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Research Report

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Supporting the Mental Health Needs of Community College Students

Supported by the Institute of Education Sciences and the Trellis Foundation

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About This Report

The United States faces an unprecedented mental health crisis, with youth and young adults at the center (U.S. Department of Health and Human Services, Office of the U.S. Surgeon General, 2021; White House, 2022). Even before the coronavirus disease 2019 (COVID-19) pandemic, nearly 50 percent of college students reported at least one mental health concern. The COVID-19 pandemic notably exacerbated these issues and underscored the urgent need to identify and implement solutions to ameliorate the youth mental health crisis. In 2021, the National Academies of Sciences, Engineering, and Medicine (NASEM) called on the field of higher education to address growing concerns about student mental health by identifying and elevating emerging and promising approaches that offer a more holistic way to support student mental health in higher education (NASEM, 2021). Serving as the main entry point for more than 40 percent of students seeking a postsecondary education degree, community colleges represent a tremendous and untapped opportunity to better address mental health in the United States, particularly for students who have been traditionally underserved (e.g., students of color, first-generation students, and low-income students). However, there is limited evidence and guidance that colleges can use to inform the implementation of multilevel, holistic approaches to support students with varying mental health needs.

To address this knowledge gap, this report shares a descriptive study of eight community colleges at the forefront of implementing multilevel approaches (i.e., a combination of prevention, early intervention, and/or treatment services) to support student mental health, and key facilitators for and barriers to their success.

RAND Education and Labor

This study was undertaken by RAND Education and Labor, a division of the RAND Corporation that conducts research on early childhood through postsecondary education programs, workforce development, and programs and policies affecting workers, entrepreneurship, and financial literacy and decisionmaking. The research reported here was supported by the Institute of Education Sciences (IES) (U.S. Department of Education) through IES supplemental funds provided through the College Completion Network ($99,988.27) under the grant R305H170085 to AIR and by the Trellis Foundation through a grant to the University of Texas, Dallas (subaward to RAND of $54,543.00 to support report development and dissemination). The research team represented a partnership among AIR, the RAND Corporation, the University of Texas at Dallas, Stanford University, Active Minds, and the Jed

Foundation (JED). RAND Education and Labor served as the lead division for the study and report.[1]

The opinions expressed in this report are the authors' alone and do not represent the views of the Institute of Education Sciences or the Trellis Foundation. More information about RAND can be found at www.rand.org. Questions about this report should be directed to Lisa Padilla at lsontag@rand.org, and questions about RAND Education and Labor should be directed to educationandlabor@rand.org.

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U.S. Department of Education's Institute of Education Sciences and the Trellis Foundation, for their support of this research and report development.

Summary

The United States faces an unprecedented mental health crisis, with youth and young adults at the center (U.S. Department of Health and Human Services, Office of the U.S. Surgeon General, 2021; White House, 2022). Even before the coronavirus disease 2019 (COVID-19) pandemic, nearly 50 percent of college students reported at least one mental health concern. Without proper support, college students are at risk for a variety of both immediate consequences (e.g., academic impairment, substance use, suicide) and longer-term ones (e.g., stop-out, drop-out, and lower lifetime earning potential). The COVID-19 pandemic notably exacerbated these issues and underscored the urgency to identify and implement solutions to ameliorate the youth mental health crisis. In 2021, the National Academies of Sciences, Engineering, and Medicine (NASEM) called on the field of higher education to address growing concerns about student mental health by identifying and elevating emerging and promising approaches that offer a more holistic way to support student mental health in higher education (NASEM, 2021). Serving as the main entry point for more than 40 percent of students seeking a postsecondary education degree, community colleges represent a tremendous, untapped opportunity to better address mental health in the United States, particularly for students who have been traditionally underserved (e.g., students of color, first-generation students, and low-income students). However, there is limited evidence and guidance that colleges can use to inform the implementation of multilevel, holistic approaches to support students with varying mental health needs.

To address this knowledge gap, we examined qualitative data from eight community colleges at the forefront of implementing multilevel approaches (i.e., a combination of prevention, early intervention, and/or treatment services) to support student mental health. Specifically, the study was designed to do the following:

1. describe community college efforts to support mental health on a continuum of care from prevention to treatment
2. describe how these colleges are addressing student mental health through the broader college environment
3. identify challenges and facilitators that these community colleges encountered in addressing student mental health.

Methods

In collaboration with Active Minds and the Jed Foundation, we identified and recruited community colleges that represented a select group that was likely "ahead of the curve" on implementing multilevel and holistic strategies to support student mental health. In addition, we selected colleges that represent geographic diversity across the United States and serve large proportions of students of color or low-income students. Between February and July 2022, we

conducted interviews with representatives from each of the eight colleges (15 interviews with 28 individuals, consisting of 19 mental health counselors or implementers of mental health programs and nine administrators). We analyzed the interview data using a combination of deductive approaches (comparing data against findings from the existing research base and insights from mental health experts) and inductive ones (identifying themes and patterns that could not be categorized by a priori knowledge).

Lessons Learned and Implications

Our findings from these eight colleges highlight a set of lessons for community colleges across the country to consider when strategizing how best to support student mental health. Below, we highlight five key lessons and their associated implications for educational institutions, practitioners, and policymakers.

Lesson 1: Community colleges in our study are implementing multilevel mental health supports, though most lack a clear organizing framework. We found that colleges implemented a wide variety of efforts to support student mental health across the spectrum from well-being to illness. These efforts included student-centric programs (e.g., stress reduction seminars or educating students on available resources), faculty/staff focused efforts (e.g., gatekeeper training or educating staff on the link between mental health and academic success), and institution-wide efforts (e.g., forming mental health task forces to drive strategies to support student mental health). Yet most colleges did not have a clear institutional vision or strategic plan for how mental health supports could be coordinated and delivered.

- **Implications:** Community colleges should consider adopting and formalizing a strategic plan or framework grounded in research evidence to improve coordination and collaboration across efforts, reduce redundancies, and guide decisionmaking on allocating resources. Such a framework also could create a common language among postsecondary institutions, which increases the likelihood that colleges can more easily learn from each other to scale promising practices to support student mental health.

Lesson 2: Community colleges have expanded the reach of their mental health supports through integration in the broader college environment. All participating colleges highlighted the importance of considering the whole college environment and the need to deeply integrate mental health supports and services with other college activities. These efforts included (1) enhancing academic environments, such as integrating information on mental health resources into course syllabi or lessons, (2) staff education on the importance of student mental health and what to do when interacting with a distressed student, (3) colocation of mental health and academic or basic needs and services, (4) the establishment of cross-disciplinary task forces, and (5) more explicit referral and screening processes and supports between instructors, academic counselors, and mental health counseling staff. Participants from those colleges using

several of these approaches shared stories of success in supporting a broader base of students and fostering a supportive campus climate.

- **Implications:** Considering major strides in supporting student mental health, community colleges should continue to integrate mental health supports into the broader college environment (i.e., classrooms, academic advising, basic needs support, financial assistance). In addition, colleges may benefit from identifying and publicly promoting student mental health as a campus-wide priority. Together, these efforts have the potential to demonstrate to students, faculty, and staff the institution's commitment to student mental health and, in turn, to help foster a supportive campus environment for all.

Lesson 3: Strong leadership support and broad buy-in from staff to prioritize student mental health is important. Support from leadership (e.g., presidents, vice presidents, deans) and broad buy-in from faculty and staff to prioritize and support student mental health were key facilitators for establishing a robust set of mental health supports for colleges in this study. Having the president, deans, and other leadership roles prioritize and elevate the importance of student mental health was reported as key to increased financial support for programs, institutionalization of mental health counselor positions, and enhanced participation from faculty and staff in education seminars, gatekeeper trainings, and integration of mental health supports into the classroom environment. However, many participants noted that faculty and staff outside fields related to mental health (e.g., psychology, social work, nursing) have not widely adopted the idea that supporting mental health is part of their role in educating students.

- **Implications:** Institutional leaders (e.g., presidents, deans, department chairs) may need to do more to elevate institutional priorities around mental health. For instance, institutional leaders from all segments of the college (e.g., president, board of trustees or regents, deans) should consider communicating publicly the importance of creating a culture of well-being on campus. Additionally, institutions could establish and/or maintain a team that involves all sectors of the college that coordinates, reviews, and addresses mental health, substance use, and well-being concerns and efforts. Those colleges that received support from leadership or established similar cross-discipline task forces said that these factors were central to their success in effectively addressing student mental health.

Lesson 4: Community colleges struggle to meet students' mental health needs because of limited resources. At most of the participating colleges, mental health counselors wore many hats, juggling delivery of counseling services, support groups for students, staff education, and orientation week sessions on mental health. Though a variety of factors are at play (e.g., leadership support, limited financial resources), limited staff capacity to "do it all" emerged as a primary challenge to meeting the increasing demand for mental health services and programs designed to bolster a foundation of mental well-being. Additionally, despite the use of a variety of approaches to expand access to mental health services (e.g., use of telehealth, grant funding to hire more counselors, community-based partnerships), many participants expressed challenges in

reaching traditionally marginalized and minoritized populations who may need additional support.

- **Implications:** To address these challenges, community colleges should consider reallocating existing financial resources or seeking opportunities for additional financial resources to increase capacity to deliver sufficient student mental health supports and services. In addition to institutional funding, counseling centers and student success staff should continue to think creatively about how to reach students who need them most and root decisions about programs and engagement in data on their target populations. To help streamline processes and alleviate some of the burdens encountered by mental health counselors, community colleges should consider conducting an audit or needs assessment of current efforts to reduce redundancy across programs while simultaneously improving integration of supports, elevate efforts that have been most successful at reaching students, and identify key areas for opportunity to better engage and support students most at risk (e.g., students of color, queer students, first-generation students, and low-income students).

Lesson 5: Financial support for student mental health should extend beyond the postsecondary institutions. Community colleges struggle to find financial resources to support their efforts (even among a sample of community colleges likely ahead of the curve on addressing student mental health). Participants from a few colleges shared successes in obtaining grant funding from local, state, and federal agencies that have earmarked dollars to support mental health and postsecondary student success efforts. Although these resources are helpful, they did not appear sufficient to meet the capacity and financial needs of the colleges to adequately support their students' mental health; as a result, this responsibility to maintain a constant flow of grant dollars places a tremendous burden on counseling and student success staff.

- **Implications:** Recognizing that the U.S. higher education enterprise is under tremendous financial stress, finding new funds to provide additional resources for students experiencing mental health problems may prove to be challenging. Nonetheless, establishing consistent, long-term funding sources to support community colleges may be necessary to create sustainable, comprehensive mental health supports for students. Government agencies and philanthropic entities should consider increasing the priority given to funding mental health supports and services on community college campuses. Additionally, national, state, and local funders of higher education should consider incentivizing community colleges to provide support for students' mental health across the continuum of care (prevention through treatment). Finally, states should consider modifying insurance laws or regulations to enable institutions to use general funds and/or designated health fees for expenses that are not covered by students' personal insurance.

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Chapter 1. Introduction

The United States faces an unprecedented mental health crisis, with youth and young adults at the center (U.S. Department of Health and Human Services, Office of the U.S. Surgeon General, 2021; White House, 2022). Even before the coronavirus disease 2019 (COVID-19) pandemic, research indicated a rise in the percentage of college students reporting feelings of hopelessness (53 percent of undergraduate students in 2017, up from 47 percent in 2008), feeling so depressed that it was difficult to function (40 percent in 2017, up from 31 percent in 2008) and seriously considering suicide in the past 12 months (12 percent in 2017, up from 6 percent in 2008) (American College Health Association, 2008; American College Health Association, 2017).[2] The COVID-19 pandemic notably exacerbated the number of students reporting mental health challenges (Czeisler et al., 2020; Ezarik, 2021; McGinty et al., 2020; TimelyMD, 2020). Without treatment, the consequences of mental illness for the individual and society are staggering, with untreated mental health disorders associated with lower persistence and college completion rates, higher rates of substance use, and lower lifetime earning potential. Mental illness is also reported to be the leading cause of disability and lost workplace productivity (Alonso et al., 2018; Arria et al., 2013; Breslau et al., 2008; Bruffaerts et al., 2018; Collins and Mowbray, 2005; Druss et al., 2009; Keyes et al., 2012).

In 2021, the U.S. Surgeon General issued an advisory underscoring the urgent need to identify and implement solutions to address the youth mental health crisis, particularly for racial and ethnic minorities, LGBTQ+ (lesbian, gay, bisexual, transgender, queer, and/or plus) youth, and low-income youth who are at increased risk for mental health challenges (U.S. Department of Health and Human Services, Office of the U.S. Surgeon General, 2021; Abelson, Lipson, and Eisenberg, 2022; Eisenberg and Resnick, 2006; Eisenberg, Hunt, and Speer, 2013; Lipson et al., 2022). These groups may be especially vulnerable because of various factors, such as experiencing microaggressions, uncertainty about their belonging, and basic needs insecurity (Goldrick-Rab, 2016; Nadal et al., 2014; Walton and Cohen, 2007). In addition, the National Academies of Sciences, Engineering, and Medicine ([NASEM], 2021) called on the field of higher education to address growing concerns about student mental health by identifying and

[2] Data from the American College Health Association's National College Health Assessment are based on a self-selected sample of U.S. postsecondary institutions (28 campuses and 16,024 students in the first survey in spring 2000). A random sampling technique was used to recruit participating students. Though the American College Health Association recognizes that the sample is not technically generalizable to all U.S. college students, it has concluded, using rigorous analyses, that the National College Health Assessment has been found to be a reliable and valid representation of college students in the United States (American College Health Association, "Generalizability, Reliability, and Validity Analysis," undated).

elevating emerging and promising approaches that offer an "all-hands" multilevel approach to support student mental health.

Community colleges serve more than 7 million students each year, making them the main entry point for more than 40 percent of students seeking a postsecondary education degree (Community College Research Center, undated). Although the prevalence for mental health problems has remained comparable for community college and four-year college students (Lipson et al., 2021b), community colleges have far fewer resources to address students' mental health needs (Katz and Davison, 2014). Additionally, community colleges serve a higher percentage of students of color and low-income students compared with four-year universities and colleges (Ma and Baum, 2016). As a result, community colleges present a tremendous, untapped opportunity for the United States to better address mental health and health equity, particularly for those who have been traditionally underserved.

Evidence suggests that mental health conditions hinder academic success. Several studies show that students with untreated mental disorders have lower rates of achievement (Bruffaerts et al., 2018), higher rates of academic impairment (Alonso et al., 2018; Keyes et al., 2012), and higher rates of stopout and dropout (Arria et al., 2013; Breslau et al., 2008; Collins and Mowbray, 2005; Keyes et al., 2012). Though the research establishing a causal link between mental health and academic outcomes in higher education is limited (Abelson, Lipson, and Eisenberg, 2022), it would be surprising if mental health and well-being did not hinder academic achievement and college completion, according to findings from adjacent literature (Eisenberg, Golberstein, and Hunt, 2009). For instance, psychiatric disorders (e.g., depression, anxiety, attention deficit hyperactivity disorder [ADHD]) and their associated symptoms (e.g., disrupted sleep, attention and concentration issues, low physical energy levels, intrusive thoughts about self-worth) likely interfere with a student's ability to perform academically. Without adequate mental health supports, college students may be at risk for a variety of academic and nonacademic consequences that reduce their overall well-being (e.g., lower persistence and college completion rates, higher rates of substance use, lower lifetime earning potential) (Alonso et al., 2018; Arria et al., 2013; Breslau et al., 2008; Bruffaerts et al., 2018; Collins and Mowbray, 2005; Druss et al., 2009; Keyes et al., 2012).

The broader mental health literature suggests that community colleges must move beyond counseling services toward comprehensive, multitiered systems of student support that adequately support student mental health (e.g., Abelson, Lipson, and Eisenberg, 2022; Cimini and Rivero, 2018; Jed Foundation, 2021; Wesley, 2019; World Health Organization, 2022). Students who attend community colleges relative to four-year universities and colleges historically have been students who disproportionately come from traditionally marginalized and underserved communities (Horn and Nevill, 2006). Consequently, these students receive more exposure to conditions that place them at higher risk of developing mental health conditions (Goldrick-Rab, 2016; Murthy, 2022; Nadal et al., 2014; Walton and Cohen, 2007). For this reason, implementing strategies that not only promote mental health but also address early

symptoms is key to ensuring that greater numbers of community college students can thrive as they pursue a college degree. Furthermore, integrating mental health supports into the broader academic mission of the community college creates opportunities for a variety of campus community members to become involved in supporting student mental health (Abelson, Lipson, and Eisenberg, 2022; Cimini and Rivero, 2018; Jed Foundation, 2019; NASEM, 2021; Wesley, 2019). However, there is limited evidence and guidance that colleges can use to inform the implementation of approaches to that do not focus heavily on the provision of counseling services to support student mental health.

This report explores this ideal of a tiered model to support students with varying degrees of mental health need. It examines qualitative data from eight community colleges identified by Active Minds and the Jed Foundation as being at the forefront of supporting student mental health more holistically.[3] The goal of the study was to understand the degree to which these institutions are implementing mental health multilevel (i.e., a combination of prevention, early intervention and/or treatment services) approaches to support student mental health. Specifically, the study focuses on three primary aims:

- Aim 1: to describe community college efforts to support mental health on a continuum of care from prevention to treatment
- Aim 2: to describe how these colleges are addressing student mental health through the broader college environment
- Aim 3: to identify challenges and facilitators that these community colleges encountered in addressing student mental health.

In the following chapter, we provide some additional background on the context for student mental health in community colleges, the frameworks we used to examine mental health supports, and the prior research on student mental health. We then discuss our methods in Chapter 3, our findings in Chapter 4, and our interpretation of findings in Chapter 5.

[3] We have not listed the surveyed colleges in order to respect confidentiality.

Chapter 2. Evidence and Frameworks for Supporting Student Mental Health in Community College Settings

Community colleges are demographically and economically more diverse than four-year institutions and serve a higher percentage of economically disadvantaged students, students of color, and working adults (Katz and Davison, 2014). Many of these students enroll in community colleges because these institutions are low-cost, offer career and technical pathways, and provide flexible class scheduling. Despite the central role of community colleges in improving the odds of social and economic mobility, they are nevertheless underresourced and struggle to provide services that address the complex array of factors, including mental health problems, that have the potential to impede success in college (Edgecombe, 2019; Yuen, 2020).

Although the prevalence for mental health problems has remained comparable for community college and four-year college students (Lipson et al., 2021b), community colleges have far fewer resources to address students' mental health needs (Katz and Davison, 2014). For instance, compared with four-year institutions, community colleges have fewer full-time-equivalent mental health professionals and higher student-to-counselor ratios, which likely increases wait times or limits access to counseling services for community college students in need of mental health support (Edwards, 2015a; Gorman et al., 2022). Additionally, community college students are significantly less likely to seek mental health support than their four-year peers (Lipson et al., 2021b). Fewer than 10 percent of community college students access on-campus services compared with 50 percent of four-year college students (Francis and Horn, 2016), despite evidence showing that most community colleges offer some type of mental health counseling services (Edwards, 2015b). Limited financial means and competing work or family obligations (Eisenberg et al., 2016; Katz and Davison, 2014; Goldrick-Rab, 2016; Lipson et al., 2021b) create additional barriers to accessing mental health services.

Providing effective mental health support to the diversity of students who attend community colleges requires sensitivity to not only to the complex interplay of individual, cultural, environmental, and societal factors that affect mental health, but also to the political and financial context in which community colleges operate. There is a growing body of research on mental health interventions being implemented at postsecondary institutions; however, the research on community colleges is notably thin (Abelson, Lipson, and Eisenberg, 2022). In the next sections, we identify two frameworks that provide a roadmap for understanding how community colleges approach student mental health. Then, we highlight evidence on approaches to supporting student mental health in postsecondary education.

Frameworks for Supporting Student Mental Health

Many postsecondary education institutions have begun to adopt more-comprehensive strategies to support student mental health that move beyond counseling services and focus on efforts that bolster mental wellness and reduce risk factors (e.g., Abelson, Lipson, and Eisenberg, 2022; Conley, Durlak, and Kirsh, 2015; Conley et al., 2016; Winzer et al., 2018). These efforts align with concepts from dominant frameworks used in other settings (e.g., public health, kindergarten through 12th grade [K–12] education, health care) to support mental health and well-being, such as the Public Health Prevention Framework (World Health Organization, 2004; Mrazek and Haggerty, 1994) and the Ecological Systems Theory (Bronfenbrenner, 1979). Using frameworks grounded in research evidence provides a guide to identify, develop, and implement efforts that are most likely to positively affect students' well-being and success. However, it is unclear the extent to which community colleges intentionally and systematically draw on these or similar frameworks to inform how they support student mental health on their campuses.

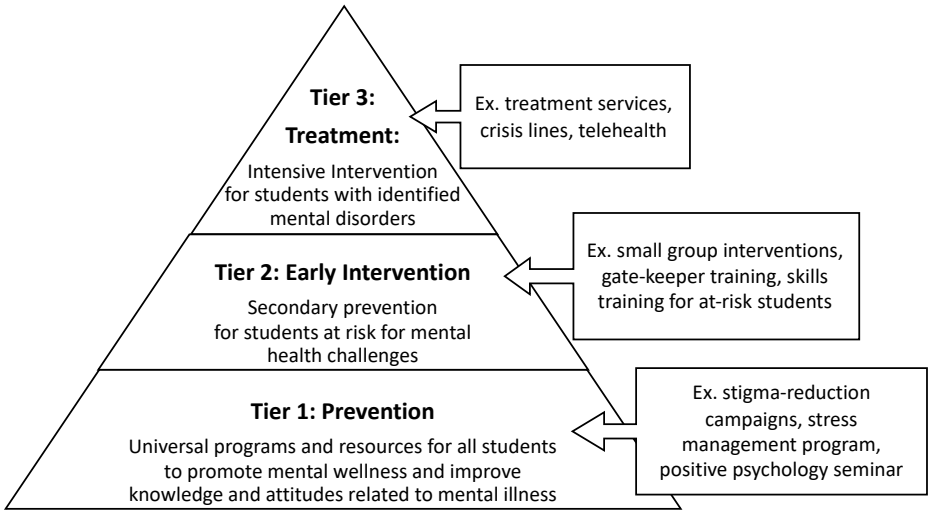
We draw on the distinct yet complementary Public Health Prevention Framework and Ecological Systems Theory to address our study aims and understand (1) how community colleges support student mental health across a continuum of care from prevention to treatment, (2) how community colleges are integrating student mental health supports into the broader college environment, and (3) factors that likely affect the successful implementation and outcome of these efforts. Below, we describe these models in greater detail and the value they add to understanding and supporting student mental health in the postsecondary setting.

Public Health Prevention Framework

The Public Health Prevention Framework (World Health Organization, 2004; Mrazek and Haggerty, 1994; Fox et al., 2003; Fox et al., 2009; O'Connell, Boat, and Warner, 2009) views mental health on a spectrum from well-being to illness and has been widely adopted in a variety of educational, health, and community settings. The Public Health Prevention Framework (also parallel to the Health Impact Pyramid, Response to Intervention, and Multitiered System of Supports) recognizes that adequate mental health support requires a shift away from relying solely on treatment services toward efforts that bolster health and wellness and offset early signs of mental illness. Drawing on this framework, we explore how community colleges support student mental health across a continuum of care from prevention to treatment (**aim 1**).

The Public Health Prevention Framework is commonly represented as a pyramid (Figure 2.1) with multiple tiers of intervention. The Public Health Prevention Framework postulates a graduated potential for influence on health outcomes, starting with universal prevention (tier 1), which has the potential to build a foundation of mental well-being for all individuals, through specialized treatment (tier 3), which focuses on a relatively smaller proportion of the population that needs more intensive care.

Figure 2.1. Public Health Prevention Framework



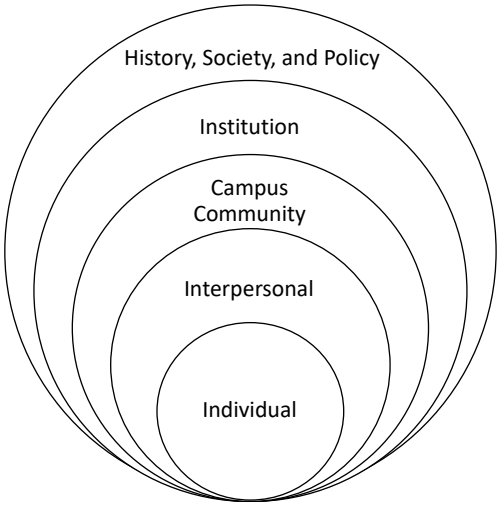
SOURCE: Adapted from Fox et al. (2009) and Abelson, Lipson, and Eisenberg (2022).

Ecological Systems Theory

Multiple factors, embedded within each other, contribute to a student's mental health, including individual factors; interpersonal factors; school contexts; and more-distal social, economic, and political contexts (see Figure 2.2). Often depicted as concentric circles with the individual at the center, the Ecological Systems Theory (Bronfenbrenner, 2005) was developed to explain how various embedded and interacting factors influence child development. In this study, we apply this framework to understand how each of these factors attenuates or exacerbates risk for mental illness. Like the Public Health Prevention Framework, the Ecological Systems Theory offers institutions a way to identify levers of change across the spectrum of systems that potentially influence student mental health. The different levels that affect a student's mental health are as follows (for a more in-depth discussion, see Abelson, Lipson, and Eisenberg, 2022):

- **Individual:** biological vulnerabilities and predispositions, and one's personality, temperament, knowledge, behaviors, and skills (e.g., family history of mental illness, coping skills, sense of belonging)
- **Interpersonal:** people who have direct contact with the individual in their immediate environment (e.g., peers, romantic relationships, academic advisers, course instructors)
- **Campus community:** students' learning environments (e.g., classroom practices, campus climate, community norms around mental health, shared priorities among staff and administration)
- **Institution:** institutional policies (e.g., leave of absence policies), provision of mental health supports and services, extent to which mental health and whole student perspectives are integrated into college mission statements, demographic characteristics of the college (e.g., enrollment size, percentage of students receiving Pell Grants, four-year versus two-year institutions, nonresidential versus residential campuses).

Figure 2.2. Ecological Systems Theory for College Mental Health



SOURCE: Adapted from Bronfenbrenner (2005) and Abelson, Lipson, and Eisenberg (2022).

Applied within the context of this study, the Ecological Systems Theory could help community colleges determine the extent to which they are addressing how the broader college environment may be influencing their students' mental health (**aim 2**). For instance, to what extent are community colleges bolstering the skills and confidence of instructors to identify and support students experiencing psychological distress? In addition, the Ecological Systems Theory provides community colleges with guidance on factors influencing the successful implementation of programs, practices, and policies (**aim 3**), and in turn, their students' mental health. For instance, provider characteristics (e.g., cultural competency, diversity of providers), organizational capacity (e.g., shared mission and buy-in among staff, leadership and program champions, shared decisionmaking), and community factors (e.g., institutional and community politics, funding, institutions' policies) have the potential to facilitate or hinder the successful

implementation of prevention and intervention efforts (Aarons, Hurlburt, and Horwitz, 2011; Durlak and DuPre, 2008; Meyers, Durlak, and Wandersman, 2012). Together, these perspectives illustrate how community colleges should consider the role of external factors (community, provider, and institutional factors) when prioritizing whether and how to implement particular programs, practices, and policy changes.

Evidence on Approaches to Supporting Student Mental Health

In a recent review of studies examining the link between mental health interventions and mental health outcomes among college students, Abelson, Lipson, and Eisenberg (2022) found a growing body of quality evidence for prevention, early intervention, and policy changes (e.g., supervised skill-training, such as mindfulness and social skills training, peer support, screening, mental health curriculum, and inclusive policy interventions). Although the evidence on the effect of these types of interventions on mental health outcomes (e.g., symptoms of anxiety, depression, suicidal ideation) remains somewhat mixed (Abelson, Lipson, and Eisenberg, 2022), findings from studies targeting more-proximal attitudes and behaviors (e.g., stigma, help-seeking behaviors, campus climate) suggest that these types of prevention and intervention efforts are useful in bolstering factors that are precursors to mental well-being (e.g., Sontag-Padilla et al., 2016; Sontag-Padilla et al., 2018). Several narrative and meta-analytic reviews that focused primarily on randomized control trials (RCTs) and quasi-experimental studies found that universal prevention programs and mental health treatment offered via face-to-face or technology-delivered formats positively affect students' mental health (e.g., Buchanan, 2012; Conley, Durlak, and Kirsch, 2015; Conley et al., 2016; Conley et al., 2017; Huang et al., 2018; Reavley and Jorm, 2010; Regehr, Glancy, and Pitts, 2013; Scott-Sheldon et al., 2014; Shiralkar et al., 2013; Winzer et al., 2018; Yager and O'Dea, 2008). Additionally, data drawn from 29 RCT studies with follow-up data on mental wellness promotion and illness prevention on college campuses indicated long-term sustainability of prevention and intervention effects for mental health outcomes, especially for interventions to reduce the symptoms of depression and anxiety (Winzer et al., 2018). Despite this emerging evidence base, Abelson, Lipson, and Eisenberg (2022) identified several important gaps in the evidence on the effectiveness of student mental health interventions, including interventions to reduce interpersonal harms and bias; school-wide interventions to address community norms, climate, stigma, help-seeking, and referral; and campus policies. Additionally, we are unaware of any evaluations of multilevel efforts (i.e., utilization of multiple efforts to target factors across the spectrum of universal prevention to treatment or the multiple embedded factors that influence student mental health).

While there is more-conclusive evidence showing that mental health interventions positively affect student mental health, attitudes, and behaviors, some research suggests that these interventions also have a positive effect on postsecondary academic outcomes. In a meta-analysis of 103 studies examining the effect of universal mental health prevention programs among

college students, Conley, Durlak, and Kirsch (2015) found that universal mental health prevention programs (e.g., teaching students skills like coping, relaxation and mindfulness, and how to effectively communicate and resolve conflict) resulted in statistically significantly improvements in student academic behaviors and performance (e.g., test scores, grade-point average, class attendance).[4] Additionally, these authors found that interventions with supervised skills practice (i.e., repeated in-session opportunities for students to practice new skills and receive performance feedback) had a greater positive influence than psychoeducational (information-only) interventions (Conley, Durlak, and Kirsch, 2015). In the K–12 sector, several studies have also found that mental health interventions improve student academic outcomes (Bradshaw, Waasdrop, and Leaf, 2012; Kataoka et al., 2011). In sum, although the evidence base is small, particularly within the context of higher education, it does suggest that mental health interventions implemented in education settings could support students' academic and postgraduate success.

Contributions of the Current Study

Despite the evidence suggesting the utility of multilevel approaches to address the mental health crisis on college campuses, there is no research that systematically documents such efforts on community college campuses. Consequently, researchers, policymakers, and practitioners know very little about how community colleges are trying to address the mental health crisis on their campuses. Furthermore, beyond financial constraints, we know little about the primary facilitators and barriers that community colleges encounter when implementing multilevel efforts to support student mental health.

To address these gaps in the evidence, members of the College Completion Network's Lead team, the Accelerated Pathways team, and Growth Mindset team conducted a descriptive study of community colleges implementing multilevel (i.e., a combination of prevention, early intervention, and/or treatment services) approaches to support student mental health. Informed by the Public Health Prevention Framework and Ecological Systems Framework, and insights from our research team, senior advisers, and Active Minds and the Jed Foundation,[5] we

[4] Conley, Durlak, and Kirsh (2015) did not specify the number of studies that exclusively examined student academic performance as the primary outcome of interest.

[5] Founded in 2003, Active Minds is one of the largest nonprofit organizations in the United States dedicated to promoting mental health awareness and stigma reduction among college students via peer-to-peer dialogue and interaction. Present on more than 600 college campuses, Active Minds employs a variety of activities to reduce stigma, increase mental health knowledge, and enhance students' abilities to identify and refer peers struggling with mental health challenges. The Jed Foundation is a national nonprofit organization that partners with high schools and colleges to develop and strengthen programming supporting mental health and preventing substance misuse and suicide. Specifically, the Jed Foundation's four-year JED Campus Program provides technical assistance to four- and two-year colleges to develop a comprehensive plan to address a diversity of student mental health challenges.

developed study aims to explore how a select group of community colleges belonging to the Jed Foundation and Active Minds networks address mental health on their campuses. Specifically, the study aimed to do the following:

1. Describe how community colleges support student mental health across a continuum of care from prevention to treatment.
2. Describe how community colleges are addressing student mental health through the broader college environment.
3. Identify challenges and facilitators that these community colleges encountered in addressing student mental health.

We intentionally drew on a sample of community colleges identified by our collaborators, Active Minds and the Jed Foundation, both national leaders in the space of college mental health, to elevate holistic models at the forefront of supporting student mental health. Centering on community colleges identified as emerging leaders allowed us to conduct a more focused, in-depth exploration of promising models for community colleges across the country to consider replicating, and a framework for thinking comprehensively about mental health supports and services.

Chapter 3. Methods

To address the study aims and address the current knowledge gap regarding multilevel approaches to support student mental health on community college campuses, we focused our efforts on community colleges implementing a combination of prevention, early intervention, and mental health services to address student mental health on their campuses.

Data Collection

We collected three types of data from each community college between February and July 2022: (1) publicly available data on the student population, (2) survey data, and (3) semistructured interviews. Below, we describe our recruitment approach and each data source.

Campus Recruitment

As a first step, we asked Active Minds and the Jed Foundation, two organizations leading nationwide efforts to support student mental health, to each identify ten community college campuses in their efforts to improve student mental health. We specifically asked both organizations to select campuses that represented a diversity of geographic regions across the United States and implemented efforts to support student mental health on at least two of three tiers as characterized by the Public Health Prevention Framework described in the previous chapter (i.e., prevention, early intervention, and/or treatment services). This strategy allowed us to purposefully recruit a geographically diverse set of community colleges that have invested resources to support students across the mental health spectrum. Community colleges that participated in this study thus lend important insights into the successes and the challenges that other community colleges may encounter as they expand their efforts to support student mental health.

We collected additional institutional data on each one of the 20 colleges from the U.S. Department of Education's Integrated Postsecondary Education Data System (IPEDS) (National Center for Education Statistics, undated). IPEDS allowed us to identify the percentage of the community college's student population who were students of color and Pell recipients and determine whether the community college was located in a town or in an urban, suburban, or rural area. Using data gathered from Active Minds, the Jed Foundation, and IPEDS, we prioritized recruiting colleges that (1) jointly implemented prevention and early intervention efforts, (2) represented at least one of five geographic regions in the United States and different levels of urbanicity, and (3) enrolled larger proportions of low-income students and students of

color.[11] This selection strategy helped to increase the study's chances of reporting how a diversity of campuses, operating within different political, economic, and cultural contexts, met the wider mental health needs of their students.

Using this selection strategy, we invited 14 community colleges to participate in the study; our aim was to recruit ten campuses. Starting in January 2021, the Jed Foundation and Active Minds identified a primary faculty or staff point of contact for each college that was heavily involved in campus efforts to support mental health. In addition, the Jed Foundation and Active Minds sent email introductions to each point of contact (i.e., a warm hand-off) providing brief information about the study and our study team; we then followed up with invitations to participate in the study. For nonrespondents, we followed-up with email correspondence. Of the 14 campuses that received an invitation to participate, eight campuses agreed to participate.

Table 3.1 provides characteristics of each of the participating colleges and mental health supports offered. Participating colleges represented a geographically diverse sample, with two colleges on the East Coast, two colleges in the Midwest, three colleges on the West Coast, and one college in the South. Most community colleges we invited were in suburban (n = 4, 50 percent) or urban areas (n = 3, 38 percent); one college was in a small rural town. Participating colleges varied in size, with the smallest college serving fewer than 3,000 students and the largest college serving more than 20,000 students. Half of the colleges served predominantly students of color (total percentage of racial/ethnic minorities was greater than 50 percent), and five colleges enrolled a large percentage of Pell recipients (50 percent or more of the student body). A review of campus characteristics (campus population size, geographic location, demographics) suggested no meaningful difference between those campuses that chose to participate and those that did not.

Survey

Approximately two weeks prior to conducting our interviews, we invited one representative from each college to complete a brief survey to gather high-level information about (1) challenges affecting their students' mental health, including the COVID-19 pandemic, (2) efforts and strategies supporting student mental health (e.g., faculty and staff mental health trainings, basic needs supports, on- and off-campus treatment services), (3) leave of absence policies, and (4) data they collect on their student mental health needs. Working with our point of contact at each college, we identified one individual best suited to answer the survey questions (see Appendix A). Typically, this person was heavily involved in student mental health efforts on campus. We used information from the survey (see Appendix A) to understand the broad context of how each college addresses students' mental health needs and to streamline our interview process. Specifically, we used survey responses to categorize colleges as providing the following

[11] The five regions are the Northeast, the Southeast, the Midwest/Plains, the West Coast, and the Southwest.

efforts: (1) prevention efforts (i.e., tier 1, programs or efforts to promote overall student mental well-being, not just for those students at risk for mental health challenges), (2) early intervention efforts (i.e., tier 2, efforts to support students at higher risk of experiencing mental illness or showing early symptoms of mental illness), (3) mental health services (tier 3), including in-person counseling services or mental health treatment services or telehealth counseling, coaching, or on-demand crisis services, (4) data on student mental health (i.e., the college collects data on students' mental health needs via administrative records or reports from student services, counseling center, registrar's office, surveys, screeners or early warning systems, or other sources to be specified), and (5) faculty and staff to support student mental health. For details on the survey items, see Appendix A.

Table 3.1. Characteristics of Participating Colleges and Mental Health Supports Offered

College	Region	Geography[a]	Students of Color (% of college)[a]	Pell Recipients (% of college)[a]	Prevention (tier 1)[b]	Early Intervention (tier 2)[b]	Mental Health Services (tier 3)[b]	Data on Student Mental Health[b]	Faculty Training[b]	In-Person Counseling[b]	Telehealth Counseling[b]
1	East Coast	Suburban	38%	58%	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	Midwest	Urban	21%	42%	Yes	Yes	Yes	No	Yes	Yes	Yes
3	West Coast	Suburban	86%	63%	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	West Coast	Rural	72%	66%	Yes	Yes	Yes	Not sure	Yes	Yes	Yes
5	East Coast	Suburban	66%	54%	Yes	No	Yes	Yes	Yes	Yes	Yes
6	West Coast	Suburban	74%	33%	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7	South	Urban	33%	58%	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8	Midwest	Urban	43%	46%	Yes	No	Yes	Yes	Yes	Yes	Yes
		Total	—	—	8 (100%)	6 (75%)	8 (100%)	7 (88%)	8 (100%)	8 (100%)	8 (100%)

[a] Features information from U.S. Department of Education's IPEDS (see National Center for Education Statistics, undated).
[b] Features information from college survey conducted for this study.

Key Informant Interviews

Our study team conducted a combination of individual and small group interviews of three to five stakeholders per college from February to June 2022. Participants were a mix of counseling and program implementation staff and administration (e.g., dean of student success, vice president of student affairs, dean of student health). In total, the study consisted of 15 interviews with a total of 28 individuals (19 mental health counselors or implementers of mental health programs and nine administrators). These informants represented a diversity of perspectives and knowledge about campus-based efforts to support student mental health. The extent to which informants interact with students also varied.

All interviews were conducted by our principal investigator (PI), with support from the study research assistant to take notes. We asked interviewees' permission to audio-record the discussions for purposes of confirming the accuracy and completeness of interview notes. Each interview was approximately 60 minutes.

The interviews were guided by a semistructured interview protocol addressing three core topics aligned with the study aims: (1) approaches to support student mental health, (2) integration of student mental health supports into broader student success initiatives, and (3) facilitators for and barriers to supporting student mental health. To develop the questions for the interviews, we drew on the collective expertise of the research team, senior advisers, and insights from Active Minds and the Jed Foundation and information from a targeted literature review focusing on best and leading practices in mental health education, implementation science, and system-level approaches to support student mental health. In particular, we drew on the Public Health Prevention Framework to examine how community colleges addressed mental health along a continuum from well-being to illness, with a focus on supports provided at three levels: prevention, early intervention, and mental health treatment services. In addition, we drew on the Ecological Systems Theory to explore the provision of mental health supports within the broader college context, exploring the integration of services and the factors that facilitate and hinder the ability of colleges to adequately support mental health.

Analytic Approach

Our study team analyzed the data using a combination of deductive approaches (comparing data against findings from the existing research base and insights from mental health experts) and inductive ones (identifying themes and patterns that could not be categorized by a priori knowledge) to synthesize the interview and survey data. According to Bradley, Curry, and Devers (2007), a hybrid approach helps researchers to identify both new concepts and those already known in extant literature. First, with guidance from our PI, our research assistant extracted quotations from each of the interviews into a data extraction spreadsheet organized by themes from our interview protocol (which was informed by the existing research base and

insights from Active Minds and the Jed Foundation; see Appendix B). These themes were as follows:

- approaches to support student mental health, including prevention (tier 1), early intervention (tier 2), and mental health services (tier 3) to support student mental health
- integration of student mental health supports into broader study success initiatives, including classroom environments and practices, basic needs support, and coordination of academic and mental health staff
- barriers to and facilitators for the implementation of mental health supports, including data tracking, buy-in among leadership, faculty and staff, financial resources, campus climate, and historical context.

Within each of these themes, the research assistant organized data by questions drawn from the interview protocol. The PI then reviewed the data extraction for agreement and potential gaps, conferring with our research assistant in the event of any disagreement about placement of data. Following this process, the PI and research assistant manually reviewed and synthesized the interview data, focusing on findings that emerged at minimum for two of the eight colleges. Following our deductive analysis, the PI and research assistant manually reexamined the interview data using an inductive thematic approach to identify themes and patterns that could not be categorized by a priori knowledge (Bradley, Curry, and Devers, 2007). All procedures were approved by RAND's Human Subjects Protection Committee, which is RAND's equivalent of an institutional review board that reviews research involving human subjects, as required by federal regulations.

Chapter 4. Results

We share key findings organized by our three study aims. First, we describe approaches that study participants said their colleges were taking to support mental health. Then we describe ways in which colleges have integrated mental health supports into the broader college environment. Finally, we describe barriers to and facilitators for supporting student mental health on campus.

Approaches to Supporting Student Mental Health

In order to address aim 1, we described community college approaches to supporting mental health according to whether the college had a framework or philosophy guiding how they support student mental health, and the types of services and resources available for prevention, early intervention, and mental health services. Using information gathered via the survey, six of the eight participating colleges reported offering all three levels of approaches to supporting student mental health: prevention efforts (tier 1), early intervention efforts (tier 2), and mental health services (tier 3). The remaining two colleges offered two of the three levels. In the sections below, we describe how the colleges conceptualize supporting student mental health and their approach to prevention, early intervention, and mental health services.

Framework for Supporting Student Mental Health

When asked about whether their college used a specific framework to guide how it supports student mental health, none of the participants reported that their college ascribed to a certain one. However, all participants shared the integral role that student mental health plays in academic success, noting the importance of supporting students more holistically rather than focusing exclusively on meeting students' academic needs. Notably, participants focused on the types of programs and services offered when asked how they support their students' mental health needs. However, when probed further, more than half of the participants shared that mental health supported student success in college. For instance, some participants noted

> How things are going physically, academically, socio-emotionally, those things go together in terms of thinking [about] our approach for students . . . the philosophy of seeing it as directly connected to the students' ability to be successful is directly connected here as well.

> As it relates to new student onboarding . . . we've tried to think about more than just completion . . . having a holistic college experience matters a lot more to us.

Although this perspective was echoed across participants, many participants noted that other faculty and staff outside the mental health-related fields (e.g., psychology, social work, nursing)

have not widely adopted the idea that supporting mental health as part of their role in serving students.

Universal Prevention Efforts (Tier 1)

All participating colleges implemented a variety of universal prevention efforts to promote overall student mental well-being, not just for those students at risk for or showing symptoms of mental illness. Table 4.1 outlines the proportion of colleges that engaged in categories of efforts we assessed via the campus resource survey.

Table 4.1. Community Colleges Reporting Efforts to Promote Overall Student Mental Health

Types of Prevention Efforts (Tier 1)	*n*	Percentage of Sample
Educate students about mental health	8	100
Reduce stigma around perceptions of mental illness or seeking help for mental illness	7	88
Help students learn how to cope with stress and hardship	7	88
Share mental health resources and information with students and faculty staff	7	88
Help students develop healthy identities, manage emotions, establish, and maintain supportive relationships, and responsible and caring decisions (e.g., social emotional learning skills)	6	75
Change institutional culture	5	63
Change institutional policies and practices	3	38

While colleges engaged in a number of prevention efforts, the vast majority invested in educating students about mental health, reducing stigma around mental health, helping students cope with stress and hardship, and providing resources to faculty and students to support their mental health. For example, participants from all colleges reported providing informational sessions about mental health resources (e.g., counseling services, educational programs), particularly during orientation week or new student sessions. One counselor shared,

> We're making sure that students know how to find us, at the beginning of this academic year in anticipation of coming back on campus. Doing a preparation and acknowledgement that a lot of students had anxiety about coming back into the classroom [post COVID-19] . . . . Just sort of basic tips to remind students that we're all here to help you and support you.

Participants commonly reported implementing efforts including mindfulness sessions, stress reduction programming during finals week (e.g., therapy dogs on campus, hanging hammocks around campus, and serving free ice cream to students), and social media campaigns raising awareness around mental health issues through social media. Less common efforts included providing students free access to online mental health support applications, like Calm, which are designed to help students manage stress and anxiety. Efforts also varied in terms of target audience, with most colleges reporting a combination of student- and faculty-focused efforts to

support campus-wide wellness. Despite how widespread these efforts were, only half of the colleges reported engaging in efforts to change institutional culture and policies to support mental health (Table 3.1). In these instances, these participants reported supporting peer-to-peer conversations and campus-wide campaigns to enhance awareness of mental well-being and reduce stigma associated with seeking help (e.g., talking to a friend or instructor, seeking mental health services).

Though colleges reported a variety of individuals involved in decisionmaking and implementation of prevention efforts, including student success staff and administrators (e.g., dean of student life) or "student champions," most participants noted that the majority of the responsibility often fell solely on counseling staff to strategize and ultimately implement the programs at their campus. Several of the colleges also reported creating task forces or committees that included both staff and students from a variety of departments and backgrounds. In these instances, participants noted staff from a broad cross-section of departments wanted to help support mental health efforts and programming on campus. One college noted,

> Our campus champions have been phenomenal. They have been self-identified or been noticed from our community that have a passion for mental health . . . . They've been the ones to champion and advocate for us in their individual areas with their supervisors and upper-level administration to let them know that this is what we need.

Another participant said that students who were enrolled in mental health–related or social work coursework often helped with implementation of mental health efforts as part of course requirements.

The extent to which universal efforts reached all students was limited. For the most part, students were not required to attend informational sessions or participate in prevention programming on mental health. Only one college reported requiring students to participate in preventative activities through a mandatory first-year seminar for students that taught skills on how to study, manage stress and anxiety, what mental health is, and how to access mental health supports and services if needed. To reach a broader set of students, colleges sent their mental health or counseling staff directly to different classes to ensure that students were aware of the resources available to them. Participants acknowledged that any support services that require students to seek out and voluntarily take up support will be limited in their reach.

Like student-targeted efforts, colleges also dedicated resources to educating faculty and staff on student mental health issues and the available resources on campus. However, because participation in these efforts is not required for staff, the responsibility and desire to engage falls on the college staff. For one of the colleges, participants said that not making these types of educational sessions mandatory for faculty was indicative of a larger issue that stemmed from a lack of support from leadership involved in institution-level decisions, such as presidents, chancellors, and deans (discussed further in the section on barriers and facilitators). Additionally, several campuses also focused some educational sessions on how staff can address their own

mental health needs. These sessions shared information on defining mental health, how to identify signs of distress, and how stress affects their daily lives. This conversation was especially important during the pandemic, when faculty and staff experienced unusually high stress levels. Although focusing on staff mental health seemed to be a productive way to introduce the topic of student mental health, more research is needed to understand the relationship between faculty/staff use of mental health resources and their ability to meet the mental health needs of their students.

Targeted Early Intervention (Tier 2)

Six of the eight colleges reported implementing tier 2 efforts to support students at higher risk of developing mental illness or showing early symptoms of mental illness (see Table 3.1). Table 4.2 presents the percentage of community colleges engaging in specific types of efforts, with the most common interventions being voluntary trainings for students, faculty, or staff to identify students showing mental distress or risk for suicide. These efforts often included educational seminars or educational campaigns on campus. Note that this is distinct from trainings designed to bolster skills and confidence around *intervening* with a student in distress (endorsed by two of the eight colleges).

Table 4.2. Community Colleges Reporting Efforts to Support High Risk Students

Types of Early Intervention Efforts (Tier 2)	*n*	Percentage of Sample
Train students, staff, or faculty to identify students showing warning signs of mental illness or suicide risk	5	63
Identify students at high risk for suicide or other serious mental illness (e.g., early warning systems)	4	50
Train students, staff, and faculty on how to appropriately respond to and support students showing warning signs of mental illness and suicide risk	2	25
Gather data to evaluate whether these efforts effectively address early symptoms of mental illness, reduce risk for developing mental illness or effectively promote academic success	2	25

Several campuses mentioned using evidence-informed trainings, such as Mental Health First Aid (Kitchener and Jorm, 2004; Wong, Collins, and Cerully, 2015), Question Persuade Refer (QPR) (Cross et al., 2011; Wyman et al., 2008), and Kognito gatekeeper trainings (Smith-Millman et al., 2022), while others discussed providing faculty and staff general information about signs of mental distress. Regarding trainings, one participant shared,

> The best strategies we've employed is working with faculty and staff and empowering them. We made sure staff had trainings on how to identify students. We have a couple hundred people that have completed this training, they understand their role. Staff get a magnet to display that the person has gone through this training, and it shows that they can have an open conversation about mental health.

Despite colleges strongly encouraging their students, faculty, and staff to participate in mental health training and educational sessions, none mandated their participation. Several participants noted that institutional and employee union policies restrict the ability for staff or administration to mandate these types of efforts, even though contracts could be modified to accommodate mandatory trainings.

In addition to identifying students showing early signs of mental distress, colleges have also invested in early intervention efforts that support students who may be at greater risk for mental health challenges because of their demographic and socioeconomic backgrounds (e.g., first-generation students, immigrants, students of color, LGBTQ+ students, or low-income students).

Participants widely acknowledged that students from traditionally marginalized and minoritized populations needed additional mental health support because these individuals were at higher risk of developing mental health challenges. For that reason, participants mentioned the need to "amplify [student] voices" and connect these students with specific programming, services, and other students who shared similar demographic backgrounds. For example, two colleges intentionally created mental health resource materials featuring diverse members of the student community. Another college offered mental health drop-ins specifically for undocumented immigrants, veterans, and students of color. Other types of efforts included pen pal programs in which students from traditionally marginalized communities could write to each other for support and peer-to-peer support groups for at-risk students, including first-generation college students, students who are caregivers, and gender-nonconforming students.

The creation of these tier 2 efforts for more-vulnerable students was also motivated by the desire to cultivate a more inclusive campus environment. Several participants reported participating in the Jed Foundation Campus program, in which health equity is a particular focus. In a few cases, participants closely engaged with diversity, equity, and inclusion staff about "special mental health programming." Despite these concerted efforts, many participants noted that they were struggling to provide this kind of targeted mental health support because they were "putting out fires," had few disposable resources that allowed for the time and staff to support development and implementation of programs, and said that institutional leadership (e.g., presidents, vice presidents, deans) did not prioritize the mental health needs of these students (as evidenced by, e.g., lack of financial support or intentional information gathering on the needs of these student populations).

Like tier 1 prevention approaches, colleges relied heavily on the counseling service departments to implement early intervention efforts. In a few instances, student-led committees helped with the implementation of these efforts.

Finally, most participants discussed early intervention programs simultaneously with universal efforts, suggesting that few colleges thought about the distinct but complementary role of prevention (i.e., creating a foundation for mental well-being for all students) versus early intervention efforts (i.e., reducing risk for more-serious mental illness). This lack of distinction is likely also an artifact of most colleges engaging in efforts that align with the Public Health

Prevention Framework while not formally ascribing to this approach in their strategy (or having no strategy).

Counseling Services and Support for Crisis Intervention (Tier 3)

All colleges reported offering mental health counseling services for their students. Most participants said that the demand for mental health counseling services has increased over time, and they reported challenges with meeting student demand. For many of the colleges we examined, the counseling service department consisted of three or fewer licensed mental health providers (e.g., licensed marriage and family therapists, psychologists, mental health counselors, social workers). To meet the rising demand for services, some colleges reported using grant funding to hire additional counseling staff to temporarily increase capacity. Other participants shared that they resorted to relying on graduate students completing their clinical internships to provide counseling services; though this approach is limited by the availability of counseling staff to provide supervision.

In addition to in-person services, all colleges reported the use of telehealth services (Table 3.1), both in response to COVID-19 risk mitigation policies (e.g., stay-at-home orders) and to accommodate the growing demand of students with limited accessibility to on-campus services and resource constraints. Although adding telehealth services addressed some barriers to accessing care, it also presented logistical challenges, according to some participants. For example, some participants struggled with bouncing back and forth between in-person and telehealth modes of service delivery, which resulted in longer wait times between sessions for students, ultimately reducing the total number of students seen. Additionally, students may not have access to proper equipment, internet, or private spaces to participate in telehealth counseling sessions. One participant shared,

> The whole universe of health needs has changed. [We] needed to make the transition to telehealth therapy only, [and] only this fall of 2021 were they back to in person counseling. [We] saw a significant wave of students who chose not to access or didn't have the right home environment to do teletherapy. Students came in droves to get in-person services. So, they let their mental health go for some time because they couldn't appropriately take advantage of telehealth.

Colleges have experimented with different approaches to delivering services to not only meet the growing demand for mental health supports but also address capacity and resource challenges. For a few colleges, mental health counseling and academic counseling were provided by the same department and individuals, raising concerns among staff of confidentiality for the student. Other participants said that their community colleges clearly delineated the role of academic-related counseling and mental health counseling. In addition to in-person and telehealth services, several colleges use external partnerships or connections with community-based mental health providers as a tool to provide students with longer-term care (many colleges

limit students to a small number of sessions per year) or connect students to more culturally sensitive care (e.g., connecting students of color with providers of similar background).

Despite experimenting with different approaches to delivery, colleges continue to face capacity constraints and struggle to meet the mental health needs of their students. Generally, counselors' roles have shifted over time, with counselors juggling many different responsibilities, including providing one-on-one services for students, leading groups for at-risk students (e.g., veterans, LGBTQ+ students), facilitating specialized programming, participating in community outreach, and providing mental health training to faculty and staff. Colleges that have historically, or even more recently, separated the roles of academic advisers and mental health counselors have been able to deliver more effective mental health support to their students according to participants. For instance, one participant shared,

> Counselors used to do academic, career, and personal counseling. Even if they weren't trained to do all these things, they used to do all types of counseling. [The] new dean of students then required that all counselors needed to be licensed, needed to specify the counseling roles. People were given the choice to get [their license] or stay with career or academic counseling; but if you wanted to maintain the role in mental health, they needed to get more education. This shift was significant and happened seven to eight years ago.

All participants expressed the importance of securing permanent mental health counselor roles to both meet the ongoing needs of students and communicate to the broader college community that mental health is a priority.

Integrating Mental Health Support into the College Environment

Guided by the notion that colleges need to think more holistically about student support and that mental health supports will be most effective when they are deeply integrated into the campus and academic environment,[6] our study team asked participating colleges about efforts to integrate mental health supports into the broader college environment (aim 2). Using findings from the interviews, our study team distilled five types of efforts that colleges were taking to ensure the integration of mental health supports into the broader college environment: (1) changing of academic environments, (2) staff education, (3) colocation of services, (4) the establishment of cross-disciplinary task forces, and (5) more-explicit referral and screening processes.

[6] See Chapter 2's discussion of the nested and interrelated factors affecting student mental health and the provision of supports.

Changing of Academic Environments

Given that campus and classroom environments play critical roles in shaping a student's postsecondary experience and have the potential to contribute to mental health in both positive and negative ways, faculty and staff are taking initiative to reform practices to better support student mental health. For example, some participants report setting afternoon assignment deadlines to discourage students from working late at night and adding information about mental health supports and services and crisis lines in course syllabi. This approach ensures that most students have ongoing access to information about some of the available supports on campus. One participant noted,

> The thing about including it in the syllabus, what's so great about that, I always say, whether it's orientation, or first week classes, it's drinking from a firehose . . . [and students] aren't going to remember everything that's thrown at them during this introductory time.

Another participant described success offering faculty language to include in their syllabi:

> On the academic side, one of the things we've done over the past couple of years, we've actually provided a mental health statement that faculty can put in their syllabus. It gives them [an] opportunity to share the resources available on campus. Again, faculty are frontline, students are usually reading their syllabus or going over things on the syllabus at the first day of class. Not everyone is using it, but most are.

As noted earlier, some colleges share information about counseling services and about mental health more broadly in visits to classrooms, particularly to those classes required of all first-year students. One participant noted,

> So many students come into this very underprepared. It allows them not only to think about what can I major in, but what are the things around me that can help me stay on that path. Just looking at the data, the students that have gone through this seminar are more likely to stay in school and get their degree compared to students who did not take the seminar.

Most of the colleges infuse information about counseling services, mental health resources, and mental health education more broadly into orientation weeks. Topics often include information about what mental health is, how to effectively cope with and manage stress, and mental health resources (e.g., programs and services). Participants shared that they use these opportunities to connect with new students and provide them a foundation of knowledge around the various supports they can access via their campus.

Faculty and Staff Education

Staff play an essential role in delivering mental health interventions across tiers, and they also help to shape the broader academic and support environments within which students are situated. Training for staff is essential to ensuring that they are aware of student mental health and contributing to supportive environments. Many of the participants highlighted staff

education efforts as key to integrating mental health considerations into the broader college environment. For instance, several colleges reported efforts to reduce faculty and staff stigma related to student experiences (e.g., crying or breaking down in class) in the classroom and normalizing the idea that it is acceptable to display one's emotions in class (and that it does not necessarily signal a crisis). Other examples included seminars for staff across departments on how to support student concerns; educating faculty and staff about supporting their own mental health and addressing implicit biases or stigma they may carry; and helping faculty and staff understand who their students are, the challenges they face, and the effect of those challenges on mental health and academic performance.

Colocation of Services

By colocating mental health supports and student support services, colleges can make them more accessible and potentially engage at-risk students who may otherwise not be aware of available resources. Recognizing the interrelatedness between basic needs (e.g., food security, housing security) and mental health, several colleges shared that counseling services are intentionally colocated with other student services (e.g., campus food pantry). Participants said that the colocation of services allows them to more seamlessly connect students with basic needs or who might need other support (e.g., financial aid) with the mental health supports and services that they may otherwise not know about. As one participant put it,

> We are colocated with the food pantry. We connect [our students] to student assistance that makes sure they can have access to emergency funds. We may not be able to meet their immediate needs, but we can connect them to resources. The student assistance team funnels a lot of students to us [in counseling services]. They can be referred for a number of things. Our accommodations and learning services programs will refer students to us.

Mental Health Task Forces

Cross-disciplinary committees or task forces can provide opportunities for building strong buy-in across college staff and, in turn, increase the likelihood of connecting students in need with mental health resources. A few campuses noted that they have developed a mental health task force, which draws on faculty and staff across a variety of departments. These task forces are responsible for program planning, monitoring of data on student needs, fundraising through grants, and implementation of mental health efforts. In our study, these task forces were tied to specific funding or programs (e.g., the JED Campus program); as a result, the sustainability of these efforts in a resource-deficit environment is unclear.

Referral and Screening Processes

Screening students for mental health challenges and referring them to appropriate services is another way in which colleges are integrating mental health supports into efforts to improve student success. Early intervention screenings and referral procedures varied among colleges.

Three colleges reported the use of a formalized screening process that uses clinically validated instruments to assess for symptoms of mental health disorders. For example, one college shared that any student visiting the student health center completes an intake form that includes screening questions to identify symptoms of depression and anxiety. The other colleges use the Counseling Center Assessment of Psychological Symptoms (CCAPS) Screen to identify and refer students screening positive for depression or anxiety.[7] For these colleges, the CCAPS is offered during Health and Wellness days on campus, on the college website for students to access and complete, or through the counseling department. However, none of these colleges implemented institution-wide mental health screenings for all students.

In addition to formalized screening processes, several colleges described institutionally standardized procedures for alerting mental health counseling staff of struggling students, such as the use of a Campus Assessment Response and Evaluation (CARE) Team in the referral process. A CARE team is a multidisciplinary campus threat assessment and behavioral intervention team that proactively assesses and addresses threatening and/or concerning behaviors among students in the college. One participant shared,

> We have a student assistance team; it's a cross-functional team of employees across the college from multiple campus locations, dean of students, student accommodations, public safety, counseling offices, etc. Our team of members meet on a regular basis to discuss student concerns. We are also a place where community members, faculty, staff, students, and outside-of-the-college community members can make referrals to our team so that we can provide outreach. An employer or parent can make referrals, too. We work to identify who makes the most sense to outreach for the student. Sometimes it's Title 9; sometimes it's the threat assessment team, sometimes student assistance team. We're somewhat of a hub for the referral process; it's been the same even pre-COVID.

Participants shared that these CARE teams are valuable because they help elevate the needs of students experiencing both academic and mental health challenges and identify the most-appropriate resources for the student while maintaining their confidentiality.

Finally, most surveyed colleges relied heavily on psychoeducation regarding symptoms and mental health resources to enhance the skills and confidence of faculty, staff, and peers to identify and refer students in need of mental health supports. Several colleges noted the use of gatekeeper training sessions (e.g., QPR and Kognito) to educate staff (including instructors and academic advisers) and students on how to identify early warning signs of suicide and how to connect students to mental health supports and services. In addition, many colleges offered

[7] The CCAPS-Screen is a validated mental health screening instrument for the general student body that assesses the most common psychological problems experienced by college students. Additional information about the CCAPS-Screen can be found at Center for Collegiate Mental Health (undated).

informational sessions to faculty and staff to learn more about different mental health challenges and where to refer students for support.

Barriers to and Facilitators for Supporting Student Mental Health

Drawing on the Ecological Systems Theory, which argues that effectively supporting student mental health hinges on a variety of personal and contextual factors, we asked participants to report issues that impeded or facilitated their efforts to support student mental health. Below, we describe the most frequently reported barriers to and facilitators for supporting student mental health.

Barriers to Supporting Student Mental Health

Four key barriers emerged as top issues among our participants:

1. **Minimal financial support:** All campuses reported lack of or minimal financial support for counseling services and mental health programs more broadly as a key barrier to implementing efforts to support a wide variety of student mental health supports and services. For these participants, the lack of prioritization of mental health supports was also indicative of a larger systemic issue around how leadership in the colleges conceptualize the importance and role of mental health in student success. Because of the lack of mandatory student health fees to support institutionalized mental health counselor positions, the community colleges in this study reported relying heavily on grant funding. This poses several challenges, including being unable to provide sustainable mental health supports and services, particularly in an environment where counseling staff are already overburdened. One participant shared their frustration with the minimal financial support, stating, "I just feel a lot of pressure to keep finding the funding and argue for funding for our mental health counselor." Others noted that after compensating the counseling staff, very little money is left over to support other aspects needed to sustain or implement programming.
2. **Lack of prioritization among leadership:** As noted our discussion earlier in this chapter about the framework for mental health supports, many participants noted that other faculty and staff outside mental health–related fields have not widely adopted the idea that supporting mental health is part of their role in educating students. In all cases in which this was mentioned, participants said that college leadership had yet to prioritize mental health efforts at the institutional level (e.g., mental health or well-being is not explicitly addressed in institutional missions, strategies, or college policies). This lack of prioritization was often associated with a lack of earmarked funds for mental health programs and lack of protected time for staff to work collaborative to proactively strategize how to best support student mental health beyond counseling services.
3. **Lack of buy-in among faculty and staff:** Community college faculty and staff are uniquely positioned to have a direct and immediate effect on students' mental health because they interact with them routinely. However, staff often feel overburdened with the sheer number of tasks they need to accomplish within their academic duties (e.g., instruction, grading, scheduling). Many staff have openly adopted the responsibility of supporting the "whole" student, including their mental health. However, many others

remain resistant to adding mental health support to their daily activities. Staff who do not prioritize student mental health (e.g., do not attend voluntary trainings, do not share mental health resources in their syllabi, and do not check in on students who display signs of distress) run the risk of missing the opportunity to intervene with students before crises arise and contribute to an unsupportive campus climate. This lack of buy-in among faculty and staff was often associated with a lack of support and prioritization of student mental health from institution leaders.

4. **Low student engagement with mental health programs and services:** Many of the colleges expressed challenges in connecting with and engaging students via mental health prevention, early intervention, and mental health counseling services. Specifically, interviewees noted an ongoing issue with long wait lists for mental health services, and low engagement numbers for campus-based and virtual programs (e.g., psychoeducational sessions, gatekeeper trainings). According to feedback from participants, colleges struggle with low participation numbers for campus-based and virtual programs (e.g., psychoeducational sessions, gatekeeper trainings). Interviewees noted a variety of challenges in engaging students, including disruptions to in-person attendance because of the pandemic, difficulty identifying the best way to promote mental health programs to students, and serving students who do not reside on campus and often have competing life obligations. Some colleges reported on the competing demands of students whereas others noted challenges with finding a good time to schedule programming. For instance, most staff are available to meet during the day, but some students may not make it to campus until late afternoon or evening. In addition, several colleges struggle to identify and connect with students who have heightened risk for mental health challenges but may be apprehensive to seek services or participate in mental health programs. This was particularly the case for subgroups of students (e.g., students of color, LGBTQ+) that typically experience culturally rooted stigma and/or do not have access to mental health staff and counselors who share their cultural background and understand their specific experiences.

Facilitators for Supporting Student Mental Health

With respect to facilitators of student mental health, colleges commonly discussed three major factors:

1. **Student information used as a communication tool:** Three colleges that reported tracking student mental health data noted that being able to use the data to tell a story and show evidence of student persistence contributed to gaining administration buy-in for institutionalizing counselor positions and for changing policies (e.g., requiring course syllabi to have information about mental health resources). The types of data collected among participating colleges varied significantly. Three colleges reported using national surveys (e.g., CCAPS Instruments and the Healthy Minds Study) to gather information on student mental health and symptoms, service utilization, perceptions of campus climate, and other factors known contribute to mental health (e.g., age, race/ethnicity, veteran status). Other colleges collected service-utilization data from the mental health counseling center, while others also gathered informal feedback from students, faculty, and staff on participation in mental health programs.

2. **Support from leadership:** Several colleges discussed the challenges of getting staff and director buy-in to prioritize mental health efforts. However, many of the colleges noted that having high-level college officials (the president, deans, and other leaders involved in institutional funding and policy decisions) prioritize and elevate the importance of student mental health was important in a variety of ways. First, leadership support seemed to translate to faculty and staff buy-in to prioritize student mental health needs, which is important not only for implementation of programming but also for cultivation of a campus climate that is perceived by students as supportive. One college shared that its "president is a very empathetic and compassionate [person] who strongly feels for student support. Because we had the backing of the president and the director, that is what led to [the prioritization of mental health]. . . . Now our dean of student success values the importance of a holistic approach to helping students." Second, leadership support and buy-in seemed to translate to financial support, such as earmarking dollars to hire more counselors or invest in activities that support implementation efforts (e.g., supporting data collection efforts for data-driven decisionmaking; hiring dedicated staff to support student mental health prevention efforts).
3. **State and local funding support:** As noted in the discussion on barriers, all colleges struggled with financial challenges that hindered the ability to institutionalize more licensed therapists or counselors, dedicate resources to data collection and strategic planning, and implement prevention and early intervention programming. However, a few colleges shared successes in obtaining grant funding from local, state, and federal agencies that have earmarked dollars to support mental health and postsecondary student success efforts. For these colleges, grant dollars supported mental health counselor salaries, data collection efforts, strategic planning (via grants to allow for participation in the JED Campus program), and other prevention/early intervention programming (e.g., a Substance Abuse and Mental Health Services Administration grant for a campus-based suicide prevention program).

Summary of Findings

By and large, the group of colleges selected for our study broadly reported implementing a variety of strategies to address mental health along a continuum from well-being to illness, with most colleges providing supports at all three levels in the Public Health Prevention Framework (i.e., prevention, early intervention, and mental health counseling services). Additionally, these colleges used a variety of strategies to ensure that mental health support systems and services were integrated into the broader college environment; these systems and services included staff education and early alert processes, changing of academic environments, colocation of services, and the establishment of cross-disciplinary task forces. Despite these efforts, most colleges still struggled to meet the needs of their students. This struggle was due in part to several barriers reported by participating colleges, including (1) minimal financial support for mental health programs and services, which made sustainability of programs and services challenging, (2) a lack of support from leadership, which likely affected faculty and staff buy-in to address student mental health needs, and (3) challenges identifying and connecting with students for prevention and early intervention programming.

With respect to facilitators, several colleges noted success in using student mental health information as a communication tool to establish support from leadership around prioritizing student mental health. Additionally, support from leadership (e.g., president, chancellors, deans) was instrumental in obtaining more funding and increasing buy-in among faculty and staff to prioritize student mental health.

Chapter 5. Lessons Learned and Implications

Student mental health and well-being are critical to postsecondary academic success. In recognition of this association, many colleges have designed and implemented a wide variety of interventions to ensure that student mental health is well supported, and students are able to persist and succeed in college. Yet some colleges, particularly community colleges, face historical challenges, such as insufficient resources and capacity to treat mental illness, which prevent them from adequately addressing students' mental health needs. Furthermore, we lack information about campus- and system-level efforts currently underway at community colleges to confront the student mental health crisis.

To address this research gap, we examined strategies to support student mental health among a diverse sample of community colleges. We used the Public Health Prevention Framework to examine how community colleges addressed mental health along a continuum from well-being to illness, with a focus on services provided at three levels: prevention, early intervention, and mental health counseling services. We also drew on the Ecological Systems Theory to explore the provision of mental health supports and services within the broader college context, examining the integration of services and the factors that facilitate and hinder the ability of colleges to adequately support mental health. Our findings highlight a set of lessons for community colleges across the country to consider when strategizing how to effectively support student mental health. Here, we highlight five key lessons and their implications for educational institutions, practitioners, and policymakers. Drawing on our literature review (Chapter 2) and our findings (Chapter 4), lesson 1 addresses study aim 1 (approaches colleges were taking to support student mental health); lesson 2 addresses study aim 2 (ways in which colleges integrated mental health supports into the broader college environment); and lessons 3 through 5 address study aim 3 (barriers to and facilitators for supporting student mental health on campus).

Lesson 1: Community Colleges Are Implementing Multilevel Mental Health Supports, Though Most Lack a Clear Organizing Framework

In our effort to describe approaches that community colleges were taking to support student mental health, we found that colleges in our sample conveyed a strong belief in the importance of mental health as a pathway for academic success. This was not surprising given that our sample represented a select group of community colleges likely ahead of the curve on implementing multitier, more-holistic strategies to support student mental health. Colleges reported implementing a wide variety of efforts to support student mental health, from student-centric programs (e.g., stress-reduction seminars or educating students on available resources), to faculty- and staff-focused efforts (e.g., gatekeeper training or educating staff on the link between

mental health and academic success), to institution-wide efforts (e.g., forming mental health task forces to drive strategies to support student mental health). Yet, despite offering a variety of mental health supports, most participating colleges did not have an institutional vision or formal strategic plan for how mental health supports could be coordinated and delivered. Additionally, most colleges discussed early intervention programs (tier 2) interchangeably with universal efforts (tier 1), suggesting that few colleges thought about the distinct but complementary role of prevention (i.e., creating a foundation for mental well-being for all students) versus early intervention efforts (i.e., reducing risk for more-serious mental illness). This finding may be an artifact of most colleges engaging in efforts that align with the Public Health Prevention Framework while not formally branding their efforts as such.

There are several advantages to formally adopting a strategy rooted in public health, education, and psychology theory. The literature suggests that having a framework that addresses mental health on a continuum, from prevention to crisis management, and recognizes larger institutional factors that affect student mental health may be important in increasing positive outcomes (e.g., Abelson, Lipson, and Eisenberg, 2022). Broader uptake of frameworks, such as the Public Health Prevention Framework and the Ecological Systems Theory, which are widely used by K–12 education settings and public health institutions, creates a common language among postsecondary institutions. This common language, in turn, facilitates cross-institution collaboration and the ability for colleges to more easily learn from each other to scale promising practices to support student mental health. In addition, the adoption of the Public Health Prevention Framework and the Ecological Systems Theory offers a blueprint for colleges to address student mental health and understand where and how their investments likely work collectively to affect student mental health. Extrapolating from feedback indicating that data-driven storytelling facilitated support from leadership, an established research-based framework may also help with leadership, faculty, and staff buy-in to prioritize mental health support strategies. However, community colleges continue to face substantial internal capacity constraints (e.g., too few staff, competing demands on time) that challenge the ability to dedicate resources to developing and implementing strategic plans that align with these frameworks. Therefore, institutions may need additional funding (e.g., grant funding, internal dollars) and support from external experts and resources (e.g., informational toolkits, technical assistance from mental health–focused organizations, and strategic planning consultants) to assist with developing a more cohesive and systemic approach to support student mental health. Lessons 4 and 5 discuss these capacity and financial constraints in greater detail.

Lesson 2: Community Colleges Have Expanded Their Reach of Mental Health Supports Through Integration in the Broader College Environment

Findings addressing the ways in which colleges integrated mental health supports into the broader college environment highlighted that all participating colleges were attentive to the importance of considering the whole college environment and the need to deeply integrate mental health supports and services with other college activities. Efforts to integrate mental health supports and services within the college environment included (1) enhancing academic environments, such as integrating information on mental health resources at the college into course syllabi or lessons, (2) staff education on the importance of student mental health and what to do when interacting with a distressed student, (3) colocation of mental health and academic or basic needs services, (4) the establishment of cross-disciplinary task forces, and (5) more-explicit referral and screening processes between instructors, academic counselors, and mental health counseling staff. Those colleges using several of these approaches shared stories of success in supporting a broader base of students and fostering a supportive campus climate.

Although our findings suggest that community colleges have made major strides in supporting student mental health, there is immense opportunity for growth and improvement in consistently and systematically supporting the "whole student." Integration of mental health supports into the broader college environment (i.e., classrooms, academic advising, basic needs support, financial assistance) should remain a core focus of community colleges. For example, explicitly integrating mental health supports into student-facing interventions, such as Accelerated Study in Associate Programs (ASAP) at the City University of New York,[8] that aim to provide holistic support to students has the potential to enhance the success of these programs while reaching those students most in need of support. Moreover, community colleges should consider continuing efforts to improve staff prioritization of student mental health through ongoing education, relationship development between instructors and mental health counseling staff, and institutionalization of low-cost efforts such as standardized language for course syllabi on mental health resources. Finally, colleges should consider identifying and promoting student mental health as a campus-wide priority. Guiding toolkits, such as the Equity in Mental Health Framework created by the Jed Foundation and the Steve Fund, recommend that postsecondary institutions publicly prioritize student mental health by centralizing mental health within a definition of overall student well-being and modifying mission statements and strategies to

[8] ASAP is a comprehensive program designed to help associate degree–seeking students earn their degrees as quickly as possible, with a goal of graduating at least 50 percent of students within three years. ASAP helps eliminate barriers to completing an associate degree by providing students with the academic, social, and financial support. For more information, see City University of New York (undated).

reflect an active commitment to student mental health.[9] Together, these efforts have the potential to demonstrate to both students and staff the institution's commitment to student mental health and foster a supportive campus environment for all students.

Lesson 3: Strong Leadership Support and Broad Buy-In from Staff to Prioritize Student Mental Is Important

As highlighted in our findings examining facilitators for supporting student mental health, support from leadership and broad buy-in from faculty and staff to prioritize and support student mental health were key to establishing a robust set of mental health supports. Having the president, deans, and other leadership figures prioritize and elevate the importance of student mental health seemed to translate to increased financial support for programs and permanent mental health counselor positions and to participation from faculty and staff in education seminars, gatekeeper trainings, and integration of mental health supports into the classroom environment. This type of leadership support and buy-in from faculty and staff is important not only for implementation of programming and availability of services (Aarons, Hurlburt, and Horwitz, 2011; Durlak and DuPre, 2008; Meyers, Durlak, and Wandersman, 2012) but may also help cultivate a campus climate that is perceived by students as supportive. However, many participants noted that faculty and staff outside the mental health–related fields (e.g., psychology, social work, nursing) have not widely adopted the idea that supporting mental health is part of their role in educating students. This may be because of a variety of factors, including feeling overburdened, feeling ill equipped to support students' mental health needs, knowing what resources are available for students on their campus, and fearing the legal implications or repercussions of helping a student in need (Lipson et al., 2021a; Sontag-Padilla et al., 2017). To support the scaling of effective mental health supports and services in colleges, institutional leaders (e.g., presidents, deans, department chairs) may need to do more to elevate institutional priorities around mental health. NASEM (2021) offers several recommendations for college campuses to help build and sustain a culture of support around student mental health. For instance, institutional leaders from all segments of the college (e.g., president, board of trustees or regents, deans) should consider communicating publicly the importance of creating a culture of well-being on their campus. Additionally, institutions should consider establishing and/or maintaining a team that involves all sectors of the college that coordinates, reviews, and

[9] The Equity in Mental Health Framework provides colleges and universities with ten recommendations and implementation strategies to help inform and strengthen their mental health support and programs for students of color. In addition, the Equity in Mental Health Toolkit offers additional support in implementing the recommendations in the Equity in Mental Health Framework, including supporting campus-based efforts to reduce stigma, improve campus climate, and provide systemwide opportunities to help all students thrive. For more on the framework and toolkit, see Steve Fund and Jed Foundation (2017).

addresses mental health, substance use, and well-being concerns and efforts. Those colleges that received support from leadership or established similar mental health task forces said that these factors were central to their success in effectively addressing student mental health.

Lesson 4: Community Colleges Struggle to Meet Students' Mental Health Needs Because of Limited Resources

As evidenced by our findings on barriers to supporting student mental health on campus, community colleges have made major strides in delivering prevention, early intervention, and counseling services despite significant financial and capacity constraints. However, community colleges continue to face challenges meeting the increasing demand for mental health services and a coordinated and strategic effort to implement programs designed to bolster a foundation of mental well-being. Though a variety of factors are at play (e.g., leadership support, limited financial resources), participants attributed these challenges primarily to limited staff capacity to "do it all." For most of the colleges, mental health counselors wore many hats, juggling delivery of counseling services, support groups for students, staff education, and orientation week sessions on mental health.

With respect to supporting students most at risk for mental health challenges (e.g., students of color, LGBTQ+ students, first-generation students, and low-income students), participants widely supported the notion that these traditionally marginalized and minoritized populations need additional programming to support their mental health. However, programs that focused on these subgroups were often designed and implemented in an ad hoc and piecemeal fashion, contributing to challenges with coordination across programs and to a lack of awareness and uptake of supports by students potentially most in need. Additionally, despite the use of creative approaches to expand access to mental health services (e.g., use of telehealth, grant funding to hire more counselors, community-based partnerships), many participants said that utilization of services among high risk students remained low. Improving access and uptake of mental health supports and services can help to advance equity (both health and academic success), but, to do so, they must reach these students.

To address these identified challenges, community colleges would need more financial resources dedicated to supporting mental health. In recognition of this barrier, the NASEM (2021) report on mental health in higher education urges institutions to consider reallocating existing institutional funds to support counseling centers and broader efforts to support student mental health. Although community colleges continue to struggle with insufficient financial resources, financially prioritizing student mental health may have large implications for future financial stability. For instance, a 2016 RAND study estimated that investing in prevention and early intervention mental health initiatives for college students could yield an $11.39 return to society for each dollar invested on community college campuses (see Ashwood et al., 2015).

In addition to more institutional funding, counseling centers and student success staff will need to continue to think creatively about how to reach students who need them most and root decisions about programs and engagement in data on their target populations (e.g., examine a variety of factors grouped by high risk subgroups, including symptoms of stress, academic impairment and mental distress, utilization of services, stigma, primary barriers to accessing services). For instance, federally supported programs like Trio, which is designed to assist eligible students (e.g., first-generation students) to begin and complete a postsecondary education, could offer mechanisms for screening and referral between academic supports and counseling centers and for mandating participation in mental health education and skill-building programs. In addition, several toolkits provide concrete and actionable recommendations for addressing mental health equity in college settings. For instance, in their Equity in Mental Health Framework, the Jed Foundation and the Steve Fund suggest several tactics to help students learn about programs and services, including (1) collaborating with student leaders and campus groups to co-lead the selection, advertising, and implementation of culturally relevant programs, and (2) taking programming to students in places they routinely access (e.g., residence halls, athletic facilities, student center, multicultural center).

Finally, to help streamline processes and alleviate some of the burdens encountered by mental health counselors, community colleges should consider conducting an audit or needs assessment of current efforts to reduce redundancy across programs while simultaneously improving integration of supports, elevating efforts that have been most successful at reaching students, and identifying key areas for opportunities to better engage and support students most at risk (e.g., students of color, LGBTQ+ students, first-generation students, and low-income students).

Lesson 5: Financial Support for Student Mental Health Should Extend Beyond Postsecondary Institutions

As evidenced by our findings on barriers to supporting student mental health and as discussed in lesson 4, community colleges struggle to find financial resources to support their efforts (even among a sample of community colleges likely ahead of the curve on addressing student mental health). A few colleges described successes in obtaining grant funding from local, state, and federal agencies that have earmarked dollars to support mental health and postsecondary student success efforts. Although these resources are helpful, they do not appear to be sufficiently meeting the capacity and financial needs of the colleges to adequately support their students' mental health and place a tremendous burden on staff to identify and apply for these funds on a continual basis. Aligned with recommendations from NASEM (2021), our findings highlight the need for government agencies and philanthropic entities to increase the priority given to funding mental health supports and services on community college campuses. Federal and state agencies should increase financial support for prevention and early intervention

efforts with particular attention to community colleges. In addition, national, state, and local funders of higher education should consider incentivizing community colleges to provide support for students' mental health across the continuum of care (prevention through treatment). Finally, states should consider modifying insurance laws or regulations to enable institutions to use general funds and/or designated health fees for expenses that are not covered by students' personal insurance. Recognizing that U.S. higher education is experiencing significant financial constraints (Finley, 2021; Hunt Institute, 2020), in part triggered by the pandemic and the resulting harm to the U.S. economy, finding new funds to provide additional resources for students experiencing mental health problems may prove to be challenging. Nonetheless, establishing consistent, long-term funding sources to support community colleges may be necessary to creating sustainable, comprehensive mental health supports for students.

Considerations

Our findings must be considered within the context of the study's limitations. First, we drew on a convenience sample of community colleges identified by our collaborators, Active Minds and the Jed Foundation, both national leaders in the space of college mental health. Relying solely on their networks for our sampling strategy excluded from consideration other community colleges that may also use a multilevel, systemic approach to supporting student mental health. In addition, we relied on a relatively small sample size of eight colleges and feedback from 28 college faculty and staff, rather than including student perspectives or data on actual services available. As a result, our findings may not represent more broadly promising and emerging approaches to supporting the mental health of community college students.

Although some colleges noted that they gathered feedback from students and tracked student mental health needs to guide decisionmaking, these perspectives were not triangulated with data to demonstrate whether any of the efforts to support student mental health identified in our interviews would be considered promising or best practices to positively affect student mental health and academic success more broadly. Finally, our study focused solely on community colleges. Although the study provides valuable information to address current research gaps in understanding what community colleges are doing to support student mental health, its findings may not translate fully to four-year institutions that also struggle to adequately address the mental health crisis among college students.

Despite its limitations, our study is, to our knowledge, the first to describe ways in which community colleges are implementing multilevel, systemic approaches to support student mental health, ways in which these efforts are being integrated into broader student success initiatives, and the barriers and facilitators that community colleges face when addressing students' mental health needs.

Conclusions

Limited financial resources and staff capacity to deliver supports and services continue to challenge community colleges' ability to adequately support their students' mental health needs. Even among a sample of community colleges embedded within a formal network of organizations supporting student mental health (i.e., Active Minds or the Jed Foundation), community colleges continue to face a number of barriers to supporting student mental health. Although limited financial resources and staff capacity to deliver supports and services continues to be a challenge for community colleges, this study identified several opportunities for community colleges to improve implementation and influence of student mental health supports (such as enhanced leadership support, utilization of guiding frameworks and data-driven decisionmaking), and to improve cross-discipline collaboration to support planning and implementation efforts. Despite these insights, our findings emerge from a small and select group of community colleges identified as emerging leaders in the space of supporting student mental health, and we lack campus- and student-level data to corroborate our findings. Therefore, our findings highlight the need for continued investment in large-scale and rigorous evaluations on system- and campus-level efforts to identify effective and scalable programs and address major gaps in our understanding of student mental health supports in community colleges.

Appendix A. Pre-Interview Survey

Collection of Student Mental Health Data

1. Does your college collect data on your students' mental health needs? (YES/NO/NOT SURE)
2. [If #1 is YES/NOT SURE] What are the sources for these data?
    a. Does your college collect student mental health data through **administrative records or reports** (e.g., from student services, counseling center, registrar's office) (YES/NO/NOT SURE)
        i. [If #2a is YES/NOT SURE] What kinds of student mental health data does your college collect from administrative records and reports? (Open response)
        ii. [If #2a is YES/NOT SURE] How often do you collect student mental health data from administrative records or reports? (Once a semester, once an academic year, on a continual basis, not sure)
        iii. [If #2a is YES/NOT SURE] Does your campus make summaries or reports on these data available to the campus community? (YES/NO/NOT SURE)
    b. Do you collect student mental health data through **surveys**? (YES/NO/NOT SURE)
        i. [If #2b is YES/NOT SURE] What kinds of student mental health data do you collect from surveys? (Open response)
        ii. [If #2b is YES/NOT SURE] How often do you collect student mental health data from surveys? (Once a semester, once an academic year, on a continual basis, not sure)
        iii. [If #2b is YES/NOT SURE] Who takes these surveys? (Check all that apply)
            - ☐ Counseling staff
            - ☐ Students
            - ☐ Faculty
            - ☐ Administrators
            - ☐ Other (please specify)
        iv. [If #2b is YES] Does your campus make summaries or reports on these data available to the campus community? (YES/NO/NOT SURE)
    c. Do you collect student mental health data from **screeners or early warning systems**? (YES/NO/NOT SURE)
        i. [If #2c is YES/NOT SURE] What kinds of student mental health data do you collect from screeners and early warning systems? (Open response)
        ii. [If #2c is YES/NOT SURE] How often do you collect student mental health data from screeners and early warning systems? (Once a semester, once an academic year, on a continual basis, not sure)
        iii. [If #2c is YES/NOT SURE] Does your campus make summaries or reports on these data available to the campus community? (YES/NO/NOT SURE)
    d. Do you collect student mental health data from sources other than the ones we just mentioned? (YES/NO/NOT SURE)
        i. [If 2d is YES/NOT SURE] What are these data sources? (Open response)

ii. [If 2d is YES/NOT SURE] kinds of student mental health data do you collect from these data sources? (Open response)
iii. [If 2d is YES/NOT SURE] How often do you collect student mental health data from these other sources? (Once a semester, once an academic year, on a continual basis, not sure)
iv. [If #2d is YES/NOT SURE] Does your campus make summaries or reports on these data available to the campus community? (YES/NO/NOT SURE)

Factors Impacting Student Mental Health

3. From your perspective, what do you see as the primary factors currently contributing to your students' mental distress or illness? **(Select the five most important challenges from the list below).**
   - ☐ COVID-19
   - ☐ Cost of living
   - ☐ Unstable housing
   - ☐ Food insecurity
   - ☐ Academic rigor
   - ☐ Campus climate
   - ☐ Access to quality mental health care
   - ☐ Competing responsibilities (e.g., school, job, family)
   - ☐ Other (please describe)

Efforts to Address Academic and Environmental Determinants of Mental Distress

Next, we would like to ask you about how your campus addresses the academic and environmental determinants of mental distress and illness.

4. Does your campus currently offer basic needs support (e.g., access to food bank, housing assistance, emergency aid funding) to students? (YES/NO/NOT SURE)

   a. [If #4 is YES] What kinds of basic needs support does your college offer to students? **(Select all that apply)**
   - ☐ Access to an on-campus food bank or pantry
   - ☐ Access to an on-campus homeless shelter
   - ☐ Help enrolling students in government assistance programs (e.g., SNAP, Medicaid, TANF)
   - ☐ Support for students transitioning to stable housing
   - ☐ Institutional funding to students for emergency aid
   - ☐ Other (please describe)

5. Does your campus currently offer programming or resources that support your students' **physical wellness**? (YES/NO/NOT SURE)

   a. [If #5 is YES] What kinds of physical wellness programming or resources does your college offer to students? **(Select all that apply)**
   - ☐ Recreational programming (e.g., exercise classes, yoga classes, intramural sports and clubs, gym access)
   - ☐ Programming promoting healthy behaviors (e.g., healthy eating and sleeping habits)
   - ☐ Resources on how to purchase or use health insurance
   - ☐ Resources on how to manage chronic health conditions
   - ☐ Resources on when to seek help if a student becomes physically ill

- ☐ Other _____

6. How does your college support the academic success of your students? **(Please select all that apply)**

- ☐ Learning communities
- ☐ Tutoring services
- ☐ Peer networks and mentoring
- ☐ Student success courses
- ☐ Academic advising and guidance
- ☐ Other _____

Leave of Absence Policies

Next, we would like to learn about your leave of absence policies for students experiencing mental distress or illness.

7. Does your campus have a leave of absence policy for students suffering from mental distress or illness? (YES/NO/NOT SURE)
    a. [If #7 is YES] Is this leave of absence policy the same for students suffering from other hardships (e.g., physical illness, family emergency)? (YES/NO/NOT SURE)
    b. [If #7a is NO] Please describe how the leave of absence policy for students experiencing mental distress or illness is different? (Open response)
    c. [If #7 is YES] Where can students suffering from mental distress or illness find your leave of absence policy? *(***Check all that apply)**
        - ☐ School's website [provide URL]
        - ☐ Counseling center
        - ☐ Student Services
        - ☐ Department Offices
        - ☐ Other _____

Staff Training on Supporting Student Mental Health

Next, we would like to learn about the training that staff and faculty receive to support student mental health.

8. Does your campus train faculty and staff to support student mental health? (YES/NO/NOT SURE)
    a. [If #8 is YES/NOT SURE] Do these trainings cover the following content? (YES/NO/NOT SURE)
        1. General information about mental health (e.g., descriptions of different mental health disorders; information about which demographic groups are most at risk of developing a mental illness)
        2. How to help students manage stress and improve their overall mental health
        3. How to identify students in distress and refer them to appropriate supports
        4. Other: (please describe)
    b. [If #8 is YES/NOT SURE] How often does your college provide these trainings? (Once a semester, once an academic year, on a continual basis, not sure)
    c. [If #8 is YES] Is participation in these trainings mandatory? (YES/NO/NOT SURE)

Programs Supporting Student Mental Health

Next, we would like to learn more about your efforts to promote student mental health.

9. Is your college currently implementing programs or efforts to promote overall student mental well-being (not just for those students at risk for mental health challenges)? (YES/NO/NOT SURE)

a. [If #9 is YES] Below is a list of efforts you may be implementing to promote overall student mental well-being. **Check all that apply to your campus:**

- ☐ Efforts to change institutional culture
- ☐ Efforts to change institutional policies and practices
- ☐ Efforts to educate students about mental health
- ☐ Efforts to reduce stigma around perceptions of mental illness or seeking help for mental illness
- ☐ Efforts to help students learn how to cope with stress and hardship
- ☐ Efforts to help students develop healthy identities, manage emotions, establish and maintain supportive relationships, and make responsible and caring decisions (e.g., social emotional learning skills)
- ☐ Efforts to share mental health resources and information with students and faculty/staff
- ☐ Other: please describe

b. [If #9 is YES] Does your college gather data to evaluate whether these efforts effectively promote **student mental health**? (YES/NO/NOT SURE)

c. [If #9 is YES] Does your college gather data to evaluate whether these efforts effectively promote **academic success**? (YES/NO/NOT SURE)

10. Is your college currently implementing efforts to support students at higher risk of experiencing mental illness or showing early symptoms of mental illness? (YES/NO/NOT SURE)

a. [If #10 is YES/NOT SURE] Please identify efforts your college is implementing to support students at higher risk of developing mental illness or showing early symptoms of mental illness. (**Check all that apply)**

- ☐ Efforts to identify students at high risk for suicide or other serious mental illness (e.g., early warning systems, mental health screenings)
- ☐ Trainings for students, staff, or faculty to identify students showing warning signs of mental illness or suicide risk
- ☐ Trainings for students, staff, and faculty on how to appropriately respond to and support students showing warning signs of mental illness and suicide risk
- ☐ Small group intervention programs focused on coping, stress management, or other ways to address early symptoms of mental distress
- ☐ Peer-to-peer support for at-risk students
- ☐ Other: please describe

b. [If #10 is YES/NOT SURE] Does your college gather data to evaluate whether these efforts effectively address early symptoms of mental illness or reduce risk for **developing mental illness**? (YES/NO/NOT SURE)

c. [If #10 is YES/NOT SURE] Does your college gather data to evaluate whether these efforts effectively promote **student academic success**? (YES/NO/NOT SURE)

Mental Health Counseling Services

Finally, we would like to ask you about the mental health treatment services offered to your students.

11. Does your college offer **in-person** counseling services or mental health treatment services? (YES/NO/NOT SURE)
12. Does your college offer **telehealth** mental health services (e.g., telehealth counseling, coaching, or on-demand crisis services) to your students? (YES/NO/NOT SURE)
13. Does your college have a partnership or collaboration with **community-based mental health providers** to offer students mental health treatment services? (YES/NO/NOT SURE)

14. Does your campus have a policy that requires faculty or staff to notify academic services when a student is experiencing mental health distress or illness? (YES/NO/NOT SURE)

Appendix B. Semistructured Interview

Background on Respondents

1. How long have you worked at [campus name]?
2. What is your current role on campus?
3. What is your role in the implementation of efforts to support student mental health?

Models Supporting Student Mental Health

We would now like to spend some time talking about how your campus supports student mental health.

1. Can you tell me about the philosophy or framework that drives how you approach supporting the mental health of your students?
    a. [If seem unsure or need clarification: For example, some campuses use a comprehensive approach to mental health, which involves doing preventive activities and enhancing treatment and crisis response. Others may focus downstream on crisis. Some may believe that mental health is the responsibility of all faculty and staff; others believe it is primarily the responsibility of counseling staff.] What has informed that thinking? [Probe on ideas, organizations, data, resources]
    b. Who were the key players that shaped that thinking? [Probe on faculty/staff, administration, on-campus or off-campus mental health providers, students]
    c. How has this approach influenced the types of efforts you are implementing to support student mental well-being?
2. In the survey, you (or your colleagues at your campus) shared a bit about the types of challenges facing your students. From your perspective, have student mental health needs changed as a result of COVID? How so? [Probe on the <u>why</u>, whether the answer is yes or no]
    a. Has your approach to thinking about supporting mental health changed in response to COVID-19? How so?
3. [If pre-interview survey indicates no data collected on student mental health] We learned from the pre-interview survey that your campus does not track data on your students' mental health needs. Can you share why not?
    a. Is this something you plan on doing in the near future?

Efforts Supporting Student Mental Health

For the next part of the interview, we are going to ask you about the programs, efforts, and initiatives that your campus is implementing to support student mental well-being. From the pre-survey, we learned about some of the ways your campus supports student mental well-being. We would like to spend a bit of time learning more about these efforts.

For the purpose of this conversation, we consider mental well-being to include healthy coping and stress management, emotional and behavioral health, healthy management of substance use and other behaviors that decrease risk of more serious mental issues. To start off, we want to learn more about how your campus is promoting a campus climate supportive of student mental health and the overall mental wellness of your students. These are efforts that focus on ALL students, not just those at risk for mental health challenges.

Tier 1: Universal Promotion / Prevention Programs / Campus Climate

1. [If reported tier 1 efforts in survey] In the survey, you (or a colleague of yours) shared that you are currently engaging in a number of efforts to promote overall student mental well-being. These would be efforts for all students, not just for those students at risk for mental health challenges. Can you share more about these efforts? [**Reminder:** Focus on efforts mentioned in survey, and probe on other efforts that directly address mental health and well-being]
2. [If reported no tier 1 efforts in survey] In the survey, you (or a colleague from your campus) shared that your campus currently does not implement universal programs or efforts to promote overall student mental well-being. These would be efforts for all students, not just for those students at risk for mental health challenges. Can you tell me why your campus is not implementing these types of efforts?

   [IF NOT PROVIDED IN ANSWER FROM PRECEDING QUESTION]

   a) How long have these efforts been in place?
   b) Are any of these efforts mandatory for all students or faculty/staff?
   c) Who is involved in implementing these efforts? [Prompt: students, health care providers, faculty, social services administrators]
   d) Which factors helped to get these efforts off the ground? [Probe on external or internal pressure, external or internal resources; close connection with local health community]
      i. What kinds of barriers did you have to overcome (e.g., faculty resistance, resource constraints)?
      ii. Can you tell if these efforts are making a difference? How so?
      iii. What factors are making these efforts successful? What could make them even more successful?

Tier 2: Early Intervention Efforts

Thanks so much for sharing that information. We are now going to turn to efforts that seek to support students who are experiencing early signs of mental distress or are at higher risk for mental distress or illness. This may include BIPOC students, LGBTQ+ students, low-income students or working parents, for instance, who we know are at increased risk for mental health challenges.

1. [If reported tier 2 efforts in survey] In the survey, you (or a colleague of yours) shared that you are currently engaging in a number of targeted efforts to support students at risk for mental health challenges or who are showing early signs of distress. Can you share more about these efforts?

[**Reminder:** Focus on efforts mentioned in survey, and probe on other efforts that directly address mental health and well-being]

2. [If reported no tier 2 efforts in survey] In the survey, you (or a colleague from your campus) shared that your campus currently does not implement more-targeted programs for students at risk for mental health challenges. Can you tell me why your campus is not implementing these types of efforts?

   [IF NOT PROVIDED IN ANSWER FROM PRECEDING QUESTION]

   a) How long have these efforts been in place?
   b) Who is involved in implementing these efforts? [Prompt: students, health care providers, faculty, social services administrators]
   c) Which factors helped to get these efforts off the ground? [Probe on external or internal pressure, external or internal resources; close connection with local health community]
      i. What kinds of barriers did you have to overcome (e.g., faculty resistance, resource constraints)?
   d) Can you tell if these efforts are making a difference? How so?
      i. What factors are making these efforts successful? What could make them even more successful?

Tier 3: Mental Health Treatment Services

In the pre-interview survey, we learned a bit about the different ways your campus offers students access to mental health treatment services.

1. What are the primary challenges your campus faces in providing students access to treatment services?
2. In your experience, are these services meeting the needs of your students? Why or why not?

Supporting Students of Color

You have shared with us some of the various ways your campus supports student mental health, both broadly and for those at risk or showing early signs of distress. We are also interested in learning about efforts your campus may be making to specifically to support the mental health and well-being of students of color. In what ways does your campus:

1. Identify and promote the mental health and well-being of students of color as a campus-wide priority?
2. [If not addressed in the above sections] Specifically address the mental health needs of students of color?
3. Gather data to understand the mental health needs and broader indicators of well-being for students of color?
4. Actively recruit, train, and retain a diverse and culturally competent faculty and professional staff?

5. Create dedicated roles to support well-being and success of students of color?

Integrating Mental Health Strategies into Student Success Initiatives

You've mentioned implementing several efforts to support student mental health on your campus.

1. How (if at all) does your campus integrate approaches to support mental health with broader student success initiatives (e.g., Single Stop, Academic early alert systems, resource centers, academic advising, peer support, centers to support basic needs)?
    a. Is mental health something addressed as part of students' first year experience?
    b. Coaching programs?
    c. Other health and wellness programs, such as those done through the campus recreation center (if one exists)?

Faculty and Staff Training

In the survey, you (or your colleague) shared some of the ways that you involve faculty and staff in supporting student mental health.

1. How does your campus encourage buy-in among faculty and staff regarding their role in student mental health and creating an inclusive environment that supports student mental well-being?

Wrap-Up

That brings us to the end of our conversation today. Is there anything else you'd like to share about supporting student mental health that we haven't already discussed today?

Abbreviations

CARE	Campus Assessment Response and Evaluation
CCAPS	Counseling Center Assessment of Psychological Symptoms
COVID-19	coronavirus disease 2019
IPEDS	Integrated Postsecondary Education Data System
LGBTQ+	lesbian, gay, bisexual, transgender, queer, and/or plus
NASEM	National Academies of Sciences, Engineering, and Medicine
PI	principal investigator
QPR	Question Persuade Refer

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