PREPARED FOR:

VIRGINIA21
VOICE OF A GENERATION

IMPROVING STUDENT ACCESS TO MENTAL HEALTH SERVICES IN VIRGINIA COLLEGES

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UVA | FRANK BATTEN SCHOOL *of* LEADERSHIP *and* PUBLIC POLICY

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AUTHOR'S NOTE

DISCLAIMER

The author conducted this study as part of the program of professional education at the Frank Batten School of Leadership and Public Policy, University of Virginia. This paper is submitted in partial fulfillment of the course requirements for the Master of Public Policy degree. The judgments and conclusions are solely those of the author, and are not necessarily endorsed by the Batten School, by the University of Virginia, or by any other agency.

CONTENT WARNING

The following report may contain distressing and/or sensitive material and may be unsuitable for some readers. Viewer discretion is advised.

Topics include: suicide and suicidal ideation, anxiety and depression, self-harm, disordered eating, substance abuse, and various mental health disorders.

HONOR CODE

On my honor as a University of Virginia student, I have neither given nor received unauthorized aid on this assignment.

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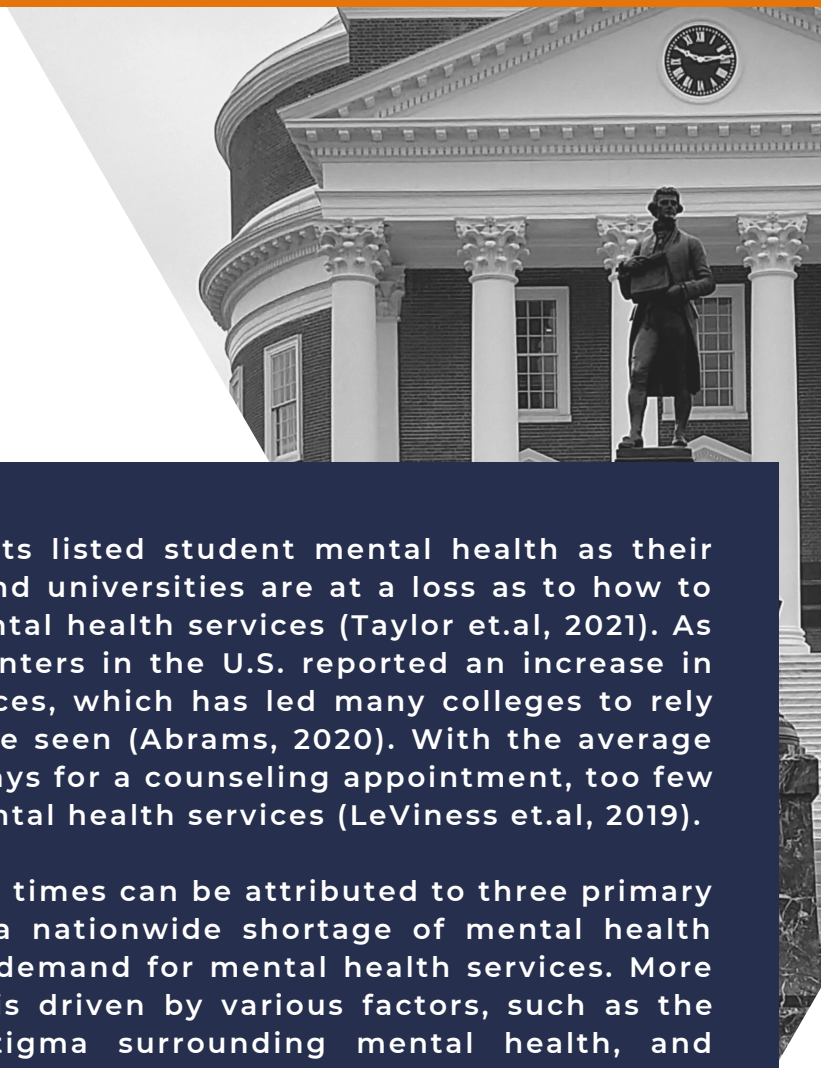


Applied Policy Project

EXECUTIVE SUMMARY

While nearly 78% of college presidents listed student mental health as their most pressing issue, many colleges and universities are at a loss as to how to combat the increased demand for mental health services (Taylor et.al, 2021). As of 2019, 90% of college counseling centers in the U.S. reported an increase in students seeking mental health services, which has led many colleges to rely on a waitlist to ensure all students are seen (Abrams, 2020). With the average waitlisted student having to wait 17 days for a counseling appointment, too few students have access to necessary mental health services (LeViness et.al, 2019).

The high counseling appointment wait times can be attributed to three primary causes: high staff-to-student ratios, a nationwide shortage of mental health professionals, and an increase in the demand for mental health services. More specifically, the increase in demand is driven by various factors, such as the coronavirus pandemic, decreased stigma surrounding mental health, and increased stress and societal pressure. This report strives to provide recommendations for Virginia colleges and universities to improve student access to mental health services, despite this increase in demand.

Three alternatives were considered to address the lack of access to mental health services:

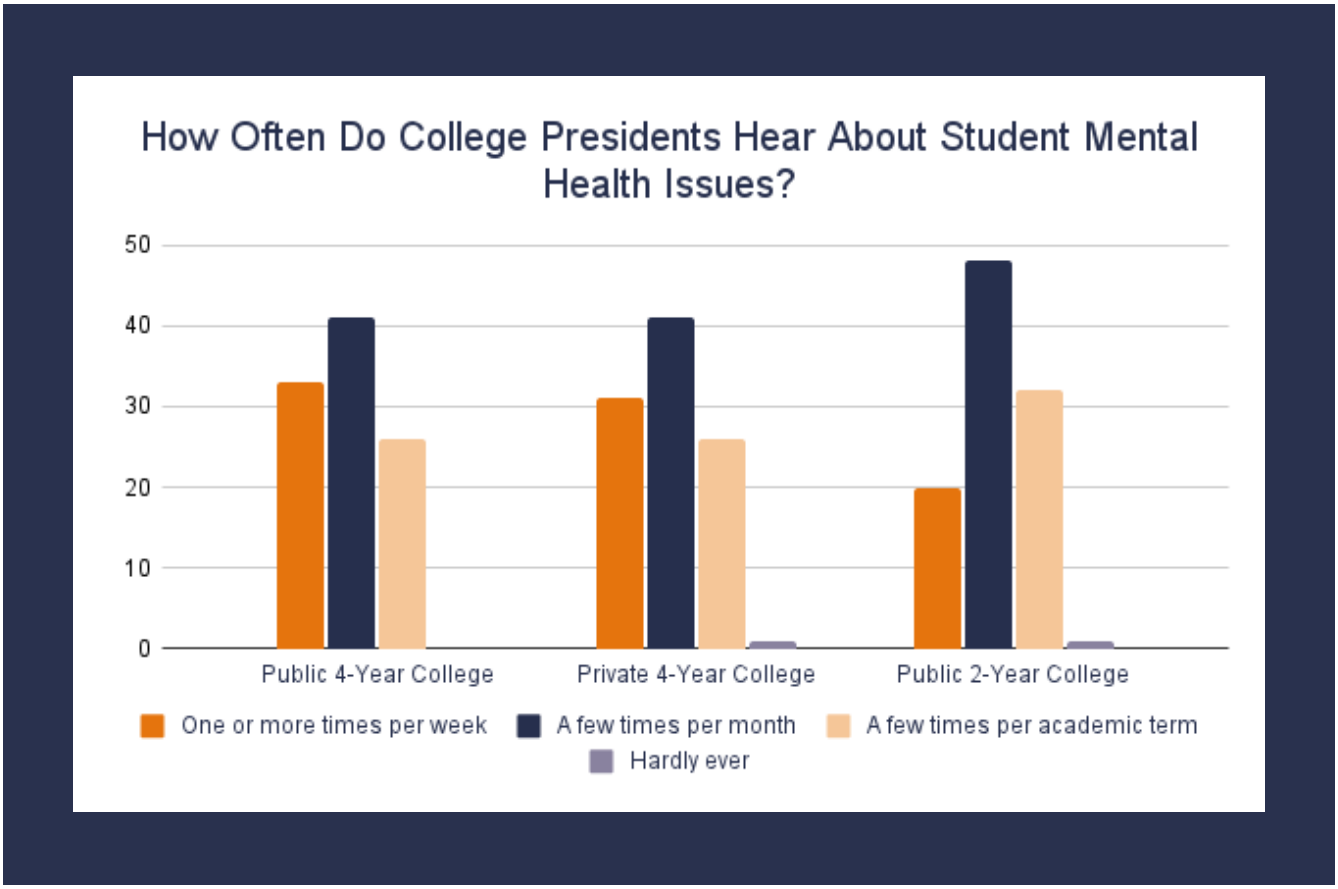
1. Maintain the Status Quo
2. Utilize Telehealth Platforms
3. Streamline Counseling Services

These alternatives were evaluated on the basis of five criteria: effectiveness, budgetary cost, cost-effectiveness, administrative feasibility, and sustainability. Following a thorough analysis of the alternatives, this report recommends that colleges and universities streamline their counseling services. While this alternative is not as cost-effective as the telehealth alternative, it is the only alternative that targets and combats the increase in demand. Following the streamlining process, the University of Pennsylvania cut its appointment wait times by 50% despite a 23% increase in the utilization of services, thus making this alternative the most sustainable option for universities.

Finally, this report provides Virginia colleges and universities with a comprehensive implementation plan, including a description of important stakeholders, a brief list of potential concerns, and a step-by-step guide to establishing a streamlined counseling program.

Problem Statement

In a 2019 study conducted by the American Council of Education, about 83% of college presidents stated that student mental health has become more of a priority since 2016 (Chessman & Taylor, 2019). As of 2021, that number has continued to increase, as about 78% of college presidents listed student mental health as their most pressing issue (Taylor et.al, 2021). This uptick in the prioritization of student mental health coincides with a recent increase in demand for mental health services. As of 2019, 90% of college counseling centers in the U.S. reported an increase in students seeking mental health services, which has led many colleges to rely on a waitlist to ensure all students are seen (Abrams, 2020). *With the average waitlisted student having to wait 17 days for a counseling appointment, too few students have access to necessary mental health services (LeViness et.al, 2019).*



SOURCE: Chessman, H., & Taylor, M. (2019, August 12). College Student Mental Health and Well-Being: A Survey of Presidents. Retrieved from higheredtoday.org

Client Overview

Virginia21 is a non-profit organization that works to empower Virginia college students to be engaged citizens and advocates for issues important to both them and Virginia's future. Additionally, Virginia21 Action, their 501(c)4 affiliate, provides lobbying efforts to help advocate for and implement the policy issues recommended by Virginia21. The lack of available mental health services in colleges is relevant to Virginia21's mission in the following ways:

Student Health and Safety: One of the founding missions of Virginia21 was to promote student health and safety. In order to be civically and politically engaged on their campuses, college students must have access to necessary mental health resources.

Student Advocacy Initiatives: Above all, Virginia21 strives to support the issues their student representatives and campus leaders care about. In a 2020 Student Leadership Committee (SLC) meeting, student representatives from about 10 Virginia colleges brought to light the lack of available mental health services and long wait times for counseling appointments on their respective campuses and indicated an interest in pursuing future advocacy initiatives to combat the issue.

Societal and Political Relevance: The topic of college student mental health has become increasingly relevant for Virginia21 due to the ongoing pandemic. In a recent study conducted by the State Council of Higher Education for Virginia (SCHEV), 76% of Virginia students faced challenges to their mental health during the COVID-19 pandemic (Wheaton & Allison, 2020). SCHEV explained that the decline in student mental health was accompanied by a spike in student stress levels due to academic, financial, and health concerns (Wheaton & Allison, 2020). Virginia21 has the opportunity to play a role in addressing these concerns by advocating for policies that work to increase student access to mental health services at both the state and collegiate levels.

Background

To understand this problem in its entirety, it is imperative to note both the historical and current demand for mental health services, the various contributing factors to such demand, and the numerous consequences that can occur if the problem continues to go untreated.

Historical and Current Trends

Since the introduction of mental health services to American colleges, counseling centers have struggled to meet the demands of their students. The history of college mental health services dates to over a century ago when Princeton University offered the first psychiatrist to help with "student personality development" in 1910 (Kraft, 2011). While college counseling and psychology centers look far different today, there has always been a lack of available services. Between 1910 and 1960, many schools delayed the establishment of their mental health services due, in part, to a lack of trained, available college health professionals (Kraft, 2011). In the early 1930s, a survey of nearly 500 schools found that only 42% of schools had established psychiatric services (Kraft, 2011). This trend continued through the 1950s with only 8% of colleges and universities employing full-time or part-time psychiatrists (Kraft, 2011).

By the 1970s, most campuses noted that 10-15% of students were accessing mental health services each year, with only 2 out of 1,000 students suffering from serious psychotic behaviors (Kraft, 2011). While these trends remained relatively stable through the early 2000s, those numbers took a drastic leap between 2009 and 2015. Despite only a 5% enrollment increase, utilization of mental health services increased around 30-40% between Fall 2009 and Spring 2015 (Penn State, 2020). This disturbing upward trend indicates that without further intervention, the increase in the demand for college mental health services is likely to continue.

Background

Vulnerable Sub-Populations

While barriers to mental health services impact students from all backgrounds, the following sub-populations are considered the most vulnerable.

LGBTQ Students: According to a 2017 study of over 33,000 California college students, sexual minority students showed higher rates of psychological distress (8 percentage points) and mental health-related academic impairment (6 percentage points) than their heterosexual counterparts (Dunbar et.al, 2017). Furthermore, non-heterosexual students were 1.87 times more likely to utilize mental health services (Dunbar et.al, 2017).

Minority Students: A recent study found that out of 43,000 students, 40% of African Americans, 53% of Arabs/Arab Americans, 44% of Latinx, and 43% of Asians/Asian Americans were struggling from mental health issues (Lipson et.al, 2017). Additionally, minority students and students of color were all less likely to seek help or be diagnosed with a mental health issue than their Caucasian counterparts.

Contributing Factors

There are three primary factors that contribute to the high wait times at college counseling centers: high staff-to-student ratios, the nationwide shortage of mental health professionals, and the increase in demand for mental health services. For this project, and for logistical reasons which will be explained below, the primary focus will be on the demand for services.

High Staff-to-Student Ratios: The International Accreditation of Counseling Services recommends that there should be 1 professional staff member for every 1,000-1,500 students, however, the current staff-to-student ratio is much higher (IACS, 2013). As of 2015, the average ratio in the U.S. was 1 counselor to every 1,737 students, with large universities reporting an average

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of 1 to 3,500 students (Reetz et.al, 2015). Additionally, just 6 in 10 college counseling centers have an available psychiatrist to prescribe or adjust medication, which is troublesome given that 25% of college students seeking services use psychotropic medications (Reetz et.al, 2015). These high ratios lead to longer wait times for counseling appointments, which negatively impacts student mental wellness.

Nationwide Shortages: The United States is currently facing a nationwide shortage of mental health professionals. In 2009, a study found that 96% of counties in the U.S. had an inadequate number of mental health professionals (Ao, 2020). These numbers have continued to grow worse over the last decade, with the National Council for Behavioral Health projecting that the shortage could grow to over 15,600 psychiatrists by 2025 (Weiner, 2018). With fewer mental health professionals available, colleges and universities are unable to hire additional staff members, which, as mentioned above, contributes to high staff-to-student ratios. Unfortunately, addressing this shortage would be out of Virginia21's sphere of influence and would otherwise be unrealistic for this project. For these reasons, the focus will instead be on addressing the increased demand for services.

Increased Demand for Mental Health Services: While there are countless contributions to the increase in demand for services, the most notable factors are as follows:

Increased Stress: With the American Institute of Stress referring to the recent uptick in stress levels as an "epidemic among college students", it is no surprise that stress has been a driving force in the increased demand for mental health services (AIS, 2019). In 2018, the American College Health Association found that 60% of U.S. college students experienced "overwhelming anxiety" regarding personal finance and academics in the past

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year (ACHA, 2018). Regarding financial stress, the National Student Financial Wellness Study found that 72% of students are stressed about their personal finances and 60% of students worry they will be unable to pay for college (The Ohio State University, 2014). Academically, the American Psychological Association found that 87% of college students cite their education as a significant source of stress (APA, 2020 Data Charts, 2020). It should be noted that the ongoing COVID-19 pandemic has exacerbated both of these stressors among college students.

Increased Societal Pressure: Over the last decade or so, the increased presence of smartphones and social media has negatively impacted the mental health of children and young adults. In a meta-analysis of 20 studies, it was found that the use of social media was associated with increased stress, body image concerns, and disordered eating (Abi-Jaoude et al., 2020). In fact, an observational study found that spending just a few hours per week on social media correlated negatively with self-reported happiness, life satisfaction, and self-esteem (Abi-Jaoude et al., 2020). This is particularly concerning as a recent study found that Americans spent an average of 25 hours a week, or 1,300 hours a year, on social media in 2020 (Suciu, 2021). Additionally, while the term “internet addiction” is loosely defined, seven cross-sectional studies found that students who obsessively used the internet were associated with self-harm or suicidal behavior (Abi-Jaoude et al., 2020). It is believed that the cause of these ideations stems from the increased access to explicit images, videos, and stories that romanticize, or in some cases encourage, harmful behavior.

Decreased Stigma: On a more positive note, the decrease in stigma regarding mental health has encouraged more students to seek help. According to the annual Healthy Minds Study, between 2016 and 2017, both perceived and personal stigma decreased from 64% to 46% and from 11% to 6%, respectively (APA, 2018). Additionally, between 2017 and 2019, over 70% of those surveyed claimed they felt comfortable talking to someone

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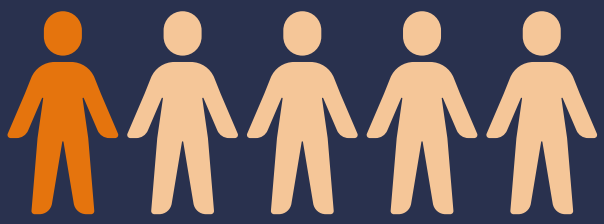
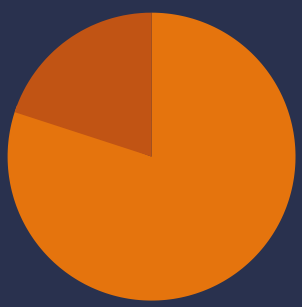
about mental illness and less than 50% stated they would be reluctant to seek help (HealthPartners, 2020). While only 25% of participants believe people are genuinely sympathetic to mental illness (thus indicating a continued need to decrease stigma), this downward trend in stigma has impacted the demand for services.

Coronavirus Pandemic: Finally, the COVID-19 pandemic has significantly increased anxiety, depression, and other mental health issues among college students. In an Active Minds study of over 2,000 college students, 80% of students reported that COVID-19 negatively impacted their mental health (Active Minds, 2020). Of those students, over 90% noted that the pandemic caused an increase in stress or anxiety, over 80% claimed they experienced disappointment or sadness, and nearly 50% encountered financial setbacks (Active Minds, 2020). Similarly, in a study conducted by SCHEV, 75% of Virginia college students were combating mental health issues related to the pandemic (Wheaton & Allison, 2020). These students noted that the pandemic triggered various anxieties related to academics, financial aid status, the physical health of themselves or loved ones, and food and housing insecurity (Wheaton & Allison, 2020).



1 in 5 college students say their mental health has worsened under COVID-19



80% of college students report that COVID-19 has negatively impacted their mental health

SOURCE: 2019 Active Minds Student Survey

Impact

The lack of available mental health services for college students has many negative and costly implications for society. Without adequate, accessible mental health care, mental illnesses among college students will continue to go untreated, thus resulting in the following costs.

Direct Costs

Suicide and Suicide Attempts: A 2015 study found that the national cost of suicides and suicide attempts in the United States in 2013 was $56.7 billion in lost productivity (Shepard et.al., 2015). To break this down further, there were 41,119 suicides and 319,000 suicide attempts in 2013 and the total indirect economic costs were $53 billion and $3.7 billion for suicides and suicide attempts, respectfully (Shepard et.al., 2015). This would make the costs about $1.3 million per suicide and $11,600 per suicide attempt in 2013 (Shepard et.al., 2015). If we were to apply these costs to Virginia, the cost of suicide in 2018 would be about $1.6 billion, with deaths in the 15-24 age range costing about $240 million (VDH, 2020).

Hospital Visits and Mental Health Care: Those suffering from untreated mental illnesses are more likely to develop other health concerns later in life. For example, those with major depressive disorder are 40% more likely to develop cardiovascular and/or metabolic diseases than those without (NAMI, 2019). Additionally, 9.5 million U.S. adults who suffer from a mental illness also experience substance abuse and addiction issues (NAMI, 2019). These illnesses often require the use of medical professionals, specialists, medications, and rehabilitation programs, which may or may not be covered by commercial insurance. While these costs are often covered, in part, by the patient, care for mental illness is the second highest expenditure for U.S. employers, resulting in an estimated cost of $87.5 billion per year (Lerner et.al, 2018). Furthermore, due to the above health concerns, those suffering

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from untreated mental illnesses are more likely to require emergency care. As of 2019, 1 out of every 8 emergency room visits involved a mental illness and/or substance abuse disorder (NAMI, 2019). Additionally, excluding pregnancy and birth, mood disorders are the most common cause of hospitalization among Americans under the age of 45 (NAMI, 2019). In Virginia, there were about 2,900 hospitalizations due to self-harm in 2018 (VDH, 2020). Resultingly, hospitalization costs totaled over $98 million, with more than 30% of costs covered by either Medicaid or Medicare (VDH, 2020).

Externalities

Income Growth Rate: In an analysis of economic and demographic data from 2008-2014, mental illness was ranked as one of the costliest forms of sickness for U.S. workers (Penn State, 2018). By adding just one additional poor mental health day in a month, per capita real income growth decreased by 1.84%, thus resulting in a $53 billion decrease in annual total income (Penn State, 2018). As of 2019, that number had skyrocketed to $193.2 billion in lost annual earnings (NAMI, 2019).

Workforce Productivity: When employees suffer from untreated mental disorders, their employers often experience financial blows. In a study by the Tufts Medical Center, the U.S. spends $44 billion, annually, in lost work productivity due to depression alone (Lerner et.al, 2018). This loss of productivity stems from work absences, impaired work performance, job turnover rate, work disability, and death from suicide or substance abuse—all of which are higher among employees with mental illnesses (Lerner et.al, 2018).

Unemployment: The rate of unemployment among U.S. adults with a mental illness is 5.8%, which is about two percentage points higher than those without (NAMI, 2019). This is especially the case among those with depression, as employees struggling with

Impact

depression were 20% more likely to become unemployed (Lerner et.al, 2018). Furthermore, a recent McKinsey and Company study found that 15% of unemployed Americans cited mental health issues as a cause for their unemployment in 2021 (McKinsey and Company, 2021). Given that there was an average of 8,625,583[1] unemployed Americans in 2021 and the United States spent $44.25 billion on unemployment in the same year, it can be estimated that the cost of unemployment due to mental health issues in 2021 was $6.64 billion (Statista, 2022).

Opportunity Costs

Educational Impacts: It has been found that students with diagnosed mental illnesses are more likely to drop out of college than students without mental illnesses. According to a recent study, college students with diagnosed mental health issues have a dropout rate of up to 86% (National Academies of Sciences, 2021). This troubling statistic has negative implications for students' future annual salary, as college dropouts earn an average of $21,000 less per year than those who graduate on time (Hanson, 2021). On a societal scale, in 2021, the cost of dropping out of college due to mental health issues was $114 million[2], per year, in lost earnings (Hanson, 2021)

Informal Caregivers: Another opportunity cost is the productivity and financial loss that informal caregivers bear. As of 2015, 43.5 million Americans served as informal caregivers, 60% of whom were employed (Lerner et.al, 2018). For those who were employed, 70% claimed they had to reduce their work hours or otherwise modify their work situation and their at-work productivity decreased by 7.7%, on average (Lerner et.al, 2018). These caregivers, who are often friends or family members, spend an average of 32 hours per week providing unpaid care to those with mental or emotional health issues, thus incurring an opportunity cost of about $360 per week, on average (NAMI, 2019).

[1] Unemployment numbers were provided by the Bureau of Labor Statistics
[2] I multiplied the cost of dropping out of college, $3.8 billion, by the percentage of students who dropped out due to mental health issues, 3%.

Literature Review

After reviewing the available literature, it is evident that colleges and universities have relied on the utilization of telehealth programs, streamlined counseling programs, outsourced counseling to decrease appointment wait times.

Telehealth Services

Made even more popular following the COVID-19 pandemic, colleges and universities have begun turning to Telehealth options for their students. Telehealth, also denoted as Telebehavioral or Telemental health is broadly defined as any virtual service provided by behavioral health professionals, such as cognitive behavioral therapy, medication management, and general psychotherapy (Lazur et al., 2020). These Telehealth options come in various forms, though primarily through video visits and mental health apps. A 2020 study by the Milbank Memorial Fund found that Telehealth options were just as effective as in-person care for the treatment of various behavioral disorders, such as anxiety and depression, and is often lower in cost than in-person visits (Lazur et al., 2020). This is particularly important to note as 70% of students at 4-year institutions indicated they experienced financial stress in 2019 (Klepfer et al., 2019).

West Virginia University (WVU) recently implemented an array of Telehealth services, such as providing student access to the mental wellness app, Talkspace. The Director of CAPS at WVU, Anne Hawkins, explained that nearly 200 students have signed up for the app, which allows students to send licensed therapists text, audio, photo, and video messages at any time (Carrasco, 2021). This service is particularly helpful for students who left campus due to the pandemic or otherwise cannot attend in-person counseling sessions (Carrasco, 2021). WVU also provides students with 24-7 access to the Crisis Text Line, which allows students to text with a licensed counselor, and ProtoCall, which acts as crisis intervention and provides referrals for off-campus network providers (Carrasco, 2021).

Literature Review

Similarly, Belmont University and the University of Virginia have contracted with virtual mental health platforms, such as SilverCloud and TimelyMD, which provide 24-7 virtual access to one-on-one counseling and other interactive tools (Carrasco, 2021). These apps have increased access to mental health services for students whose families or cultural backgrounds typically do not seek such assistance (Carrasco, 2021).

While Telehealth services have been widely useful on college campuses, there are several drawbacks. For one, mental health professionals may be unable to practice virtually due to state licensure laws (Lumpkin, 2020). Medical professionals are limited in where they can practice by their state licenses; a counselor who is licensed in Virginia can treat students in person at a Virginia college, regardless of the student's home state, however, if that student goes home to a different state, that counselor is potentially unable to treat that student virtually (Carrasco, 2021). Virtually all states temporarily suspended this Telehealth rule during the pandemic; however, about 50% of states require psychologists to apply for temporary licenses or special permits (Carrasco, 2021). These requirements prevent students from accessing therapy that otherwise would have been available to them on-campus.

Additionally, many of the mental wellness apps that colleges have begun to use sell their users' data for ad revenue. Apps, such as BetterHealth and Talkspace, will ask users specific and personal questions regarding their physical and mental wellness to best match users with a mental health professional; however, they also are actively selling that data to companies like Facebook and Google to generate ad revenues (Germain, 2021). While on-campus counselors are bound by medical laws, such as the Health Insurance Portability and Accountability Act (HIPAA) or the Family Educational Rights and Privacy Act (FERPA), these laws do not apply to user-generated data platforms, such as the self-assessments and quizzes required by

Literature Review

mental wellness apps (Paul, 2020). Resultingly, if a user indicated they suffer from substance abuse issues, Facebook or Google can use that information to target alcohol or cigarette ads toward that user. This can have unintended consequences and can further damage the physical and mental health of the user.

Interactive Self-Help Tools

One way that colleges and universities have attempted to reduce wait times is by utilizing interactive self-help tools to decrease the number of non-urgent appointments. These platforms provide students with interactive modules that encourage the use of healthy coping mechanisms to combat mental health issues, such as stress, anxiety, relationship problems, and eating disorders. Recently, various Virginia colleges, including James Madison University and the University of Richmond, have begun to utilize TAO Connect, which is an online self-help program that was created by the University of Florida (Fain, 2015). TAO Connect, which stands for Therapy Assisted Online, differs from regular telehealth programs in that instead of offering students access to live counseling, it provides 24-7 access to interactive treatment modules that are meant to provide students with the tools to cope with their mental health issues on their own (James Madison University, 2019). Similarly, Harrison College, a for-profit college in Indiana, partnered with WellConnect, which offers students 24-7 access to interactive self-help tools, and assistance for personal needs, such as childcare access, transportation, or legal advice (Tribune Star, 2014). WellConnect is also made available to the students' dependents, spouses, and other family members (Tribune Star, 2014).

Unfortunately, these interactive self-help tools may be beneficial for students, there is very little evidence to suggest they help decrease appointment wait times. Regarding TAO Connect, the Associate Director of Clinical Services at James Madison University, Katrina Simpson-McCleary, stated that it does not appear that TAO Connect has had any impact on reducing counseling appointment wait times.

Literature Review

While colleges and universities may find it helpful to use these platforms as supplementary programs, they alone are not capable of decreasing the demand for services enough to make an impact on appointment wait times. For this reason, interactive self-help platforms will not be considered as an effective or sustainable solution.

Streamlined Counseling Services

Before a college student can attend a counseling session on campus, there are various steps they must complete, such as completing necessary medical forms, attending an intake appointment, and using online appointment scheduling services. While reducing these barriers is likely to increase the number of students seeking services, the University of Pennsylvania recently implemented a new program that reduced appointment wait times despite the associated increase in demand. In 2018, the University's executive director of the Counseling and Psychological Services (CAPS) center, Meeta Kumar, helped to overhaul the program by eliminating triage screenings and intake appointments, implementing drop-in clinics, and allowing students to directly schedule appointments at the front desk (Nguyen, 2019). By restructuring the job functions of the CAPS staffers, mental health professionals were able to dedicate more time to urgent cases, which cut back on appointment wait times. For example, front-desk employees, whose jobs were previously purely administrative, now conduct preliminary patient surveys that otherwise would have required an intake appointment with a counselor (Nguyen, 2019). Additionally, the inclusion of the drop-in clinic, which helps create short- or long-term care plans for patients, allows students with urgent issues to see a professional immediately. By reducing the barriers to appointment access, the University of Pennsylvania reduced its average wait time from 12 days to just 6 days, despite a 23% increase in the number of appointments made between 2017 and 2018 (Nguyen, 2019).

Literature Review

Harvard University implemented a similar strategy in 2018. Their pilot program was spearheaded by Harvard University Health Services (HUHS) and strived to streamline the counseling appointment-making process and establish a drop-in clinic (Kurilla & Sarig, 2019). While the University of Pennsylvania essentially eliminated the need for an intake appointment, the HUHS still requires students to schedule an initial consultation through their online patient portal. The purpose of this methodology is to allow students to choose a provider that they are most comfortable with so that they can begin to establish a relationship right away. Additionally, the Counseling and Mental Health Services (CAMHS) center established an initiative known as “Let’s Talk”, which allows students to drop in for informal, 20-30 minute therapy sessions with CAMHS clinicians (Kurilla & Sarig, 2019). CAMHS Chief Barbara Lewis stated that the University had a goal of ensuring that 80% of students would receive their initial consultation within 48 hours of contacting the center; through these various strategies, CAMHS and HUHS were able to achieve that goal (Kurilla & Sarig, 2019). Furthermore, patient satisfaction surveys indicate that 81% of students seeking services were satisfied with their experience (Kurilla & Sarig, 2019).

Limitations of Existing Evidence

There are several noticeable gaps and limitations within the literature that are worth mentioning:

Lack of Long-Term Studies

The most notable limitation of the above evidence is that there are few long-term studies regarding the efficacy of the various solutions. As noted above, mental health is a relatively new priority for colleges, and while numerous strategies have been attempted, there is very little evidence indicating that such measures have been successful. This makes it challenging to determine the reliability of available evidence.

Lack of Empirical Evidence

Another limitation is the over-reliance on anecdotal evidence. This is particularly true of the schoolwide initiatives, as there are no available empirical studies on their efficacy. Instead, the evidence lies in the personal narratives of the colleges and universities themselves. Given that it is in these institutions' best interests to show favorable results, such anecdotal claims are unreliable, and it is difficult to determine a causal claim. Additionally, a meta-analysis on Telehealth interventions indicated that while many studies suggest Telehealth options are effective, there are noticeable methodological issues within the studies themselves, thus making the results less reliable (Davies & et al., 2014).

Impacts of the Pandemic

As a result of the COVID-19 pandemic, there is a common gap in the literature for the year 2020. Much of the above evidence is from 2019 or before, which is useful in determining causality as the pandemic cannot be factored into the outcome. That being said, the pandemic will undoubtedly play a pivotal role in the future of collegiate mental health services, so it can be assumed that more empirical or long-term studies will become available in the following years.

Evaluative Criteria

The following criteria will be used to evaluate the policy alternatives:

Effectiveness

This criterion will measure how well each alternative achieves its goal of lowering the wait times at college counseling centers. Effectiveness will be measured in the average percent change in days on the counseling center waitlist. Because the intended effect is a decrease in wait-times, a negative percentage is to be expected—the greater the change, the higher the effectiveness.

Budgetary Costs

This criterion will measure the cost of each alternative as it would pertain to the University of Virginia. This institution was chosen due to its moderate enrollment size and is meant to provide a means of standardization between alternatives. Budgetary costs will be measured in dollars.

Cost-Effectiveness

This criterion will measure how much each alternative will cost the colleges and universities in relation to how effective it will be. Cost-effectiveness will be measured by dividing the cost of each alternative by the percent change in the number of days on the counseling center waitlist. Cost-effectiveness should also present itself as a negative number; the less negative the number, the more cost-effective the alternative is.

Administrative Feasibility

This criterion will measure how plausible it is for each alternative to be implemented in colleges and universities. Administrative feasibility will be measured via an analysis of the resources available to the institutions.

Sustainability

This criterion will measure how well the alternative will continue to lower appointment wait times as time goes on and the demand for services increases. Sustainability will be measured via an analysis of the economic and societal factors impacting the effectiveness of the alternative over time.

Policy Alternatives

Alternative 1: Maintain the Status Quo

The first alternative is to maintain the current college counseling center programs. By choosing to maintain the status quo, college counseling centers are likely to become overwhelmed as the demand for services continues to grow. From a health standpoint, students and mental health professionals will become burnt out and their physical and mental health will continue to deplete. It is also possible that suicide and suicidal ideation rates will increase along with the number of mental health emergencies. From an academic standpoint, student GPAs will continue to diminish, which can lead to the loss of scholarships and financial aid. From an economic standpoint, student retention rates are likely to decrease, which will stunt funding generated from students' tuition and fees.

Effectiveness: Using information from the Association for University and College Counseling Center Directors' annual survey from 2020, the average wait time for counseling appointments is 17 days (Gorman et.al, 2020). Given that this alternative will not implement any additional changes, we can assume that there will be no change in the wait time, thus making it entirely ineffective.

Budgetary Costs: Given that Alternative 1 requires no additional expenditures, we can assume that the marginal cost will be $0.

Cost-Effectiveness: We are unable to use the cost-effectiveness formula for Alternative 1 because the percent change in appointment wait times is 0%.

Administrative Feasibility: Alternative 1 will require no additional resources for colleges and universities, so it is considered highly administratively feasible.

Sustainability: As noted in the literature review, the utilization of mental health services on college campuses has increased by 30-40%

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over the last decade and is predicted to continue its upwards trend (Penn State, 2020). Given that Alternative 1 would do nothing to combat this demand, this would be a highly unsustainable option.

Alternative 2: Utilize Telehealth Platforms

The second alternative is to utilize various campus-wide telehealth services. This alternative will follow the model implemented by the University of Virginia (UVA), which utilizes a mental health support interface known as TimelyCare (University of Virginia, 2021). As part of this model, UVA students are allowed 12 free, scheduled telehealth counseling visits each calendar year, as well as 24-7 access to an on-demand helpline called TalkNow (University of Virginia, 2021). This alternative would allow colleges and universities to expand their services by offering virtual counselors and providing an option for students who need immediate attention at any hour of the day.

Effectiveness: The University of Virginia declined the request for data[1] regarding counseling center wait times and was unable to establish a baseline for such alternatives. The following data is based on a singular attempt to make a counseling appointment through CAPS and through the TimelyCare interface. On March 3rd, the next available appointment for a mandatory informative phone call was March 14th, or in 7 business days. When using TimelyCare, the next available counseling appointment, which required no prerequisite intake call, was March 4th. By applying the percent change formula, we find that wait times decreased by about 86% when utilizing TimelyCare, versus an in-person appointment.

Budgetary Costs: UVA was also unwilling to provide the implementation costs for TimelyCare, however, the Connecticut State Colleges and Universities (CSCU) signed a 2-year contract with TimelyCare for $660,000 (CSCU, 2021). When considering that CSCU combined 17 campuses and 78,332 students, the cost for TimelyCare is

[1] Note the sampling process in the following Limitations section (pg. 29).

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$8,426 per 1,000 students (CSCU, 2021). If we apply that estimate to the total enrollment of UVA[1], we find that the total cost for TimelyCare is about $219,100[2].

Cost-Effectiveness: After applying the cost-effectiveness formula, the total comes out to about -$254,800. In comparison to Alternative 1, this alternative proves to be more cost effective.

Administrative Feasibility: The primary administrative constraint for colleges and universities is a lack of available funding. While Alternative 2 requires a considerable expenditure, telehealth programs are highly cost-effective and several colleges, such as CSCU, utilized emergency coronavirus funding to purchase such programs for their institution (CSCU, 2021). Another benefit of telehealth programs is that they are often customizable depending on the institution's needs and rarely utilize a one-size-fits-all approach; this allows colleges and universities to implement an efficient and effective approach.

That being said, the lack of HIPAA protection amongst telehealth platforms could potentially pose a threat to administrative feasibility. While college counseling centers are categorized as health care professionals, and thus considered covered entities under HIPAA, mental health apps prove to be a legal grey area. Although there is no real legal threat to colleges or universities, should institutions continue to recommend telehealth services without educating students on the potential data privacy concerns, there is a possibility of negative publicity. Given that telehealth is becoming a prominent policy topic in both federal and state legislation, students may become wary of these services as they gain publicity. Based on these reasons, Alternative 2 is moderately administratively feasible.

Sustainability: One potential concern with Alternative 2 is its lack of sustainability. As noted before, there is a shortage of mental health professionals throughout the United States, and that shortage does

[1] Total enrollment, which includes both undergraduate and graduate students, is approximately 26,000 students.
[2] For full breakdown of costs and equations, see Appendix.

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not exclude telehealth; as the utilization of mental health resources continues to rise, and the number of available mental health professionals continues to decline, these mental health apps will be unable to meet the demands of students in the long term. While some mental health apps are attempting to combat this issue by creating "chatbots", which are artificial intelligence programs that mimic mental health professionals, these chatbots have not been tested in depth and there is very little data suggesting they are beneficial in the long-term (Cerrato & Halamka, 2019). Resultingly, Alternative 2 fails to target the root cause of the demand increase, thus only posing a temporary fix. For this reason, Alternative 2 is largely unsustainable.

Alternative 3: Streamline Counseling Services

The third alternative is to streamline college counseling centers to reduce the steps necessary to make and attend a counseling appointment. This alternative would follow the previously mentioned UPenn model, which eliminates triage screenings and intake appointments, allows students to directly schedule appointments at the CAPS center's front desk, establishes a drop-in clinic for urgent appointments, and implements a 24-hour phone line for after-hours issues (Nguyen, 2019). This model would also restructure the role of front desk employees by giving them access to the center's master schedule and training them to ask questions that would normally be conducted in a formal intake appointment to ensure the appointment best suits the needs of the student. Though it depends on the institution, colleges and universities likely will not need to rely on massive staff increases, but instead focus on restructuring their current workforce to make it more efficient.

Effectiveness: Following the implementation of the streamlined counseling program, the University of Pennsylvania decreased appointment wait times from 12 days to 6 days (Nguyen, 2019). With a 50% decrease in wait times, Alternative 3 is moderately effective.

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Budgetary Costs: While UPenn did not disclose the cost of their streamlined approach, they stated that they hired minimal clinical staff, several administrative employees, and implemented a 24-hour mental health hotline. As previously stated, to ensure a method of standardization between alternatives, the following costs indicate an estimate as it would pertain to the University of Virginia. As of 2022, UVA currently utilizes a 24-7 emergency hotline through the TimelyCare platform and a non-emergency drop-in clinic, known as Let's Talk, that provides 15 minute consultations between 1pm and 3pm on Mondays (UVA, 2022). While UVA will not need to implement a 24-7 hotline, which otherwise would cost approximately $72,000 annually, to further expand their drop-in clinics, they will likely need to hire at least one additional clinical psychologist and two administrative assistants (Perez, 2021). The average salary of a college clinical psychologist is $79,500 per year and the average salary for a counseling center administrative assistant is about $45,000 per year, thus making the annual cost for the University of Virginia $168,500 (Allient International University 2021; Glassdoor, 2021). It should be noted that these costs are rough estimates and the average salaries for these employees will differ depending on location and experience.

Cost-Effectiveness: After applying the cost-effectiveness equation, the total comes out to -$337,000. Based on this estimate, Alternative 3 is more cost effective than Alternative 1, but less cost-effective than Alternative 2.

Administrative Feasibility: While the UPenn model serves as a blueprint for other colleges and universities, as seen with UVA, it can be amended to best suit the needs of individual institutions. This alternative will require a significant amount of collaboration between the college administration and the counseling center to ensure the streamlined model is implemented in the most effective manner; however, given the tentative nature of the costs and the flexibility allowed within the UPenn model, Alternative 3 is moderately administratively feasible.

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Sustainability: One of the more notable aspects of Alternative 3 is its sustainability. At the University of Pennsylvania, the streamlined counseling program successfully cut wait times in half despite a 23% increase in the utilization of services (Nguyen, 2019). This indicates that, despite the continually increasing demand, this alternative will continue to cut down on wait times. For this reason, Alternative 3 is found to be highly sustainable.

Outcomes Matrix

	WAIT TIMES	BUDGETARY COSTS	COST EFFECTIVENESS	ADMINISTRATIVE FEASIBILITY	SUSTAINABILITY
ALTERNATIVE 1: MAINTAIN THE STATUS QUO	N/A	$0	N/A	High	Low
ALTERNATIVE 2: UTILIZE TELEHEALTH PLATFORMS	7 to 1 Day	$219,100	-$254,800	Medium	Low
ALTERNATIVE 3: STREAMLINE COUNSELING SERVICES	12 to 6 Days	$168,500	-$337,000	Medium	High

*Note that the Cost-Effectiveness values are negative to reflect a decrease in the number of days on the waitlist. The more negative the value, the more effective or cost-effective.

Explanation of Sampling Process

Limitations of the Sampling Process

Before a recommendation can be given, it is worth mentioning several limitations of the above data. Unfortunately, while five Virginia colleges and universities were contacted, along with the University of Pennsylvania, only half of the institutions were able to provide baseline data regarding their counseling center wait times. While James Madison University, Bridgewater College, and George Mason University all provided such data, Virginia Tech explained that their data was not publicly available, the University of Virginia stated they do not collect such information, and the University of Pennsylvania failed to respond to any inquiries. Though several institutions provided helpful baseline data, these schools were meant to serve as comparisons to the University of Virginia and/or schools who utilize TimelyCare, so without such a comparison this data was unusable.

This sampling process may negatively impact the accuracy of the effectiveness, budgetary costs, and cost effectiveness estimates found above. Regarding the wait time for TimelyCare, that number could increase depending on a student's respective needs. For example, one student who was surveyed only wanted to meet with a female counselor who specialized in a certain subject area, however, when they narrowed down their counselor selections, the next available appointment was not for five months. When this student broadened their selection of counselors, the wait time was approximately 7 days. While this is just one student, it shows the vast variability in appointment availability.

Additionally, the cost estimates for TimelyCare may be inaccurate. Based on the TimelyCare website, it is explained that schools can create customizable plans based on the needs of their school, which would effectively impact the price of the program. While the estimate is satisfactory for the purposes of this analysis, it is worth noting that the cost-effectiveness outcome may be slightly skewed.

Recommendation

After considering the above analysis and limitations, I recommend Alternative 3, Streamlining Counseling Services. While Alternative 2 is the more cost-effective option, I believe Alternative 3 is the preferable option for several reasons. First, Alternative 3 is highly flexible and depending on the needs of the individual school, the streamlined program can be as extensive or minimal as necessary. As seen with the University of Virginia, many of the key elements of the streamlined program have already been implemented and it is just a matter of expanding them so that they are best serving students' needs.

Additionally, given the increase in demand for services over the last decade, colleges need to prioritize effective, sustainable solutions to the college mental health crisis. While I believe telehealth is an important consideration for colleges, and likely will work its way into college campuses across the country, it alone is not strong enough to decrease wait times in the long run. Alternative 3 is by far the most sustainable option as it successfully cut wait times by 50% despite the 23% increase in demand for services (Nguyen, 2019). For these reasons, I believe Alternative 3 is the most favorable option.

Implementation

Virginia colleges and universities should consider the following when implementing the streamlined counseling program:

Stakeholders

There are several stakeholders that will play a role in implementing this recommendation. First, university administrators, such as the President, Dean of Students, and Director of Counseling, will need to work together to approve changes to the counseling programs and create a timeline and implementation plan. Additionally, some institutions may require approval from a Board of Directors or Visitors before major changes are implemented on campus. These administrators and board members will also likely have some control over the budget and can potentially help search for financial donations. Next, Counseling center staff and administrators will play one of the most important roles in the implementation process. The job description for several administrative employees, such as front-desk employees, receptionists, and office managers, will expand to include in-person scheduling and, if applicable, intake screenings. Some counselors or new hires will solely assist with the drop-in clinic, while others will continue with their normally scheduled counseling sessions. Lastly, financial donors will potentially play a role in funding the new counseling program. Streamlining a counseling program does not require large-scale construction projects, however, it is possible that an institution may rely on outside funding to help with any initial costs that they may incur when implementing the program.

Potential Risks and Concerns

One of the positive aspects of this alternative is that there is very little risk involved in its implementation. The only real concern is that the streamlined program will likely require a significant level of collaboration between university administrators and the counseling centers themselves. Given that many colleges and universities are still financially recovering from the pandemic, they may be short-staffed or unable to make the financial investment necessary to properly streamline their counseling programs.

Implementation

Next Steps

Colleges and universities should take the following steps to properly implement the recommendation:

1. **Determine Your School's Needs:** First, colleges and universities should determine what changes would best aid their institution. This can be done by taking inventory of the resources that are already available (e.g. is there already an established 24-hour crisis line?) and those that should be added (e.g. walk-in clinics). Additionally, institutions should consider the aspects of their current counseling program that are working and those that are not. By determining the needs of the institution, colleges and universities can establish an implementation plan.
2. **Secure Funding:** After the school's needs are established, colleges and universities will need to secure the necessary funding. To do this, institutions will need to determine the costs associated with their implementation plan and go through the necessary budgetary procedures to get expenditures approved. If necessary, institutions will also need to contact donors to help raise funds.
3. **Establish an Implementation Timeline:** Next, institutions will need to develop an implementation timeline. The new program should be rolled out at the beginning of either the Fall or Spring semester in a given school year, depending on the respective timelines. Institutions will also have to consider the timeline for hiring new staff members and establishing contracts with crisis lines or other services.
4. **Hire Staff and Contract Service Providers:** In accordance with the implementation timeline, institutions will need to create job postings, conduct interviews, and leave room for necessary onboarding and HR processes for new staff hires. Additionally, they should communicate with service providers to establish any necessary contracts.

Implementation

5. Promote the Streamlined Program: Next, colleges and universities should promote the streamlined program by educating students, faculty, and staff on the changes to the counseling program. The counseling center should create infographics and informational posters to promote the new program and ensure students know how to access services and what has changed.
6. Ensure Proper Data Collection Methods: Finally, every counseling center should collect certain data so that they may establish a baseline and determine the impact of new interventions. Data should include but is not limited to, the number of students utilizing counseling services (demand for services), rates of anxiety/depression/suicide/suicidal ideation, average wait time for an intake/triage appointment (if applicable), and average wait time for a counseling appointment following proper intake procedures. Institutions should ensure that there is an accessible database for such information. Data should be collected once per year or once per semester and should be compiled and analyzed in a yearly report.

Works Cited

Abi-Jaoude, E., et al. (2020). Smartphones, Social Media Use, and Youth Mental Health. CMAJ.

Abrams, Z. (2020, July 11). A Crunch at College Counseling Centers. Retrieved from apa.org: https://www.apa.org/monitor/2020/09/crunch-college-counseling

ACHA. (2018). National College Health Assessment. ACHA.

Active Minds. (2020, April). April 2020 Survey Data. Retrieved from activeminds.org: https://www.activeminds.org/studentsurvey/

AIS. (2019, Septmeber 6). Stress: An Epidemic Among College Students. Retrieved from stress.org: https://www.stress.org/stress-an-epidemic-among-college-students

Allient International University. (2021). How Much Does a Clinical Psychologist Make? Retrieved from allient.edu: https://www.alliant.edu/blog/how-much-does-clinical-psychologist-make

Ao, B. (2020, October 2). As need for mental-health services rises for college students, suburban Pa. campuses face lack of psychiatric providers. Retrieved from inquirer.com: https://www.inquirer.com/health/college-mental-health-depression-anxiety-psychiatry-20201002.html

APA. (2018, November 5). Among College Students, Mental Health Diagnosis and Treatment are Up, Stigma is Down. Retrieved from psychiatry.org: https://www.psychiatry.org/newsroom/news-releases/among-college-students-mental-health-diagnosis-and-treatment-are-up-stigma-is-down

APA. (2020). 2020 Data Charts. Retrieved from apa.org: https://www.apa.org/news/press/releases/stress/2020/infographics-october

Carrasco, M. (2021, September 20). Colleges Seek Virtual Mental Health Services. Retrieved from insiderhighered.com: https://www.insidehighered.com/news/2021/09/20/colleges-expand-mental-health-services-students

Cerrato, P., & Halamka, J. (2019, June 17). Mental Health Apps: Do They Work? Are They Safe? Retrieved from chiefhealthexecutive.com: https://www.chiefhealthcareexecutive.com/view/mental-health-mhealth-apps-work-safe

Chessman, H., & Taylor, M. (2019, August 12). College Student Mental Health and Well-Being: A Survey of Presidents. Retrieved from higheredtoday.org: https://www.higheredtoday.org/2019/08/12/college-student-mental-health-well-survey-college-presidents/

Works Cited

CSCU. (2021). CSCU Announces Expanded Mental Health Options for Community College Students. Retrieved from ct.edu: https://www.ct.edu/newsroom/cscu_announces_expanded_mental_health_options_for_community_college_student

Davies, B. E., et al. (2014). Computer-Delivered and Web-Based Interventions to Improve Depression, Anxiety, and Psychological Well-Being of University Students: A Systematic Review and Meta-Analysis. Journal of Medical Internet Research.

Dunbar, M. S., et.al. (2017). Mental Health Service Utilization Among Lesbian, Gay, Bisexual and Questioning or Queer College Students. Pittsburgh: RAND Corporation.

Fain, P. (2015, September 4). Call for Help. Retrieved from insidehighered.com: https://www.insidehighered.com/news/2015/09/04/outsourced-employee-style-counseling-can-work-first-generation-college-students

Germain, T. (2021, March 2). Mental Health Apps Aren't All As Private As You May Think. Retrieved from consumerreports.org: https://www.consumerreports.org/health-privacy/mental-health-apps-and-user-privacy-a7415198244/

Glassdoor. (2021, July 26). The Counseling Center Administrative Assistant Salaries. Retrieved from glassdoor.com: https://www.glassdoor.com/Salary/The-Counseling-Center-Administrative-Assistant-Salaries-E2016005_D_KO22,46.htm

Gorman, K. S., et.al. (2020). The Association for University and College Counseling Center Directors Annual Survey: 2020. AUCCCD.

Grasgreen, A. (2012, March 26). Counseling Conflict. Retrieved from insidehighered.com: https://www.insidehighered.com/news/2012/03/26/georgia-state-university-outsources-counseling-centers-clinical-staff

Hanson, M. (2021, November 22). College Dropout Rates. Retrieved from educationdata.org: https://educationdata.org/college-dropout-rates#:~:text=The%20cost%20of%20dropping%20out,billion%20in%20a%20single%20year.

HealthPartners. (2020, February 24). Stigma of Mental Illnesses Decreasing, Survey Shows. Retrieved from healthpartners.com: https://www.healthpartners.com/hp/about/press-releases/stigma-of-mental-illnesses-decreasing.html

IACS. (2013). Staff to Student Ratio. Retrieved from iacsinc.org: https://iacsinc.org/staff-to-student-ratios/

James Madison University. (2019, Octobe 19). TAO: Free Online Counseling Resources. Retrieved from jmu.edu: https://www.jmu.edu/news/counselingctr/2019/01-tao1.shtml

Works Cited

Klepfer, K., et al. (2019). Student Financial Wellness Survey. Trellis Research.

Kraft, D. P. (2011). One Hundred Years of College Mental Health. Journal of American College Health.

Kurilla, M. G., & Sarig, T. (2019, March 8). Harvard Mental Health Services Works to Reduce Student Wait Times. Retrieved from thecrimson.com: https://www.thecrimson.com/article/2019/3/8/student-wait-time-camhs/

Lazur, B., et al. (2020). Telebehavioral Health: An Effective Alternative to In-Person Care. Milbank Memorial Fund.

Lerner, D., et.al. (2018). The High Cost of Mental Disorders. Tufts Medical Center.

LeViness, P., et.al. (2019). The Association for University and College Counseling Center Directors Annual Survey: 2019. AUCCCD.

Lipson, S. K., et.al. (2017). Mental Health Disparities Among College Students of Color. Society for Adolescent Health and Medicine.

Lumpkin, L. (2020, May 28). College Student Count on Their Schools for Mental-Health Help, But Now Many Can't Get It. Retrieved from washingtonpost.com: https://www.washingtonpost.com/local/education/college-students-count-on-their-schools-for-mental-health-help-but-now-many-cant-get-it/2020/05/28/e6f6e710-8b2b-11ea-ac8a-fe9b8088e101_story.html

McKinsey and Company. (2021, December 13). America 2022 in Charts: An Economic Opportunity Snapshot. Retrieved from mckinsey.com: https://www.mckinsey.com/featured-insights/sustainable-inclusive-growth/america-2022-in-charts-an-economic-opportunity-snapshot

NAMI. (2019). Mental Health By the Numbers. Retrieved from nami.org: https://www.nami.org/mhstats

National Academies of Sciences, E. a. (2021). Mental Health, Substance Use, and Wellbeing in Higher Education: Supporting the Whole Student. Washington, D.C: The National Academies Press.

Nguyen, T. (2019, March 7). How UPenn Cut Counseling Wait Times in Half Without Hiring More Counselors. Retrieved from chronicle.com: https://www.chronicle.com/article/how-upenn-cut-counseling-wait-times-in-half-without-hiring-more-counselors/

Open Minds. (2020, May 6). The US Mental Health Market: $225.1 Billion in Spending in 2019: An Open Minds Market Intelligence Report. Retrieved from openminds.com: https://openminds.com/intelligence-report/the-u-s-mental-health-market-225-1-billion-in-spending-in-2019-an-open-minds-market-intelligence-report/

Works Cited

Paul, D. (2020, January 2). Colleges Want Freshman to Use Mental Health Apps. But Are They Risking Students' Privacy? Retrieved from washingtonpost.com: https://www.washingtonpost.com/technology/2019/12/27/colleges-want-freshmen-use-mental-health-apps-are-they-risking-students-privacy/

Penn State. (2018). Poor Mental Health Days May Cost the Economy Billions of Dollars. ScienceDaily..

Penn State. (2020). 2020 Annual Report. University Park: Center for Collegiate Mental Health.

Perez, K. (2021, October 7). University of Iowa debuts 24-hour Mental Health Support Line for UI students. Retrieved from dailyiowan.com: https://dailyiowan.com/2021/10/07/university-of-iowa-debuts-24-hour-mental-health-support-line-for-ui-students/

Reetz, D. R., et.al. (2015). The Association for University and College Counseling Center Directors Annual Survey. AUCCCD.

Shepard, D. S., et.al. (2015). Suicide and Suicidal Attempts in the United States: Costs and Policy Implications. The Official Journal of the American Association of Suicidology, 352-362.

Cerrato, P., & Halamka, J. (2019, June 17). Mental Health Apps: Do They Work? Are They Safe? Retrieved from chiefhealthexecutive.com: https://www.chiefhealthcareexecutive.com/view/mental-health-mhealth-apps-work-safe

Statista. (2022, March 14). Total Unemployment Benefits Paid in the US 2021-2022. Retrieved from statista.com: https://www.statista.com/statistics/284857/total-unemployment-benefits-paid-in-the-us/

Suciu, P. (2021, June 24). Americans Spent More Than 1,300 Hours On Social Media Last Year. Retrieved from forbes.com: https://www.forbes.com/sites/petersuciu/2021/06/24/americans-spent-more-than-1300-hours-on-social-media/?sh=1c8a5c042547

Taylor, M., et.al. (2021). College and University Presidents Respond to COVID-19: 2021 Spring Term Survey. American Council on Education.

The Ohio State University. (2014). National Student Financial Wellness Study. The Ohio State University.

Tribune Star. (2014, September 27). Harrison College Provides Professional Student Support Through WellConnect. Retrieved from tribstar.com: https://www.tribstar.com/news/local_news/harrison-college-provides-professional-student-support-through-wellconnect/article_700b92a6-ba91-5c5c-8574-7d983d5a342c.html

University of Virginia. (2021). TimelyCare. Retrieved from studenthealth.virginia.edu: https://www.studenthealth.virginia.edu/timelycare

Works Cited

UVA. (2022). Let's Talk: Drop-In Consults. Retrieved from studenthealth.virginia.edu: https://www.studenthealth.virginia.edu/lets-talk

VDH. (2020, July). Suicide and Self Harm in Virginia. Retrieved from vdh.virginia.gov: https://www.vdh.virginia.gov/content/uploads/sites/179/2020/08/Suicide-and-Self-Harm-in-Virginia.pdf

Weiner, S. (2018, February 12). Addressing the Escalating Psychiatrist Shortage. Retrieved from aamc.org: https://www.aamc.org/news-insights/addressing-escalating-psychiatrist-shortage

Wheaton, G., & Allison, T. (2020, May 28). Virginia College Students Shed Light on Challenges Related to COVID-19. Retrieved from schev.edu: https://www.schev.edu/index/reports/insights/insights/2020/05/28/virginia-college-students-shed-light-on-challenges-related-to-covid-19

Appendix

Effectiveness

Alternative 2

	Initial Wait Time	New Wait Time	Percent Change
Telehealth Platforms	7 days	1 day	-86%*
Calculations	(1 -7) / (7) = -0.857 -0.86 x 100 = -86%		

Alternative 3

	Initial Wait Time	New Wait Time	Percent Change
Telehealth Platforms	12 days	6 days	-50%
Calculations	(6 -12) / (12) = -0.50 -0.50 x 100 = -50%		

Budgetary Cost

Alternative 2

	Cost	# of CCSS Students	Cost per 1,000 Students	# of UVA Students	Cost for UVA
TimelyCare	$660,000	78,332	$8,426*	26,000	$219,100*
Calculations	78,332 / 1,000= 78.332, 26,000 / 1,000= 26 $660,000 / 78.332= $8,425.68 $8,426 x 26= 219,076				

Alternative 3

	Cost	Quantity	Total	Cumulative Total
Psychologist Salary	$79,500	1	$79,500	$79,500
Administrative Assistant Salary	$44,500*	2	$89,000*	$168,500*
Calculations	Psychologist Salary Range: Psychologist w/ PhD= $82,000, Psychologist w/ PsyD= $77,000 ($82,000 + $77,000) / 2= $79,500 Administrative Assistant Salary Range: $34,270 - $54,722 ($34,270 + $54,722) / 2= $44,496			

Appendix

Cost-Effectiveness

Alternative 2

	Effectiveness	Cost	Cost-Effectiveness
Telehealth Platforms	-86%*	$219,100*	-$254,800*
Calculations	$219,100 / -.86= -$254,767		

Alternative 3

	Effectiveness	Cost	Cost-Effectiveness
Streamlined Counseling Services	-50%	$168,500*	-$337,000*
Calculations	$168,492 / -.50= -$336,984		