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Integrating Advanced Behavioral Science into 21st Century Mental Health

A White Paper on Health Masters' Approach to Behavioral Health

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I. Introduction

This paper is about mental health. More specifically, it is about how to attain and how to retain good mental health. Since the beginning of the 21st century, reports on the epidemiology of health in the world (WHO), the United States (NIMH, CDC, and the New Freedom Commission on Mental Health), and Canada (MHCC) indicate that mental health is the number one public health concern of this century. If unaddressed, mental health problems and illnesses will continue to increase, costing the economy trillions of dollars over the next several decades. Aside from the cost to our economy, the cost of mental health problems and illnesses include damaged lives and relationships. Given the far reach of its impact, mental health is an issue that affects everyone. As such, finding solutions is a concern of everyone.

Unfortunately, these same reports indicate that we are poorly prepared to deal with the current mental health crisis, let alone what will be developing in the foreseeable future. Inadequate human and financial resources need to be addressed. The estimated ten year delay between incorporating new research findings into existing mental health treatment programs contributes to less than adequate treatment for those who need help. Delivering mental health care to where it is needed presents a major challenge. Lack of education about mental health results in prejudice and poor treatment of those suffering mental health issues. Likewise, lack of education about mental health poses an obstacle to people seeking out treatment or programs that can assist them in recovery or improving their resiliency. What is most needed is the development of cost-effective treatment protocols that are efficacious and facilitate recovery or increase resiliency in a timely fashion.

Fortunately, advanced behavioral science is revealing a number of factors that may hold the key to addressing what may seem to be an overwhelming public health problem. Along with many of the technological advances that have been developed during the last few decades, we now have the opportunity to develop new and innovative programs that will be able to address mental health concerns efficiently and affordably. This paper will discuss several of these factors as well as the technology that are immediately available for addressing mental health struggles and illnesses. This paper will also present a new product, Health Masters, which is at the forefront of integrating new technology with mental health strategies with demonstrated efficacy.

II. MENTAL HEALTH & Its Economic, Societal, and Individual Costs

A. Mental Health: What is it?

It has long been recognized that there is a close association between our mental health and our physical health. Achieving good psychological health without good physical health or vice versa can be challenging for any person. Comorbidity, or the co-occurrence of two or more disorders or illnesses, is not uncommon when considering mental health. Poor physical health can be a source of stress that poses a challenge to maintaining our mental health. For example, someone with a chronic physical illness may also experience depression. Poor mental health, on the other hand, can result in behaviors that sacrifice our physical health. Oftentimes, severe psychological and emotional trauma may, along with dysfunctional psycho-behavioral expressions, be manifested in the form of physical diseases such as diabetes or obesity.

Good mental health refers to a state wherein we are able to fulfill our potential. It exists when we are able to make contributions to our community and our workplace, while weathering the daily stressors that come with belonging to a community and having employment.

Usually we think of mental health as simply the absence of mental illness. But mental health, or the lack thereof, is more than the absence or presence of relatively common illnesses such as anxiety, depression, substance abuse/dependence, or even the more severe forms of mental illness like schizophrenia and bipolar disorder. Good mental health also means that there is the absence of mental health problems. In other words, there are other things that result in poor mental health but don't rise to being a true illness. For example, problems like excessive anger, poor quality or negative relationships, and workplace bullying (whether as victim or perpetrator) can all be indicators of poor mental health. At the very least, these emotional-relationship problems can contribute to the development of more serious conditions. In general, the consensus is that any discussion about improving mental health needs to begin with recognizing that both mental health problems as well as mental illness need to be addressed.

It is also recognized that in order to improve mental health, we need to have a clear idea of what our goal "to improve" actually means. The traditional goal of health care has been to "cure" the health-related problem. In other words, the treatment process, in physical and psychological health care, has been to identify the cause, remove the cause or treat the symptoms, and then send the patient home, presumably

problem-free. Although this model may roughly work for some physical ailments, for most circumstances it cannot be successfully applied. One reason it may be inapplicable is that more often than not, we have yet to discover the cause of the illness. Logically, if we do not know the cause, we cannot remove it. Nonetheless, we still need to treat the illness. In other situations, we may actually know the cause, such as in diabetes Type I or Huntington's disease, but we have yet to discover a satisfactory cure. With many mental health problems e.g. emotional control problems, the inability to form positive, constructive relationships, or illnesses e.g. clinical depression or schizophrenia, there can be numerous root causes. Discovering the actual cause for any given individual's psychological condition won't gain us any traction in improving their mental health, since the cause is less relevant than the behavior itself.

For reasons such as these, *recovery*, rather than curing, has become the goal for most treatment models today. Recovery is an evidence-based treatment approach that focuses on getting the person to live, as much as possible, an independent, high-quality life where they are able to work toward successfully achieving their life goals. SAMHSA (Substance Abuse and Mental Health Services Administration) has identified the following four areas as essential components to a life of recovery: 1) *Health*, or being able to make choices that positively impact our physical and emotional health; 2) *Home*, or having a stable living space that we feel safe in; 3) *Purpose*, or living our days with positive and constructive activities that provide us with meaning and satisfaction; 4) *Community*, a life filled with relationships and social connections that we can turn to for various reasons ranging from talking about our problems with others to just spending time with and feeling connected to others. Although curing an individual isn't excluded, recovery focuses on reducing the symptoms or even attaining full remission of the symptoms, so the individual can lead a normal life in spite of their mental health illness or problem.

Relative to taking a curative approach, assisting a client in recovery has a lower threshold for success, but is more challenging, typically due to aiming for more elusive, abstract goals. For example, things such as *quality of life* have a tremendous individualistic component to them. In other words, one individual, who is challenged with developing good relationships with others, may view the "good life" as being filled with many close friends, whereas another might see the "good life" as filled with good working relationships with their co-workers.

Because of the individual nature of recovery, successful practices are moving towards therapies that emphasize evidence-based treatment. It is only the client who can ultimately identify satisfactory goals for treatment and, since these goals generally occur outside of the treatment context, it is also only the client who can truly determine how progress is being made.

Clients are being asked to participate in helping to customize the treatment process, providing feedback on the process as an integral measure of the progress being made towards achieving the treatment goals.

To summarize, mental health is seen today as more than the absence of clinically significant illness. Dysfunctions in a wide range of an individual's life can also contribute to poor mental health. The goal of treatment is to help the individual achieve a life filled with purpose, achievement, and all of the other things that we generally consider to be essential elements for living a fulfilling life. Given the idiosyncratic nature of these elements, treatment models are moving towards including the clients in determining the treatment goals as well as incorporating the client's perceptions of the treatment progress.

B. Mental Health: The Numbers

Discussions about mental health center on three areas: 1) The presence of mental health problems and illness; 2) The treatment of mental health problems and illness; 3) Prevention of mental health problems and illness. Any discussion, therefore must begin with the incidence (number of new or newly diagnosed cases within a specified period of time) and the prevalence (number of actual cases during some specified period of time or at a particular point in time) of mental health issues, the availability of treatment, and the risk factors that are involved.

1. The Prevalence & Incidence of Mental Health Problems and Illness

According to the World Health Organization (WHO), there are at least 450 million people globally suffering from an array of mental illnesses. The National Institute of Mental Health (NIMH) estimates that approximately 48 million U.S. citizens, or around 18.6% of those 18 or older, can be diagnosed with a mental disorder in any 12-month period. Nearly 7 million Canadians, or close to 20% of the adult population, have a diagnosable mental disorder each year, according to the Mental Health Commission of Canada.

WHO places the contribution of untreated alcohol dependence, substance-abuse disorders, depression, anxiety, schizophrenia, post-traumatic stress disorder, and other mental/neurological disorders to the global disease burden at 13%. Furthermore, 4.3% of the global burden of disease is attributable to unipolar depressive disorder. It is predicted that by 2030, major depression will the foremost cause of the global disease burden. In North America, three of the most common mental health problems are mood, anxiety, and substance use disorders. According to the NIMH, major depression is the primary cause for disability in the U.S. for those between the ages 15-44. Approximately 14.8 million Americans (6.7% of the population) eighteen or older are affected by major depression. The Mental Health Commission of Canada reports there were approximately four million

Canadians suffering from mood and anxiety disorders, making them the most common mental illnesses. Furthermore, it is predicted that that number will increase to 4.9 million Canadians by the year 2041.

Approximately 1 million young people (1 in 4 or 20%) aged 9-19 lived with a mental illness in Canada in 2011. These numbers are similar in the United States. Approximately 20%, or 1 in 5, children aged 13-18 have or have had a serious mental illness, while 13% of children 8-15 have had a mental health issue during the last year. Attention-deficit/hyperactivity disorder (ADHD), general mood disorders, major depression, and conduct disorder are the most common mental disorders affecting young people.

Mental health problems in the working population estimate 2011 prevalence rates to be around 21%. The peak years for mental health problems were 20-29 years of age. Young adulthood has been traditionally seen to be the greatest risk period for mental health issues. However, as the population ages, it is predicted that individuals 69 plus years in age will be increasingly vulnerable to mental health problems. Although dementia will represent a greater proportion of mental health-related issues in this age group, prevalence of anxiety, depression and substance use disorders are likely to increase as this portion of the population increases.

2. Comorbidity, Life Expectancy, & Suicide

Life expectancy is shortened by approximately 25 years in those with mental illness. This diminished life expectancy can be attributed to two factors: 1) Comorbid states; 2) Increased risk for suicide.

Comorbidity, or the occurrence of at least one other health-related issue along with the primary problem, is often found with mental health illness and problems. Substance use disorders develop in the presence of any number of mental, emotional, and relationship problems as a means of coping or self-medication. Alternatively, anxiety and mood disorders often develop in those with substance abuse disorders.

Our overall health is intimately linked to our mental health. More specifically, good mental health is associated with good physical health, while poor physical health co-occurs with poor mental health. It is not uncommon, especially with more serious mental illness, to see the presence of largely preventable physical conditions e.g. sexually transmitted disease, cardiovascular disease, respiratory illness, and diabetes which result in lowered life expectancy.

Suicide, which has increased as much as 65% in the last few decades, is the third leading cause of death for 15-44 year olds and the second leading cause for 10-24 year olds. (WHO) In the United States, 33,300 people committed suicide in 2006. (NIMH) The 2013 National Vital Statistics Report ranked suicide as the 10th leading cause of death in

2010. Of those taking their own lives, 90% have a diagnosable mental illness. (NIMH)

3. Risk Factors

Aside from providing prevalence and incidence rates of a disease or disorder, epidemiological research also can reveal the potential risk factors for a disorder or disease. Although by no means showing a causal link between the condition under investigation and the risk factors, by showing what variables or characteristics correlate with the condition, we can gain some valuable insight into what other factors need to be addressed when trying to attempt a solution or, in the case of mental health, achieving recovery and wellness.

The risk factors for specific mental health issues are varied and beyond the scope of this paper. The focus here are risk factors that interfere, or will interfere, with mental health and wellness.

Many adult mental health issues can be traced back to childhood and adolescence. The data indicates that untreated mental health problems during childhood will likely result in greater risk of experiencing mental health problems during adolescence. Likewise, untreated issues during adolescence increases the likelihood of experiencing mental health problems during adulthood. Furthermore, people's emotional responses and their ability to form positive relationships is largely influenced by their parents, while it is often found those in abusive relationships, either the perpetrator, victim, or both, were raised in homes where abuse was common.

The Adverse Childhood Experiences Study (ACE Study), conducted by the Center for Disease Control and Prevention and Kaiser Permanente, has had some startling but, in hindsight, very expected findings. An adverse childhood experience, or ACE, can take the shape of abuse, neglect or extremely dysfunctional family dynamics during those early formative years. The more ACEs in a person's life, the greater the likelihood that person will develop cognitive/emotional problems, health problems, and unhealthy behaviors that lead to social problems and early death. The toll that these childhood events can take upon an individual is life-long.

As noted earlier, there are high comorbidity rates between mental health problems and illnesses and physical ailments, which typically results in shorter life expectancies. To large part, these physical health issues are due to fact that mental health problems and illnesses, if untreated and provided little support, can lead to victimization, incarceration, homelessness, social isolation, unemployment, and poverty. These are all circumstances that can result in decreased physical health and can exacerbate existing mental health issues, because of the unhealthy behaviors that are associated with these conditions. For example, one is more likely to see behaviors like unsafe

sexual practices, lack of exercise, poor nutrition, obesity, smoking, problematic alcohol and other drug use (substance use disorders are commonly seen with other mental health problems and illnesses.

4. **Access to Treatment**

Mental health problems and illnesses are the leading cause of disabilities. (WHO) Yet, according to a 2005 report, only 6% of health care dollars are directed towards mental health care. Of those health care dollars spent, the majority (80%) are in human resources. In other words, there is a high workforce attrition in the mental health field. There are three areas that play a critical role in accessing mental health care: 1) Financial Resources; 2) Stigmatization; 3) Availability of competent mental health care providers.

a. **Financial Resources**

Historically, financial resources directed towards mental health have not matched the dollars spent on physical health care. As recently as 1997, states spent 30% less on mental health than they did in 1955 after adjusting for inflation and population growth. There are multiple reasons for this, but one major cause has been the stigma associated with mental illness. This stigma has dampened any public discussion of mental health needs. However, over the last two or so decades, largely as a result of the gathering data showing the magnitude and the cost of a mental health problem, there has been a considerable shift in the attitude that mental health problems and illnesses need to be urgently addressed. As a result, there has been an increase in funds available for mental health care from Federal programs, more localized programs (state and provincial), and many private and public health insurance plans. Even so, the general conclusion is that mental health care is underfunded and the funds that are available are not managed as effectively as they could be. As a result, those who need support for their mental health needs are often limited in their ability to obtain the quality care that they need.

Any solution to successfully addressing the mental health needs in North America will need to take into account these resource limitations and the likelihood that there will not be any major increase in those resources on the government level anytime soon. This means that a more grassroots (with government support and guidance) approach is needed with the development of more efficient, effective strategies that consume less time.

b. **Stigmatization**

Since rumours of having been treated for depression threatened to derail Michael Dukakis' 1989 bid for president, considerable progress has been made in eliminating the stigma of having a mental illness

or mental health problem. Unfortunately, stigmatization is still a factor that needs consideration when it comes to mental health problems and illnesses.

The stigmatization associated with mental health problems and illnesses can hamper having the social support mechanisms necessary for recovery or living a normal life. According to the 8th Annual National Report Card on Health Care (2008), 72% of people would tell a friend or co-worker if a family member had cancer, only 50% would do the same when it comes to a mental illness. One in four report being fearful of someone with a serious mental illness. Slightly less than half (46%) use "mental illness" as an excuse for bad behavior, while 55% indicate they wouldn't marry someone with mental illness and at least 58% would not hire a physician, financial advisor, lawyer, or child care worker with a mental illness.

For many people, having a mental health problem or illness is felt to be shameful and because of the stigma, many people do not seek help. Although the focus of stigmatization's impact centers on serious mental illness e.g. schizophrenia, stigmatization plays a role in whether people with mental health problems, rather than illness, seek support as well. For some, seeking psychotherapeutic support might be perceived as a weakness or incompetence in dealing with "normal" life issues. As a result, they only obtain professional support for emotional or relationship issues when they are forced to i.e. to avoid divorce, losing their employment, or incarceration. By this time, the problem will have likely escalated to a point that it poses a greater challenge to address than if a more preventive approach had been taken. It is believed that eliminating the stigma associated with mental health problems and illnesses will result in people becoming more willing to taking a preventive, proactive approach to their mental health.

c. Availability of competent mental health care providers

Only about 10% of those needing care receive mental health treatment in developing nations. Although conditions are generally much better in the developed, wealthy countries, only about 50% of those needing support are able to obtain mental health care.

One reason for this is the lack of local mental health care providers or agencies. Rural areas and tribal lands tend to have less access to health care providers in general. Finding a mental health care provider in these areas poses an even greater challenge.

A second reason that so many people are unable to get appropriate and effective health care is economics. Although the poor have programs such as Medicare and Medicaid, they typically don't have access to the same level of support as do those who are more financially well off. The middle class may have access to better

quality support, but they may not have health plans that cover mental health. The fees that accompany mental health care may be too much for many budgets today.

A final reason affecting the availability of competent mental health care providers is the mental health workforce itself. As mentioned, around 80% of all mental health dollars is spent by human resources to find replacements for vacated jobs. On top of this high attrition, many therapists, for various reasons, do not keep up with the latest research findings. It is estimated that it takes at least ten years for any advances in psychotherapy to find their way into the clinical setting.

C. Mental Health: The Cost

Approximately 20-25% of the population in North America experience some mental health issue each year. That, in itself, is an appreciable number of people. However, mental health problems and illness do not occur in isolation. They occur within the framework of society, work, and relationships with friends and family. This means that those suffering mental health problems and illness aren't the only ones who are impacted. Mental health problems impact relationships, schools and workplaces, and society. Everyone is impacted. This, of course, makes mental health the concern of everyone. It also means that there mental health problems and illnesses have a cost.

1. Direct and Indirect Impact on the Economy

It is estimated that in 2010, the cost of mental health problems and illness to the world economy was 2.5 trillion dollars. It is further predicted that the financial burden of mental health on the world economy will be $16.1 trillion over the next 20 years. According to the MHCC, mental health issues cost the Canadian economy $50 billion each year. The NIMH reports that these costs to the U.S. economy was $100 billion in 2002. All indications are that these costs will be increasing over the next couple of decades if the status quo is maintained. Human resources account for 80% of these costs.

This financial impact reflects both direct and indirect costs. For example, it is estimated that $6 billion of annual costs to the Canadian economy are indirect, whereas the NIMH reports that in 2002 serious mental illness produced additional indirect costs of $193.2 billion for lost earnings and $24.3 billion in disability benefits.

Direct costs of mental health problems and illnesses result from hospitalization and other residential costs, professional care, drugs, insurance, and community-based mental health organizations. Indirect costs include impacts upon business in the form of disability benefits and lost productivity e.g. absenteeism, presenteeism, and turnover, legal/law costs e.g. court costs and incarceration, drain on educational

systems, and loss of family revenue as a result of assuming caregiver responsibilities for a family member. There are other indirect costs that don't lend themselves readily to being measured in dollars and cents. These *intangible costs* address quality of life and are important to the individual with a mental health problem or illness, as well as to those around the individual.

2. Intangible Costs

a. Impact on Workplace Culture and Productivity

Untreated mental health problems and illnesses can result in loss of productivity for the individual. Because of the potential to negatively impact the workplace culture e.g. lowering morale or introducing dysfunctional coping behaviors, there can be a loss of production seen in coworkers as well.

Although serious mental illnesses have the potential to produce considerable harm in the workplace, these mental health concerns are likely to receive appropriate treatment if the individual is to maintain their employment. Mental health issues that may be overlooked and can negatively impact the workplace include anxiety or other factors associated with mental health problems e.g. feelings of stress or helplessness. Given that 36% of Canadians report experiencing stress and 23% report feelings of worthlessness or helplessness, these "part of life" psychological experiences can impact a large portion of the work force.

Mental health problems in the workplace can either arise from various dysfunctional behaviors or be the cause of those behaviors. For example, workplace bullying is relatively common and can have a negative impact upon the workplace culture. Although bullying may be seen at first glance as a voluntary behavior, it is often a result of challenges in an individual's personal life e.g. problems in their marriage or other relationships, feelings of low self-esteem or helplessness, or an inability to manage one's emotional state in a constructive manner.

Businesses and the resultant employment are generally viewed through fiscal glasses. As a result, the financial costs found in lost productivity tend to be the focal point of discussions of mental health problems and illnesses. Fifty years ago, when the primary model describing the employer-employee relationship as a money-for-service model, this limited analysis was justified. However, during the latter part of the 20th century, other models have been developed and integrated into the relationship between employer and employee. These other models emphasize intangibles as well as monetary compensation. For example, people may see their place of employment as a place to meet their social needs i.e. the so-called Japanese model. For others, work is a place to develop a sense of

achievement and self-esteem by successfully meeting challenges and making goals or being able to contribute to the decision process. Some will seek self-improvement/growth needs through the educational opportunities offered by their workplace. When mental health problems and illnesses are not addressed in the workplace, not only does the bottom line of the business suffer, but so does the ability of coworkers to achieve these intangible needs.

b. Impact on Marriage and Other Intimate Relationships

The ability to form and maintain intimate relationships based upon trust is one of the key characteristics that differentiate human beings from other social animals. As a result, intimate relationships play a critical role in human happiness and wellness. Research has demonstrated that intimate relationships, such as marriage, can contribute significantly to our engaging in healthy behaviors or positive coping strategies as a way of dealing with stress and other challenges life throws our way. Fractures in this type of relationship can result in negative ramifications in other aspects of a person's life.

Mental health problems and illness have the potential to destroy intimate relationships. Perhaps a husband develops schizophrenia. A lack of knowledge about this disorder and its treatment may result in fear and uncertainty in the wife. This fear and uncertainty may, in turn, create distance between her and her husband, perhaps even leading her to leave him. The loss of this social support mechanism may impede the husband's attempts at recovery.

Alternatively, mental health problems and illnesses may have a more direct impact upon intimate relationships. If one or both individuals have low emotional intelligence, their inability to manage their emotions in a constructive manner may result in fracturing of their relationship as well as negatively impacting other areas of their lives, e.g. work and family.

c. Impact Upon Family

For most people, families are the first social group that we belong to. Families are where we learn many of our behaviors for social interactions. If the behaviors that our families display are dysfunctional, there is a high likelihood that, not only will we adopt those behaviors, but we will pass those behaviors down to our children. Mental health problems tend to cluster in families. Although genetics may play a role in the amount of risk a child has in developing psychological and emotional problems, growing up in a family where dysfunctional behaviors are the norm poses challenges to the child developing psychologically healthy.

Outside of intimate relationships, families play a significant role in helping us cope with life and maintaining our health. Mental health problems and illnesses interfere with the ability to benefit from the social support that families can provide. Because mental health issues disrupt familial connections, the feelings of joy and connectedness that family can offer are unavailable.

d. Impact on Interpersonal Relationships

People who are clinically depressed can be difficult to be around. It is not a natural state for people to seek out sadness, unhappiness, and feelings of aloneness. Unfortunately, these sorts of feelings are what those who are clinically depressed are immersed in, making it hard for others to want to connect with them.

A major outcome of mental health problems and illnesses is the loss of friendship and the general decline in interpersonal relationships. Whether it is dysfunctional behaviors and cognitions or the embarrassment of the stigma of having a mental health problem or illness, those who have mental or emotional problems tend to lose their connections to others. Alternatively, many who have suffered mental health problems or illnesses since childhood may never have learned how to develop healthy and strong relationships in the first place.

Friendships and other interpersonal relationships are important for psychological, physical, and emotional health. They provide the sense of community that is essential to the well-being of every human being. The isolation that results from the lack of healthy relationships or the destruction of existing ones place us at greater risk for poor physical health and increased risk of psychological, behavioral, and emotional problems.

III. MENTAL HEALTH & Strategies for Achieving Better Mental Health

A number of authorities have argued that developing programs for achieving better mental health should be a priority in the 21st century. The cost to society economically and to individuals, in terms of broken lives and relationships, makes finding effective solutions an imperative. With the aged segment of the population growing as much as the general population, mental health problems and illnesses will continue to grow through the century if the status quo is maintained.

In an ideal world, we would eliminate things like war, violence, and economic instability that aggravate mental health problems and are associated with increased risk for developing mental illnesses, mood, anxiety, and substance abuse. Furthermore, our formal education would include learning strategies and techniques for managing and optimizing our psychological state, emotions, and relationships. Such strategies and techniques have the potential to bring tremendous improvements in mental health in not just North America, but globally.

Realistically, none of these things are likely to happen in the near future. Nor is it likely that we are going to discover cures for more serious mental illnesses, e.g. schizophrenia and dementia, any time soon. Because of this reality, it behooves us to develop and embrace strategies that will help those people, who are currently suffering from the consequences of some mental health problem or illness, to achieve recovery. For those who aren't suffering, it doesn't mean that they won't in the future. Nor does it mean that their lives are problem free. It makes sense to use the same strategies to increase the resiliency of these people, enabling everyone to maximize good mental health. Because of the limited resources at our disposal, especially when considering the magnitude of the problem, any strategy to optimizing mental health needs to emphasize the development of programs that are highly effective, highly efficient, and that can reach the greatest number of people.

Models that emphasize prevention are ideal approaches to responding to the mental health needs of the 21st century. Accumulated data has shown that taking a proactive approach to physical health can significantly reduce medical costs. In the same vein, taking a proactive approach toward mental health will decrease the costs associated with responding to mental health problems and illnesses. For example, treating mental health needs in children and adolescents will reduce the need for treatment in adults. This, in turn, will reduce the monetary costs associated with mental health issues, such as incarceration, lost work productivity, and increased disability expenditures. On the other hand, creating educational programs that focus on answering such questions as "What is mental health" and "How to achieve mental health" will reduce both direct and indirect costs of

mental health problems and illnesses by: 1) Reducing the stigma mental health issues; 2) Teaching people the skills needed to manage their own mental health: 3) Providing people with the knowledge needed to be a caretaker of someone with mental health issues. In short, proactive programs will increase the resiliency of people, thereby resulting in an increased portion of the population that is happy, healthy, and able to fully participate in their community without needing to seek mental health treatment.

For those who do suffer a mental health problem or illness, more effective and efficient recovery treatment models that are responsive to what the client perceives as their needs will have to be developed. There are numerous treatment approaches that have been developed over the last century that have all been demonstrated to have equivalent clinical efficacy. Which of these approaches should any clinical setting emphasize at any given time is beyond the scope of this paper. Instead, the focus is on what the advanced behavioral sciences have found to be critical to any successful treatment protocol. Applying these findings to any treatment model will only increase its effectiveness.

A. The Expectation of Change

It is the nature of all living things to change. When we stop changing, we stop growing, we stop achieving our potential; basically, we stop moving. The process of recovery is built upon the concept of movement and that movement is found in change. We move from having behaviors, cognitions, and perceptions that interfere with our ability to work, learn, and participate in our communities, to behaviors, cognitions, and perceptions that enable us to develop and maintain positive, constructive relationships and contribute to our communities. Positive change means developing the resiliency to be able to deal with all that life throws at us in a healthy way without being sabotaged by dysfunctional behaviors, perceptions, and cognitions. Change involves learning, developing, and honing the skills that will increase our resiliency and future recovery if needed.

The desire for change is the first step in any recovery program. Essential to any process of change is having a *realistic expectation* of change. For an individual to consider engaging in any program designed to improve mental health, they need to first have an expectation that change is possible. All too often, people see their thoughts and actions to be as permanent as their height or eye color. As a result, they resign themselves to a life filled with unhappy consequences, seeing no alternatives. For example, an individual may come from a family whose prevailing philosophy is that life is sorrowful and the only solace for that sorrow is work. It could very well be that the family represents a cluster of low-grade depression and a little treatment could open the doors to all of Life's potential.

Ultimately, any program, whether the focus is on increasing resiliency, bringing about recovery, or both, must first bring about a change in perceptions about

the immutability of our psychology. The possibility of change, itself, becomes clear when we learn and understand that our psychology is, in fact, mutable.

But any expectation of change needs to be grounded in reality. For many people, the fact that permanent change does not happen rapidly confirms their view that change is not possible. The notion that change can or must occur quickly is detrimental to not only the process of change, but also to the expectation of change. A good case in point are New Year's resolutions. People create lists of behaviors they wish to change in the next year. Aside from the fact it is easier to change one thing at a time rather than entire lists of behaviors, these resolutions to change are more often than not unsuccessful because they expect permanent change to occur quickly and easily. The individual's inability to permanently stop smoking, lose weight, or be a nicer person in a week or two confirms the person's self-identification as a smoker, overweight, or just a mean person. It also confirms in their mind that change isn't possible.

The perception that change is not possible poses a challenge to any program designed to improve mental health. Successful programs need to begin by assuring people that change is possible. They need to educate people about the process of change and teach that change results from a gradual learning process. Most people who are successful in quitting smoking or losing weight do so after multiple attempts because they have to learn how to engage in behaviors that are incompatible with smoking or weight gain.

B. Reinforcing Change

The sense that behaviors are permanent is a common misconception. Such beliefs are a contributing cause to why people don't seek help for their mental health problems and illnesses. Everyone has the capacity to bring about positive change in their lives. The real trick is to bring about lasting change.

All of our behaviors are motivated by the outcomes they provide. These outcomes strengthen, or reinforce, the behaviors, cognitions, and perceptions that preceded them. People will continually engage in dysfunctional behaviors e.g. problematic alcohol consumption, because the perceived rewards of the behavior outweigh any potential negative consequences.

Replacing dysfunctional behaviors with functional behaviors is a two-fold process. First, the process of change itself needs to be reinforced. In other words, change needs to be perceived as a rewarding experience rather than something to be feared. Without this perception, people are less likely to be engaged and, thereby, will not be able to achieve the changes they desire. Second, the new behaviors need to be reinforced. This means that the value of the outcome resulting from the new, functional behavior needs to be increased, while the value of the outcome resulting from the old, dysfunctional behavior needs to be decreased.

Reinforcement tends to be idiosyncratic - what works well with one person doesn't necessarily work well for another. Nonetheless, reinforcement can broadly be seen as social (better personal or work relationships), physical (better physical health), or psychological (achieving self-set goals).

Bringing about lasting, successful change is a challenge, even when that change is reinforced. Often, the most effective way to bring about lasting change, particularly when changing complex behaviors and cognitions, is to break the process of change down into small, incremental steps. Each of these smaller, more manageable changes are reinforced. An added bonus to approaching change in this manner is that change itself can become reinforcing. In other words, successfully achieving ones goals of change, whether small or large, can provide the individual with the self-confidence to take on the process of continued change with courage.

C. Evidence-based Practices

In the early part of the 21st century, the American Psychological Association (APA) recommended the implementation of the "evidence-based practice" into psychotherapy. The introduction of the evidence-based practice led to a more official incorporation of science and scientific findings into the field of psychotherapy. In other words, any therapeutic approach should be evaluated on its efficacy and clinical utility. Incorporation of the evidence-based model into psychology has led to the development of the concept of "best practice," or the integration of the client's unique characteristics and needs, experience of the therapist with empirical findings derived from advanced behavioral science.

Around the same time that the APA was making its recommendations for improving the effectiveness of psychotherapy, The President's New Freedom Commission on Mental Health recommended that psychotherapy should be approached as a team effort between the therapist and that the client. Furthermore, the client should be part of the decision process for determining therapeutic goals. This approach, of course, is crucial to the success of the recovery movement. After all, it is only the client who can determine what they need to achieve the therapeutic goals of recovery.

Likewise, it is only the client that can determine whether their mental, emotional, and relationship goals are being achieved. Most people lack the training to objectively determine whether progress is being made towards achieving their therapeutic goals. This is part of the role of the therapist. The challenge for the therapist is measuring that change or lack thereof.

To assist therapists in engaging their clients in the process of change and measuring that change, a number of tools have been developed to solicit feedback from clients. One example is MyOutcomes, a Health Masters' sister product that has been listed on SAMHSA's National Registry of Evidence-based

Programs and Practices, Outcome Rating Scale (ORS). Each therapeutic session, the ORS measures the client's perceptions of key psychological and social areas, enabling the therapist to evaluate the client's progress towards achieving their mental and relationship goals. Using this evidence, the therapist can determine if progress is being made or not. If progress towards recovery isn't being made, the therapist is able to make appropriate adjustments to the therapeutic program.

Unique to these sort of evidence-based tools, MyOutcomes also offers the Session Rating Scale (SRS). The SRS is a measure of the therapeutic alliance, a critical factor in successfully achieving therapeutic goals. The SRS helps the therapist evaluate whether their view of "best practice" for a particular client matches that of the client's. Put another way, the SRS can be seen as a team building tool.

D. Engagement & Engagement Theory

It is an understatement to say that in order for change to occur, a person needs to be engaged in the process. Although countless research in learning and memory has demonstrated the value of engagement, all too often is seems that little is done to ensure the presence of this factor in the clinical setting. The ability to engage the client in the therapeutic process of change may be a critical factor that differentiates highly successful therapists from those who struggle with their clients in achieving therapeutic goals. The use of therapeutic tools e.g. MyOutcomes that support feedback-informed therapy may contribute to engaging clients in the process of change.

Engagement Theory is an approach to learning that takes advantage of the developing distant education technologies. Recognizing that many human activities involve participating in groups, it incorporates group engagement strategies with modern technologies for communication and education. Although mental health problems and illnesses are such because of the stress they pose for the individual, much of this stress originates in the disruptions these mental and emotional issues cause in group settings or interactions e.g. the workplace, family, etc. The basic elements of Engagement Theory lend themselves readily to treatment models for mental health problems and illnesses because of the focus on group participation.

There are three components to Engagement Theory. The first component is that learning involves "collaboration." Collaboration refers to the members of a group working as a team. This team work requires communication, planning, management, and social skills. As a result, there is a need to develop these skills to a sufficient level of competence so that the team can be successful. The second component is that learning needs to be "project-based," where a purposeful activity lends itself to using newly learned ideas in a specific situation. The third component is that the process of change needs to be authentic, applying learned activities to real-life aspects of the individual.

E. Social Influence

Human beings are social creatures; we act and self-identify within the framework of various social factors and settings. For most of us, our individuality is important. So too are our group affiliations. In order to fit into the group, we readily adopt behaviors that will make us “normal.” Of course, what is “normal” is defined by each group. Many of our behaviors that are dysfunctional were most likely acquired from belonging to a dysfunctional group where those behaviors were the norm.

This natural tendency to modify our behaviors and cognitions to fit into a group can be utilized into treatment models. Others, who are going through the process of change, can normalize that process as well as the new behaviors or cognitions that are being introduced. Group members can provide needed support, offering advice and feedback to individuals about their performance. Belonging to a group, because of these factors, increases the likelihood that we stick with the program.

Social groups are also just generally good for our psychological and physical health. Just as married men tend to show a lowered risk for cardiovascular disease and married women with involved and supportive spouses are at lower risk for clinical depression, group membership provides benefits. Research indicates that those who walk in groups show better body-fat ratios, cholesterol levels, lung function and scores that measure depression. Such findings would suggest that treatment models for mental health problems and illnesses that utilize a group approach might see better improvement as a consequence of that group participation.

F. Mentoring

Mentoring is a form of social influence that has a more directly prescribed purpose. Mentoring involves an individual, who has gone through the process, providing support and guidance to an individual who is currently going through the process. It is a model of social influence that has been used in a vast array of activities. In academia and business, it is common practice for a more senior member to be assigned to a new hire in order to guide them towards success. This concept of using mentors is not new for programs that focus on bringing about constructive mental-emotional changes e.g. Alcoholics Anonymous or the Big Brothers/Big Sisters programs. The mentor is seen as providing both support and facilitation for change. Evidence shows that individuals with peer support are discharged from a long-term hospital 116 days earlier than those without peer support.

G. Consistency

Consistency is a double-edged sword. On the one hand, consistency is essential to learning and producing long-term behaviors. As most parents are aware, the key to raising children who demonstrate appropriate behaviors is to send consistent messages of what is expected, as well as have consistent outcomes. In this respect, adults are no different than children.

In this framework, treatment models for mental health problems and illnesses need to be consistent with how they approach the problem. Clients need to be encouraged to be consistent in using new behaviors to ensure their incorporation into the individual's behavioral repertoire.

At the same time that consistency can play a key role in bringing about successful, constructive change, consistency can be the enemy at the gate as well. Humans have a natural tendency to prefer and gravitate towards consistency rather than inconsistency. Cognitive consistency creates mental states of calm, whereas cognitive dissonance creates anxious states. If we experience cognitive dissonance, we will engage in processes that return us to a state of calm i.e. cognitive consistency. There are a number of ways we approach this. For example, in this day and age, being a smoker can lead to numerous experiences of cognitive dissonance. As a smoker, you might come across information emphasizing the reduced life expectancy associated with smoking. The dissonance occurs as a result of the conflict between your behavior and this information. If you are a typical person, you will likely use rationalization e.g. "we all die eventually" so that you can avoid change.

This tendency towards cognitive consistency can pose a problem for any treatment program. People's natural inclination is to avoid change. However, this tendency can be exploited to help increase the likelihood of making needed changes. By creating a state of cognitive dissonance, the therapist can guide the individual towards making a change. Thereafter, the individual's tendency toward consistency will help insure that that change becomes permanent.

H. Cardiovascular Activities

Lifestyle changes are often critical aspects when addressing mental health problems and illnesses. Dysfunctional lifestyles can be a contributing factor to developing mental, emotional, and relationship problems or dysfunctional lifestyles can be a consequence of these problems. Either way, changing lifestyles is often a major step in bringing about recovery or improving resilience.

Cardiovascular activity is important to our physical health. It is also important to our psychological health. Exercise has been demonstrated to reduce anxiety, depression, negative moods, and social withdrawal, while improving cognitive functioning and self-esteem. The more immediate benefits or reinforcement of behavioral changes that include increases in cardiovascular activity include stress relief, improved sleep, increased energy, increased sexual interest along with the physical benefits of weight and cholesterol reduction.

I. Distant Education Technology (DET)

The development of the internet along with associated technologies over the last twenty years or so have been a boon for distant education. Distant education allows the instructor and student(s) to be in different places during times of instruction. With inexpensive computers and easy access to high speed

internet, instructors and students can all be in different locations or some may be offsite, while others are participating from the same classroom or conference room. DET can take two forms. There is synchronous distant education where participation is occurring in real time. Videoconferencing, web conferencing, and live streaming are all possible avenues for this type of learning. The second form of DET is asynchronous. This is the "go at your own pace" sort of learning. Students can view videos, read materials, work on exercises, and write in a journal that are part of the learning experience. Typically students have access to the teacher and/or other students via email or discussion groups for discussing and asking questions.

Distant Education Technology lends itself readily to mental health treatment programs. In a time when mental health problems and illnesses are the leading health problem worldwide and, if the status quo is maintained, the situation is predicted to worsen. DET may be a significant key in addressing the problem facing us for a number of reasons. First, given that the financial resources available aren't sufficient to currently meet the problem, DET is an inexpensive way to provide highly effective treatment to groups or to individuals. Second, provided internet access is available, DET can provide services to more rural areas where traditional therapy is not available. Third, because of the nature of DET, programs that utilize this technology can provide programs and access to specialists to groups e.g. minorities with unique needs and who live in areas with inadequate support. Finally, limited time may make it difficult for couples or other family members to regularly meet with a therapist or another specialist to address relationship and other issues. DET is ideal for the development of "come to the workplace" skill-building workshops.

IV. Health Masters: Using Advanced Science for Effective Solutions

There is a consensus that the world is facing a major mental health crisis. Although developed countries are better positioned than developing countries to address this problem, the same challenges confront both. Not counting the toll that mental health problems and illnesses take on people's lives, the cost to the economy is tremendous. If steps aren't taken, the cost and the toll will continue to grow.

There are three major challenges facing any attempt to address this crisis and help those who need treatment to recover, while increasing the resiliency of those who have not yet experienced any mental health issues. First, given the limited resources available, new treatment and educational models are needed that are highly effective, highly efficient, timely, and affordable for goal achievement.. Second, delivering those treatments to those who are typically overlooked in the mental health care system or, because of their lifestyle, find it difficult to obtain the care and education that they need. Third, a mental health force with up-to-date skills and knowledge as well as high job satisfaction needs to be available to deliver the treatment and education.

Health Factors, a company that has been in the vanguard for 21st century mental health product development since 2000, is now offering Health Masters. Combining

technology with advanced behavioral science, Health Masters has developed effective solutions to the three major challenges to achieving good mental health. Using synchronous and asynchronous distant learning technology, Health Masters brings the best-fit, expert professionals to the classroom, the conference room, the office, or any other place where a computer can be set up with access to the internet. Health Masters offers solutions for improving mental-emotional health to people via face-to-face or virtual meetings.

The program is designed to assist employees, family members, and executives develop the skills needed so that they can: 1) Recover from existing mental health problem or illness; 2) Improve resilience, thereby reducing susceptibility for developing problems; and 3) Enhance mental health to help achieve personal or workplace performance goals.

Health Masters has a roster of workshop topics that include learning the skills for managing one's psychological health, developing strategies for avoiding fatigue and improving mental and physical energy, increasing higher levels of joy and happiness, improving relationships and minimizing fractures to those relationships, building skills for filling one's life with strong, positive friendships, and managing one's anger. Each year, three new topics are researched and developed into short read mental health guides.

A. How Health Masters Works

Health Masters is an evidence-based, feedback-informed approach to mental health. It offers virtual, facilitated, and interactive workshops that occur once a week for seven weeks. In keeping with being an evidence-based approach to mental health, the workshops are tailored to train participants to improve their mental health via developing skills and strategies that work for them. Health Masters fosters a non-judgmental, encouraging, and supportive atmosphere. If adopted at the workplace, Health Masters' workshops typically occur during the lunch hour and require minimal work on the part of the employer.

B. Options for Attending Health Masters' Workshops

Health Masters is open to anyone who wishes to improve their own, or a loved one's mental health. Health Masters is equally valuable to those who appreciate the relationship between optimizing one's mental health strategies and enjoying a life of wellness.

Currently, there are three Health Masters' workshops each year, beginning on the 15th of the month. Workshops are offered in January, April, and September.

Health Masters is a flexible program that tries to accommodate the modern world in which people have busy schedules and sometimes are separated by physical distances. Health Masters generally consists of groups of 5-15

individuals. Participation can be in-house where the group meets together in a designated location. Alternatively, group participation can be virtual, where group members are in different physical locations and meet via teleconferencing technology. Finally, workshop groups can be a mix of in-house and virtual.

C. How to Implement Health Masters

One of Health Masters' advantages and one of its strengths is the ease with which it can be implemented into any type of organization. There are seven discrete elements to implementing Health Masters:

1. An onsite Health Masters' host needs to be recruited. This individual will be responsible for organizing and assisting in the entire process.
2. The host undergoes training. This training is important because the host will play a key role promoting the program, recruiting group members, and assisting group members in the logistical function of Health Masters' weekly Team Training sessions. A Masters-level counsellor is available to the group via telephone.
3. Health Masters is promoted and participants register online. Health Masters has developed software to assemble the group thereby minimizing administrative resources needed.
4. A private room is secured. If the workshop is entirely in-house, the host will need to secure the meeting room. The host will also print the written materials for each training session, which can be found on the website.
5. The first session of Health Masters is carried out. Aside from the topic content, this session will introduce group members to Health Masters' resources and the technology used by Health Masters.
6. Weekly check-ins and activities between group members conducted via telephone or in-person are assigned through the Health Masters' dashboard.
7. The remaining six Health Masters sessions and their respective activities are carried out over the following weeks.

During the course of the seven week workshop, participants will receive learning tips from the Team Trainer. Group members will also have access to a Health Masters' counsellor. Alternatively, if the workshop is at a place of employment, group members can use their employer's EAP program, which can be easily integrated with Health Masters.

D. Inpatient Program

Individuals may require more intensive one-on-one support. In conjunction with Learn to Leap, Health Masters' sister product that is designed for one-on-one support (www.learntoleap.ca), Health Masters also offers some one-on-one

inpatient and outpatient support. In contrast to the more traditional single strategy approach, this support uses a multi-strategy approach for treating mental health struggles.

The inpatient program involves spending 2, 4, or 6 weeks in a supportive environment in Kelowna, BC. The overall goal of the program is to build self-esteem and a high trust quotient, both of which are necessary to increase responsiveness to positive, constructive change. After the client returns home, they continue to receive coaching sessions each week to provide the support needed to maintain the skills they have learned that will help them achieve the psychological and behavioral goals they have set for themselves.

Although a variety of traditional treatments are provided, the inpatient program takes a holistic approach towards achieving and strengthening mental health. Activities include incorporating healthy eating patterns, hydrotherapy, cardiovascular activity, engaging in social engagement activities, and wilderness treks that involve hiking up to and spending a weekend at a cabin in the surrounding mountains. The core feature of all of these activities is to create a warm, nurturing and loving environment that optimizes the building of self-esteem, self-growth, and the confidence and courage needed to bring about real sustainable change and achieve the mental, emotional, and relationship goals of the individual.

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