PREDICTING CHANGES IN SOCIAL STIGMAS SURROUNDING MENTAL HEALTH AS A RESULT OF INCREASED USE OF REMOTE MENTAL HEALTH SERVICES

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By

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On my honor as a University student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments.

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The ongoing COVID-19 pandemic has forced a dramatic restructuring in healthcare systems as a whole, including mental health services. As a direct result of lockdown procedures, an overwhelming majority of mental health services had to convert to a telehealth setting. Such a sudden and dramatic shift in the way these services are given can be expected to have several social repercussions. However, given that not 2 years have passed since the first COVID-19 lockdown measures (at the time of writing), there has not been enough time for these potential social consequences to be fully realized, and certainly not enough time for a rigorous observational study into the social consequences of widespread use of telehealth mental health services. The potential change in the social landscape has the potential to disrupt an ongoing research project (2016-present) at the University of Virginia on mental illness identification and treatment in Virginia jails. The research is being conducted by George Corbin, Nora Dale, Aatmika Deshpande, Katherine Korngiebel, Paige Krablin and Emma Wilt. Advising this project are Professors Emeritus K. Preston White and Michael Smith, as well as Professor Loreto P. Alonzi. This project, like many long-term mental health research projects, has been collecting information on mental illness identification going back to 2012, however the COVID-19 pandemic has disrupted several identified patterns in the data. While COVID-19 could be cited as an explanation for why these disruptions exist, predictions on social ramifications of treatment changes, such as that discussed in the discussed STS research, could provide more concrete explanations for trend changes in data from the past 2 years. This will ultimately help answer the proposed research question of the ongoing technical research project; how is mental illness detected and treated in local jail populations, and what elements of these processes can relevant stakeholders improve to ultimately improve the quality of life of affected individuals? To provide some aid in understanding the social ramifications of the shift to online mental health

services, this literature synthesis of psychology, sociology, STS publications and a SCOT model, as defined by Pinch and Bijker (1984), intends to predict possible effects of the shift to telehealth mental health services on the social stigma surrounding mental illness.

PREDICTING CHANGES IN SOCIAL STIGMAS SURROUNDING MENTAL HEALTH AS A RESULT OF THE INCREASED USE OF REMOTE MENTAL HEALTH SERVICES

There is no question that severe mental illness can negatively affect the quality of life of those afflicted by it, however what is often ignored is the impact stigma, both by other people and the individual suffering severe mental illness themselves. The degree of impact by the stigma is, as suggested by Corrigan and Watson (2002), comparable to that of the immediate symptoms of severe mental illness (para. 1). The stigma can manifest itself in several different ways, including a feeling of being excluded by or even feared by others, being infantilized by one's peers and being seen as incapable of making decision for and taking care of oneself (Corrigan & Watson, para. 7).

Features and trends in a social network, such as the stigma surrounding severe mental illness, are constructed and maintained by the actors in the network itself. It follows that a change in the social network can lead to changes in these social trends. The ongoing COVID-19 pandemic has had an incredible impact on countless social networks, including the existing system of mental health service providers. As a result of the COVID-19 pandemic, an overwhelming majority of mental health service providers had to restructure how they were providing services to their patients to ensure that regional lockdown orders were being followed. On March 13, 2020, the same day that US president Donald Trump declared a state of emergency over the COVID-19 pandemic, the US Secretary of the Department of Health and

Human Resources waived certain sections of the Social Security act which, as illustrated by Duff and Sarata (2020), removed restrictions on the use of remote telehealth technologies on use of federal healthcare programs (p. 1). Similarly, several HIPPA regulations were relaxed or temporarily suspended to make it easier for medical professionals, including mental health service providers, to meet the requirements to provide healthcare in a remote environment (Duff and Sarata, p. 2). Telehealth technologies, as described by Reay, Looi and Keightley (2020), refer to synchronous and asynchronous internet technologies to provide mental health services, including audio and audiovisual conferencing software, services over email and text, or purpose-built applications to provide additional support. At the time of writing, this massive shift of mental health services to telehealth setting occurred just over 2 years ago, which is not enough time to expect any possible consequences on the stigma surrounding mental health as a result of the near-universal shift to remote services to stabilize, nor is it enough time for a rigorous observational study to be conducted. In light of these constraints, a methodology is proposed to use a SCOT model, as described by Pinch and Bijker (1984), to better understand the relationship that telehealth technologies have with relevant social groups with regard to the stigma surrounding severe mental illness.

METHODOLOGY

The primary output of the discussed research methods is a SCOT model of telehealth technologies, limiting the scope to the relationship between this technology and relevant social groups as it pertains to severe mental illness stigma (Pinch and Bijker, 1984). However, this model in a vacuum is not enough to make inferences about one of the key elements of the research question, the sudden and dramatic increase in use of telehealth technologies for mental

health services. To best respond to the change in use element of the research question, the research was conducted in 3 distinct phases:

1. A model of relationship between stakeholders and severe mental illness stigma was created to serve as a 'control group' representing severe mental illness stigma in a pre-COVID setting, and therefore before the sudden and widespread adoption of telehealth offerings for mental health services. This model was informed using mental illness stigma research conducted before March 2020.
2. The efficacy of remote mental health services compared to traditional services, as well as any relevant interaction between public mental health and the COVID-19 pandemic itself, as it is the direct cause of the shift to telehealth services, were collected and recorded.
3. The previously mentioned SCOT model of telehealth technologies with a focus on mental illness stigma (Pinch and Bijker, 1984). This model was informed by synthesis in the previous two stages of research, as well as additional research on mental health services conducted during the COVID-19 pandemic.

DISCUSSION OF EXISTING STIMGA AND TELEHEALTH RESEARCH

In order to establish a baseline of the social context of the stigma surrounding severe mental illness, a relational model of social groups and mental illness stigma was built, and a parallel analysis of immediate observable changes in the efficacy of telehealth-based mental health services was conducted.

Mental Illness Stigma Before the COVID-19 Pandemic

The constructed model of mental illness stigma sources and interventions in relevant social groups depicted in Figure 1 on page 5 provides an overview of how different social groups

interacted with the nonhuman actor of mental illness stigma before the COVID-19 shift to telehealth services (p. 5). It is important to note that the discussion of mental illness stigma in this section is an oversimplification of an incredibly complex social phenomenon and the model exists only to be used as a tool for understanding the effects of the shift to remote mental health services as a result of the COVID-19 pandemic.

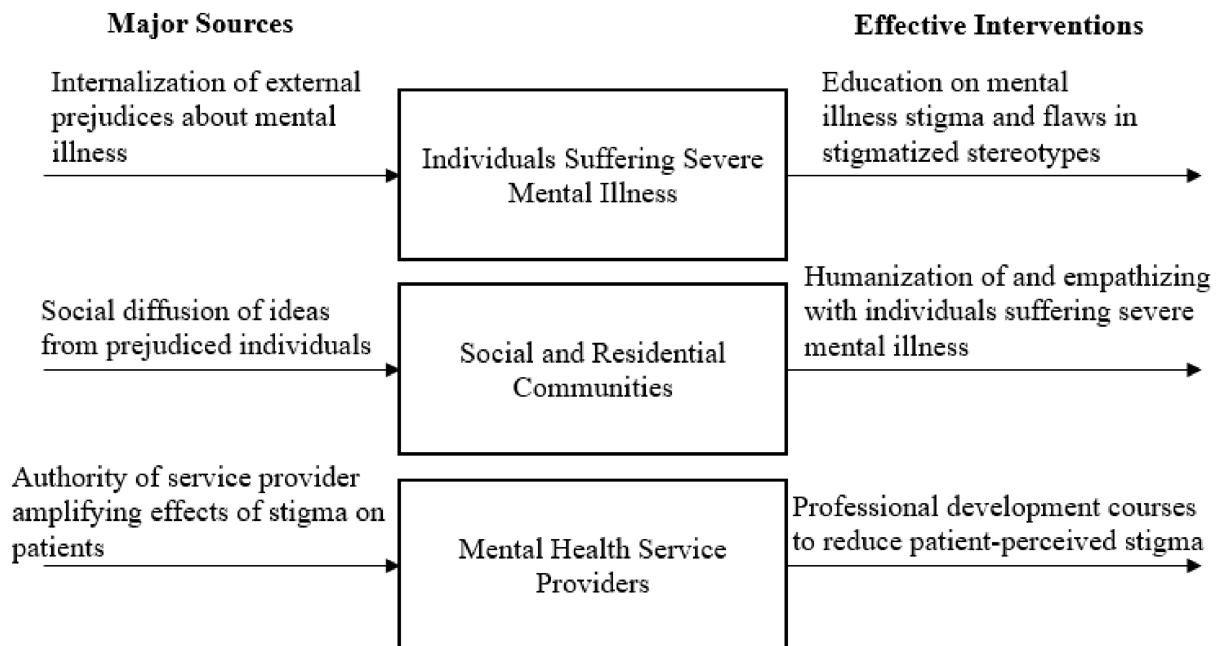

Figure 1. Mental Illness Stigma Before COVID-19 in Relevant Social Groups. A model highlighting major sources of and effective interventions to reduce mental illness stigma in relevant social groups. (Corbin, 2022a).

Individuals Suffering Severe Mental Illness

As noted by Corrigan and Watson (2002), the stigma surrounding mental illness can fall into two categories; public and self-stigma (para. 4). Both types of stigma will affect the individual suffering severe mental illness, but the self-stigma is constructed entirely by the afflicted individual, as opposed to public stigma which is constructed and maintained by a

population. Both types of stigma, as explained by Rüsch, Angermeyer and Corrigan (2020), are "comprise[d] of stereotyping, prejudice and discrimination" and can have similarly affect the individual suffering mental illness – a plethora of negative emotions stemming from the eroding of the individuals' confidence in themselves or their abilities (para 14). Rüsch, Angermeyer and Corrigan also bring up an interesting relationship stereotyping from public stigma and an individual suffering mental illness – an individual exposed to stereotypes will not necessarily agree with them, and disagreement can drastically reduce the likelihood of that individual developing self-stigma. In some cases, this can lead to a self-empowerment and actually lead to an increase in the self-esteem of the individual (para. 24).

Social and Residential Communities

Unlike self-stigma, public stigma is constructed by and maintained by attitudes in a general population. As noted by Corrigan and Watson (2002), the exact attitudes towards mental illness can vary between populations, but common attitudes include seeing individuals suffering from mental illness as violent and unpredictable, that they are simple-minded and childlike, that mental illness is a personal failing of the individual for having some sort of weakness, or a combination of these and other stereotypes. Communities are very rarely homogeneous in thought, and therefore not everyone in a population presenting public stigma towards severe mental illness will themselves hold the stigma, however as long as there is a sufficiently large number of "prejudiced persons", as defined by Rüsch, Angermeyer and Corrigan (2020), the stigma will perpetuate itself by instilling the associated stereotypes and discrimination on new members of the population (para. 14). There is, however, research documenting how public stigma can be overcome. Pinfold *et. al.*, in their 2005 analysis of what factors make mental illness stigma interventions successful, identified that across all analyzes social groups involving

adults, the most successful method in reducing fear and discrimination towards those suffering severe mental illness is social testimony from afflicted individuals, and other forms of direct social interaction (p. 4). The second most effective method, and most effective method for students and children, is education on mental illness, its symptoms, and how it can affect the daily life of individuals. Notably, both of these methods encourage the public to empathize with individuals suffering severe mental illness and directly attempts to counter the dehumanization present in public stigma.

While public stigma is traditionally seen as a non-formal social feature rather than an organized and systematic prejudice towards individuals suffering severe mental illness, Corrigan, Markowitz and Watson (2004) offer a perspective on mental illness stigma that argues the exact opposite; structured, legal prejudice towards individuals suffering severe mental illness in the denial of various rights in several US counties (p. 2). Similarly, mass-media sources such as televised entertainment or news outlets may perpetuate harmful stereotypes of individuals suffering severe mental illness. Formal and non-formal public stigma are not mutually exclusive and, more often than not, occur simultaneously. One arguable benefit of the formalized nature of this public stigma is that there will exist a clearly defined way to counter it, by removing or modifying the rules or laws codifying the discrimination. However, because the formalized public stigma goes hand-in-hand with non-formalized stigma, interventions focused on humanizing individuals suffering severe mental illness are still going to be needed to reduce or possibly overcome the stigma.

Mental Health Service Providers

It is the duty of mental health providers to help individuals suffering severe mental illness to not only better manage the symptoms of their illness, but also the stigma that comes with it —

public and self-inflicted. By the nature of the services they provide, individuals suffering mental illness are more likely to view service providers as authorities on mental illness. Thornicroft *et. al*. (2015) assert that this trust makes mental health service providers potentially far more influential sources of stigma than the average member of the population (Interventions with health-care staff section). While mental health service providers are more likely on average to be accepting of mental illness than the general population, as demonstrated by Lauber *et. al.* (2004), they are no less likely to be socially distant towards individuals suffering mental illness, potentially contributing to the erosion of the self-efficacy of the afflicted individual (p. 4). These findings are not universal, as Thornicroft *et. al.* demonstrates, and there are several studies that claim mental health service providers show evidence of stronger prejudice towards individuals suffering mental illness than the general population. Mental health service providers are still members of their own community, so interventions targeting public stigma would also be effective in reducing the stigma held by service providers, but service providers can be effectively targeted directly during training and professional development courses (Thornicroft *et. al*., Interventions with health-care staff section).

The Rise of Telehealth Technologies in the Wake of the COVID-19 Pandemic

The use of internet-based telehealth technologies for mental health services had already been occurring for nearly 30 years at the onset of the COVID-19 pandemic, albeit in varying forms, and the efficacy of the technology compared to traditional in-person services is commonly understood to be comparable (Reay, Looi and Keightley, 2020, Effectiveness of internet-delivered interventions section). However, the previous research often assumes that telehealth-aided services are not used as a replacement for in-person services, but as a supplement or alternative for specific individuals for whom a remote environment is more beneficial. The

symbiotic relationship is not possible on a large scale during the COVID-19 pandemic, and the mental health services industry in March 2020 was forced to convert to a primarily remote format.

Research on the efficacy of specific telehealth technologies being used during the COVID-19 pandemic, the aforementioned remote conferencing technologies, asynchronous text support and mental health apps may give a more nuanced picture of the effectiveness of remote mental health services during the COVID-19 pandemic. Synchronous telehealth technologies, audio and audiovisual conferencing software or text-based therapy, is proven to be just as effective as traditional in-person services by a majority of studies investigating the two methods in research conducted before March 2020 (Reay, Looi and Keightley, 2020, para. 3). When the same research approaches were applied to text-based therapy, there was not a clear consensus on its effectiveness compared to traditional in-person services, if there were any significant results at all. Asynchronous technologies can make for effective mental health services, however, as demonstrated by Chan *et. al.* (2018), the efficacy of individual methods can vary greatly based on the patient's reception to the method, provider's comfort and experience providing support using the technology, and the strengths and weaknesses of the technology itself.

Although it is not itself a telehealth technology, the impetus of the large-scale shift to telehealth technologies for mental health services should also be considered when analyzing the effects of the shift. A 2020 report by the United Nations classified the COVID-19 pandemic as a mental health crisis as well as a physical health crisis for a myriad of reasons (p. 5). The lockdown procedures present in early stages of the pandemic strongly encourages individuals to isolate themselves socially, which on its own can lead to increased social anxiety, stress and other symptoms that can build into more severe mental illness. When considering the added

stress of the severity and infectiousness of the disease and threat of losing one's income as a result of declining economic conditions, this creates a perfect storm for psychological stress (p. 7). Further contributing to this mental health crisis, the United Nations' report points out that, in the face of the increased demand for mental health services, legislation and social pressure to reduce the spread of the COVID-19 virus dramatically decrease the availability of mental health services, most notably for inpatient care. For outpatient care, while telehealth solutions are more easily applicable than they are for inpatient care, providers still need some experience with or access to training to effectively use these technologies for mental health services, which is far from guaranteed for all healthcare providers. The combination of increased stressors from the COVID-19 pandemic and reduction in availability of mental health services, telehealth-aided or otherwise, created a climate that generates more mental illness and more severe mental illness than before March 2020.

SCOT MODEL OF TELEHEALTH TECHNOLOGIES FOR MENTAL HEALTH SERVICES

To facilitate discussion on possible ramifications on the social stigma surrounding mental illness stigma as a result of the COVID-19 shift to telehealth mental health services, a modified SCOT model of telehealth technologies during the COVID-19 pandemic illustrated in Figure 2 on page 11 was developed (Pinch and Bijker, 1984). The social groups present in a traditional SCOT model are replaced with the non-human actors of various forms of mental illness stigma, which then influence notable social groups as described in Figure 2 (p. 11).

Telehealth and Communities

Public stigma, as discussed in the 'Mental Illness Stigma Before the COVID-19 Pandemic' section, is most effectively disrupted when communities' perceptions and stereotypes

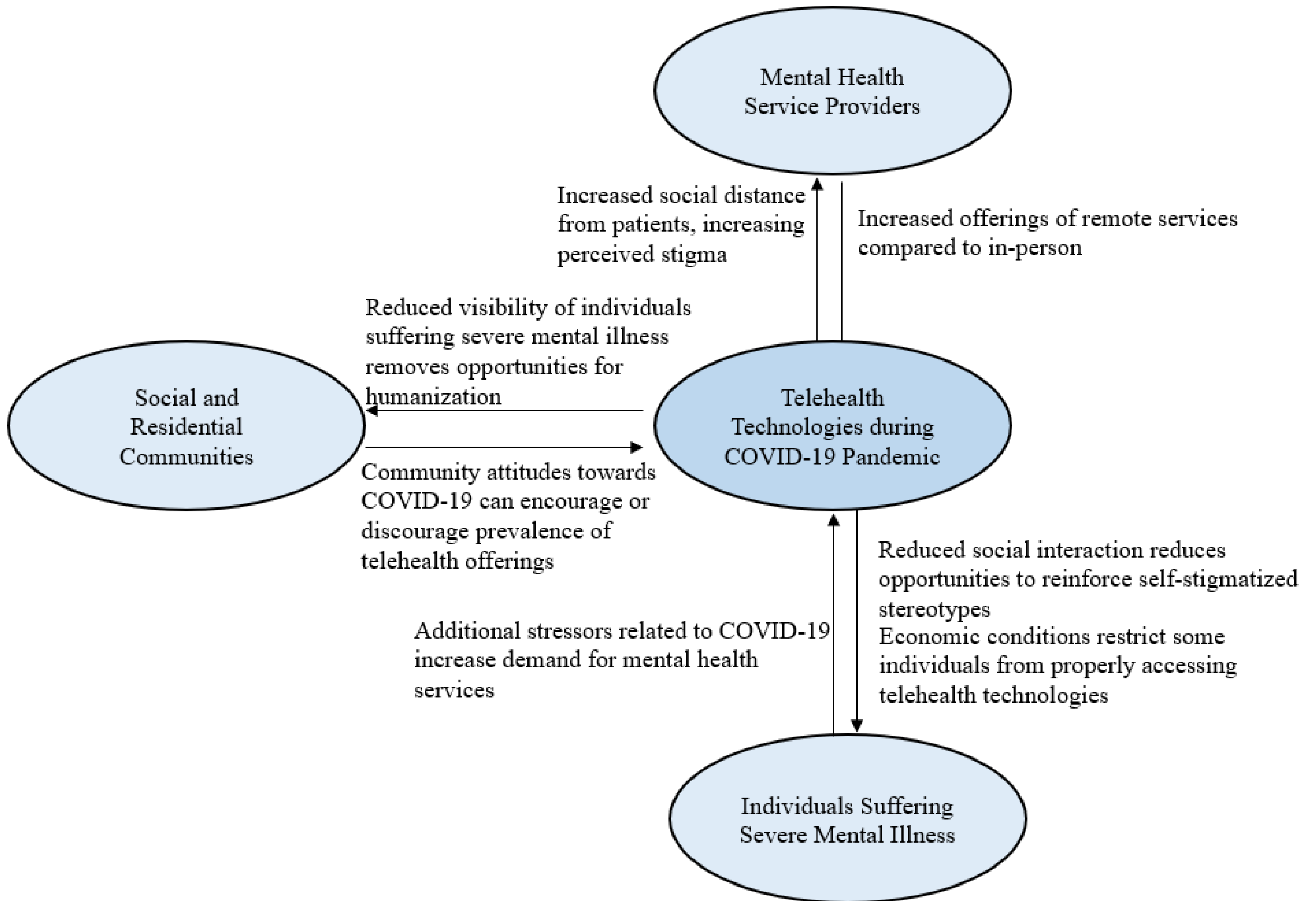

Figure 2. SCOT Model of Telehealth Technologies. A SCOT model to describe the relationships between relevant social groups and telehealth technologies as it relates to mental illness stigma. (Corbin, 2022b).

of individuals suffering severe mental illness are challenged by social interactions with those same individuals, thus humanizing them in the eyes of previously prejudiced members of the community illustrated in Figure 1 on page 5. When avenues for social interaction are disrupted, such as by the COVID-19 pandemic, chances for members of the community to interact with and empathize with individuals suffering severe mental illness are similarly disrupted. Additionally, telehealth-aided mental health services do not have a physical presence in the community, and as

telehealth services increase in popularity, there is less physical visibility of these services in the community, further reducing opportunities for prejudiced individuals to see, interact with and otherwise humanize afflicted individuals. The degree of shift to telehealth solutions for mental health services is influenced by the community itself. Different communities have different social expectations for how COVID-19 is treated, and these expectations will dictate to what extent mental health services will be offered in a telehealth medium.

Telehealth and Individuals Suffering Severe Mental Illness

The shift to telehealth-based mental health services affects individuals suffering severe mental illness differently person-to-person. Some individuals are more receptive to remote mental health services than others, and naturally those more receptive to the care that can be accessed during the COVID-19 pandemic will have a better chance managing or even overcoming their illness – thus reducing self-inflicted stigma for a disease they no longer suffer. Similarly, those less receptive to remote services are less likely to overcome their struggles. This becomes more likely for those of lower socio-economic status, as synchronous telehealth services, the most comparable to traditional services and most effective as a stand-alone telehealth method, can be difficult to access without access to an internet-connected device in a private setting. Self-stigma can be founded by and is reinforced by contact with prejudiced members of the afflicted individual's community, and an internalization of these prejudices. The reduced social contact as a result of the COVID-19 pandemic decreases opportunities for this reinforcement of self-stigma to occur. This is not the only consequence of the reduction of social contact however. This reduction also brings with it numerous stressors on the individual, as previously discussed, which have the potential to create or intensify existing mental illness, increasing demand for the already insufficient supply of mental health services. While this could

encourage a further increase of supply of mental health services, as well as public visibility of individuals with severe mental illness, this is a double-edged sword that also gives more opportunities for prejudiced individuals to reinforce or spread prejudices against afflicted individuals.

Telehealth and Stigma from Mental Health Service Providers

Mental health service providers have much more potential to create or reinforce the self-stigma of their patients, for reasons discussed in the 'Mental Health Service Providers' subsection. As noted in this section, the reported social distance between service providers and their patients is no different than the general population, and a very potent potential source of self-stigma reinforcement. The nature of telehealth services, particularly asynchronous services, can further increases the social distance by removing the direct social interaction between the provider and consumer, contributing to a further feeling of alienation on the part of the client, reinforcing their self-stigma. The format of service providers' services is influenced by outside incentives. The changes to existing US Federal legislation highlighted by Duff and Sarata (2020), and similar policy changes aimed at increasing the prevalence of telehealth, will influence service providers' decisions on the format of their offered services, contributing to how thorough the shift to telehealth services is in their community (p. 2).

PREDICTING CHANGES IN STIGMA

As a result of the explorative nature of the implemented methodology, there is no way to make precise, probabilistic predictions on how the shift to telehealth-based mental health services during the COVID-19 pandemic will impact the stigma surrounding mental illness. However, this does not mean that there were not trends in the possible consequences derived from the relationships in Figure 2 (p. 11). Common trends in the predictions indicate that the

social isolation resulting from the COVID-19 pandemic as a whole have potential to reduce opportunities for individuals to reinforce their biases and thereby reduce stigma. However, other sources of stigma such as that from service providers are amplified by the use of telehealth technologies. Most likely, the structural shift will change how mental illness stigma is spread, and potentially reduce the impact of self-stigma while worsening public stigma. It is important to note, however, that these claims have to assume that all predictions made during the analysis have a similar change of being true once the changes to the social landscape stabilize. To improve public understanding of the effects of the shift to telehealth mental health services, mental health stigmas need to be studied in a rigorous observational study after time is given for social changes to stabilize, thus giving concrete answers to how such a dramatic shift in service offerings effected mental illness stigma and providing a more concrete basis for making similar predictions in the future.

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