecting other people to show up so it has that extra….structure is one of the better things when implemented into a care plan to help someone with an addiction

Structure/routine/accountability
<Files\\AZ Data> - § 1 reference coded [0.83% Coverage]

Reference 1 - 0.83% Coverage

scheduling would be an important factor in how to implement that

<Files\\CL Data> - § 1 reference coded [0.76% Coverage]

Reference 1 - 0.76% Coverage

having a program creates a routine, gives clients something to look forward to

<Files\\KaTh Data> - § 1 reference coded [0.95% Coverage]

Reference 1 - 0.95% Coverage

I think a lot of our clients lack structure to their day so it would be something to look forward to

<Files\\TB Data> - § 3 references coded [12.09% Coverage]

Reference 1 - 2.12% Coverage

There is the being separated or moved out of ah there home and general routine. If it is a regular thing, it also gives them something to create a calendar schedule around.

Reference 2 - 4.05% Coverage

We use medications to help stabilize someone in community, get them housed and off the street and the next thing should be looking at employment, should be looking at volunteering, and should be looking at physical activity, things that get them activated working for something within their own community and working on stuff.

Reference 3 - 5.93% Coverage

a) What client needs have been identified by your organization that exercise addresses?

Social isolation, cardiovascular and weight gain issues that occur with a number of the meds that people are on, there is a reward to physical activity, and it is something that people have to schedule around, especially if they are expecting other people to show up so it has that extra….structure is one of the better things when implemented into a care plan to help someone with an addiction

Intervention Characteristics

Adaptability of Intervention
<Files\\AZ Data> - § 1 reference coded [1.91% Coverage]

Reference 1 - 1.91% Coverage

It would probably it would have to be flexible in terms of hours and number of participants just because of the nature of ACT client struggling with routine

<Files\\BM Data> - § 1 reference coded [4.07% Coverage]

Reference 1 - 4.07% Coverage

It would have to be like the ACT model and have to meet the client where they are at and based on their individual needs and interests, but there would have to be some sort of an assessment process to help them set those goals.

<Files\\CL Data> - § 1 reference coded [3.48% Coverage]

Reference 1 - 3.48% Coverage

Oh yeah, obviously a program that this is something that they've requested, that's kind of their own interest and likes first and foremost. If most of them are saying, “Okay, we want to do yoga or we want to hike” then doing that activity so that it is very client centered in that regard. Also, something that works for their level of ability as well.

<Files\\HG Data> - § 2 references coded [2.35% Coverage]

Reference 1 - 1.09% Coverage

> I think it would have to be attainable goals and realistic for the client population in terms of delivery and strenuousness.

Reference 2 - 1.26% Coverage

> I think finding out what interests them [clients] and trying to tailor it to make it so that it's what they deem is reasonable and enjoyable.

<Files\\KaTh Data> - § 3 references coded [7.68% Coverage]

Reference 1 - 3.00% Coverage

> I think a lot of our clients lack structure to their day so it would be something to look forward to and be nonthreatening and can look very different depending on what their abilities are. I also think for some people that have mobility issues you might have to get creative about what that would have to look like.

Reference 2 - 2.27% Coverage

> It would have to be very flexible with low barriers. I think even basic things, like going for a walk, requires having proper footwear and we would have to take all that into consideration, so it was equally accessible to all our clients.

Reference 3 - 2.41% Coverage

> I think flexibility, adaptability, keep it fun and with more of a social dynamic. It needs to non-intimidating because people struggle with anxiety and these types of things, so we want to create a safe space for people and make it accessible, simple.

<Files\\KT Data> - § 2 references coded [6.36% Coverage]

Reference 1 - 3.75% Coverage

It would have to be accessible in the sense of not needing transportation or a lot of finance because I can't see it being financed by Island Health. It would have to be something using your own body so something like going to the area behind Crystal Pool and having a game of soccer or something like that.

Reference 2 - 2.60% Coverage

One that has different tiers, different levels, so that we reach a lot of clients. There are ones that are physically able, but there are some people who have some limitations so making sure it is fun for them too

<Files\\MP Data> - § 1 reference coded [2.09% Coverage]

Reference 1 - 2.09% Coverage

I think it would have to be accessible, so it would have to be something, an activity, that is something that can be accessed and enjoyed by people of different physical capabilities, people at different stages of their recovery, and it wouldn't set people up to fail.

<Files\\TB Data> - § 1 reference coded [5.86% Coverage]

Reference 1 - 5.86% Coverage

It would have to be long enough to be of benefit but short enough that they don't get too antsy. It would have to be selective, so people have different options. So have one where people exercise for 15min, have a smoke break, exercise for 15 min. One where they're there for. A full hour going at it and maybe one where they just go for a run with someone for 15min and get dropped off at home because for some clients realistically that's the only thing they can tolerate.

Belief that PA Improves mental health

<Files\\AZ Data> - § 1 reference coded [1.65% Coverage]

Reference 1 - 1.65% Coverage

I would say increased overall health increased physical health for sure and probably mental health I would suspect with also improved

<Files\\BM Data> - § 2 references coded [5.97% Coverage]

Reference 1 - 3.04% Coverage

I mean, its understood fact that physical exercise will benefit you in multiple ways towards your whole wellness. It is the most underutilized antidepressant I believe.

Reference 2 - 2.93% Coverage

a) What client needs have been identified by your organization that exercise addresses?

Overall better wellness. Better physical health, improved mood and motivation

<Files\\CL Data> - § 2 references coded [3.33% Coverage]

Reference 1 - 0.65% Coverage

I think it's definitely like an antidepressant and mood enhancing.

Reference 2 - 2.68% Coverage

With the clients that I have worked with in physical activity, it's been mostly great as far as their enthusiasm but also more importantly you know the effects it has on their mood. I'm a firm believer that it does reduce symptoms, decreases depression, increases motivation

<Files\\HG Data> - § 4 references coded [8.85% Coverage]

Reference 1 - 2.86% Coverage

b) What are your thoughts about the value of regular PA for your own mental and physical health?

The benefits of it on myself? I would say that it helps me in terms of alleviating any anxiety and depression, it helps me with concentration, it provides me with a sense of wellbeing, and it helps me feel more balanced overall.

Reference 2 - 1.90% Coverage

exercise is really shown to be as beneficial as a lot of medications, especially for treating depression, but for our specific clients it would help contribute to the improvement in it very many areas of their lives.

Reference 3 - 1.71% Coverage

I think in terms of just the influence of physical health on mental health and vice versa, it is so significant that I think it would really enhance and optimize their [the clients'] outcomes.

Reference 4 - 2.38% Coverage

It would help to ensure better client outcomes in terms of their mental health, but also improve their overall, holistic wellness. It would address their mental, physical and social well-being. Even their spiritual well-being, because it provides meaning to the client.

<Files\\KaTh Data> - § 2 references coded [6.01% Coverage]

Reference 1 - 3.18% Coverage

There's the whole science behind it, a lot of our clients are suffering from things like depression, anxiety. Research shows exercise helps with all those things, not only with building self-confidence and providing social connections but also the way it can actually change your brain chemistry and act as a natural antidepressant.

Reference 2 - 2.83% Coverage

We're treating mental illness and exercise is a big piece in protecting against mental illness. It should be something that we do, not something extra. I think we see exercise as something extra we do to be extra healthy, but we should look at exercise as a basic requirement for good mental health

<Files\\KT Data> - § 1 reference coded [1.24% Coverage]

Reference 1 - 1.24% Coverage

You can get out, it lifts your spirits, and it can help with your weight, your mood, overall well-being.

<Files\\MP Data> - § 2 references coded [4.70% Coverage]

Reference 1 - 3.24% Coverage

Also, other the self-care benefit of getting out and doing things; it is mood boosting for people. It also can be a social thing too, so a lot of the folks that we work with have significant social isolation and engaging in physical activity, even if it's just with a practitioner, let alone in a group setting. It benefits their mental well-being and decreases their social isolation and benefits them in lots of ways.

Reference 2 - 1.46% Coverage

I think it might decrease the amount of medication that people need to take to manage symptoms, particularly depressive symptoms, but even feelings of anxiety can be addressed with exercise

<Files\\TB Data> - § 3 references coded [7.82% Coverage]

Reference 1 - 0.71% Coverage

I find the more I exercise, the better my mood is overall.

Reference 2 - 2.26% Coverage

I think that overall physical activity is good for people, that help their mood overall is better. I think therapeutically, overall, it would have a positive impact in several ways.

Reference 3 - 4.85% Coverage

Social isolation, cardiovascular and weight gain issues that come with a number of the meds that people are on, there is a reward to physical activity, and it is something that people have to schedule around, especially if they are expecting other people to show up so it has that extra….structure is one of the better things when implemented into a care plan to help someone with an addiction

Belief that PA improves physical health

<Files\\AZ Data> - § 2 references coded [2.09% Coverage]

Reference 1 - 1.21% Coverage

I definitely think that it is really important for brain health and overall health and functioning

Reference 2 - 0.88% Coverage

I would say increased overall health increased physical health for sure

<Files\\BM Data> - § 1 reference coded [2.93% Coverage]

Reference 1 - 2.93% Coverage

a) What client needs have been identified by your organization that exercise addresses?

Overall better wellness. Better physical health, improved mood and motivation

<Files\\HG Data> - § 4 references coded [6.81% Coverage]

Reference 1 - 1.38% Coverage

Just in terms of a physical health, exercise would help to alleviate a lot of like ailments and I think it would give them also an overall sense of wellbeing.

Reference 2 - 1.33% Coverage

There is so many benefits! Unlimited benefits! I think that it is one of the most important aspects of a person's life, movement and physical wellness.

Reference 3 - 1.71% Coverage

I think in terms of just the influence of physical health on mental health and vice versa, it is so significant that I think it would really enhance and optimize their [the clients'] outcomes.

Reference 4 - 2.38% Coverage

It would help to ensure better client outcomes in terms of their mental health, but also improve their overall, holistic wellness. It would address their mental, physical and social well-being. Even their spiritual well-being, because it provides meaning to the client.

<Files\\KT Data> - § 1 reference coded [1.24% Coverage]

Reference 1 - 1.24% Coverage

You can get out, it lifts your spirits, and it can help with your weight, your mood, overall well-being.

<Files\\MP Data> - § 3 references coded [5.53% Coverage]

Reference 1 - 2.93% Coverage

Most of the psychiatric medications have huge metabolic side effects, including dyslipidemia, high blood pressure, and weight gain particularly around the midsection, diabetes, and hyperglycemia. Exercise, as we know, is often a good

lifestyle modifier for any of those conditions alone and as that is one of the side effect profiles of psychiatric meds, it mitigates some of those risks.

Reference 2 - 1.46% Coverage

I think it might decrease the amount of medication that people need to take to manage symptoms, particularly depressive symptoms, but even feelings of anxiety can be addressed with exercise

Reference 3 - 1.14% Coverage

People being able to maintain a healthy body weight or even somewhat more of a healthy body weight through physical activity would go a long way.

<Files\\TB Data> - § 1 reference coded [4.85% Coverage]

Reference 1 - 4.85% Coverage

Social isolation, cardiovascular and weight gain issues that occur with a number of the meds that people are on, there is a reward to physical activity, and it is something that people have to schedule around, especially if they are expecting other people to show up so it has that extra….structure is one of the better things when implemented into a care plan to help someone with an addiction

Perceived challenges or barriers to implementation

<Files\\AZ Data> - § 3 references coded [6.25% Coverage]

Reference 1 - 1.47% Coverage

I wouldn't have enough time to do this but in a perfect world I would be like 9 out of 10 motivated to implement this

Reference 2 - 2.04% Coverage

I think I'd be worried that I might say something that they would hurt themselves or something because I'm not an athletic person or athletically trained in any way

Reference 3 - 2.74% Coverage

ACT clients seldom fit in with other populations and that can be an incredible barrier for some of them just given behavior on any given day or just the overall amotivational kind of things that lead to hygiene difficulties.

<Files\\BM Data> - § 2 references coded [3.23% Coverage]

Reference 1 - 1.40% Coverage

I don't feel that we have the room necessarily in our programming to offer it

Reference 2 - 1.83% Coverage

I think that we have to have a more realistic client to staff ratio. It has to be part of our process.

<Files\\CL Data> - § 2 references coded [3.48% Coverage]

Reference 1 - 2.99% Coverage

From an organizational standpoint, because VIHA is so big and messy, it's hard to implement. From a team standpoint, definitely there can be steps taken by the smaller units from a bottom-up approach, but otherwise, to be honest, I don't know, from an organizational standpoint, what that would look like.

Reference 2 - 0.49% Coverage

I definitely think more collaboration is needed.

<Files\\HG Data> - § 5 references coded [9.77% Coverage]

Reference 1 - 3.16% Coverage

I would say that it was really challenging to actually focus on that area. I would say that, in terms of demands, I generally had to triage things in terms of urgency and so I would end up focusing more on immediate needs such as medications, food, shelter and sort of basic treatments, rather than creating exercise plans and focusing on the physical activity.

Reference 2 - 2.30% Coverage

I don't think VIHA is opposed exercise, I just think it's not prioritized and as of right now there is no plan in place to make it part of what we do so it's just not and not given a lot of value or thought right now because it doesn't seem imminent within ACT.

Reference 3 - 1.57% Coverage

Within ACT, I think the clinicians are so busy that can feel less critical to implement any sort of exercise regime. There's lots of theoretical support, but no real-life support

Reference 4 - 0.89% Coverage

We only have so much time and resources to do what we need to do to keep our clients out of hospital.

Reference 5 - 1.85% Coverage

a) Would you be interested in being involved in the development and implementation of a PA program for ACT clients?

Oh yeah! Of course!! It's so important! Definitely, it's just a matter of time and resources.

<Files\\KaTh Data> - § 6 references coded [14.57% Coverage]

Reference 1 - 3.81% Coverage

I think that we are really far behind in terms of realizing how important physical activity is to mental health and I feel like sometimes we make efforts to try to start something and obviously with our clients it's a little more challenging in terms of trying to find people and maintain a schedule for that kind of thing, but I do feel like not enough is being done to make it more of a priority.

Reference 2 - 2.10% Coverage

> But I think there's also not a lot of time or space to do it within the context of ACT. Most of us are run off our feet just getting the basic tasks done so it's really hard to have much time to implement anything else.

Reference 3 - 1.24% Coverage

> If it (physical activity) was an expectation of our job I do think that a lot of people would not know what that should look like.

Reference 4 - 3.64% Coverage

> I feel like a lot of people think it's a good idea, I never hear a lot of resistance to the idea, but I also think it's something people see as extra, as going "above and beyond". So, I think while people support the idea, I don't think much is being done to actively support it. I don't think there's extra funding for it so then it just falls to the wayside when things get busy.

Reference 5 - 2.35% Coverage

> I think a lot of people don't want to take it on because they don't really know how to do it and how to do it in a physically safe way and a culturally safe way. If we gave staff those opportunities, then people would probably get excited by it.

Reference 6 - 1.42% Coverage

> We would need time and space and dedicated staff.… there hasn't been a lot of opportunities and resources over the years that I have been involved.

<Files\\KT Data> - § 3 references coded [8.55% Coverage]

Reference 1 - 1.93% Coverage

> We have done a walking program and a gym program before, it was really hit or miss trying to get a consistent approach and consistent people coming every time

Reference 2 - 3.24% Coverage

> Having someone who is wanting to do that. It would be hard to have a program like that and assigning staff to it because different staff are at different levels. I think that would be one of the biggest challenges – the consistency with staff that want to do it.

Reference 3 - 3.37% Coverage

> And money, then we can buy what we need to get – like shoes for people. I think one of the biggest barriers for people is not having the appropriate gear. We could get exercise equipment like a football or a basketball. We could get swimsuits if someone needed a swimsuit.

<Files\\MP Data> - § 5 references coded [20.60% Coverage]

Reference 1 - 3.20% Coverage

> In my utopian existence as an ACT nurse, I would have the time and ability to engage in that more than I do. Pre-COVID, I would say that I probably was seeing clients more and that included going for leisurely walks and things like that. As a nurse, I tend to do less of the physical activities, just because my time is often spent doing sort of like less fun tasks like injections and appointments and medications.

Reference 2 - 4.79% Coverage

> I do think that that is an area that's lacking within the ACT model. We have all of these recovery focused things, like peer support and vocational rehabilitation and nursing, psychiatric nursing, social work, counseling, addictions workers… all of those components and we don't actually have a physical rehabilitation specialist that's attached even as a float position between the teams, even as a consultative service to provide us with information on how to incorporate that [physical

activity] more into work that we do. Without that kind of direction, I don't know if I feel qualified to set up a fitness program.

Reference 3 - 3.53% Coverage

I don't think it's given enough focus. I think that a lot of times, in the work that I do in this environment, a lot of times the go-to is medications. There's a lot of emphasis placed on the pharmacological management of mental illness, but for people who don't have severe refractory illnesses like psychosis, I think exercise is potentially undervalued and underutilized as a means to address some of the less severe refractory mental health concerns.

Reference 4 - 7.11% Coverage

Often, I think our focus tends to be more pharmacological and, we like to say we're holistic practitioners, but are we really? How much are we engaging in holistic care for our clients? A lot of it [ACT] is under this heavy legal framework of the Mental Health Act, it's within the medical system, there's medications and blood work and all of those types of things, so most of our focus, the expectation of our work, tends to be focused on that. I don't know that we have a lot of funding for [exercise] equipment, we don't have funding for people to come in and facilitate those types of [physical activity] programs. I think within our MHSU [Mental Health and Substance Use] portfolio, along the whole continuum, we have some arts things, but I don't know that there's actually anything geared specifically towards bringing people together to get them moving; yoga or going for walks or swimming or anything like that.

Reference 5 - 1.97% Coverage

Yeah, I think I have discussed it and it does come up cyclically, right? Best intentions. “We need to do something!”… and then we all just don't do anything because there's not time or there's not expertise or the demands on our time just don't permit it.

<Files\\TB Data> - § 2 references coded [10.11% Coverage]

Reference 1 - 4.58% Coverage

> The only team I have seen do that with any success has been VICOT and even then, they struggled to get it up and running so I don't know that I've actually seen much. There are a few clients where I made a real effort to get them out to the gym a couple times a week with myself. It is really tough to keep them sticking to that schedule and keep them motivated and going.

Reference 2 - 5.54% Coverage

> It's kind of hard to get the organization to pay any attention to anything to do with ACT it feels like. Not a lot of funds or resources get thrown towards any kind of real recovery. I think if we had hard evidence that this is a good way of moving people through services, getting them out of supported housing sites, less hospital stays and get hard evidence that, overall, it would cost the system less money we could probably get more resources.

Relative advantage of PA

As important as PSR but not as important as crisis management

<Files\\CL Data> - § 1 reference coded [6.02% Coverage]

Reference 1 - 6.02% Coverage

> From a therapeutic standpoint, I think physical activity specifically is just like any other games I've played with clients; it's pretty valuable. I would say as far as my own experiences, playing basketball with clients for instance, which is primarily what I've done, that's pretty much my main physical activity with clients is one on one basketball or a game of 21 or something, and that's been I great as far as having conversations with clients about other things as well goals, PSR (psychosocial rehabilitation) stuff, counseling, therapeutics conversations, and it's been great for connecting with clients.

<Files\\HG Data> - § 1 reference coded [6.47% Coverage]

Reference 1 - 6.47% Coverage

> I think it's higher on Maslow's hierarchy of needs. A lot of our clients are very low in terms of socioeconomic status and in terms of functioning, so we have to focus on very basic functioning and support such as just getting them shelter, ensuring their safety and trying to maintain or move them from an acute mental state or crises to a more stable mental state, which involves just making sure they're taking medication every day. So, in terms of long-term approaches, I think it rings up there with important things like finding work and some financial stability and insight and having social commitment like finding more meaningful social work and stuff like that. I think its [physical activity] up there with those priorities.

<Files\\TB Data> - § 1 reference coded [5.92% Coverage]

Reference 1 - 5.92% Coverage

> I think it would actually, were it something we were able to do more consistently, I would put it as one of the more important things that we could do. We use medications to help stabilize someone in community, get them housed and off the street and the next thing should be looking at employment, should be looking at volunteering, and should be looking at physical activity, things that get them activated working for something within their own community and working on stuff.

As important as PSR but not as important medication

<Files\\CL Data> - § 1 reference coded [6.02% Coverage]

Reference 1 - 6.02% Coverage

> From a therapeutic standpoint, I think physical activity specifically is just like any other games I've played with clients; it's pretty valuable. I would say as far as my own experiences, playing basketball with clients for instance, which is primarily what I've done, that's pretty much my main physical activity with clients is one on

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<Files\\HG Data> - § 1 reference coded [6.47% Coverage]

Reference 1 - 6.47% Coverage

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Just as important as all other interventions

<Files\\AZ Data> - § 1 reference coded [1.06% Coverage]

Reference 1 - 1.06% Coverage

I think it's really important, maybe as important as our daily contact kind of mandates

<Files\\KaTh Data> - § 1 reference coded [3.80% Coverage]

Reference 1 - 3.80% Coverage

I think that it's just as important and I feel like we're starting to see that a holistic approach is much more beneficial. I think it's just as important as any other intervention or treatment, we just haven't grown enough to make it a part of the medical model in the way that other interventions have. Hopefully now, with some of the research coming out, we can start to change that philosophy.

<Files\\KT Data> - § 1 reference coded [2.37% Coverage]

Reference 1 - 2.37% Coverage

I think I would have to see more of it in practice in order to properly rank it, but I think I would rank it quite high. That it is quite an important one that is underutilized at this point.

<Files\\MP Data> - § 1 reference coded [3.51% Coverage]

Reference 1 - 3.51% Coverage

I don't think it's given enough focus. I think that a lot of times, in the work that I do in this environment, a lot of times the go-to is medications. There's a lot of emphasis placed on the pharmacological management of mental illness, but for people who don't have severe refractory illnesses like psychosis, I think exercise is potentially undervalued and underutilized as a means to address some of the less severe refractory mental health concerns.

Not important
**No participants believed exercise/PA were unimportant

Outer Setting

Are necessary resources available?

Funding

<Files\\CL Data> - § 1 reference coded [1.56% Coverage]

Reference 1 - 1.56% Coverage

> I know in services like care homes, they have recreational workers so putting something like that in the budget. Hiring a person who's specialized in that role

<Files\\HG Data> - § 3 references coded [3.21% Coverage]

Reference 1 - 1.63% Coverage

> Probably hiring and giving actual time towards developing these programs and hiring someone, maybe an Occupational Therapist, on the team that could develop programs and assess progress.

Reference 2 - 0.95% Coverage

> Probably just people, a qualified clinician, and time for that clinician and money to develop these programs

Reference 3 - 0.63% Coverage

> It’s so important! Definitely, it's just a matter of time and resources.

<Files\\KaTh Data> - § 2 references coded [3.94% Coverage]

Reference 1 - 0.97% Coverage

> I don’t think there’s extra funding for it so then it just falls to the wayside when things get busy.

Reference 2 - 2.97% Coverage

> We are already stretched on ACT to do the basic tasks that we are required to do and, without being compensated, to try to take that on extra to the work that we do.

We would need time and space and dedicated staff…. there hasn't been a lot of opportunities and resources over the years that I have been involved.

<Files\\KT Data> - § 3 references coded [7.23% Coverage]

Reference 1 - 2.20% Coverage

Having finances set aside for this program that are not going to be affected by fiscal changes at the end of the year and budgets. Something financial that is not going anywhere.

Reference 2 - 3.34% Coverage

And money, then we can buy what we need to get – like shoes for people. I think one of the biggest barriers for people is not having the appropriate gear. We could get exercise equipment like a football or a basketball. We could get swimsuits if someone needed a swimsuit.

Reference 3 - 1.69% Coverage

We used to have a very small account that we could access if we needed to get different things for people. We don't have any of that now.

<Files\\MP Data> - § 3 references coded [4.52% Coverage]

Reference 1 - 1.33% Coverage

I don't know that we have a lot of funding for [exercise] equipment, we don't have funding for people to come in and facilitate those types of [physical activity] programs.

Reference 2 - 1.36% Coverage

But, at the end of the day, I do think that there needs to be a position created and funding for that specifically and there needs to be a protective guarding of that position.

Reference 3 - 1.83% Coverage

> I think there would just need to be a position created or people brought in or funding in some way for us to even on a team-by-team basis decide what we're going to do in order to create this physical activity programming for our clients.

<Files\\TB Data> - § 2 references coded [4.06% Coverage]

Reference 1 - 3.11% Coverage

> If we had any kind of support that paid for workers or a specialized position. Even if we just had one person for all the teams a couple times a week and then had a few support workers to give a hand here and there that would probably be all we needed.

Reference 2 - 0.95% Coverage

> Not a lot of funds or resources get thrown towards any kind of real recovery.

Space

<Files\\AZ Data> - § 1 reference coded [3.90% Coverage]

Reference 1 - 3.90% Coverage

> I think maybe direction from the team leads like that always works well sort of having it come up in our meeting where it's sort of like “hey, this is in the budget or this is of interest to us because there's a large evidence based kind of thing” and then seeing maybe what the team has to bring to the table Thursday

<Files\\CL Data> - § 1 reference coded [0.86% Coverage]

Reference 1 - 0.86% Coverage

> So budget, training and the expectation that physical activity be a part of our service.

<Files\\HG Data> - § 2 references coded [6.49% Coverage]

Reference 1 - 0.77% Coverage

Making sure that it's just a regular part of our schedule rather than an optional idea.

Reference 2 - 5.72% Coverage

ACT’s mandate is psychosocial rehabilitation and that is all about the focus on recovery, which is in the enhancement of one’s well-being and living with and beyond a mental illness rather than just treating the illness and not focusing on the other strengths in a person's life and building those strengths. I think just the fact that it's supposed to be PSR [psychosocial rehabilitation] and currently is not really treated as such. Having exercise regimes, which focuses on mental well-being, physical health, and more resilience in all of those. All of those positive benefits would really represent what PSR [psychosocial rehabilitation] is about.

<Files\\KaTh Data> - § 1 reference coded [1.08% Coverage]

Reference 1 - 1.08% Coverage

It would have to be an organizational requirement and written into policy to be a standard of care and practice.

Staff

<Files\\AZ Data> - § 1 reference coded [1.68% Coverage]

Reference 1 - 1.68% Coverage

Forming a kind of task force or planning committee to help something out. And to have dedicated time for staff to implement the program.

<Files\\BM Data> - § 3 references coded [5.51% Coverage]

Reference 1 - 0.53% Coverage

A better staff to client ratio

Reference 2 - 2.04% Coverage

Well, again, I think that we have to have a more realistic client to staff ratio. It has to be part of our process.

Reference 3 - 2.93% Coverage

Staff! Somebody that can guide them through calisthenics and stuff, that can do some kind of an assessment to find out what their individual program would look like

<Files\\CL Data> - § 3 references coded [5.54% Coverage]

Reference 1 - 2.00% Coverage

Definitely a lot of collaboration with the team and having enough team members be involved so that it could be a regular thing. But also, something that is agreed on with the team as far as the frequency.

Reference 2 - 1.56% Coverage

I know in services like care homes, they have recreational workers so putting something like that in the budget. Hiring a person who's specialized in that role

Reference 3 - 1.99% Coverage

the importance of having or hiring or contracting staff to specifically work with organizations or some of the rec centers or agencies that promote physical activities and whatnot at the community level.

<Files\\HG Data> - § 5 references coded [7.32% Coverage]

Reference 1 - 1.16% Coverage

I think it would be helpful to have more knowledgeable staff that can develop plans and other staff could follow through with them.

Reference 2 - 1.63% Coverage

Probably hiring and giving actual time towards developing these programs and hiring someone, maybe an Occupational Therapist, on the team that could develop programs and assess progress.

Reference 3 - 2.22% Coverage

Just hiring at least someone, a qualified clinician, to do some program development and spend time and resources to ensure that it actually can be utilized effectively and be easily delivered ensure that it could be used again and it will be consistent.

Reference 4 - 0.95% Coverage

Probably just people, a qualified clinician, and time for that clinician and money to develop these programs

Reference 5 - 1.37% Coverage

Probably, at the very least, it would involve having a qualified person to develop the programs and create a unified, consistent approach for the ACT teams.

<Files\\KaTh Data> - § 2 references coded [6.39% Coverage]

Reference 1 - 3.42% Coverage

I think we'd have to have employees trained on what type of activities are appropriate for different clients. You might want to have an occupational health therapist, provide some basic training for people interested in taking it on, and then everybody would have to be on board and buy into the fact that this is something we should be doing for our clients.

Reference 2 - 2.97% Coverage

We are already stretched on ACT to do the basic tasks that we are required to do and, without being compensated, to try to take that on extra to the work that we do. We would need time and space and dedicated staff.… there hasn't been a lot of opportunities and resources over the years that I have been involved.

<Files\\KT Data> - § 1 reference coded [3.47% Coverage]

Reference 1 - 3.47% Coverage

> Staffing, obviously. Having someone who is wanting to do that. It would be hard to have a program like that and assigning staff to it because different staff are at different levels. I think that would be one of the biggest challenges – the consistency with staff that want to do it.

<Files\\MP Data> - § 4 references coded [9.75% Coverage]

Reference 1 - 2.70% Coverage

> We don't actually have a physical rehabilitation specialist that's attached even as a float position between the teams, even as a consultative service to provide us with information on how to incorporate that [physical activity] more into work that we do. Without that kind of direction, I don't know if I feel qualified to set up a fitness program.

Reference 2 - 3.34% Coverage

> I think it would be ideal to have vocational rehab, to have someone that was able to provide information and develop those structured type programs, even on a consultative basis, where they set us up and they give us the resources and teach us how to do it. But, at the end of the day, I do think that there needs to be a position created and funding for that specifically and there needs to be a protective guarding of that position.

Reference 3 - 1.83% Coverage

> I think there would just need to be a position created or people brought in or funding in some way for us to even on a team-by-team basis decide what we're going to do in order to create this physical activity programming for our clients.

Reference 4 - 1.86% Coverage

I have discussed it and it does come up cyclically, right? Best intentions. “We need to do something!”… and then we all just don't do anything because there's not time or there's not expertise or the demands on our time just don't permit it.

<Files\\TB Data> - § 3 references coded [7.06% Coverage]

Reference 1 - 1.89% Coverage

So, if we had people whose position it was to actually do that it would be a big help. So, if there was a dedicated position to that physical activation.

Reference 2 - 3.11% Coverage

If we had any kind of support that paid for workers or a specialized position. Even if we just had one person for all the teams a couple times a week and then had a few support workers to give a hand here and there that would probably be all we needed.

Reference 3 - 2.05% Coverage

If we had someone whose job it was to oversee it, if you had some form of transport. Similar to what we do with the garden program, if it was set up in a similar way.

Time

<Files\\AZ Data> - § 2 references coded [3.13% Coverage]

Reference 1 - 1.46% Coverage

I wouldn't have enough time to do this but in a perfect world I would be like 9 out of 10 motivated to implement this

Reference 2 - 1.68% Coverage

Forming a kind of task force or planning committee to help something out. And to have dedicated time for staff to implement the program.

<Files\\BM Data> - § 2 references coded [3.36% Coverage]

Reference 1 - 1.40% Coverage

I don't feel that we have the room necessarily in our programming to offer it

Reference 2 - 1.95% Coverage

Regular, anticipated, protected time to be able to deliver that so that there's some consistency for clients.

<Files\\CL Data> - § 1 reference coded [2.00% Coverage]

Reference 1 - 2.00% Coverage

Definitely a lot of collaboration with the team and having enough team members be involved so that it could be a regular thing. But also, something that is agreed on with the team as far as the frequency.

<Files\\HG Data> - § 7 references coded [11.41% Coverage]

Reference 1 - 0.82% Coverage

However, there are a lot of limitations in terms of what I can fit into just my daily schedule

Reference 2 - 3.17% Coverage

I would say that it was really challenging to actually focus on that area. I would say that, in terms of demands, I generally had to triage things in terms of urgency and so I would end up focusing more on immediate needs such as medications, food, shelter and sort of basic treatments, rather than creating exercise plans and focusing on the physical activity.

Reference 3 - 1.99% Coverage

I feel like it could work well having it regularly put into the calendar for each person [client] or groups of people [clients] every week, because then it wouldn't fall by the wayside it would just be part of our service plan.

Reference 4 - 0.77% Coverage

Making sure that it's just a regular part of our schedule rather than an optional idea.

Reference 5 - 2.39% Coverage

I think the clinicians are so busy that can feel less critical to implement any sort of exercise regime. There's lots of theoretical support, but no real-life support. We only have so much time and resources to do what we need to do to keep our clients out of hospital.

Reference 6 - 1.63% Coverage

Probably hiring and giving actual time towards developing these programs and hiring someone, maybe an Occupational Therapist, on the team that could develop programs and assess progress.

Reference 7 - 0.63% Coverage

It's so important! Definitely, it's just a matter of time and resources.

<Files\\KaTh Data> - § 2 references coded [5.86% Coverage]

Reference 1 - 2.88% Coverage

I think there's also not a lot of time or space to do it within the context of ACT. Most of us are run off our feet just getting the basic tasks done so it's really hard to have much time to implement anything else. I do think if our priorities changed then we could incorporate some of that other stuff

Reference 2 - 2.97% Coverage

> We are already stretched on ACT to do the basic tasks that we are required to do and, without being compensated, to try to take that on extra to the work that we do. We would need time and space and dedicated staff…. there hasn't been a lot of opportunities and resources over the years that I have been involved.

<Files\\KT Data> - § 1 reference coded [1.87% Coverage]

Reference 1 - 1.87% Coverage

> I think given some more space… sometimes you're limited to what the care plans are or limited to what they are asking you to do when you come in for work

<Files\\MP Data> - § 5 references coded [8.56% Coverage]

Reference 1 - 0.83% Coverage

> In my utopian existence as an ACT nurse, I would have the time and ability to engage in that more than I do.

Reference 2 - 1.37% Coverage

> As a nurse, I tend to do less of the physical activities, just because my time is often spent doing sort of like less fun tasks like injections and appointments and medications.

Reference 3 - 2.78% Coverage

> Having a structured program in that sense would probably decrease the number of excuses that we make for not doing it [physical activity]. So, having something that we have specifically protected time in which to engage, I think probably would increase our ability to actually stick with it and an offer it as opposed to kind of triaging it out if crises arise.

Reference 4 - 1.71% Coverage

Within ACT is so fast paced and its high acuity and the changing population we're working with …a lot of us are just kind of like day to day where nobody really has the time to take that [physical activity programming] on

Reference 5 - 1.86% Coverage

I have discussed it and it does come up cyclically, right? Best intentions. “We need to do something!”… and then we all just don't do anything because there's not time or there's not expertise or the demands on our time just don't permit it.

<Files\\TB Data> - § 1 reference coded [0.94% Coverage]

Reference 1 - 0.94% Coverage

ACT teams are not focused on that and it’s tough for them to find the time.

Does organizational culture support PA

<Files\\AZ Data> - § 1 reference coded [2.14% Coverage]

Reference 1 - 2.14% Coverage

I would say I have heard at least one team lead say that it's a really good idea and um would definitely be interested in exploring implementation of a program for ACT clients

<Files\\BM Data> - § 1 reference coded [3.20% Coverage]

Reference 1 - 3.20% Coverage

a) Describe the level of support in the organization for PA programs for ACT clients?

Currently? Currently, I would not say that there is very much at all. It’s almost nonexistent.

<Files\\CL Data> - § 3 references coded [10.38% Coverage]

Reference 1 - 2.42% Coverage

> I think it would be great! I know on other teams there's been talks about going on organized hikes with clients, which I haven't personally participated in yet, but that's something that I think as far as an activity idea that would be just huge.

Reference 2 - 4.97% Coverage

> I mean it's… minimal …. I think that the teams generally, not VIHA, but certainly individually I think team members are certainly open and aware of going back to the PSR goals and some of the overlapping kind of shared goals between let's say VIHA's policy with PSR and physical exercises so there's certainly an element to that and Wellness plans but it's not something that's talked about regularly as far as "okay, let's do some physical activity, let's come up with some ideas around that"...not so much.

Reference 3 - 2.99% Coverage

> From an organizational standpoint, because VIHA is so big and messy, it's hard to implement. From a team standpoint, definitely there can be steps taken by the smaller units from a bottom-up approach, but otherwise, to be honest, I don't know, from an organizational standpoint, what that would look like.

<Files\\HG Data> - § 2 references coded [11.13% Coverage]

Reference 1 - 5.41% Coverage

> I don't think VIHA is opposed exercise, I just think it's not prioritized and as of right now there is no plan in place to make it part of what we do so it's just not and not given a lot of value or thought right now because it doesn't seem imminent within ACT. I think in other areas maybe it does and there's more space for it, but within ACT, I think the clinicians are so busy that can feel less critical to implement any sort of exercise regime. There's lots of theoretical support, but no real-life support. We only have so much time and resources to do what we need to do to keep our clients out of hospital.

Reference 2 - 5.72% Coverage

> ACT’s mandate is psychosocial rehabilitation and that is all about the focus on recovery, which is in the enhancement of one’s well-being and living with and beyond a mental illness rather than just treating the illness and not focusing on the other strengths in a person's life and building those strengths. I think just the fact that it's supposed to be PSR [psychosocial rehabilitation] and currently is not really treated as such. Having exercise regimes, which focuses on mental well-being, physical health, and more resilience in all of those. All of those positive benefits would really represent what PSR [psychosocial rehabilitation] is about.

<Files\\KaTh Data> - § 1 reference coded [2.66% Coverage]

Reference 1 - 2.66% Coverage

> I feel like a lot of people think it’s a good idea, I never hear a lot of resistance to the idea, but I also think it’s something people see as extra, as going “above and beyond”. So, I think while people support the idea, I don’t think much is being done to actively support it.

<Files\\MP Data> - § 1 reference coded [4.42% Coverage]

Reference 1 - 4.42% Coverage

> I don’t know that there’s support or not support, because I'm not sure that it's been explored. I haven't explored it myself. Often, I think our focus tends to be more pharmacological and, we like to say we're holistic practitioners, but are we really? How much are we engaging in holistic care for our clients? A lot of it [ACT] is under this heavy legal framework of the Mental Health Act, it's within the medical system, there's medications and blood work and all of those types of things, so most of our focus, the expectation of our work, tends to be focused on that.

Expectation of implementation

<Files\\AZ Data> - § 1 reference coded [3.90% Coverage]

Reference 1 - 3.90% Coverage

> I think maybe direction from the team leads like that always works well sort of having it come up in our meeting where it's sort of like “hey, this is in the budget or this is of interest to us because there's a large evidence based kind of thing” and then seeing maybe what the team has to bring to the table Thursday

<Files\\CL Data> - § 1 reference coded [0.86% Coverage]

Reference 1 - 0.86% Coverage

> So budget, training and the expectation that physical activity be a part of our service.

<Files\\HG Data> - § 2 references coded [6.49% Coverage]

Reference 1 - 0.77% Coverage

> Making sure that it's just a regular part of our schedule rather than an optional idea.

Reference 2 - 5.72% Coverage

> ACT’s mandate is psychosocial rehabilitation and that is all about the focus on recovery, which is in the enhancement of one’s well-being and living with and beyond a mental illness rather than just treating the illness and not focusing on the other strengths in a person's life and building those strengths. I think just the fact that it's supposed to be PSR [psychosocial rehabilitation] and currently is not really treated as such. Having exercise regimes, which focuses on mental well-being, physical health, and more resilience in all of those. All of those positive benefits would really represent what PSR [psychosocial rehabilitation] is about.

<Files\\KaTh Data> - § 1 reference coded [1.08% Coverage]

Reference 1 - 1.08% Coverage

> It would have to be an organizational requirement and written into policy to be a standard of care and practice.