

# A Systematic Review

Ariane Willhoit<sup>1</sup> and Dr. Bruce Lazar, MBA, DM<sup>2</sup>

<sup>1</sup>MHA, Graduate Student, Southern Illinois University, Carbondale, USA

[ariane.willhoit@siu.edu](mailto:ariane.willhoit@siu.edu)

<sup>2</sup>School of Health Sciences, MHA Lecturer, Southern Illinois University, Carbondale, USA

[bruce.lazar@siu.edu](mailto:bruce.lazar@siu.edu)

**Abstract:** *The uneven distribution of mental health providers poses a significant issue to underserved communities across the United States. Healthcare administrators have a unique opportunity to address these challenges by implementing strategies to help reduce emergency care visits and encourage participation in local health department programs for the continuation of care. The purpose of this systematic literature review is to explore and identify effective strategies that health administrators can implement to reduce emergency care visits and increase participation in local continuation-of-care programs in underserved populations experiencing maldistribution of mental health providers. A thorough search was completed using the academic PubMed database and the EBSCOhost platform as a general academic search tool, following the Preferred Reporting Items for Systematic Review and Meta-Analyses (PRISMA) guidelines. Twenty-one relevant articles were analyzed thematically through constant comparison, evaluation of findings, and the categorization of key concepts. Three major themes emerged: underserved areas with maldistribution of mental health providers (48%), successful strategies by health administrators (57%), and reducing emergency department visits and improving continuity of care through local behavioral health programs (24%). The findings indicated that several effective programs, particularly telehealth services and coordination with local home visit programs, have been implemented to improve mental health access and reduce emergency care visits in underserved communities. Additionally, the overall findings provide an opportunity for healthcare leaders to coordinate efforts with policymakers to create practical guidelines that administrators can use to support care better and manage mental health crises during an emergency care visit.*

## Introduction

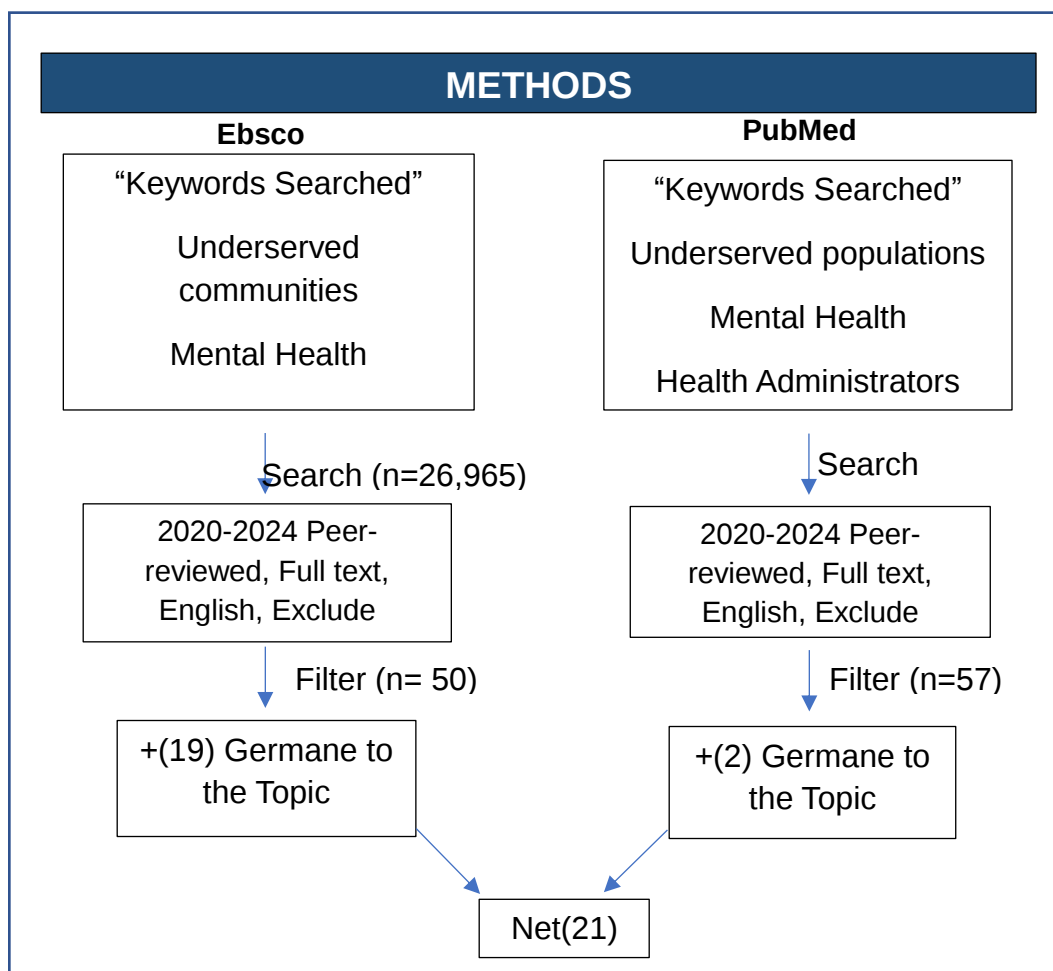
The U.S. mental health care system struggles to meet the demands for services in underserved populations, especially in remote areas. According to an article published in PubMed, it states, “Post-COVID, the World Health Organization estimates that there has been further worsening of mental health status with a further 25% increase in depression and anxiety disorder [3]. Mental health has a negative stigma that encourages society to overlook real illness or disorders diagnosed in underserved populations. Often, patients who have had mental health crises and are seen in emergency care clinics don’t have the proper behavioral health resources to help with long-term treatment for mental illnesses. In a study looking at methods of preventive measures to predict emergency care visits, “report that youth with childhood maltreatment have higher care utilization costs, and increased ED visits contribute in part to this higher overall cost [9]. In some cases, this lack of care can lead to patients not being properly examined and being misdiagnosed by emergency care providers who do not have a professional background in psychology. Therefore, it leaves health administrators with the difficult task of coordinating care for patients in an area that is dealing with the maldistribution of mental health providers. Different administrative strategies have been implemented, focusing on training programs for new incoming mental health professionals, incorporating integrated behavioral health into clinics, encouraging clinical research on mental health treatment, and funding community-based intervention programs. These strategies focus on mental health treatment in underserved communities and on how these services are delivered and accessed more easily. Since mental health providers are scarce in rural areas in the United States, some communities are focusing on telehealth strategies, making mental health treatment more accessible to a wide range of people in underserved communities. The purpose of this systematic literature review is to explore strategies implemented by healthcare administrators to reduce emergency department visits and improve continuity of care through local behavioral health services in underserved areas experiencing a maldistribution of mental health providers.

## Methods

After narrowing down the research topic choice, a selection of articles aligned with the research question was utilized for the review. The research question was as follows: In underserved areas with a maldistribution of mental health providers, what strategies are implemented by healthcare administrators that can help reduce emergency department visits and improve continuity of care through local behavioral health programs? The literature search process used the Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) guidelines. PRISMA guidelines were used in the searching for pertinent studies, screening for inclusion and exclusion criteria, data extraction based on the screening for criteria, synthesis of the data to identify key themes, and finally reporting the findings [1,2]. A literature search was conducted using the Elton B. Stephens Company (EBSCO) and Public MEDLINE (PubMed), adhering to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) protocols (Moher et al., 2009). The Methods phase included: 1. Searching for relevant studies, 2. Screening for inclusion and exclusion criteria 3. Extracting data based on the screening criteria 4. Synthesizing the data to identify key themes 5. Reporting

and disseminating the findings (Page et al., 2021). Searching the academic databases utilizing keywords, underserved communities/population, mental health, hospitals, local behavioral health programs, and health administrators provided consistent parameters in choosing the best articles to review the topic and answer the research question. For inclusion of articles to review, publications had to meet all the following criteria: (a) articles published between 2020 and 2025, (b) articles written in the English language, (c) peer-reviewed journal articles, (d) full-text articles, and (e) with a focus on strategies administrators use to improve mental health access and reduce emergency care in underserved areas. When the applied inclusion criteria were in place, EBSCO resulted in 19 articles, and PubMed produced 2 articles. This review excluded articles not meeting the inclusion criteria above (see Figure 1).

**Figure 1:** Flow Diagram



## Results

The primary research question of this study is in underserved populations experiencing a maldistribution of mental health providers, what strategies can health administrators implement to reduce emergency care visits and encourage participation in local health department programs for continuation of care? The review followed PRISMA guidelines by implementing a systematic literature search using the EBSCO and PubMed academic databases, applying defined inclusion and exclusion criteria for selecting studies, and using a thematic approach to analyze the data (Moher et al., 2009). Based on an initial search retrieval of 107 articles, 21 were chosen for further analysis, given the relevance to the stated research question. Table 1 lists the titles, key summations and numbering of the 21 articles selected for the systematic literature review. Each article in the table has been ordered and labeled numerically from one to 21. The article number will be used in the results and discussion section for citation and clarity purposes.

**Table 1**

*Summarized findings of the literature*

| Titles                                                                                                                                                                        | Findings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
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| 1. The mental health impact of the COVID-19 epidemic on immigrants and racial and ethnic minorities                                                                           | <p>This article looks at the ethnic minority population that has had worse outcomes from the COVID-19 pandemic. The disease brought inequality issues and resource scarcity to the forefront during the pandemic. The disproportionate burdens were the difference in chronic disease conditions, living conditions, and the ability to social distance. Services need to be put into place during these states of emergencies for individuals who are battling substance abuse and mental illnesses.</p>                                                                                                                                                                                                                                                                                                                                                                                  |
| 2. The impact of the COVID-19 pandemic on suicide rates                                                                                                                       | <p>This article looks at the multiple lines of evidence that the COVID-19 pandemic had profound psychological and social effects. Vulnerable populations in high COVID-19 prevalence areas have developed or exacerbated psychiatric disorders that include suicidal behaviors. Promoting traditional and social media campaigns for mental health and reducing stress can help mitigate the consequences of the COVID-19 mental health issues.</p> <p>This review looked at recent literature that regarded tele-mental health outlets that were focused on tele-consultation and tele-supervision in post-disaster and low-resource settings that were impacted by the COVID-19 pandemic. Using telehealth platforms holds promising approaches to narrowing the gap in quality mental health services in vulnerable populations that are often impacted by disasters and conflicts.</p> |
| 3. The role of tele-mental health, tele-consultation, and tele-supervision in post-disaster and low-resource settings                                                         | <p>The scoping review focused on the impacts of climate change on physical and mental health. The main findings showed that mental health impacts included trauma, depression, and anxiety. Evidence on population exposure to hazardous climate is limited, but social determinants of health and individual factors were identified as vulnerable factors.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 4. Identifying gaps on health impacts, exposures, and vulnerabilities to climate change on human health and wellbeing in South America: a scoping review                      | <p>This systematic and meta-analysis review examined literature on home visiting administered by professional/paraprofessional families with young children in highly vulnerable and complex environments. This study showed evidence that home visiting interventions had improved some child outcomes, but more studies need to be conducted.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 5. Systematic review and meta-analysis of home visiting interventions aimed at enhancing child mental health, psychosocial, and developmental outcomes in vulnerable families | <p>This article looked at the humanitarian settings of people who are exposed to a constellation of physical and psychological stressors that make them vulnerable to developing mental disorders. There were studies that were conducted for both controlled and non-controlled surveys. Of the seven prevention studies in this review, none assesses whether the prevention intervention reduced the incidence of mental disorders. Some areas of the study were not eligible for inclusion, which brought up the risk of bias. More studies need to be conducted and assessed.</p> <p>This study's objective is to educate practitioners on the psychosocial concerns that were exacerbated during the COVID-19 pandemic. It</p>                                                                                                                                                       |

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| <p>6. Psychological and social interventions for the prevention of mental disorders in people living in low-and middle-income countries affected by humanitarian crises</p> <p>7. Glitches in the utilization of telehealth in pediatric rheumatology patients during the COVID-19 pandemic</p> <p>8. Integrating Artificial Intelligence (AI) with workforce solutions for sustainable care: a follow-up to artificial intelligence and machine learning (ML) based decision support systems in mental health</p> <p>9. Clinicians' perspectives of immersive tools in clinical mental health settings: a systematic scoping review</p> <p>10. Typology of organizational innovation components: building blocks to improve access to primary healthcare for vulnerable populations</p> | <p>looks at the hurdles in utilizing telehealth care for the most vulnerable patient population.</p> <p>This integrative literature review looks at the role that artificial intelligence and machine learning based clinical decision support systems in mental health care. It showed improvement in diagnostic accuracy, alleviating clinician workloads, and addressing missed care. New evidence shows the importance of clinician trust, system transparency, and ethical concerns, including algorithmic bias and equity, particularly in vulnerable populations.</p> <p>Virtual reality in mental health treatment has potential in addressing the wide spectrum of psychological and neurocognitive disorders. However, there is limited research on clinicians' perceptions of using this new technology and implementing these new methods in mental health services. There are some concerns with human interactions and their suitability for specific patient groups.</p> <p>This review looks at primary healthcare organizations' implementation of tailored needs and abilities of vulnerable populations. They developed components akin to building blocks that combine different ways to innovate or add methods to existing organizational processes to improve access to primary healthcare.</p> <p>Veterans Affairs (VA) has been seen as the national leader in implementing telehealth, with gaps remaining in the promising strategies to expand access to virtual care. This review aims to address three questions to focus on access to virtual care. It will take multiple levels of healthcare professionals to collaborate on VA development, implementation, and evaluation of the spread of virtual care access strategies.</p> <p>Clinicians are now caring for a more diverse population with the shift in racial and ethnic subgroups. They are now faced with the challenges of cultural and language barriers that can have severe impacts on the quality of care. This study looks at the National Health Service Corps programs to help address shortages of clinicians by providing loan repayment programs and scholarships. This study looks at the decline and increase in clinicians in racial and ethnic populations.</p> <p>Community health workers such as Accredited Social Health Activists (ASHAs) are critical resources to help facilitate the bridging of mental health treatment gaps in Indian populations. Incorporating screenings, identification, and follow-up appointments for those with mental health concerns in the community will be a great resource.</p> <p>Individuals with mental illness and adverse childhood experiences have been shown to visit emergency departments more often than the general population. This study analyzed databases as predictors</p> |
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| <p>11. Research priorities to expand virtual care access for patients in the Veterans Affairs Health Care system</p> <p>12. Racial and Ethnic concordance between national health services corps clinicians and underserved populations</p> <p>13. Stakeholder perspectives on the role of accredited social health activists (ASHAs) in the Indian public mental healthcare space: A qualitative study</p> <p>14. Can the adverse childhood experiences (ACEs) checklist be utilized to predict emergency department visits among children and adolescents?</p> <p>15. Abstracts from the 2023 Annual Meeting of the Society of General Internal Medicine</p> | <p>regarding children and adolescents struggling with addiction and mental health issues.</p> <p>The study looks at the importance of gathering admission vital signs and clinical laboratory values that are associated with patient discharge status. These factors need to be taken into consideration by physicians when prognosticating patients' care plans to have a better measure of achieving the highest quality of care for their patients.</p> <p>This article looks at how some organizations emphasized psychoanalytic thinking, training, and practices in combating community mental health issues. The modifications made both the community mental health they served and the psychoanalytic enterprise.</p> <p>This study conducted a randomized controlled trial utilizing a learning collaborative to implement two behavioral health home models in community mental health provider organizations serving adults with serious mental illness. The paper presented provider results focused on behavioral health home plus training, learning collaborative implementation, physical health, and wellness promotion within the sites.</p> <p>Individuals with mental illness and adverse childhood experiences have been shown to visit emergency departments more often than the general population. This study analyzed databases as predictors regarding children and adolescents struggling with addiction and mental health issues.</p> <p>The study looks at the importance of gathering admission vital signs and clinical laboratory values that are associated with patient discharge status. These factors need to be taken into consideration by physicians when prognosticating patients' care plans to have a better measure of achieving the highest quality of care for their patients.</p> <p>This article looks at how some organizations emphasized psychoanalytic thinking, training, and practices in combating community mental health issues. The modifications made both the community mental health they served and the psychoanalytic enterprise.</p> <p>This study conducted a randomized controlled trial that utilized a learning collaborative to implement two behavioral health home models in community mental health provider organizations serving adults with serious mental illness. The paper presented provider results focused on behavioral health home plus training, learning collaborative implementation, physical health, and wellness promotion within the area.</p> |
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| 16. All that glitters is not gold: the application of psychoanalytic principles to community mental health                                    |  |
| 17. Scaling a behavioral health home delivery model to special populations                                                                    |  |
| 18. Can the adverse childhood experiences (ACEs) checklist be utilized to predict emergency department visits among children and adolescents? |  |
| 19. Abstracts from the 2023 Annual Meeting of the Society of General Internal Medicine                                                        |  |
| 20. All that glitters is not gold: the application of psychoanalytic principles to community mental health                                    |  |
| 21. Scaling a behavioral health home delivery model to special populations                                                                    |  |

After reviewing the data from the 21 articles, the findings were categorized into three common themes. Each theme was directly related to the research question and was reported in an affinity matrix (Table 2) to determine the rate of occurrence of the common themes in the research question. The four common themes include: (a) underserved areas with maldistribution of mental health providers, (b) successful strategies by health administrators, and (c) reducing emergency department visits and improving continuity of care through local behavioral health programs.

**Table 2**

*Frequency of occurrence in literature*

| Benefits                                                                                                    | Occurrences                    | Instances of Attributes (n) | Percentage |
|-------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------|------------|
| Underserved areas with a maldistribution of mental health providers                                         | 2,4,5,6,8,10,15,16,20,21       | N=10                        | 48%        |
| Successful strategies by health administrators                                                              |                                |                             |            |
| Reduce emergency department visits and improve continuity of care through local behavioral health programs. | 2,3,4,7,9,12,13,14,15,17,20,21 | N=13                        | 62%        |
|                                                                                                             | 3,9,10,15,18                   | N=5                         | 24%        |

Here are some of the name revisions that should help strengthen the study, being more descriptive for the readers:

Theme 1: Underserved areas with maldistribution of mental health providers

Theme 2: successful strategies by health administrators

Theme 3: Reduce emergency department visits and improve continuity of care through local behavioral health programs

**Table 2**

*Frequency of occurrence in literature*

| Themes                                                      | Articles (n)                              | Instances of Attributes (n) | Percentage |
|-------------------------------------------------------------|-------------------------------------------|-----------------------------|------------|
| Mental Health Provider Shortages in Underserved Populations | 2, 4, 5, 6, 8, 10, 15, 16, 20, 21         | 10                          | 48%        |
| Effective Health Administration Strategies                  | 2, 3, 4, 7, 9, 12, 13, 14, 15, 17, 20, 21 | 12                          | 57%        |
| Reduction in Emergency Visits and Improved Care Continuity  | 3, 9, 10, 15, 18                          | 5                           | 24%        |

Based on the research findings, 48% of the articles documented underserved areas experiencing a maldistribution of mental health providers [2, 4, 5, 6, 8, 10, 15, 16, 20, 21]. 62% of the articles addressed successful strategies implemented by health administrators [2, 3, 4, 7, 9, 12, 13, 14, 15, 17, 20, 21]. Finally, 24% of the articles observed the reduction in emergency department visits and improved continuity of care through local behavioral health programs [3, 9, 10, 15, 18].

## Discussion

Underserved populations that suffer from mental disorders face significant barriers to receiving adequate care within their communities. In 2019, mental health disorders were the top ten leading causes of burden worldwide [13]. The purpose of this systematic literature review is to explore and identify effective strategies that health administrators can implement to reduce emergency care visits and increase participation in local continuation of care programs in underserved populations experiencing maldistribution of mental health providers. Twenty-one peer-reviewed articles were published between 2020 and 2025. They were considered in the study, which allowed for a current analysis of underserved populations, health administrators, and mental health.

The data results shown in Table 2 display the main themes that emerged from the literature analysis. Three main themes emerged from the literature analysis that included underserved areas with maldistribution of mental health providers (2,4,5,6,8,10,15,16,20,21), successful strategies by health administrators (2,3,4,7,9,12,13,14,15,17,20,21), and reducing emergency department visits and improving continuity of care through local behavioral health programs (3, 9, 10, 15, 18).

Several authors documented that underserved areas with maldistribution of mental health providers have successfully implemented strategies to encourage local behavioral health programs in their communities (2, 4, 5, 6, 8, 10, 15, 16, 20, 21). The primary focus of the information was to increase telehealth applications to be more accessible to communities that are burdened with mental health issues. During the COVID-19 pandemic, healthcare workers and mental health providers were being pushed to their limits by trying to meet the demands of the population [3]. Research findings indicate that the use of telehealth applications was successful in delivering mental health care services without disrupting routine care. Primary or emergency doctors have no expertise in diagnosing a mental disorder that is already difficult to detect on a routine visit. Telehealth applications can help give consultation as an indirect service that a specialist, such as a psychiatrist, provides as either a one-time or a series of consultations [3]. Researchers' findings indicate a high percentage of maldistribution of mental health providers in underserved areas of 48% (1,2,3,4,5,6,8,10,11,15,16,20,21). In an article published in the National Center for Health Workforce Analysis, it states that

approximately 122 million US population lives in a Mental Health Professional Shortage Area (HPSA). In contrast, several authors' results noted that the maldistribution of mental health providers was not the root cause of the disruption to routine care appointments. However, the overall results indicate that most of the authors, 48% saw that other barriers, such as socioeconomic status or individuals who lived in remote areas, created more challenges to seek help for their mental health needs.

The theme of successful strategies by health administrators has several authors who documented the increased results of participation in both routine care and continuation of care with local behavioral health programs (2,3,4,7,9,12,13,14,15,17,20,21). The strategies used by health administrators were successful in the coordination of mental health providers and primary care providers. They were demonstrated by a percentage of 57% of the articles in the literature review (2,3,4,7,9,12,13,14,15,17,20,21). The strategies that have been proven to increase participation in local behavioral health programs have successfully developed an application model to help mental health providers in underserved areas. The primary focus of the information was to increase telehealth applications to be more accessible to communities that are burdened with mental health issues. Research findings indicate that mental health providers can give support through these telehealth applications to patients and healthcare workers. Most direct care is often provided by community health workers, who may or may not have either graduated or post-graduate training to support the mental health needs of the community [3]. In contrast, several authors' results noted that the telehealth applications take time and need multiple funding sources to support these new delivery methods. However, technology is becoming increasingly more available to all generations, therefore becoming more affordable to all populations.

The third theme of reducing emergency care visits by improving continuation of care through local behavioral health programs had little information on statistical evidence (3,9,10,15,18). Underserved populations that experience a high risk of homelessness or poverty have led most people to rely on emergency departments for mental health crises. An article published in BMC Medical Research Methodology states, "Individuals with mental illness and Adverse Childhood Experience exposure have been shown to visit emergency departments more often than those in the general population" [18]. There are some programs that were being implemented to help with continuation of care after an ER visit, such as the use of Adverse Childhood Experience (ACEs), which refers to a set of stressors that occur during childhood [18]. In contrast, several authors' results noted that 24% had successful programs like home visit interventions or supporting training programs in psychoanalysis that apply towards community mental health [21]. As a result, there would be much-needed research to be done on learning how to reduce emergency care visits for mental health crises and improving the continuation of care using local behavioral health programs.

### **Limitations**

The limitations in these studies were the quality of assessment of underserved populations. Some studies could not collect accurate data based on the measurement of mental health constructs. Patients with mental health disorders cannot provide solid information about their symptoms due to inconsistency of appointment visits. Individuals with mental health issues tend to receive limited or disconnected healthcare, despite having a higher risk for chronic diseases than other individuals [21]. Also, most primary care providers do not have adequate mental health education to help individuals struggling with mental health issues like manic episodes. Therefore, this causes patients to seek treatment in other unhealthy lifestyles, like the use of drugs or thoughts of suicide. The negative stigma towards mental health issues has led to many biases in data collection and decreased trust in local health organizations. Patients experiencing a mental health crisis need support and resources at any given moment to help increase their well-being.

### **Future research**

The focus of integrating technology with personalized care in the healthcare organization will help future research in collecting accurate data. This will allow the improvement of diagnosing disorders that are hard to detect during routine care visits. There will be more data on the complex understanding of psychological, social, and biological factors that contribute to mental health issues. Helping researchers connect across different platforms and easily exchange information that they have come across. Especially in underserved populations that have trouble with the maldistribution of mental health providers in their community. New artificial intelligence programs can help primary care providers in accurately diagnosing or detecting early signs of mental health disorders. AI can help underserved populations have access to mental health care services and help with the negative stigma that prevents individuals from seeking help.

### **Conclusion**

Mental health has been a sensitive topic for underserved populations that face unique challenges in accessing quality healthcare services in their communities. Health administrators play a crucial role in implementing strategies to address the maldistribution of mental health providers by reducing emergency room visits and promoting local behavioral health programs. The key strategies that health administrators can help implement include telehealth technology and home visits. These have been proven to encourage participation in these programs. Four these emerged during the data analysis process related to the research

question: underserved areas with maldistribution of providers, successful strategies by health administrators, compared routine care, and reducing emergency department visits by improving continuity of care through local behavioral health programs. Based on the findings of this literature review, the primary strategies that health administrators can promote are telehealth services and coordination with local home visit programs to improve participation in ongoing care. Future research should focus on expanding access to data across Artificial Intelligence (AI) programs and efforts to combat the stigma surrounding mental health discussion in communities. Ultimately, a global effort will be needed, involving more researchers to explore all aspects of mental health issues, informing policymakers in developing guidelines for intervention that all healthcare professionals can use during mental health crises.

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