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Examining the Role of Perceptions in the Appraisal of Mental Health, Self-Stigma, Resource Availability, and Work Environment Among Healthcare Providers at Different Career Stages in the Emergency Department

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ABSTRACT

Background: Psychological distress among emergency department (ED) providers is a pervasive concern within healthcare, yet very few seek care. This phenomenon is multi-faceted and often attributed to fear, lack of time, inadequate resource availability, and mental health care-seeking stigma. Resource availability, legislation, and recommendations from governing bodies surrounding educational requirements have evolved significantly in recent decades, effectively changing learning environments and customs across providers at different career stages, however, there is still an ongoing need to address concerns. Among a cohort of ED providers at varied career stages, this thesis examined their perceptions of resource availability throughout training, stigma, and the status of mental health in the ED in hopes of understanding how individual experiences shape perceptions.

Methods: A two-wave, sequential mixed-methods study was conducted to examine physicians, advanced practice providers (APPs; i.e., nurse practitioners and physician assistants), and resident physicians working in the ED at an academic medical center in the northeastern U.S. The wave 1 survey assessed demographic information in addition to resource availability during training, institutional monitoring, and institutional regulations. Wave 2 qualitative interviews were conducted following the completion of the quantitative survey. Thematic analysis was used to analyze qualitative data.

Results: The wave 1 respondent sample included 20 physicians, 10 APPs, and 13 residents (an overall survey response rate of 39% of all ED clinical staff). There were 13 in-training providers, 21 early/mid-career providers, and 9 senior-career providers included in the quantitative sample. From the survey, more than two-thirds of in-training and early/mid-career providers perceived to

have access to wellness programming, mental health counselors, crisis resources, and peer support throughout education and training, whereas less than 25% of senior-career providers reported having the same resources. The results from the survey helped in the development of the interview guide and shaped the qualitative assessment. The interview sample included 6 physicians, 8 APPs, and 2 residents (75% of whom had completed the initial survey). 4 participants were designated as in-training, 6 as early/mid-career, and 6 as senior-career. Thematic analysis identified three main themes: (1) perceptions of mental health care and resource accessibility across training, (2) perceived cultural and self-stigma, and (3) a negative ED culture.

Conclusion: Findings highlight a significant disconnect in reported resource availability and stigma across stages of professional development. This disconnect may, in part, emphasize the significance of providers' perceptions and clarify how they impact provider mental health and well-being. Future research should examine the evolution of social, occupational, mental, and physiological influences and the impact on provider perceptions, to better understand the mental health crisis in medicine.

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Chapter 1: Introduction

A cultural phenomenon within the field of medicine is the widely held belief that providers should possess an undeniable mental and physical toughness, rooted in self-sufficiency and invincibility (Shanafelt et al., 2019; Wessely & Gerada, 2013). The evidence of this cultural belief is made clear when examining the incongruence between espoused value (what is said) and artifacts (real behavior) within various domains in medicine. For example, among physicians, the espoused value is that self-care is important; after examining real behavior, however, the indication is work is regularly the first priority and often physicians do not take care of themselves (Shanafelt et al., 2019).

Healthcare professionals are used to caring for others and, therefore, it is often assumed that they can manage their own mental health as well (Gascon Ivey, 2023), however the opposite has frequently been found to be the case. The prevalence of depression, anxiety, and burnout among healthcare providers is a rapidly growing public health issue that has begun to receive a lot of attention. In the United States, workplace demands among physicians, advanced practice providers (APPs; nurse practitioners (NPs) and physician assistants (PAs)), and resident physicians have resulted in high levels of stress and deteriorating mental health (Buck et al., 2019; Kirch, 2021; Mihailescu & Neiterman, 2019). For example, Shanafelt and colleagues (2019) found providers were sacrificing their mental and physical health to prioritize work. Researchers identified providers as “dysfunctional perfectionists,” operationalizing the term to reference providers who prioritize work in an unsustainable manner that leads to dissatisfaction and burnout (Shanafelt et al., 2019). This is not merely a descriptive problem; it has been shown that providers experiencing severe stressors, burnout, and even depression are more likely to commit medical errors, putting patient safety at risk (de Oliveira et al., 2013; Shanafelt et al.,

2010). Such findings raise concerns for healthcare providers, as burnout is the culmination of acute and chronic stressors, one's appraisals of stressors, and perceptions of support, that can each have long-term repercussions on provider health through the disruption of physiological stress systems.

Physiological Response to Stress

For instance, acute stress resulting from individual appraisal of a stressful situation resulting in a behavioral and physiological stress response concludes when the body returns to a normative or homeostatic state (Smyth et al., 2013). However, chronic stress resulting from repeated activation of the stress response system due to frequent exposure to stressors can have detrimental physiological effects. Relevant physiological mechanisms for adverse long-term health outcomes include repeated activation of the sympathetic-adreno-medullar (SAM) and hypothalamus-pituitary-adrenal (HPA) axes (Hannibal & Bishop, 2014). Repeated activation of these systems produces elevated levels of circulating stress hormones including epinephrine, norepinephrine, and cortisol (Greenland et al., 2010). Excessive secretion of these hormones has been related to immune function suppression, incite variations in normal heart rhythm (e.g., ventricular arrhythmias), provoke adverse physiological changes such as increased blood pressure (Greenland et al., 2010), and put an individual at risk for developing cortisol dysfunction and other related health problems including cardiovascular disease (CVD) and depression (Cohen et al., 2007; Hannibal & Bishop, 2014). Therefore, it is essential to consider both the psychological and biological side effects of stress experienced by providers and the potential repercussions on the greater healthcare system (e.g., patient care, provider health and ability to work). Acknowledging and valuing the ramifications of provider physiological and

psychological wellbeing can serve to better understand provider attitudes and stigma in the workplace and how they contribute to the culture of medicine – a topic addressed below.

Current State of Mental Health in Medicine

As discussed previously, the culture of medicine perpetuates the requirement for providers to possess certain values. The requirement for toughness is believed to perpetuate self-stigma— an individual's negative personal perceptions about oneself or one's qualities that contributes to a lack of vulnerability among providers in the field (Braquehais & Vargas-Cáceres, 2023). The perception of a collective negative view and outside or self-stigma surrounding mental health in the medical field is deeply rooted in a cultural phenomenon that neglects and fails to recognize mental health as a significant health topic; one in which providers are indoctrinated into quite early in their careers. For example, Schwenk and colleagues (2010) found that among a cohort of 512 medical students, those suffering from depression, or another mental illness, held differing if not stronger stigmatic views than those who had not been diagnosed with a mental illness. Participants in the described study noted they were self-conscious about their condition and believed it directly reflected their own shortcomings (Schwenk et al., 2010). They were fearful that asking for help was risky and, if they asked, their peers would not take them seriously at work as a result of their condition (Schwenk et al., 2010). Additionally, fear of negative outside attitudes (e.g., judgement, disapproval, etc.), lack of respect from peers, and questions surrounding one's clinical and academic capabilities contribute to the self-stigmatization that many experienced (Schwenk et al., 2010). Among a similar cohort of students across 6 medical schools, Dyrbye and colleagues (2015) highlighted that a majority of respondents agreed that they would hide treatment received for a mental or emotional health problem. There is also a common belief that supervisors, peers, or residency directors would

view students less favorably for seeking treatment, and that patients would be hesitant to seek care from a provider if they knew that they suffered from an emotional or mental health problem (Dyrbye et al., 2015).

Mental Health Stigma and Changes in Medical Education and Regulation

Common stigma fears have been shown to manifest within the field as competition and animosity among providers, healthcare providers assuming extra work to not seem weak, and masking emotions to not show vulnerability (Shanafelt et al., 2019). The high prevalence of providers and providers in-training who suffer the adverse effects of psychological distress and comorbid stigma fears raises significant concern about the gaps identified in the current literature regarding operational regulations and services available to providers across their career (e.g., school, residency, employment), and how these have evolved as awareness of these issues grows.

Although the need for provider mental health resources is apparent, there are many gaps in the current literature regarding services available to providers across training and at the institutional level. Attention to this issue began long ago. A classic 1983 paper by Seigle and colleagues demonstrates the historical availability of mental health resources during training as reported by the deans of 85 medical schools. The consensus across the deans' reports was that "some" resources were available to students, but that there were major confidentiality concerns and low levels of availability and accessibility. Counseling services run by psychiatrists and psychiatry residents were available upon request but were not widely or regularly advertised. Some noted that support counseling was offered by faculty members and members of the student affairs office. Understanding that fear is a significant barrier to seeking mental health care (Dyrbye et al., 2015; Seigle et al., 1983), there is reason to believe that services provided by faculty contributed to the perpetuation of stigma-related fears among students. Overall,

conversation surrounding mental health was scarce and accompanied by minimal resource availability. During the same time period, only nominal documentation of institutional resources has been found. Soon after Seigle and colleagues (1983) reviewed mental health and support resources for students, a case brought before the courts began to shift the conversation in medicine.

The 1984 Libby Zion court case pertaining to the death of an 18-year-old spurred the first recommendations for resident duty-hour restrictions as well as supervision of junior providers by attending physicians (Asch & Parker, 1988). The case effectively changed the medical field and medical education after 18-year-old Libby Zion was admitted to the hospital. After several hours and examinations from resident physicians, Zion died after her condition was incorrectly diagnosed. Although direct fault was not placed on the medical team, it uncovered the flawed system of graduate medical education, including the tendency to overwork residents and the risk imposed on both patients and clinicians (Asch & Parker, 1988). Despite this call to action in 1984, the formal implementation of duty-hour restrictions did not occur until 2003 when the Accreditation Council for Graduate Medical Education (ACGME) officially set resident work-hour limits to 80 hours per week (Burchiel et al., 2017). The ruling no longer allowed residents to continue their practice of working upwards of 100 hours per week, with many of their shifts being 36 hours in length with less than 12 hours between shifts (Imrie et al., 2014). These events were the beginning of the cultural change to make resident and provider well-being more of a priority. In 2017, the trend continued with the first-ever acknowledgement of the importance of resident wellness by the ACGME (Burchiel et al., 2017). The guidelines were again changed to include resident wellness as an important factor in patient care and safety, for provider mental and physical health directly impacts the care they provide (Burchiel et al., 2017). This watershed

moment in prioritizing provider wellbeing in medicine helped to initiate momentum towards the current landscape.

Healthcare Provider Wellbeing

The climate surrounding student and provider wellbeing after the recent regulation changes is outlined in a 2023 review conducted by Hale and Davis. Compared to the mental health resource availability documented in the 1983 Siegel et al. article, there has been a significant increase in awareness, availability, and utilization of mental health resources such as counseling and wellness initiatives (Hale & Davis, 2023). The guidelines put forth by the Association of American Medical Colleges (AAMC) for medical schools include recommendations of confidential counseling, clear disclosure of policies to both students and faculty regarding the role of treatment records in disciplinary action decisions, provision of treatment or counseling by non-teaching faculty, existence of a continually updated and transparent list of mental health services, accessibility, and costs associated with utilization, amongst others (Hale & Davis, 2023). What Hale and Davis (2023) found in the review of 120 allopathic medical schools (77% of all Liaison Committee on Medical Education (LCME) accredited medical schools in the U.S.) was that more than half of the institutions did not adhere to any of the AAMC's recommendations, and only 15% followed all the guidelines. Even amongst the most commonly followed practices, three-quarters offered confidential counseling, and only 30% provided a comprehensive list of mental health resources with confidentiality distinctions, accessibility, and cost transparency (Hale & Davis, 2023). This newfound data highlights specific continuing needs and gaps to be filled to increase utilization and decrease stigma. Despite the adaptations made to mental health programming among medical schools

since comparative studies in 1983, the same changes have generally not been documented or evaluated at the institutional level.

In part as a response to the lack of data in this field, perhaps including the absence of documented programs and the magnitude of the influence of provider health on patient outcomes, the American Medical Association (AMA) put forth guidelines and recommendations for providing mental health resources in medical schools and institutions across the country. The AMA has strongly urged state licensing boards as well as institutional credentialing boards to review their credentialing applications and remove any potentially stigmatizing questions, including those referring to a past diagnosis rather than current impairment. Additionally, the AMA supported the passing of the Dr. Lorna Breen Health Care Provider Protection Act, which took effect in March of 2022 (Welcher et al., 2019). The legislation outlines the future availability of grants for educational institutions, hospitals, private practices, academic medical centers, etc. to help implement or support wellness and training programs for providers targeting the development of evidence-based practices to improve provider mental health, decrease provider depression, and reduce suicide among this population (Rep. Wild, 2022). Conversely, clear guidelines regarding the provision of mental health and wellbeing resources are not available from the American Academy of Physician Assistants (AAPA). The organization addresses societal mental health, but do not appear to have formally addressed the wellbeing needs of those in the profession. They do provide external references but do not advertise their own recommendations or standards for physician assistants (PA) mental health and wellness (AAPA, n.d.). Because the aforementioned initiatives are recommendations, not requirements, it leaves room for meaningful variability in resources offered to providers in training and at the institutional level.

Overview of Approach

This thesis examines the perceptions and beliefs among clinicians in the context of Emergency Medicine at different stages of their careers as they relate to access to mental health care, stigma, and workplace environment. Emergency Medicine is a very fast-paced, high stress environment that requires collaboration among colleagues and across departments. The increasingly demanding nature of being on the frontlines of patient care has led providers to report increased stress, burnout, and work-life balance dissatisfaction (Shanafelt et al., 2012). Although healthcare professionals overall often have elevated levels of burnout compared to the general population, a study by Shanafelt et al (2012) found that, when examined by specialty, ED providers had the highest level of burnout compared to their counterparts in other specialties. Nearly 70% of the emergency medicine physicians included in the study met criteria for burnout. Considered in the context of the broader and historical evidence presented, this finding is not surprising given the underlying culture of toughness, invincibility, and lack of vulnerability in medicine and the taxing work environment of the ED. The high stress levels and heightened prevalence of burnout and mental health issues among providers in the ED can partially be attributed to long work hours, lack of control in number and type of patients, and high acuity of cases. Additionally, navigating communication networks while managing a high volume of patients is another commonly cited stressor within the ED (Person et al., 2013). More generally, working in the ED is physically, mentally, and emotionally demanding leading to both immediate and long-term fatigue among providers (Person et al., 2013). The danger imposed on both providers and patients by neglecting provider wellbeing is significant, as the health of both populations is at stake. Patient safety can be jeopardized by provider exhaustion, subpar decision-making skills, and errors in judgement resulting from the ED work environment and

culture of medicine, as seen in the Libby Zion case as well as countless others that have gone unnoticed to the public (Asch & Parker, 1988).

Because of the overhaul that was done to the medical education system in recent decades, it is important to acknowledge the differences in provider experiences, norms, and expectations throughout their training. For example, the Libby Zion case forced the implementation of duty-work hour restrictions, effectively changing the way residents are trained (Asch & Parker, 1988). Not only did this legislation modify training procedures, but it also may have altered expectations for what training should look like in trainees subsequent to this decision compared to their more senior counterparts. Furthermore, with the addition of guidelines for fostering provider well-being and positive mental health, more recently trained providers likely have a different sense of what training should look like. With these changes likely come disparities in perceptions of what training and working in the ED should entail, perhaps creating gaps in expectations held by providers of varying ages and career stages. There is reason to believe that the different systems that providers have learned under have contributed to their individual assessments of mental health and communication, expectations of support, and perceptions of job expectations (Heuss et al., 2022).

Not only is the context in which a provider trained and how they were educated important for understanding their deeply rooted perceptions of mental health, but the duration of time in which they have worked in their position could further contribute to their opinions. A study by Dyrbye and colleagues (2013) assessing perceptions of burnout and career satisfaction among physicians found that satisfaction and perceptions of professional challenges varied by career stage. Those that were deemed mid-career (11-20 years in practice) reported the longest working hours, highest levels of burnout, and lowest work-life satisfaction. The lower levels of

satisfaction among the mid-career group was attributed to both the longer working hours and on-call shifts, but also because of the generational shifts in medicine that the group has endured (i.e. changes in the wake of the Libby Zion case) (Dyrbye et al., 2013). Mid-career providers hold a unique perspective, having worked through reform and major structural changes to the healthcare system throughout their careers. They have endured a significant level of change and will have to continue to adapt in ways that their younger and more senior counterparts have not or will not have to (Dyrbye et al., 2013). Conversely, in this study late-career providers (21 or more years in practice) had significantly lower levels of distress and higher levels of satisfaction compared to the mid-career group, likely related to their proximity to retirement (Dyrbye et al., 2013). Therefore, acknowledging the individualized experiences of providers stemming from the duration of time that they have been in practice as well as when the completed their training helps to characterize the importance of outlining occupational developmental processes. Individualized experiences throughout training and working in the field have shaped providers accordingly. Therefore, it is important to understand how these experiences have influenced perceptions of mental health, resource availability, and overall levels of support, for perceptions are the root of belief and action and can assist in understanding the deeper issues of mental health and help-seeking in medicine.

Because of the perceived lack of mental health and support resources for ED providers yet the desperate need, the aim of this study is to examine provider perceptions of access to mental health resources, self- and outside-stigma, and ED environment to gather a sense of how personal experiences have shaped provider expectations and beliefs. There is a paucity of data pertaining to healthcare provider perceptions of mental health in medicine and the availability of mental health care resources provided to them. This study serves, to our knowledge, as one of the

first of its kind to focus solely on the thoughts, perceptions, and feelings about access to care, stigma, burnout, and work environment of Emergency Department clinicians across time points in their career.

Chapter 2: Methodology

Researcher Process of Preparation

In preparation for the study to ensure a complete understanding of both the literature and the study procedures, I completed a continual investigation of topics directly related and adjacent to mental health within the ED, healthcare provider burnout, and mental health resources and programming across education and the workforce. Refinement of topic identification was a continual process to ensure the most optimal focus of the project. I assisted in pilot testing the initial surveys distributed in Wave 1, which served to familiarize myself with the questions to be asked and with the experience providers would have with completing the survey. After examining the survey results and using my background knowledge on provider mental health and resource availability, I was able to collaborate with the research team to create the semi-structured interview guide, informed by the themes in the survey data, used in Wave 2.

Participants

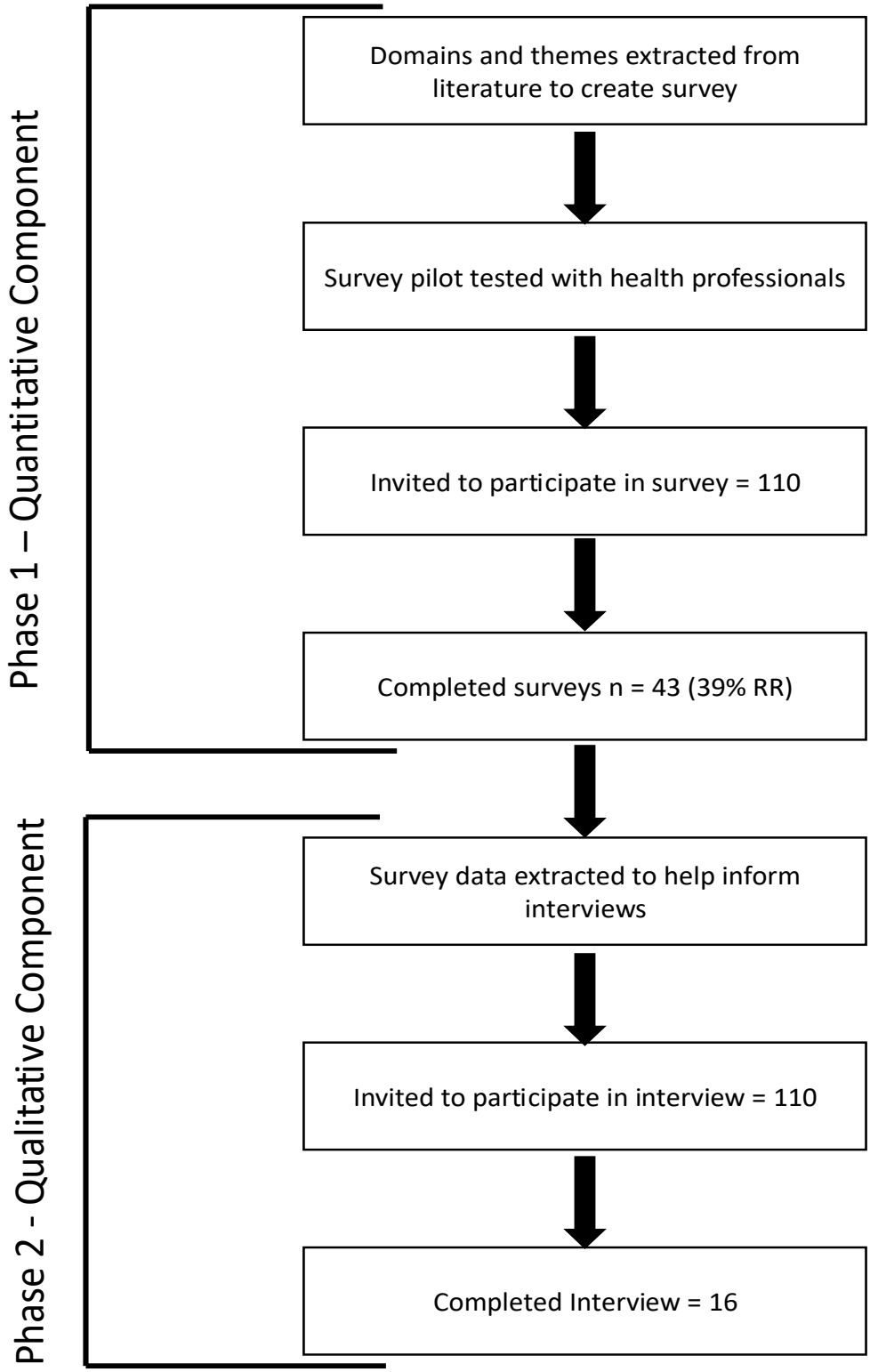
This study presents an analysis of a subset of data from the Assessing Clinician Experiences (ACE) study. The study used a two-wave sequential explanatory mixed-methods (Figure 1) approach, in which the survey results from Wave 1 informed the semi-structured interview guide used in Wave 2, to assess clinician experiences with mental health help seeking, mental health resource availability during training, occupational support, occupational stress and individual coping mechanisms, and self-stigma related to mental health. For the purpose of this study, analysis will focus on providers' perceptions and beliefs of mental health, resource availability, and stigma throughout training and within the ED. We will also be examining the work environment of the emergency department, as each of these factors may shape behavior and levels of burnout. Participants were recruited from an emergency department at an academic

medical center in the Northeastern region of the United States. To be eligible, participants were required to be US residents, be proficient in English (verbal and written), and work in the emergency department in one of the following roles: physician, resident physician, or advanced practice provider (APP; physician assistant or nurse practitioner). Recruitment procedures for both waves are detailed below. The study was reviewed and approved by the Pennsylvania State University Institutional Review Board. All study participants provided informed written consent prior to study enrollment.

Research Design

The two-wave design of this study (as seen in Figure 1) allowed for the collection of quantitative and qualitative data. The advantage of this approach is it allowed the objective statistical analysis strengths of the quantitative work to inform the qualitative interview protocol to better capture the nuanced human experiences of participants.

Figure 1. Two-Wave Sequential Study Design.



Procedures

Wave 1

Wave 1 of the project utilized a 3-step process for survey development and distribution. Step 1 consisted of an in-depth literature review to familiarize the research team with the existing data and to characterize any useful scales or systems. In Step 2, the team utilized the literature review to identify gaps or interesting areas of focus to serve as the foundation for survey development. Finally, in step 3, the survey was pilot tested with clinicians (N=10) working in a different emergency department, to not only provide feedback on clarity and relevance, but also to ensure intended interpretation of survey items.

In Wave 1 following pilot testing, a departmental email listserv was used to recruit specific types of healthcare providers within the emergency department of the specified hospital. Emails were sent to the listserv bi-weekly for 10 weeks. Each email included a brief description of the research and a link to the online survey. Participants who met the inclusion criteria and provided informed consent were re-directed to the online survey. For the purpose of the current study, participants received a $20 e-gift card for completing the survey. After the conclusion of Wave 1, the data collected was analyzed to gather general descriptive statistics to characterize the sample and inform modifications to the interview guide for the semi-structured interviews conducted in Wave 2 (described more fully below).

The complete survey included measures assessing demographic characteristics, mental health resource availability across training, engagement in various stress coping mechanisms, perceptions of occupational support, experiences with occupational stressors, and barriers to seeking mental health care. The current study used the following measures.

The Assessment of Well-Being Resources Questionnaire

Developed specifically for the study, availability of resources (wellness programs, institutional access to mobile mental health app, crisis resource, confidential psychological counseling, physician health programs), access to mental health professionals (mental health counselor, psychologist, psychiatrist, social worker, peer support, therapist), and institutional regulations (institutional monitoring of weekly work hours, fatigue, sleep deprivation, clinical performance, academic performance (only asked in the context of medical training), during training, residency, and/or fellowship was assessed. For each resource and mental health professional listed, a 3-point Likert scale indicating 0 (yes, I had access to or was aware of), 1 (No, I did not have access to or was aware of), and 2 (do not know/ recall). For the assessment of institutional regulations, a 3-point Likert scale was used ranging from 0 (yes, institutional policy in place), 1 (no institutional policy in place), and 2 (do not know/recall). Items were not validated scales that produced scorable values, but rather descriptive items that were thematically analyzed.

Demographic Characteristics

Demographic data to help characterize the sample was collected. This included age, gender, race/ ethnicity, and marital status. Occupation relevant demographics collected included type of health care professional, time since completion of primary clinical training, years working in ED, elements of training completed in the United States, state in which training was completed, and states where license to practice was held.

Wave 2

Before the start of data collection in Wave 2, the interview guide was piloted by ED providers at the same academic medical center as the remainder of the study and at a hospital in Toronto, Canada (N=3) to assess question clarity, content validity, and format, followed by

minor revisions to enhance clarity. The pilot participants were not included in the participant count for the subsequent, larger study. A recruitment email including a brief description of the research and a link to the informed consent was sent to subjects who participated in Wave 1 and to the department listserv used in Wave 1. Upon consenting, participants were re-directed to a questionnaire allowing them to register for a preferred time. Once a participant completed the questionnaire, a member of the research team reached out to confirm the interview time and provide participants with interview details (e.g., zoom link). The interview followed a semi-structured guide, exploring various aspects of participant experiences as it related to their role as a healthcare provider. All interviews were conducted and recorded using Zoom Video Conferencing software. Interview audio files were transcribed using Trint and verified by members of the research team. Participants received a $40 e-gift card for participating in the interview.

For the current thesis study, analysis will focus on a subset of the data collected pertaining to participant experiences with and perceptions of availability of resources throughout training and in their current job, the ED work environment, perceived self- and outside stigma, and beliefs about the mental health of emergency medicine providers.

Data Analysis

Participant Group Categorization

For this report, providers were separated into three groups based on where they were in their career development to capture how their experiences during training and their time in the ED may shape the perceptions they share. Groups were defined as providers in-training, early/mid-career providers, and senior career providers. Providers were classified as ‘in-training’ if they were actively still in residency or APP fellowship. In order to delineate between early/mid

and senior-career providers, we referenced the literature and the AAMC's report of the active physicians by age and specialty (AAMC, 2023; Dyrbye et al., 2013). We chose to define early/mid-career providers as those having graduated from training fewer than 16 years ago. Senior-career providers were grouped as those who graduated from training 16 or more years ago. This was decided based on the comparatively early retirement age of emergency medicine providers and therefore shorter practicing careers (Shin et al., 2018).

To ensure accuracy of groupings, data from the demographics questionnaire was used. Participants were asked to provide their age, the number of years since completion of their primary clinical training, and years working in the emergency department. Using responses from all three questions, participants were categorized into one of the three groups.

Wave 1 – Quantitative Component

General descriptive statistics (means, SDs or frequencies) were reported for all demographic (e.g., age, gender, race/ ethnicity, and marital status) and occupation specific characteristics (e.g., type of health care professional, time since completion of primary clinical trainings, years working in ED). Analyses were used to characterize the study population in a variety of ways: in its entirety, based on clinician type, and by number of years since primary clinical training, a statistic used to separate participants into three groups.

Wave 2 – Qualitative Component

Interview content was analyzed using thematic analysis, specifically a reflexive approach identified by Braun and Clarke (2006). The six steps include (a) familiarization, (b) generation of initial codes, (c) searching for themes, (d) reviewing themes, (e) defining and naming themes, and (f) producing the report. Analysis began with each researcher familiarizing with the data by listening to the recordings twice— once to familiarize and verify transcription, and a second to take notes. A preliminary memo/synopsis was written during the second listen to note major

themes or important notes. Next, the interviews were coded independently by two researchers using an inductive, line-by-line coding approach. The research team engaged in semantic initial coding process using an open coding approach and electing not to use pre-set codes. By using semantic coding, researchers captured surface level data and focused on explicit meaning of participant phrasing (Terry et al., 2017).

Once the initial coding process was completed for every interview, researchers worked independently to search for themes within their initial codes by grouping codes that shared similar meaning. The memos created by research team members, interview notes, and team member codes were referenced to note the frequency of a reported topic and contributed to the development of themes. The lead researcher met regularly with each member of the analysis team to discuss code groupings and themes, to ensure understanding. Next, the research team worked collaboratively to revise and collapse themes that shared the same meaning. Finally, the research team named and defined the salient themes. Coding was completed using qualitative data analysis software MAXQDA.

Chapter 3: Results

Participant Characteristics

Wave 1

The sample included 43 providers from the ED. Participants (M age = 37.57, SD = 10.43) were about evenly split on reported gender (male 51.2%), predominantly married (65%), and majority White (67%). Participants included physicians (n = 20), APPs (n = 10), and residents (n = 13). Complete sample data is presented in Table 1. Participants were grouped by career stage. In-training providers (N = 13, M age = 29.4) were entirely residents (n=13) and were 54% male. Early/Mid-career providers (N = 21, M age = 32.38) included physicians (n = 12), physician assistants (n = 8), and a nurse practitioner (n = 1) and were 57% male. Senior-career providers (N = 9, M age = 54) included physicians (n = 8) and physician assistants (n = 1) and were 33% male.

Table 1. Participant Demographic Characteristics.

	Total (N = 43) N (%)
Gender	
Female	20 (47%)
Male	22 (51%)
Chose not to disclose	1 (2%)
Age [Mean ± SD]	37.57 ± 10.43
Race	
Asian or Pacific Islander	8 (19%)
Black or African American	1 (2%)
White or Caucasian	29 (67%)
Hispanic or Latino	4 (10%)
A race/ethnicity not listed here	1 (2%)
Clinician Type	
Physician	20 (47%)
Physician Assistant	9 (21%)
Nurse Practitioner	1 (2%)
Resident	13 (30%)

Wave 2

The complete interview sample included 16 providers from the same ED. Participants (M age = 37.86, SD = 12.42) were mostly female (56%) and consisted of physicians (n = 6), PAs (n = 7), NPs (1), and residents (n = 2). Complete sample data is presented in Table 2. The in-training group (participants 1005; 1009; 1013; 1015) had a mean age of 27.25 and was 50% male. The early/mid-career group (participants 1001; 1002; 1004; 1010; 1012; 1014) had a mean age of 31.4 and were predominantly male (67%). The senior-career group (participants 1003; 1006; 1007; 1008; 1011; 1016) had a mean age of 52.8 and were majority female (83%).

Table 2. Interview Participant Demographics.

Participant ID	Participant Group	Clinician Type	Gender	Age	Years Since Primary Clinical Training	Years in ED
1001	Early/Mid-Career	Physician Assistant	Female	25	<5 years	1-3 years
1002	Early/Mid-Career	Physician	Male	39	6-10 years	10+ years
1003	Senior Career	Physician	Female	53	21+ years	10+ years
1004	Early/Mid-Career	Physician	Female	37	6-10 years	7-9 years
1005	In-Training	Resident	Female	28	In-Training	PGY-1
1006	Senior Career	Physician	Female	50	21+ years	10+ years
1007	Senior Career	Physician Assistant	Female	49	16-20 years	10+ years
1008	Senior Career	Physician	Female	58	21+ years	10+ years
1009	In-Training	Resident	Male	27	In-Training	PGY-1
1010	Early/Mid-Career	Physician Assistant	Male	26	<5 years	1-3 years
1011	Senior Career	Physician Assistant	Female	-	16-20 years	10+ years
1012	Early/Mid-Career	Physician Assistant	Male	-	<5 years	1-3 years
1013	In-Training	Physician Assistant	Female	24	In-Training	1-3 years
1014	Early/Mid-Career	Nurse Practitioner	Male	36	6-10 years	6-10 years
1015	In-Training	Physician Assistant	Male	30	In-Training	10+ years
1016	Senior Career	Physician	Male	54	21+ years	10+ years

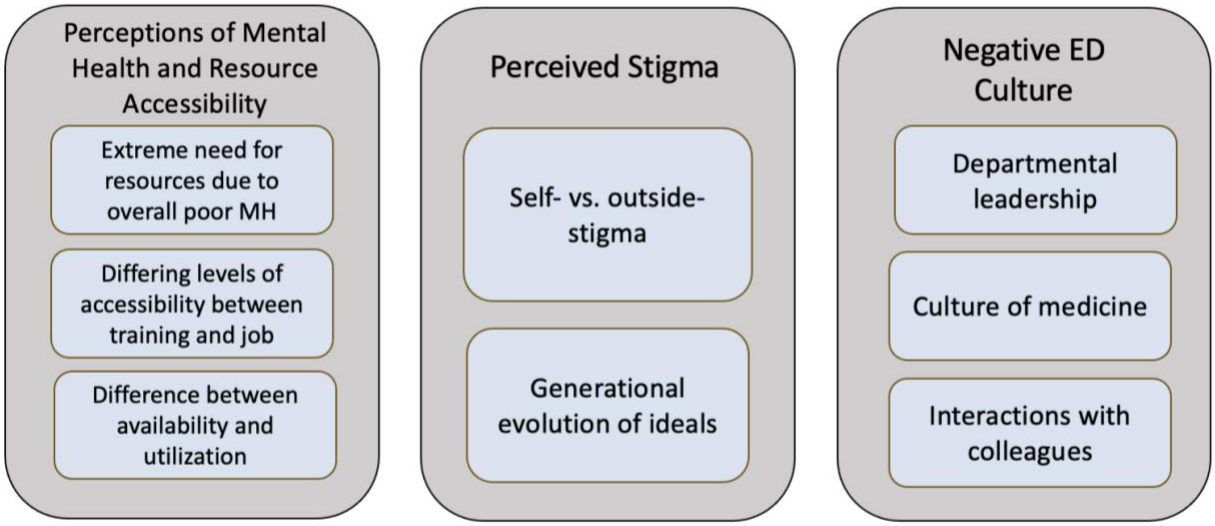
Quantitative Findings

Participants (N=43) completed a survey about resource availability and access to mental health professionals during training (i.e. school, residency, and fellowship) as well as regulations imposed by their institutions surrounding sleep deprivation, weekly work hours, etc. When asked about the availability of wellness programs (e.g., physical, mental, spiritual, emotional) during their medical training, 67% (n=14) of early-mid career physicians and APPs reported having access to them whereas only 11% (n=1) of senior career providers reported the same. Similarly, 76% (n=16) of early/mid-career physicians and APPs reported having access to a crisis resource contact, whereas only 22% (n=2) of senior career providers reported having a similar resource. 67% (n=6) of senior career physicians and APPs noted that they did not have access to mental health professionals like mental health counselors, psychologists, and peer support, whereas the majority of early/mid-career providers had access to mental health counselors (67%, n=14) and peer support (76%, n=16). Residents also noted having mental health counselors (77%, n=10), psychologists (62%, n=8), and peer support (77%, n=10). No senior career providers reported having access to social workers or institutional monitoring of fatigue or sleep deprivation. 29% (n=6) of early/mid-career providers reported access to social workers and 5% (n=1) and 10% (n=2) reported having institutional monitoring of sleep and fatigue, respectively. Conversely, 31% (n=4) of residents reported access to a social worker and 31% (n=4) experienced institutional monitoring of fatigue, while 23% (n=3) had sleep deprivation monitored.

Qualitative Findings

As participants discussed beliefs and perceptions of mental health, the following three themes emerged (as see in Figure 2): (1) perceptions of and access to mental health care across training (2) perceived stigma and (3) negative ED culture. To protect the privacy and confidentiality of all participants, participant IDs are used throughout this study. Participant demographics are available in table 2. The provider population of the emergency department sampled is predominantly White, and therefore race and ethnicity are not included to protect participant identity.

Figure 2. Major Themes and Sub-Themes.



Theme 1: Perceptions of Mental Health

Providers were asked about their perceptions about mental health and the need for resources among colleagues in the emergency department. This theme emerged from how providers described the status of mental health and need for resources as a whole among their peers in the ED. Across provider groups, there was an agreement that the state of mental health in healthcare, and specifically in the ED, is poor. Nearly every participant explicitly noted that there is an extreme need for mental health resources among EM providers. Although provider

groups generally expressed similar opinions about the status of mental health in their department, when asked to elaborate on their experiences, differences in their desire or ability to take action, their sense of control in the situation, and their perceptions of the department's response differed significantly between age-based provider groups. These issues are described in greater detail below.

In-Training Providers

Providers in-training are in a unique position having recently finished school but are entering their dedicated clinical training period and are new to working in the ED. Therefore, they have not been immersed in the working environment for an extended period like their more senior counterparts. Participants belonging to the 'in-training' group demonstrated strong opinions on interview topics when asked to describe the culture of help seeking for mental or emotional health among providers, including barriers and stigma, awareness of programming, and shared beliefs, conveying not only that there is a lack of resources available but also that the culture of help-seeking is minimal. Participant 1009, a physician in their intern year, said *"I know they talked a lot about mental health resources available, and I knew that the resources were there, but the issue wasn't the availability of mental health resources. It was that we were put into a system in which it was not ideal to get them involved. And if we did get them involved, we never had time to use them anyway."* Providers in training also commented on the substantial differences in the mental health resources made available to them during their time in medical school compared to in their role in the hospital. When asked about the difference in resources available and how it impacts mental health perception, participant 1005 said *"I think they're extremely different […] But as far as I know, I haven't been given any in residency, and in med*

school I feel like we had a lot more [resources] accessible to us and I feel like I need it more now than I did then." Many providers have a strong opinion, believing not only that there is a lack of resources, but also that the culture of help-seeking is minimal.

When asked about the culture of mental health help-seeking in the ED, resident physician participant 1005 claimed that *"From my knowledge, at this point, it doesn't really exist."* In addition to the established issues with mental health accompanied by a culture of invincibility, some providers still in training were able to examine more systemic issues. In reference to the resources available, providers described many of the resources offered were "quick fix" solutions, failing to address the real reason someone may be utilizing a resource. For example, participant 1005 provided insight into common thought processes that undermine the help-seeking process, discerning that,

> *"I don't think there's enough I don't think there could ever be enough. I think sometimes we want to, like, be like, oh, there's like free yoga classes and we want to like fix the person more than we want to actually like provide a resource for them, like to go talk to a psychiatrist or psychologists where they can go speak to someone like one-on-one or something along those lines. I think there's not enough resources for that at all."*

Early/Mid-Career Providers

Among early-to-mid-career providers, the need for mental health services was discussed by many providers, including participant 1001, a PA who captured a sentiment shared by majority of participants. She said "*the need is super high. Our profession, particularly the specialty of emergency medicine, is very emotionally and mentally taxing. And we talk about burnout all the time, like it's a topic that comes up nearly constantly."* Her belief, similar to that

of her peers who participated in an interview, was that the need is high, and resources are needed but those made available are not utilized or fail to address prominent issues (e.g., burnout). Participant 1010, a physician assistant, outlined his experience with resource availability throughout training, elaborating that during medical school resources and awareness were limited but during graduate level training resources were more expansive and available. He said, *"I don't necessarily know that there are any specific resources I had during, you know, training or clinical rotations, any of that stuff... it was kind of talked about with professors and other faculty said, hey, you know, you can reach out to the school they have certain resources. But I did feel like at least that where I went, where I did my graduate training, there were definitive resources."* In chronicling his experience with mental health and wellness programming, participant 1010 described that resource availability in the ED, much like in school, is minimal. He commented, *"but then when we got specifically into physician assistant training here, it was kind of not talked about as much. You could go to the college and see, Oh, there was all these resources for everyone, but then specifically devoted to my program, we weren't talking about it much at all."*

Participant 1010 also voiced his agreement about the need for, and value of, mental health resources for providers particularly in response to the high level of patient acuity in the ED (i.e. patients with severe illness requiring significant or immediate attention and monitoring). He said *"Because, I mean, you're working multiple days in a row, you have multiple exposures to these and it can be difficult and I think an outlet would be very valuable as well."* Participant 1014, a nurse practitioner, further supported the attribution of some of the mental health issues experienced to the pace of the ED environment:

> *"I think that it being a pretty high stress environment that's like constantly on the go, um, that the need is definitely there for those individuals that work in that that area just because. Pretty high stress all the time and then you know you- there's not a time to decompress while you're at work. You got to figure out a way to do that somewhere else."*

Many participants expressed how different emergency medicine is from other medical specialties (e.g., ICU). Participant 1004, a physician with experience in other specialties, offered relevant insights into how mental health initiatives are facilitated, more specifically who is responsible for facilitation. When asked about how she utilized resources offered, she spoke about how she chose to not participate in department offered programs for a very specific reason. It was her perception that she would find limited value in programs offered because they are *"not given by people that really understood, in my opinion, really understood you know, me and my job"*. When probed to explain what it meant to be understood, she said *"my impression was that they were not physicians. And I think to really help a physician, you need to be a physician, like a practicing physician or have had, you know, a career as a practicing physician."* The notion that individuals offering mental health resources to providers share a sense of lived experience with providers was very common among participants. The perceived value in shared experience, and for facilitators to truly understand providers' experiences could, in part, explain why some providers may struggle with openly discussing mental health. It also supports the perception agreed upon by respondents that in the medical field, there is a large need for the improvement in how mental health is addressed. Acknowledging the shortcomings of mental health infrastructure in the medical field, early-to-mid career providers were able to identify potential methods of improvement while offering insight into the perceptions of mental health among their peers.

Senior-Career Providers

Unique to providers within this group are their personal insights into the long-term repercussions of mental health struggle and burnout that newer providers have not yet been exposed to. Drawing on their long-standing personal experience as emergency medicine providers, it was concerning that the majority of participants shared a similar perspective as participant 1003 regarding the perception of the mental health status of ED providers. She, a physician, stated that *"the mental health of emergency physicians is bad. I mean, it's very bad."* Senior-career providers, similar to early-mid career providers, agreed that ED clinicians are facing serious mental health struggles that are further exacerbated by factors unique to emergency medicine. Participant 1007, a female physician assistant, provided a very personal narrative highlighting the toll working in emergency medicine can take on providers over a long period of time. She shared the following when asked if she perceived a need for mental health:

> *"Oh, I think [mental health is] a definite need for sure. I've worked there 20 years and I've seen […] I've went through burnout maybe twice. I know what burnout is. I've seen it in others. I've seen a lot of people handle it differently. […] I've seen good times and bad times in the ED, and I've seen what it's done to people, seeing people not be able to handle anger, getting walked out to um other people going inward. Some people taking their lives. Some people being um...um I guess uh annoying to others where they kill them. [...] and it may be a cause of working in the ED that their behavior changed them, you know. And there's other factors at home, I'm sure, but in personalities. But other than that, uh no, I see it especially in an ED because people come in there they're not well. And I always use this line to people. I'm like, people don't come there because they feel good."*

When providers in this group were asked about how they perceived the need for mental health resources there was a consensus that the need was high. However, responses regarding the utilization and facilitation of resources varied quite significantly. Participant 1006, a female physician, supported the notion of there being a need for mental health related support, however offered insight into issues contributing to utilization *"I think there's a big need, but I think the culture of medicine is such that we hesitate to go for help."* Similarly, participant 1008, a female physician, shared her perception that *"I think it's really important to have the opportunity for people working in a difficult environment that's high stress to have the availability of mental health resources. I think the issue is whether or not people will use those resources."* Both participants acknowledged a very real need, but shared the perspective that factors relevant to the culture of medicine would potentially prevent individuals from seeking mental health related care; a perspective that was found to be common among providers within the senior-career group. When thinking about the need for the availability of mental health options, unlike the in-training group, senior-career providers' experiences with resources in training and early in their career did not seem to inform their current perceptions of the matter. In fact, providers in this group did not directly mention the availability of resources during their training experiences, likely relating to the absence of opportunities at the time, or the change in relevance due to the significant amount of time since their training.

The enduring familiarity with the palpable presence of mental health struggle yet lack of resources compelled one physician to go as far as to say the provision and utilization of mental health resources should be mandatory to combat the mental health crisis and the difficult ED environment. She, a female physician in a leadership role, noted that:

> *"I think [seeking mental health care] has to be required. I think it's not an option. Like, you know, maybe you have nothing to talk about but something tells me if you sit in a room, looked at someone long enough, something would come out. Yeah, we all have stuff, whether it's work related, home related, but that makes us who we are and how we function in all of our interactions with people. And I think just getting the opportunity to kind of unpack that, talk about it to with someone who is unbiased, right? They can help you maneuver and work through things in ways that you may not have been able to do."* (1008)

This theme highlighted the common belief among providers within all groups that their peers are struggling, thereby creating an urgent need for mental health resources in emergency medicine. However, there is a divergence in opinion and perception among the three groups about the design, delivery, and utilization of resources across the scope of training and field work, with resources during education and training serving as a reference point for providers that are earlier in their careers but not necessarily so for those that have more career experience and received training a longer time ago.

Theme 2: Perceived Stigma

Similar to the participant consensus on the need for mental health support resources, most providers expressed a common understanding of the presence of a perceived cultural stigma in the ED surrounding mental illness and help-seeking. Perceived stigma was operationalized as participants alluding to or stating negative or discriminatory attitudes that others have about mental illness or seeking help for mental illness. Early/mid-career providers as well as senior-career providers agreed that there are strong negative beliefs about mental health, with some strides to improve that aspect of the culture. However, some of the in-training providers shared a

different opinion that there has been a significant improvement in stigma in recent years, with their perception that current stigmatization is not a major issue. This review of perceptions among provider groups demonstrates the nuances to each argument, giving insight into the experiences shaping the opinions of providers of differing experience levels.

In-Training Providers

Among providers in training, beliefs about the presence of a cultural mental health stigma differed among participants. Some believed that stigma runs rampant through the department whereas others felt that it has significantly decreased in recent years. Participant 1005, a female first-year resident, was the only respondent of the providers in-training to believe that the overarching stigma is still pervasive, leaving little room for help-seeking. This was demonstrated by their comment that *"from [their] knowledge, at this point, [a culture of help-seeking] doesn't really exist,"* going on to describe how the overall stigma surrounding mental health influences personal opinions of and actions surrounding help-seeking. In describing the culture of seeking help in the ED, which may have a connection to both the outside and self-stigma experienced by providers, 1005 cited aspects of the ED environment and self-stigma beliefs as contributors to this phenomenon:

> *"I think the barriers are, one, you don't want to show that you're struggling because if you do, it looks like you're weak or you weren't made for this job, especially, I think as a whole, and especially E.R. in like more high-pressure environments or specialties. But you definitely don't want to show like your weaknesses because you feel like you're falling behind or you're not progressing adequately, and you don't want anyone to think that you're not doing a good job."*

The remaining providers in training that were interviewed shared a different opinion. They believed that, although there may have been a significant negative stigma in medicine and society about seeking help and about mental illness in general in the past, opinions have changed. With this, they note that there has been a movement towards increased acceptance in this realm. Resident physician, participant 1009, voiced their belief about the change in opinion surrounding help-seeking by making it more of a career-stage distinction: *"There was always that argument that some people say about weakness, but I think that that's really more of the past than it is current. I haven't heard anybody, at least from my generation, say that seeking therapy is a sign of weakness."* Similarly, when asked about the presence of general stigma surrounding mental illness, participant 1013, a female PA, gave insight into her perception of the change in stigma:

> *"if you were to ask me that like four years ago, I would have said 100%. Yes, um, I think now, not as much as it used to be. Like, I feel like the stigma behind mental health has been improving and it's not the like extreme negative connotation that it used to be. I do think some people just don't really […] overthink things, like it's not many, but like I know a couple and they're just like, Oh, whatever. Like, it's fine. So like, for them, the idea of using those services is just not there because they just kind of let everything kind of slide by, um, And so for them, I don't think that they would take, um, someone seeing a therapist as necessarily like a bad thing or like the stigma behind it. […] And a lot of times, like a lot of my friends would just go to therapy. Like it was just like an outlet almost, which is basically what therapy should be. But if people take it that way, then it's not as much of a negative [self-] stigma. And so I don't really think, at this point, it's as much of that anymore. That's just kind of what I've experienced."*

Not only has there been a reported change in larger stigma beliefs, but perhaps also a more accepting view of the use of therapy. This seemingly newfound change in stigma surrounding seeking help for a mental illness is reportedly a multifaceted shift. The current movement away from self-stigma and adoption of new opinions is believed to be partially attributed to differences in career stage. 1013 describes the tangible shift in terms of increased awareness, openness, and mindset shifts between generations:

> *"But over like the past ten years, I personally think that there's been a giant change in how it's perceived. But I also feel like our generation is more open to it anyway, and they kind of always have been. I feel like we kind of grew up with the idea of like going to talk to someone and that kind of stuff, and there's just more awareness to the mental health aspect, and it's been growing over the past ten years. I would say like personally based off of what I've experienced. So it's not even as much, um. Our generation. But I would say like when in high school, like when we- I would talk to my parents about like friends who were seeing therapists, like they didn't understand it, like it was more of uh. And even now I think it's just something that they're not used to the idea of, and not even just my parents, but just like that generation. Like it's like, I don't want to go talk to someone about my problems. Like, I, that's not how I want to deal with this. While, our generation is more like, yeah, I'll go. I'll go chitchat. So it's like I think it's very generational as to who's open to it and who's not."*

Along a similar thought process, some attribute the current lack of cultural stigma to the individual providers' perceptions of how ingrained stigma is to individual awareness of ED providers and to a general increased awareness on the matter. More specifically, provider personal knowledge about, awareness of, and experience with mental health as a whole can

normalize the topic, effectively working to decrease the stigmatic views of it. Although not attributed to differences in career stage directly, participant 1015 offers a perspective that confidence and awareness make the difference to minimize stigma in the ED:

> *"So I haven't personally seen [an outward] stigma against mental health. I feel like people are very, I guess, aware. From everyone I've met. People are very aware of how they feel, I guess. Or very good at hiding it I don't know. Yeah, but. I feel like people in the E.R. usually generally very confident but that could Yeah, something can be held by and haven't heard any statement against it since I've been there."*

Although there was not an overarching consensus among the in-training cohort, many of the opinions about perceived stigma seem to converge around the view that the negative, unaccepting self-stigma that was once indoctrinated into ED providers is slowly being replaced with awareness, acceptance, or even neutrality on the subject with links to personal and generational experiences. It is reasonable to believe that this change in prevalence of cultural stigma can be explained by providers trained under previous structures being replaced by providers who have been trained under a structure more accepting of mental health or with more updated beliefs about mental health.

Early/Mid-Career Providers

Among the early-mid career providers, the majority expressed the belief that there continues to be at least some underlying, cultural stigma in reference to mental health and help seeking in the ED. Participant 1001, a female PA who is early in her career, echoed this sentiment when she shared *"I don't personally feel like seeking mental health services is weak, but I think that's the overall the overarching theme,"* referring to the notion that stigma experienced may not always be a personal stigma, but is often more of a collective, cultural

stigma. A few others in the group, like many of the providers still in training, reported a recent change in the level of stigma surrounding mental illness in medicine and the ED specifically. To exemplify the remaining underlying self-stigma in the field, participant 1010, an early career PA, commented that,

> "*Some of my colleagues will say, hey, there is no stigma. If you need help, go get help, but even in my short time, it does feel like there's a little bit of underlying stigma, whether it's not overtly voiced, but it seems like it kind of is lying there and dormant and just it's kind of across the board. It seems like no one no one is supposed to go get mental health. No one is supposed to be upset about a case."*

Providers will say that they take action toward bettering their mental health or that they do not view mental health struggle negatively, however their actions or the feelings they express do not align with the opinions they voice, demonstrating the nuance and underlying message surrounding mental health in the field. The recognition and understanding of this nuance help explain how the existence of self-stigma is deeply engrained in the culture of medicine, more specifically within the culture of the ED because these beliefs are general, widely held, and often unspoken feelings. Participant 1014, a mid-career, male NP, provided insight into the presence of self-stigma when he discussed the lack of vulnerability and discussion of mental health among colleagues. He said:

> *"I think there probably is a stigma, um, that we all sort of just deal with it on our own. And I don't think if somebody told me that they were seeking therapy or something like that, that anybody would shun them. But I also don't think that people talk about it as much as maybe they should."*

Conversely, the same participant shared that *"if you can't deal with it on your own, then maybe you're just not strong enough to be in the position that you're in*", highlighting the disconnect, shared by many, that struggling with one's mental health remains a taboo topic that many see as a personal weakness. This has been found to be a significant fear experienced by many providers, however it has also been noted by other providers in this group to be a component of the culture of medicine that has evolved, although very slowly. An increased awareness and more common conversation about mental illness in the workplace seems to be normalizing, albeit slowly, help seeking behaviors among providers.

The evidence of this change was found when participants discussed the presence of stigma rooted in the culture of medicine across training and the work environment. Participant 1004 discussed her personal perception of change, saying *"I think [the presence of stigma is] much less so than even when I was a medical student."* Further, participant 1012, a male physician assistant who has worked in the ED fewer than 5 years, discussed how general societal perceptions are changing as a result of increased attention on mental health and that in turn is impacting the cultural stigma within healthcare. He said *"I just think people are becoming more aware about the importance of mental health. You know, you so many I mean, I feel like stories of suicide, drug addiction, all that stuff is becoming more in the forefront, more prominent,"* characterizing the increased awareness and change in the field. Additionally, the same participant, along with others in this group (participant 1002), compared seeking mental health care to seeking help for one's physical health. It is proposed that if mental health were treated like physical health that it would be taken more seriously and there would be less shame associated with this form of self-care. Participant 1012 discussed reducing shame associated with seeking mental health care, stating *"I think we are moving away from that so people can not feel*

shame to go get help and just like going to the doctor to manage your blood pressure. You know, you can go to a psychiatrist to get help for your mental health as well." Although this group of providers, similar to those still in-training, expressed a view that there has been a change in perceptions of mental health and self-stigma in recent years, the early-mid career providers generally perceived there to still be a greater level of stigma remaining in the department (relative to the in-training clinicians).

Senior-Career Providers

Senior-career providers, those who completed their primary clinical training more than 16 years ago, collectively noted the pervasive self and cultural stigma still widespread in the ED. It was discussed with reference to the underlying culture of medicine, how gender plays a role, and steps in the positive direction. Participants commonly attributed the common self-stigma to the culture of medicine and the pressure placed on providers by the societal and medical communities.

Participant 1006, a female physician, describes the cultural presence of mental health stigma in American society which insinuates a need for mental and physical toughness. She explains that *"there's a sort of bootstrap your way out of mental health attitude in America that I think is not particularly helpful. And rather than saying, Hey, what's wrong with society that so many people are feeling bad, we're like, Oh, well, it must be you. You're just not trying hard enough."* The blame is placed on the individual struggling rather than examining the root cause.

This theme was explored with several participants. In an attempt to explain this phenomenon, when asked what they think perpetuates self-stigma, provider 1008, a female physician, responded,

> *"I mean, I think people in medicine are, you know, that's your job. You deal with this every day like, you know, you got that kind of tough it out. You'll be fine. This happens to all of us. Don't worry. And then I think we do see people with really bad mental illness in the emergency department. You don't want to equate yourself to someone that in your mind is really sick. You know, there's something wrong with them."*

Many providers expressed that the label of needing mental health help dissuades them from seeking assistance. Providers interviewed discussed how it is within their nature to prioritize being a provider and actively avoiding being a patient in any way, even going as far as to sacrifice their own health. Participants discussed that when this status quo is reversed, and the provider has to assume the role of the patient, they experience a loss of control and authority, making them feel vulnerable; a quality they have been taught to bury. In addition, being the healer and someone that needs to be healed creates cognitive dissonance that is too difficult for many to handle. Participant 1008 described her colleagues fear about the label placed on them if they were to ask for help:

> *"there's a stigma attached to having, needed, or worked with mental health professionals. Other people will say they don't have the time. They're too busy. I think people don't want to be labeled in a certain way, so they wouldn't want others to know that they were maybe not strong enough or don't have the capabilities to deal with the type of work they have or they do."*

Participant 1007, a female physician assistant, expressed an additional level to the cultural stigma experienced by providers in that male and female providers are labeled differently regarding their emotions and help-seeking. She described the expectation for male providers to be tough and emotionless, maintaining their façade through all situations in the ED.

In contrast, she described the expectation of female providers is to show emotion, however they will be labeled as weak for doing so. Based on her own personal experience she shared:

> *"as a female, I think I'm very more intuitive, you know, and I was always, when I started, there was the only female provider, um, so I do see males having to hold up that façade, the older males not showing emotion, not showing how they feel. They never get a chance at work to say how they feel and as a provider. Also, you have no one to stand up for you."*

Participant 1003, a female physician, supported the expectation of female providers described by participant 1007 in her work as a mentor to younger providers. Expanding on her personal experience with coaching female providers to curb their emotions temporarily to avoid judgement from others in the department, she said:

> *"with the women in the department, you know, when they break down, I tell them, I literally pull them out of the department and be like, you can't cry in front of the nurses. You cannot. You will be looked at as, they will come after you. So let's go. Let's go outside. Get a breath of fresh air."*

Removing providers from the situation appears to serve two purposes: 1) to give them a quick reprieve to recover from the chaos of the ED, and 2) to allow them to express their emotions in a safe environment free of resultant departmental stigma. Participant 1003 acknowledged that the practice of hiding emotions to appear strong perpetuates the culture that so many are working to remove, however, as a mentor, she serves to protect the younger providers in the "cutthroat ED environment." She went on to say:

> *"in a way, you do have to suck it up. And I understand what you're saying, like to tell the residents, don't show emotion, don't show. But really like honestly, it's in her best interest*

not to cry in front of the nurses. You can't break down because you will be talked about. That will be looked upon. You know, you need to walk outside."

Most often, participants described that the perpetuation of cultural stigmas was as a direct result of their intention to protect and help the newer providers that are still learning the unspoken expectations.

There was also some articulation that this phenomenon poses challenges for providers. For example, participant 1011 reported working to improve the cultural stigma beliefs specific to the ED; she describes being aware of and open to cultural shifts in stigma, but acknowledges the slow progress, as well as barriers to making change. She stated:

"I think that there is less of a bias nowadays in the department but that is unofficial. I think officially it's and we still don't talk about it as we should. And I think as far as like our human resources personnel knowing about it, I definitely would not answer honestly on any questionnaires."

Her comments about (not) honest reporting within institutional resources brings up a large fear of confidentiality and safety in reporting one's history of help-seeking. Although there have been improvements in the discriminatory views of help-seeking, this female PA notes her own hesitancy and skepticism on the matter. In describing what she sees as the modest shift in bias and self-stigma, she highlighted the benefit of social media in supplementing communication webs and the circulation of (typically confidential/anonymous) personal stories to increase exposure and awareness. She further expresses her belief that:

"social media has made [mental health struggle] more acceptable because we're now sharing more of the stories that happen. We're more aware that people are mentally

struggling. And so that yes, I think the generational shift in that technology has helped us with that."

In summary, senior-career providers have been in the field for a longer period, have a greater level of experience, and likely have only recently been exposed to the shift in mental health beliefs in medicine. They appear more deeply rooted in their traditional practices and beliefs that were instilled in training and experienced over a longer period of time, but generally do acknowledge the need for change. They may not be easily able to take action in the necessary change, but they recognize the strong cultural and personal stigma and its often-unhealthy consequences for providers.

Theme 3: Negative Aspects of the ED Environment

When examining provider perceptions and experiences with mental health in the ED, participants consistently referenced cultural elements of emergency medicine that in turn created a negative environment within this ED. Overall, participant experiences that led to their characterization of this ED were based on the demeanor of colleagues within the department (e.g., friendly, and helpful vs. demeaning), decisions made by departmental leadership, and the role of core values and beliefs that are foundational to emergency medicine (e.g., types of personalities, culture, etc.). Although some providers mentioned a shift in the ED environment over their career, the majority shared the belief that there remains a damaging culture within emergency medicine that continues to contribute to the negative ED environment experienced by providers.

In-Training Providers

Resident physicians and PAs in training have a unique perspective of the ED because they are still in a formal learning stage of their career. Given that this study was conducted

within the ED at an academic medical center, where providers are required to meet certain benchmarks for the number of cases and patients they see, this in turn creates a high level of competition between providers, often manifesting as animosity between different providers. Participant 1005, a female in her first year of residency training, describes the feeling induced by transparent productivity metrics across the department and their role in holding providers to a standard of excellence while fostering an environment that negatively affects mental health. She noted that administration:

> *"also put a productivity, like how many patients you're seeing in an hour out for everyone to see as well. So it definitely spikes it up a little. I think there's some truth that that needs to be, like, you know, documented or like, you know, you need to see how productive you're being because at the end of the day, it is a job and this is a job you signed up to do. But in terms of the mental health aspect, I don't think that there's any matching component."*

By doing this, the department makes an already demanding environment even more stressful for providers. Participant 1005 elaborated on this shared feeling of heightened awareness and stress when she said:

> *"it definitely fosters a competition because everybody's staring at it and everyone goes, Oh, I saw more, but I feel like I saw more patients. Or they say, Oh, I should be seeing more. Or if I like my numbers or not great, I need to do better kind of thing. And I think it just like the ER is already a stressful place anyway. So I think that adds to like, oh, you're not being productive, so you must not be very good at what you're doing, which is not true at all. But the E.R. is a conveyor belt at the same token."*

Many providers shared the sentiment that they are made to feel like their performance (e.g. quality of care, ability as a provider, etc.) is reliant on their productivity, which can lead to providers that are already stretched thin working harder to meet ED productivity metrics that are determined by institutional administration.

Further contributing to the heightened stress experienced by providers in-training within the ED, in addition to departmental hierarchies and unspoken politics, is the high level of patient acuity that may enter the ED at any time and the knowledge required of ED providers to treat such patients. Participant 1015, a PA in-training who served in other roles in the ED prior to going back to school, highlights the physical and mental toll that the ED takes on providers:

> *"It's just like, you use your brain a lot. Like you're constantly up to be on your feet and think. I think people like that because it's like it's a mixture of like it's not too much medicine. Like, it's not like you have to know crazy everything about medicine. And then there's procedures mix and there's, you know, decision making and coordination at the same time. But then you have to use your brain a lot and think about the pathophysiology of things, but then you don't necessarily have to finish it all. It's just, you know, it's like this balance and I don't know it's just like not knowing what's coming."*

Although he describes the caliber of medical knowledge and the expectation of high levels of thinking and decision-making in somewhat positive ways, it is not unreasonable to believe that engaging in this process every day would be mentally and physically draining. There is concern that the need for constant upper-level executive functioning combined with productivity expectations and competition between colleagues can make for a very negative work environment, as working in the ED is exhausting and providers have little time for breaks.

In addition to productivity pressures and decision-fatigue, providers in-training opened up about the difficulties posed by the lack of structure and scheduling within the ED. Because there is a steady stream of patients of varying acuity at random time intervals, ED providers lack free time or flexibility in the composition of their shift. This unpredictability makes the EM specialty unlike many others in that scheduled breaks are hard to come by. Participant 1015, a young PA who joined the ED in the last 6 months after working in family medicine, gave insight into his experiences with ED scheduling challenges:

> *"I feel like in the emergency department, it's a little harder to go to organized events because there's no schedule in the emergency department. We you know, we have our patients and they come in and we have to tend to them. We don't have a lunch time. We don't have a break where we cannot schedule people so I feel like that makes it a little hard for us."*

This comment was in the context of not being able to take a break or go to a department-wide event. When compared to his experience in the highly structured specialty of family medicine in which most providers have a set number of patients, a scheduled break in the day, and few high acuity patients. His opinion, which was echoed by other providers in training, was that the fast-paced nature of the ED lends itself to creating a setting where lunch and even bathroom breaks are hard to come by, which in-turn makes it difficult to decompress after a difficult case, or cases, and has been shown to contribute to the negative, competitive environment in which providers feel as though they have little control over their day.

Early-Mid Career Providers

Among the early-mid career providers there were numerous opinions consistent with views regarding the negative environment within this ED as a result of numerous factors including cultural norms. Female PA, participant 1001, echoed a sentiment share by many when she said,

> *"[the ED is] a very cutthroat kind of environment. That cutthroat nature of things is very competitive, and competition doesn't often breed a great environment to discuss sensitive topics like mental health."*

Based on providers' perspectives shared during interviews, this ED has been depicted as having an environment with little empathy for or acknowledgement of the notion that providers are humans. The expectation to go the hospital, do their work, not show emotion, and just make it through the shift was one repeated by many within this group. Participant 1010, an early-career male PA, described the lack of empathy and high expectations in the department when he said,

> *"It's not talked about as much, making sure you're mentally healthy coming in to work every day. It's just kind of you're expected to hit the ground running, you know, and then just crank through your whole shift and then finish out."*

This belief corresponds with many of his peers'; for example, participant 1001, a female PA, said, *"I have not found that conducive to be an environment where I feel super comfortable talking about mental health topics"* when she discussed the environment of working in this specific ED. The providers' hesitation to confide in one another helps to better understand the stigma and subsequent negativity within the department.

The frequent schedule changes, high stress situations, and lack of support in the ED have some providers looking to change careers because of the negative environment and its detriments

to mental health. Participant 1010 voiced his concerns and future planning surrounding the difficult ED experience: *"going back forth to days and night shifts and weekends and holidays is going to be very difficult to do the things that I want to do with family and loved ones. So I can definitely see my exit strategy coming at some point later."* Prioritizing his mental health and family, he can already see how the ED environment is not currently conducive to provider health and wellbeing. His reservations and difficulty compartmentalizing traumatic patient interactions with no downtime between patients gives concern for the negative mental burden placed on ED providers. In describing this fear, he told us:

> *"We see a lot of traumatic type things. We see some very unfortunate things with whether it be abuse or things like that, things that are just kind of mentally draining. And, you know, we go in for these long shifts and we see a lot of just not so pleasant things go on in each one of our shifts. Not only do we have to see that, we have to then kind of compress and then decompress and then go on to the next patient, which is going to be a totally different."*

Not only do provider-provider interactions contribute to the perceived ED culture and environment of this ED, but patient interactions as well as support from supervisors and administration impact the experience and mental health outcomes for providers as well. Working in a hostile and unsupportive environment with little time to process extremely stressful and/or traumatic patient experiences has been said to negatively affect one's mental health. Early/mid-career participants that were interviewed held similar beliefs that the culture of medicine has progressed in recent years to such a negative place that the problems feel insurmountable. There is reason to believe that this perceived lack of support combined with the systemic issues facing the medical field have framed and informed the development of the negative ED environment

reported at this institution. Participant 1014 who is a young male Nurse Practitioner gave an insight that had not otherwise been formally articulated that providers are tired, frustrated, and do not have the energy to fight back. This NP alluded to the fact that the exhaustion that providers are experiencing, worrying and lacking the ability to do anything more than survive, is likely detrimental to mental health. He said,

> *"I think that we all feel the frustration. I've talked to some of my colleagues about this, too. Some of the physicians who see the same problem, too, like, the system is broken, but we're so focused on just surviving the day that we can't change what's happening in the in the next couple of days, let alone the next couple of months and the administration of the hospital, who then we blame for all the problems. Because we see the administrators as those that are just setting the rules and making us change the way we chart so that we can bill the patients appropriately. And then we blame Medicare because they're the ones who pay us and because they keep changing the rules. And we have to change what we do. And ultimately, we spend more time worrying about that than we're worrying about the patients. And nobody can focus on what to do, on how to make the system better. All we're doing is trying to survive the day."*

Providers appear to be so jaded by the adaptation of their ED work environment to the negative culture of medicine that they report not having the bandwidth to tackle systemic problems. Any call to action for change is thus muffled by worn-down providers not being able to see past their daily duties to care for themselves or the system in which they work. The same NP connected the negative environment, constant survival mode, and detriments to mental health experienced by providers to physical and physiological wellbeing. The lack of sustainability of life as an ED provider is cause for concern, and the young NP gave us a clear picture of the conflict providers

are experiencing— trying to protect their personal health while running themselves dry trying to care for others. He said:

> *"And if you think about the constant fight or flight, you know, the survival mode, when you are in that survival mode for prolonged periods of time, that just weighs on your not just your mental health, but your physical well-being as well. And it's not something that we are as humans are supposed to sustain, sustain for a long time. And a lot of us are just trying to survive the shift without killing patients."*

Senior-Career Provider

The senior provider cohort, given their long-standing history and experiences in the ED, were very vocal when asked about the environment within the ED. They noted multiple perceived changes in culture (e.g., hardening provider personalities and increasing provider and productivity expectations) and procedures (e.g., long wait times and staffing shortages) over time, with the senior provider cohort providing additional detail about their experiences with the negative environment of the ED.

Participant 1016, a male physician with institutional leadership experience, when asked about the state of the ED said, *"the whole ED is a hot mess."* Other providers, including participant 1003, a female physician, shared the same sentiment when asked about their perceptions about the status of this specific ED. She said that *"the culture [of the ED] is not good"*, and when probed further she described a multitude of reasons, including long work hours, negative culture, cutthroat and toxic nature, and high acuity of patient cases. When asked about her responsibilities as a senior physician in the department, she captured many of these reasons when she said:

> *"there's so many things that are imposed upon you. You need there's the patient volume, there's, you know, getting the diagnosis right. There's also the rapport with the patient. There's so many factors, the RVUs, you have to like it's the money situation, too, in terms of you need to see more patients...you need to do the scholarship. You need to do the research. You need to teach the residents. You need to be good at procedures. You need to be good diagnostically. You need to be good at teaching. So there are so many things that are put upon you that you need to be good at and it's expected to you, not to mention. And that's outside of just being in the space. You mean you have to actually you have to adapt pretty quickly because so many things are thrown at you. You don't know what's going to happen when you walk through the door."*

In her detailed summary of the multitude of expectations set for ED clinicians, participant 1003 highlighted not only personal expectations, but also systemic, financial contributors that are difficult to tackle. Similarly, participant 1006, a female physician that has been in the field for 20+ years summarized the practice of working among the negative culture described above by describing a common ED experience. She said,

> *"and when you get into the sort of the soul crushing, oh, you have nine hour waits, and we're boarding half the E.R., and we have a nursing shortage, and we can't open rooms, and this consult is taking 3 hours. It's sort of like, it's hard to really imagine that you're practicing medicine in the way you want to. It's hard to imagine being happy in that kind of system."*

She notes that she is no longer able to practice medicine the way she intends and struggles to find the joy she once did as an ED provider. Changes in the way medicine is practiced, both good and bad, were described as being felt by and disruptive to providers like participant 1003. Much like

participant 1003, participant 1006, a female physician with a similar level of experience opened up about how she feels in the wake of the current ED environment and that she is struggling to function in this unfamiliar system that leaves her questioning:

> *"That got me thinking. It's like, why? Why do I do this anymore? Why do I want to? Every day I come in and I leave the shift completely exhausted and, you know, with a nine hour wait in the waiting room and there's not much administrative support. Like, you know, can I keep working in the system? Like how? Can I actually leave? Do I want to try and fix this? You know, there's so many things wrong with our health care system that it's sort of like to be functional in an unfunctional system. Like that's abnormal in and of itself."*

The customs in this ED, shaped by the culture of medicine over time, have likely influenced providers to develop the tough, unfeeling exterior that participants interviewed described. More specifically, participant 1007, a female PA, described the expectations set for providers to act like robots at work. She said, *"Well, I mean, you're expected to do your job, be a provider and not have feelings."* Senior physician 1003 elaborated on the stoic and hardened nature of providers set forth by her colleague, saying,

> *"I particularly noticed like a lot of us as whether or not your physicians or providers, nurses, you have a very thick exterior. You have to block off so many sounds and noises that you don't actually hear the person next to you."*

The need to wall-off emotions and thoughts, developing a thick skin to survive as an ED provider, appears to be troubling, alarming and alerting providers to larger issues in the field throughout their careers. When examining the adapted traits of this group, many providers bring up the common personality types seen among ED clinicians and that they may contribute to the ED culture. Participant 1016 explained this phenomenon by saying,

> *"we take whatever we take and do whatever we do and sort of that, you know, mental heroic mentality is, it draws people to [the ED]. So, I think that personality types there are generally drawn to that type of, you know, run towards a fire as opposed to away from the fire."*

This view proposes that in self-selecting to the ED specialty, many share certain personality traits, which could contribute to the tendencies and underlying culture found in the specialty.

Chapter 4: Discussion

This thesis reports a subset of findings from a mixed-methods study that sought to characterize the perceptions and beliefs surrounding mental health and help-seeking behaviors among providers working in the emergency department at an academic medical center. Specifically, this report focuses on differences in groups segregated by career stage. This approach allows researchers to better understand the experiences and opinions of providers across different groups, in an effort to begin addressing gaps in current literature. This work will present a more complete picture of provider experiences with mental health and how the availability of resources and perceptions of stigma in the ED have evolved.

From the survey it was clear that perceptions of access to mental health resources and professionals throughout training differed by group. Residents and trainees reported having access to the greatest number of mental health resources and providers during training. Resources included wellness programs, crisis resources, confidential counseling, and mental health professionals (i.e., psychologists, psychiatrists, counselors, and peer support). The early/mid-career providers indicated having similar mental health resources during training, but reported lacking the same access to mental health professionals as the providers from the current 'in-training' group. Conversely, participants identified as being senior career providers reported having significantly fewer resources, regulations, and mental health professionals available to them throughout their training, overall.

These findings support previous work examining mental health programming in medical schools and across residency programs. For example, a 1983 study by Siegel and colleagues found there to be a significant lack of resources and mental health programming available to medical students and residents. Although there was not a clear reason for the lack of resources,

minimal communication and advertising of initiatives as well as confidentiality concerns were reported to explain the underutilization of the existing opportunities. It is reasonable to believe that these could serve as barriers to availability for many individuals. Considering the year in which that study was published, individuals in training during that time would be those classified as senior-career providers in the current study.

More recently, ACGME guidelines have been revised to increase the presence of mental health programming within residency programs. For example, the inclusion of resident wellness as an important component in patient care has spurred many programs to introduce initiatives like group exercise classes outside of work, gym access, and increased mentorship opportunities (Berardo et al., 2020). Research conducted by Wolfe and colleagues (2019) and Berardo and colleagues (2020), has demonstrated how residency programs have implemented novel wellness programs, and increased the availability of mental health professionals within their system. Evidenced by these findings, it is reasonable to believe that this gradual shift towards greater availability of mental health resources is reflected by the early/mid-career cohort within the current study that perceived to have greater access to resources throughout training when compared to their more senior counterparts. Further, when we compared findings published by Hale and Davis (2023) to the data presented in the earlier Siegel et. al. (1983) report, the more recent publication demonstrated the adoption of new programming within medical schools and the increased availability for students. The differences found across provider groups in this study is broadly consistent with what is found in the literature and is recognized as the evolution of mental health awareness and subsequent resource availability for providers in training. Through the evolution of the presence of mental health education within training programs, we would expect to see differences across individuals in different career stages, as there has been a gradual

increase in resource availability during training since the senior career providers graduated from medical training. However, because the participants work together within the same ED under one institution, when speaking about current trends in resource availability, we would not expect to see differences overall. Therefore, when referring to resources available at the current institution in which all of the participants are working, the reported differences are likely rooted in perception, not actuality, for each member of the department would have identical resource availability. Although resource availability within one's current role was not assessed in the survey, many participants chose to discuss it in the interview. The data gathered from this survey was used to inform the interview guide that served to foster discussions and conversations about participant experiences.

Three main themes emerged from participant interviews: (1) Perceptions of mental health and access to resources across training, (2) stigma beliefs, (3) negative ED environment. When asked to discuss their perceptions of mental health in the ED, there was a unanimous opinion that the status of mental health in the ED is very poor and action needs to be taken. This sentiment is in agreement with findings in the literature regarding the gradual uptick in the incidence of mental health struggles among providers overall, but especially in the ED. Shanafelt and colleagues (2012) not only found that there is an increased prevalence of burnout among healthcare providers when compared to the general U.S. population, but also that ED providers are among those with the greatest risk of developing burnout symptoms based on their specialty. While much of the exposure is connected to the nature of their job, we must acknowledge the role of experiences and perceptions in providers' appraisal of and reaction to stressors.

When thinking about appraisal of stressors, perceptions of mental health, self-stigma, and one's work environment, it is important to understand the long-term and downstream effects of

these persistent issues. Chronically elevated cortisol levels resulting from repeated exposure to stress, can have an array of downstream effects due to the HPA and SAM axes. Because these communication systems within the body facilitate widespread interactions throughout many bodily systems, elevated cortisol or stress hormone exposure can impact heart health, immune function, anxiety, and depression, as well as many other systems (Cohen et al., 2007; Hannibal & Bishop, 2014). With dysregulated glucocorticoid secretion, individuals are likely to experience high levels of inflammation, marked by pro-inflammatory cytokine levels, deficient immune function, anxiety and depression, and cardiovascular diseases if not treated appropriately (Jones & Gwenin, 2021). Inflammation is a widespread bodily process, and therefore it is interconnected with many physiological, psychological, and metabolic repercussions, effectively making it an important marker for health or ill-health. The high levels of chronic stress that ED providers experience throughout their careers and how they internalize such stressors disproportionately exposes them to these risks. It is important to acknowledge the role of personal perceptions when thinking about the one's stress response, for perceptions influence how one internalizes stressors and, subsequently, how the body reacts, thus affecting one's physiology and behavior.

These physiological processes exemplify how mental health may tangibly affect physical health through these interconnected biobehavioral pathways (Jones & Gwenin, 2021). These trends are concerning for both providers and patients, as the compromising of provider physical health, which could be a downstream effect of long-term mental health struggle, ultimately impacts patient health outcomes through the care they receive. Therefore, it is important that we explore and convey the perceptions and beliefs of this group of ED providers, as it can help

connect the unexplored link between perceptions, internalization of stressors, and their biological repercussions, which can influence behavior and decision-making.

The often-reciprocal influence between repeated negative physiological responses and individual perceptions of one's own experiences can give insight into the importance of personal perceptions when thinking about resource availability and self-stigma. With regard to availability of resources across education and training, providers expressed a variety of experiences. In-training providers felt that they had significantly more resources offered during medical school than they currently do in training or residency. Because in-training providers had recently completed medical school and had not been immersed in the department for an extended period of time, their perceptions of resource availability in the ED were likely framed by their most recent experiences in medical school. Conversely, early/mid-career providers mentioned that there were few resources in medical school, definitive resources during residency or training, and some available in their current ED environment. In each of the experiences mentioned, early/mid-career providers felt that they had the lowest level of support in the form of resources or programming within the ED when compared to training and school. The shared feeling of a lack of support among early/mid career providers within our study is consistent with findings from other research. For example, a study by Dyrbye and colleagues (2013) examining levels of burnout and satisfaction among providers across career stages found a common theme that mid-career providers not only perceived to have the lowest levels of support among their colleagues, but that they also worked the longest hours and rated the lowest levels of satisfaction. Therefore, these perceptions, unique to this generational group, may be due to a common experience or career stage.

Hale and Davis (2023) provide insight into the current climate of mental health within medical schools, broadly demonstrating the noncompliance of many schools with the AAMC's guidelines for student mental health services. The lack of adherence to recommended practices suggests that schools likely are not offering adequate mental health services or are offering them in a way that may limit or discourage use (Hale & Davis, 2023). The data from that study is divergent from our findings among in-training providers; that discrepancy, however, could be attributed to providers' comparison to the very minimal programming reported in the ED. It is important to examine these results in the context that conclusions were made by providers as part of a comparison between environments and time points, which can differ greatly between provider groups. From these results, at a glance, it could appear as though providers at different career stages and periods of training have inconsistencies in the resources available in their current ED position, when in reality, resource availability should be nearly identical to providers working within the same department. This gives reason to believe that the phenomenon is likely two-fold and dependent upon individual perceptions; as previously mentioned, individuals' opinions about the resources offered to them in their current job is likely quantified relative to the resources they had available during training. If resources were abundant during training and education, are more difficult to access, or not as widely available in the current ED, then a provider may perceive a significant decrease in resource availability compared to their previous experiences. Not only does past experience shape individual perceptions, but individual beliefs also play a role in desire to use and subsequent attention paid to resource availability, thus exemplifying the importance of capturing and understanding the nuance behind a perception.

Among senior-career providers, there was a commonly expressed opinion that mental health in the ED desperately needs improvement. Although this group spoke broadly about the

need for additional resources, they acknowledged, as did the other groups of providers, that there is a significant underutilization of resources within the department. They spoke deeply about providers' hesitancy to ask for help and seek out medical care from the resources provided but did not mention the availability of resources during their training period. The reported underutilization across groups mirrors similar findings in the literature that barriers to seeking care like time constraints, stigma, fear, etc. influence provider utilization of resources (Keyworth et al., 2022). The lack of discussion of resources during training likely relates to the length of time since they completed their training, as they have been immersed in the ED for an extended period. Therefore, it is within reason to assume the opportunities during education no longer serve as a reference point. At this point, there is minimal data currently available on early resource availability during a time when the senior-career provider group would have been in training and on general resource availability in larger hospital systems and institutions.

Within the current sample, participants shared conflicting views on mental health and help-seeking related stigma in the ED, with some participants emphasizing persistent challenges, and others perceiving a positive shift in attitudes, often linked to differences in career stage and increased awareness. These results are in agreement with data presented by Lien and colleagues (2019) that there has been a positive shift in mental health stigma in recent decades for a multitude of reasons, but a main contributor is increased awareness of and education on mental health globally. Despite the improvements in mental health-related stigma in healthcare, providers still report significant barriers to seeking help and a pervasive stigma in the field (Dyrbye et al., 2015). Recent findings suggest much of the stigma experienced currently seems to be more aligned with self-stigma rather than stigmatizing beliefs imposed by others. Much of this mental health self-stigma stems from fearing negative views, opinions, or judgements of

others (Dyrbye et al., 2015, 2021; Lien et al., 2019). Considering the conversation surrounding mental health did not begin to change until the early 2000s when the ACGME put forth guidelines for resident work hours (Burchiel et al., 2017), many of the senior-career providers practiced for decades in an environment unreceptive to mental health struggles. This serves as a potential explanation for more experienced providers' reluctance to seek help or have conversations about mental health. Additionally, state medical licensing applications often ask questions about mental health in a stigmatizing manner, which could make providers reluctant to being open about their struggle (e.g., *Have you ever sought treatment for a nervous, mental or emotional condition or ever been diagnosed as having such a condition or ever taken any psychotropic drugs?* [*Ellen S. v. Florida Board of Bar Examiners,* 859 F. Supp. 1489 (S.D. Fla. 1994)]) (Schroeder et al., 2009). The perceived judgement from colleagues and potential licensing repercussions, including restriction or loss of one's license, could effectively reinforce the stigma experienced by many. Because reports of mental illnesses could jeopardize one's career and license, many opt not to disclose them, a decision that poses its own risks (Gascon Ivey, 2023).

Early-mid career providers grew up in a generation much more receptive to conversations surrounding mental health compared to the senior-career providers (Baral et al., 2022). Therefore, early-mid career providers had mental health interventions integrated as early as medical school in their training, and therefore they have trained in an environment in which conversations about mental health and help-seeking were more common and accepted. Additionally, in-training and early-mid career providers were more likely to grow up with more open conversations about mental health struggles compared to older generations that lacked discussions on the topic (Baral et al., 2022). We recognize this among providers within the in-

training and mid-career groups in which individuals in those groups were more exposed shifts in acceptance. Moreover, the culture of medicine as well as the culture of the ED fuels the stigma experienced by providers. The culture of medicine is an underlying traditional belief system instilled in medical professionals that they must be invincible, resilient, self-sufficient, all-knowing, and emotionally and physically tough (Shanafelt et al., 2019). With these unsustainable expectations in place, providers who do not meet these expectations are seen as weak or unfit for the environment. While this is a multifaceted phenomenon, social media, technology, and increased communication in general could be contributors to the changing the narrative surrounding mental health in medicine (Braquehais & Vargas-Cáceres, 2023). The increased communication and circulating information facilitated by technology could be a contributing factor to not only the increased identification of stigma, but also the improvement of stigma beliefs in the field.

When discussing factors contributing to the negative ED environment experienced by many providers, participants across all groups identified stress and the need to conceal their emotions as significant contributors. Providers in-training and in the early/mid-career group identified competition as a leading contributor to negative ED environment, whereas senior career providers discussed the struggle to affect change and adequately support patients, underscoring the complex dynamics within emergency healthcare settings. The expectation to mask emotions and be stoic contributes to the commonly held stigma and perpetuates the negative culture of medicine. Reviews have shown what is described as the common “culture of stoicism” that providers adopt and how it contributes to the creation of a negative work environment (Mihailescu & Neiterman, 2019). Not only do the high expectations set for providers and the lack of vulnerability in the department make for a negative work environment,

but the nature of the patient population (i.e., high acuity and volume) also contributes to the difficulties experienced by ED clinicians. In a study by Person et. al. (2013), ED providers shared similar experiences with the unpredictable, exhausting, and demanding nature of their work environment that often made for a negative experience. Many found it immensely challenging to adequately care for their patients with the lack of resources, technology roadblocks, and animosity between providers surrounding job expectations— issues similar to those reported in our work. Similarly, because the workload in the ED is essentially boundless, extreme overcrowding has been reported in recent years (Eisenberg et al., 2005). The chronic overcrowding of emergency departments in the U.S. not only poses safety concerns for the patients, but also adds to clinicians' workload. The increased number of patients and subsequent charting and time constraints further stretches clinicians and puts their already precarious physical and mental wellbeing further at risk (Kelen et al., 2021). Although there are many causes for overcrowding, one contributor is inefficiency in seeing and discharging or admitting patients, which could be reciprocally linked to the disorganization and divide between departments and providers (Kelen et al., 2021; Morley et al., 2018). The increasingly demanding nature of being on the frontlines of patient care has led providers to report amplified stress, burnout, and work-life balance dissatisfaction (Shanafelt et al., 2012). The nature of the ED is stressful at baseline, and the culture of medicine provoking providers to be invincible, self-sufficient, and not ask for help, compounds those effects. With that said, it is evident that healthcare providers, specifically those in the emergency medicine specialty, appear in broad need support in the realm of mental health resources and help-seeking.

Limitations

Some limitations associated with the current study are the small sample size of 43 providers for the quantitative aspect and a smaller cohort of 16 providers for the qualitative interview portion. More specifically, only two participants were designated as resident physicians, making it difficult to draw appropriate conclusions from the perspectives of this underrepresented group. In addition, the sample is limited to providers working at an academic medical institution, which may invoke a lack of generalizability to institutions of a different classification. Wave 1 survey respondents were predominantly male overall, however the opposite was true for interview participants who were predominantly female. Additionally, among senior-level providers only one participant was a male, giving an uneven distribution of perspectives by gender— a topic further discussed below. The nature of emergency medicine could have served as a barrier to participation, as providers may not have had the time or ability to participate in the study due to scheduling or time commitment. Finally, as emergency medicine providers, the participants are immersed in the ED environment every day. They are often approached to talk about their experience with burnout, which can be time consuming and mentally draining. One provider termed the phenomenon "burnout tourism," noting the frustration they feel when asked to complete another survey on the topic. This could be a barrier to entry for some participants.

There was an overrepresentation of female participants in the senior-career interview group. This phenomenon, in part, could be attributed to the cultural stigma surrounding the help-seeking expectations of male providers. Much of the literature has shown that male providers, specifically those designated as more senior-career, carry more shame, embarrassment, and both self and outward stigma surrounding seeking mental health care (Clement et al., 2015; Dyrbye et

al., 2021). The proposed cultural stigma surrounding male providers to be masculine, tough, and resistant to mental health struggle may have contributed to the lack of male participation in the interview portion. There appears to be a cultural stigma surrounding male providers and the expectations for their help-seeking tendencies, termed the "masculine norm," for the established male tendencies are likely exacerbated by the culture of self-sufficiency within medicine (Clement et al., 2015; Mahalik et al., 2003; Milner et al., 2018). If our cohort was similar to those identified in the literature, there is reason to believe that the male providers' underlying stigmatic views may have deterred them from participating in the interview and disclosing information about their experiences with mental health. Despite these limitations, this research serves as a window into real-life experiences and accounts of working in the ED, while providing an accurate representation of how provider perceptions are shaped by ED experiences and interactions as well as past education and training methods. It also helps to quantify provider experiences to identify regions of potential intervention and where intervention may work most effectively or be better received.

Conclusion and Recommendations for Future Research

This mixed-methods approach to mental health research in medicine adds to the literature surrounding ED provider experiences related to mental health. This study aims to capture the nuance of clinician experiences and give insight into the individual experiences of providers belonging to differing career stages in medicine and medical training, a topic that has little data at this time. Our findings highlight the need for research with greater sample sizes and even distribution of provider groups that would assist in addressing the disparities in data across provider classifications. Furthermore, a sample with sufficient gender and racial diversity that represents the sampled ED populations would be highly informative and have the ability to

explore additional perspectives and draw a more complete picture. Finally, longitudinal qualitative work examining the evolution of provider perceptions and experiences across training and their career would be beneficial in exploring how individual experiences shape perceptions over time (rather than comparing across different individuals as a proxy for time).

Given our data displaying that the current generations of providers have grown up and trained in different environments, hold different views surrounding mental health and stigma, and are at different stages of life, future recommendations include tailoring mental health and wellness education and initiatives in delivery method and content to both age and specialty to ensure relatability and interest in the topic. The unique approach of this study served as an exploration of ED provider experiences in hopes to tease apart the overlap between perception and reality. The results demonstrate the importance of emphasizing individual experiences and their role in shaping thoughts, behaviors, physiology, and – ultimately – provider well-being, health, and the quality of patient care provided.

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