**Capstone Project:**

# IMPROVING OUTCOMES THROUGH INTEGRATED BEHAVIORAL HEALTH FOR CHRONIC DISEASE/ILLNESS PATIENTS

Shawna L. Haddox

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Dr. Jim Dockins

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## Introduction

Mental Health treatment has long been a major issue in the healthcare industry. Since the beginning of structured healthcare treatment, mental health, and the appropriate treatment methods have been a source of contention industry-wide. As with mental health, chronic disease and illness treatments have also been an area that has received vast amounts of scrutiny due to the results of many treatment strategies being sporadic. With treatment outcomes for both issues constantly being called into question it brings up the viability of mental health treatment plans to be a precursor, or beginning focus for chronic disease/illness treatment strategies. The hope is to also show the potential future direction for addressing these issues based upon the new federal administration and the expected new guidelines that will be established. This project will show the potential for improved patient outcomes for chronic disease/illness treatments when mental health evaluations or treatment is integrated as a part of the overall treatment plan. The model of integrated behavioral health (IBH) is showing promising results. If healthcare professionals can move beyond the negative stigma associated with mental health illness and work toward of inclusion of IBH into primary care plans, outcomes will improve, costs will be reduced and patients will be happier. This project will cover all of these areas and offer support for the need for increased education, training, and collaboration for the expanded use of IBH.

## Abstract

Treatment for chronic diseases and illnesses has long been focused on management. While this approach is still necessary at times, the focus of this project is to draw attention to the potential effectiveness of ensuring that behavioral health screening and treatment are integrated into the initial diagnosis and treatment plan formation of chronic disease/illness. This integrated behavioral health (IBH) can lead to significantly improved outcomes in patients diagnosed with various chronic diseases or illnesses. The obstacles to mental health treatment are addressed as well as the potential treatment options. This project will show that improved outcomes are attainable, and in some cases, chronic disease/illness is preventable, with the aid of mental health treatment. The importance of training and education for patients and medical professionals alike is addressed as well as the potential cost savings associated with inclusion.

## Acknowledgments

I would like to express my appreciation to the University of Arkansas Ft. Smith and, more specifically, the Healthcare Administration Department. I wish to extend a special thank you to Dr. Cheryl Holden, Executive Director of the Master's in Healthcare Administration Program, for her support and for giving me the confidence to begin and finish this journey. To all of my instructors, thank you for pushing me beyond my limits, expanding my knowledge, and stretching my understanding of what it takes to be a successful healthcare administrator. This program has been nothing short of exceptional and has given me the foundation necessary for success as I move forward with my career choices.

## Dedication

I would like to dedicate this work to my Lord and Savior, Jesus Christ, through whom all things are possible. I also wish to dedicate this to my late brother, Wayne Tucker, who was not only a brother but also my best friend, and to my husband, you have been my rock and have encouraged and supported me through every step of the journey. Thank you for being the best dad and husband, and for always putting a smile on my face. Lastly, for all of those suffering from mental health issues, you are not alone.

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## Figures

Fig. 1 (Buchanan et al., 2024).

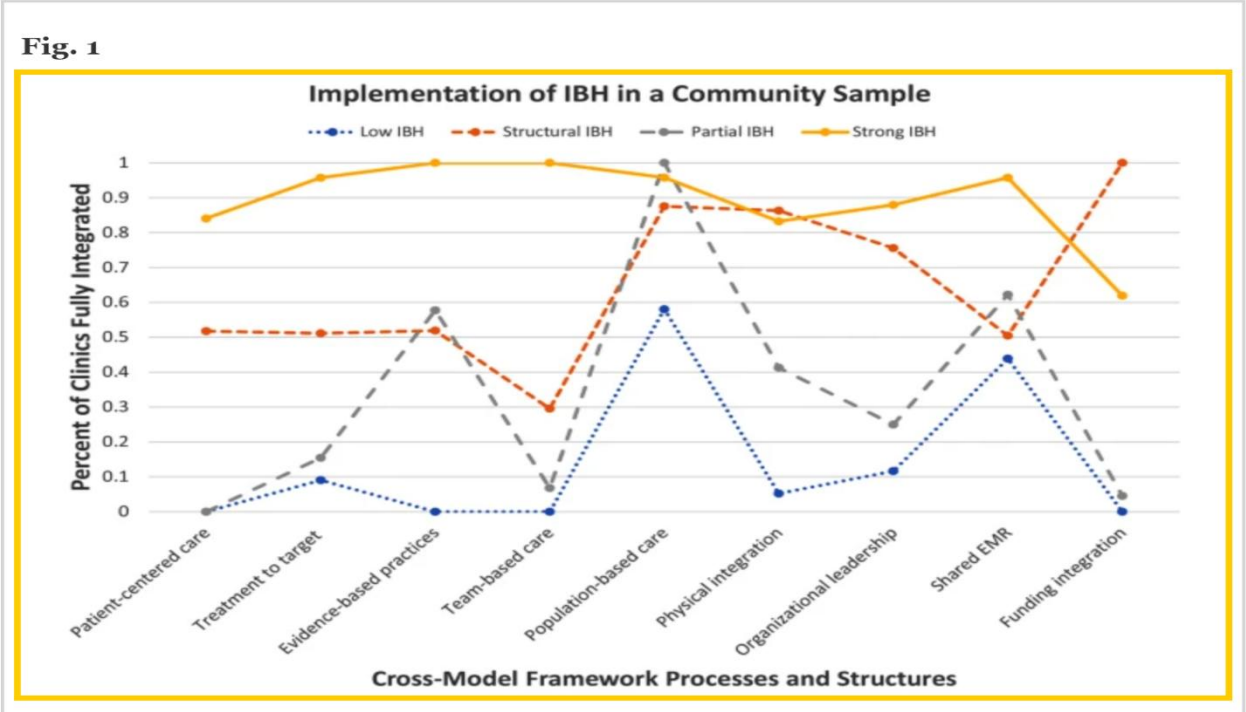


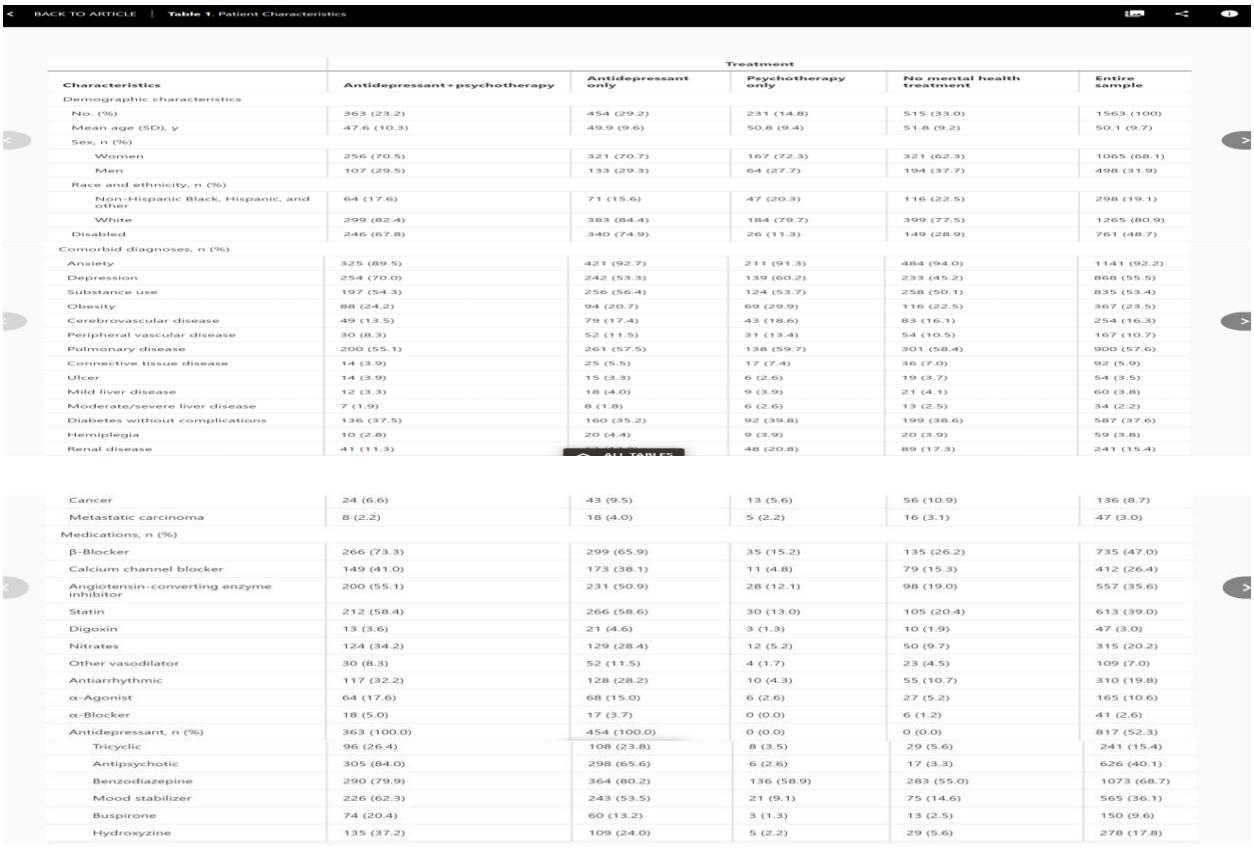

Fig. 2 (ALPHA, 2024).

| Key Considerations: |
| --- |
| **Training:** Healthcare providers should receive training in recognizing signs of mental health disorders and conducting appropriate screenings. This will enable them to identify patients who may require further assessment and intervention. |
| **Standardized screening tools:** Implementing standardized screening tools ensures consistency and accuracy in identifying patients' mental health needs. Tools such as the Patient Health Questionnaire (PHQ-9) for depression or the Generalized Anxiety Disorder (GAD-7) scale for anxiety can be used as part of routine screenings. |
| **Integration into electronic health records:** Incorporating mental health screenings into electronic health records can help streamline the process and ensure that results are recorded and easily accessible to the healthcare team. This promotes continuity of care and enhances communication among providers. |

Fig. 3 (ALPHA, 2024).

| Suggestions for overcoming barriers: |
|---|
| **Advocacy for policy changes:** Healthcare systems and organizations can advocate for policy changes that prioritize and support the integration of behavioral health screenings in chronic disease management. This includes campaigning for reimbursement policies that recognize the value of mental health screenings and ensuring adequate resources for implementation. |
| **Increased funding for mental health services:** Adequate funding for mental health services is essential to provide access to necessary care for patients in need. Allocating funds towards expanding mental health services and resources can help overcome barriers such as limited access to specialized care. |
| **Improved coordination:** Enhancing collaboration and coordination between healthcare providers and community organizations is crucial. This ensures a holistic approach to chronic disease management, with mental health support being integrated seamlessly into the overall care plan. |

Fig. 4 (Carmin et al., 2024).



BACK TO ARTICLE | Table 1. Patient Characteristics

| Characteristics | Treatment: Antidepressant+psychotherapy | Antidepressant only | Psychotherapy only | No mental health treatment | Entire sample |
|---|---|---|---|---|---|
| Demographic characteristics | | | | | |
| No. (%) | 363 (23.2) | 454 (29.2) | 231 (14.8) | 515 (33.0) | 1563 (100) |
| Mean age (SD), y | 47.6 (10.3) | 49.9 (9.6) | 50.8 (9.4) | 51.8 (9.2) | 50.1 (9.7) |
| Sex, n (%) | | | | | |
| Women | 256 (70.5) | 321 (70.7) | 167 (72.3) | 321 (62.3) | 1065 (68.1) |
| Men | 107 (29.5) | 133 (29.3) | 64 (27.7) | 194 (37.7) | 498 (31.9) |
| Race and ethnicity, n (%) | | | | | |
| Non-Hispanic Black, Hispanic, and other | 64 (17.6) | 71 (15.6) | 47 (20.3) | 116 (22.5) | 298 (19.1) |
| White | 299 (82.4) | 383 (84.4) | 184 (79.7) | 399 (77.5) | 1265 (80.9) |
| Disabled | 246 (67.8) | 340 (74.9) | 26 (11.3) | 149 (28.9) | 761 (48.7) |
| Comorbid diagnoses, n (%) | | | | | |
| Anxiety | 325 (89.5) | 421 (92.7) | 211 (91.3) | 484 (94.0) | 1141 (92.2) |
| Depression | 254 (70.0) | 242 (53.3) | 139 (60.2) | 233 (45.2) | 868 (55.5) |
| Substance use | 197 (54.3) | 256 (56.4) | 124 (53.7) | 258 (50.1) | 835 (53.4) |
| Obesity | 88 (24.2) | 94 (20.7) | 69 (29.9) | 116 (22.5) | 367 (23.5) |
| Cerebrovascular disease | 49 (13.5) | 79 (17.4) | 43 (18.6) | 83 (16.1) | 254 (16.3) |
| Peripheral vascular disease | 30 (8.3) | 52 (11.5) | 31 (13.4) | 54 (10.5) | 167 (10.7) |
| Pulmonary disease | 200 (55.1) | 261 (57.5) | 138 (59.7) | 301 (58.4) | 900 (57.6) |
| Connective tissue disease | 14 (3.9) | 25 (5.5) | 17 (7.4) | 36 (7.0) | 92 (5.9) |
| Ulcer | 14 (3.9) | 15 (3.3) | 6 (2.6) | 19 (3.7) | 54 (3.5) |
| Mild liver disease | 12 (3.3) | 18 (4.0) | 9 (3.9) | 21 (4.1) | 60 (3.8) |
| Moderate/severe liver disease | 7 (1.9) | 8 (1.8) | 6 (2.6) | 13 (2.5) | 34 (2.2) |
| Diabetes without complications | 136 (37.5) | 160 (35.2) | 92 (39.8) | 199 (38.6) | 587 (37.6) |
| Hemiplegia | 10 (2.8) | 20 (4.4) | 9 (3.9) | 20 (3.9) | 59 (3.8) |
| Renal disease | 41 (11.3) | 48 (20.8) | 89 (17.3) | 241 (15.4) | |
| Cancer | 24 (6.6) | 43 (9.5) | 13 (5.6) | 56 (10.9) | 136 (8.7) |
| Metastatic carcinoma | 8 (2.2) | 18 (4.0) | 5 (2.2) | 16 (3.1) | 47 (3.0) |
| Medications, n (%) | | | | | |
| β-Blocker | 266 (73.3) | 299 (65.9) | 35 (15.2) | 135 (26.2) | 735 (47.0) |
| Calcium channel blocker | 149 (41.0) | 173 (38.1) | 11 (4.8) | 79 (15.3) | 412 (26.4) |
| Angiotensin-converting enzyme inhibitor | 200 (55.1) | 231 (50.9) | 28 (12.1) | 98 (19.0) | 557 (35.6) |
| Statin | 212 (58.4) | 266 (58.6) | 30 (13.0) | 105 (20.4) | 613 (39.0) |
| Digoxin | 13 (3.6) | 21 (4.6) | 3 (1.3) | 10 (1.9) | 47 (3.0) |
| Nitrates | 124 (34.2) | 129 (28.4) | 12 (5.2) | 50 (9.7) | 315 (20.2) |
| Other vasodilator | 30 (8.3) | 52 (11.5) | 4 (1.7) | 23 (4.5) | 109 (7.0) |
| Antiarrhythmic | 117 (32.2) | 128 (28.2) | 10 (4.3) | 55 (10.7) | 310 (19.8) |
| α-Agonist | 64 (17.6) | 68 (15.0) | 6 (2.6) | 27 (5.2) | 165 (10.6) |
| α-Blocker | 18 (5.0) | 17 (3.7) | 0 (0.0) | 6 (1.2) | 41 (2.6) |
| Antidepressant, n (%) | 363 (100.0) | 454 (100.0) | 0 (0.0) | 0 (0.0) | 817 (52.3) |
| Tricyclic | 96 (26.4) | 108 (23.8) | 8 (3.5) | 29 (5.6) | 241 (15.4) |
| Antipsychotic | 305 (84.0) | 298 (65.6) | 6 (2.6) | 17 (3.3) | 626 (40.1) |
| Benzodiazepine | 290 (79.9) | 364 (80.2) | 136 (58.9) | 283 (55.0) | 1073 (68.7) |
| Mood stabilizer | 226 (62.3) | 243 (53.5) | 21 (9.1) | 75 (14.6) | 565 (36.1) |
| Buspirone | 74 (20.4) | 60 (13.2) | 3 (1.3) | 13 (2.5) | 150 (9.6) |
| Hydroxyzine | 135 (37.2) | 109 (24.0) | 5 (2.2) | 29 (5.6) | 278 (17.8) |

Fig. 5 (Carmin, et al., 2024).

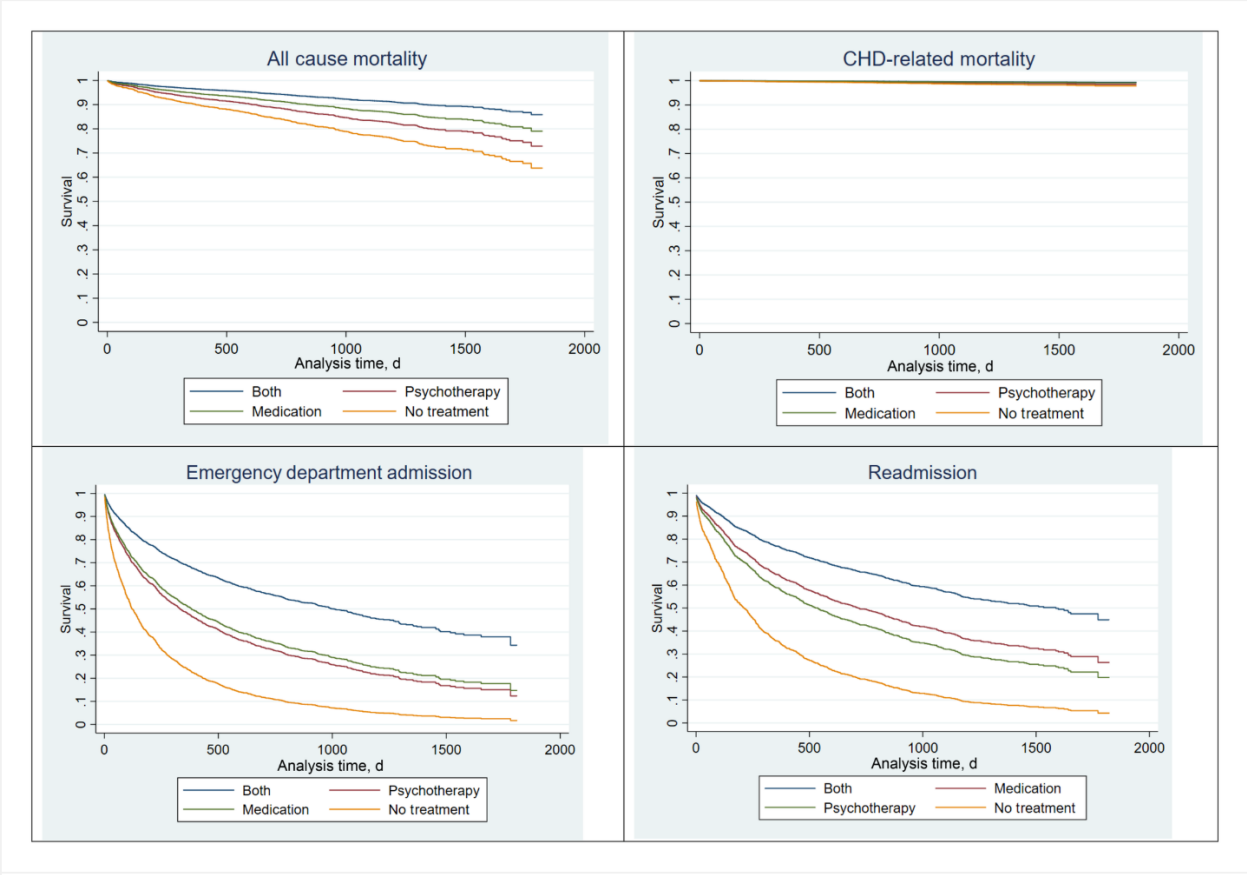
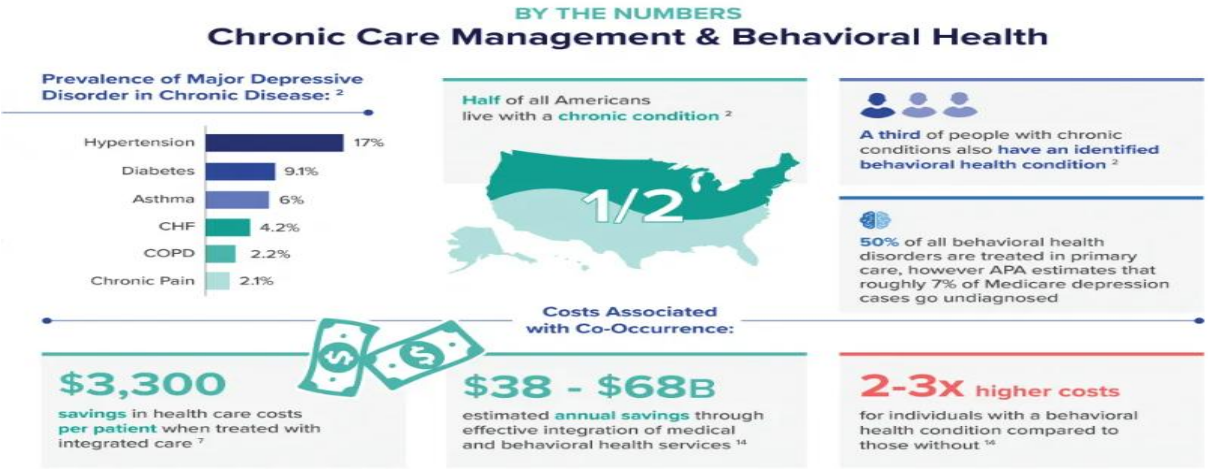



Fig. 6 (Crowley, 2022)



## Problem Statement

Chronic Disease and Illness have been a major issue in healthcare since the early 20th century. Repetitive treatment has been accepted too often as the only or best option for attacking chronic disease and illness. It is past time to remove the stigma associated with mental health treatments and bring it to the forefront when building treatments intended to tackle chronic disease and illness. Mental health evaluations should take place early on during the planning process for the treatment of chronic disease/illness. This project is intended to determine if health outcomes improve during and after treatment plans addressing chronic disease. Health problems associated with patients suffering from mental health issues have been shown to have significant impacts on overall health outcomes for patients, and the effect on chronic disease treatment plans is an area of needed analysis to show that tackling mental health should be a first step in many treatment plans.

## Purpose Statement

Mental health evaluations and treatments can significantly impact patient health outcomes related to chronic disease/illness.

## Research Question

Does mental health evaluation/treatment inclusion in initial treatment plans improve overall patient outcomes when addressing chronic disease/illness?

## Methodology

Data collection will be primarily through secondary, existing data sources. Both quantitative and qualitative data sources will be used to support the information. Mental Health has come to the forefront of healthcare in recent years, and more data is now available than ever before showing the effects of mental health treatment on patient health outcomes. A focus on the outcomes of those being treated for chronic diseases is the focus of the data collection for this project. The need for chronic disease treatment plans to include mental health as a part of control and prevention strategies is becoming more common due to the positive outcomes being seen. Through analysis of existing studies and provider evaluations, the data will provide evidence of the effectiveness or ineffectiveness of these strategies.

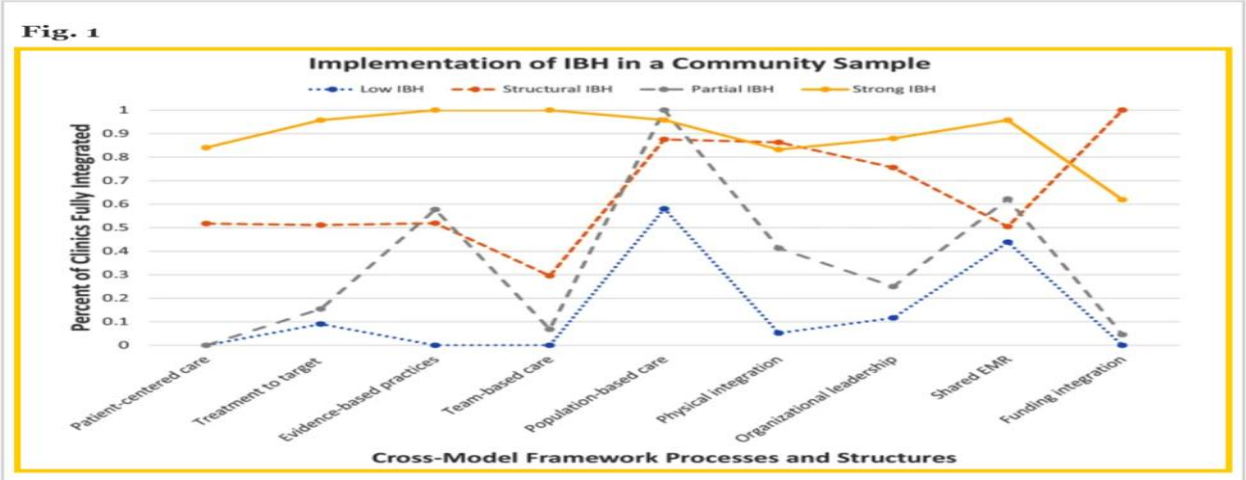
Participants in the studies will be patients who have or are being treated for chronic diseases or illnesses as well as those involved in non-chronic treatment plans.

Anytime you are dealing with mental health issues, significant ethical issues could arise. It must be established that the stigmas associated with mental health can create vulnerability in patients. With all mental health treatment plans, the concern exists for patient impairment during all decision-making. Of course, as with all treatment plan concerns, confidentiality becomes even more critical. All of these can be addressed by ensuring that the highest quality standards are in use and that all local, state, and federal laws and guidelines are being followed.

## Results

The purpose of this project is to determine if the inclusion of mental health evaluations or treatments implemented at the beginning of treatment plans for chronic disease/illness will improve overall patient outcomes during and after treatment. Integrating behavioral healthcare services into primary care holds promise in helping the primary care team better manage patients' conditions, however, it involves changing the way care is delivered in multiple ways (Buchanan et al., 2024). This concept has come to be known as Integrated Behavioral Health (IBH). In Figure 1 of this project, we see the results of a cross-model framework of processes and structures.

Fig. 1 (Buchanan, et al., 2024).




This model shows the complexities involved with the implementation of IBH. For this model, the measurement of IBH was based on nine separate components. Strong implementation, as shown in the model, resulted in positive results for all areas except funding. We see from Figure 1 that some implementation models achieved success in some areas while falling short in others. This shows us that strong implementation in all areas is necessary to achieve the best results.

**Cost**

A major emphasis of this project is that health systems should not underestimate the impact mental health has on one of their costliest areas—treating chronic diseases (Caldwell, 2024). The cost of chronic disease to the American healthcare system is enormous, accounting for more than $1 trillion every year (Hacker, 2024). Implementation of more cost-effective treatments and management plans have been put into use, and while some positive results have been found, the costs are still enormous. IBH has the potential to significantly reduce costs by improving the outcomes of chronic disease/illness treatments in this country. IBH can result in earlier and more effective chronic disease/illness treatment. Data indicates that IBH adoption correlates with a reduction in emergency department (ED) and office visits (*Why Integrated Behavioral Health Improves Patient Outcomes in Primary Care | Carelon Behavioral Health*, 2020). The implementation of IBH in healthcare institutions of all sizes can have a positive impact on long-term costs associated with the treatment of chronic disease/illness. For smaller healthcare facilities, this could be more complex as funding becomes an issue. Funding opportunities are now available through various state and federal agencies to aid in the implementation of IBH. While cost is not the primary focus, controlling and reducing costs associated with chronic disease/illness treatment will aid in overall improved health outcomes.

**Outcomes**

We are beginning to see an increase in the inclusion of behavioral/mental health treatment into the primary care model of patients. Patients receiving this kind of integrated care are happier and healthier because they are tackling the root causes that negatively affect their

overall health (Henry, 2021). While the studies researched for this project have found that health outcomes do improve, the research has also shown that even with the implementation of IBH, inequities still exist in access to care. Interestingly, clinics with better chronic disease management were more likely to have Low IBH rather than any other level of integration (see Figure 1) (Buchanan et al., 2024). The key component of these findings, however, points strictly to management. What is being suggested based on this study is that implementation of mental health treatment and evaluation at the beginning of chronic illness/disease treatments will effectively improve outcomes. The desired result is not simply management. The problem has been a lack of adherence to treatment plans as well as the inability to self-manage from those who have undiagnosed mental health issues. Depression and other mental health illnesses, including substance abuse, can potentially have a major impact on the severity and progression of chronic conditions (Bala et al., 2025). Late diagnosis of mental health illness prolongs treatment as well as positive outcomes. In many cases, chronic conditions are already advanced once treatment is sought because many patients who are suffering from mental illness have avoided seeking medical care. This fact alone points to the necessity for IBH inclusion at the onset of the development of treatment plans. Mental Health treatment has been neglected by many health care professionals because of the stigma associated with it or simply from a lack of understanding on the part of the health care professional. Mental Illness can create problems in any treatment plan for chronic disease/illness because the psychological issues being faced have a high potential to complicate or increase physical symptoms. Mental health and physical health are fundamentally linked, and people living with mental illness are at higher risk of experiencing a wide range of chronic physical conditions (Canadian Mental Health Association, 2008). There is currently an increased opportunity to address these issues with the appointment of Robert F.

Kennedy Jr. and his desire to address the chronic disease epidemic. For this to take place, healthcare professionals must embrace this opportunity, and education related to the connection between mental health and chronic disease/illness must be expanded.

It is necessary to understand how mental health issues can be directly tied to chronic disease/illness outcomes. When people are happier, their blood pressure is better, and they feel better overall (Dennis, 2023). Listed below are some common mental health issues that can affect both behavioral and physical health:

- New diagnoses often lead to anxiety
- Loss, loneliness, and grief can cause insomnia
- Shortness of breath can result in anxiety
- Substance abuse will often accompany anxiety and depression

This is just a small sampling of the potential effects of mental health illness. As previously noted, training for healthcare workers must be emphasized. This can begin with the de-stigmatization of mental health in general. Take a look at some key considerations, as pointed out in Figure 2.

Fig. 2 (ALPHA, 2024).

| **Key Considerations:** |
| --- |
| **Training:** Healthcare providers should receive training in recognizing signs of mental health disorders and conducting appropriate screenings. This will enable them to identify patients who may require further assessment and intervention. |
| **Standardized screening tools:** Implementing standardized screening tools ensures consistency and accuracy in identifying patients' mental health needs. Tools such as the Patient Health Questionnaire (PHQ-9) for depression or the Generalized Anxiety Disorder (GAD-7) scale for anxiety can be used as part of routine screenings. |
| **Integration into electronic health records:** Incorporating mental health screenings into electronic health records can help streamline the process and ensure that results are recorded and easily accessible to the healthcare team. This promotes continuity of care and enhances communication among providers. |

Training, standardized screening tools, and integration into electronic health records are all ways to enable smoother implementation of mental health screenings into chronic disease management (ALPHA, 2024). We also previously emphasized overcoming barriers to mental health treatment. Figure 3 offers recommendations for overcoming some of those barriers.

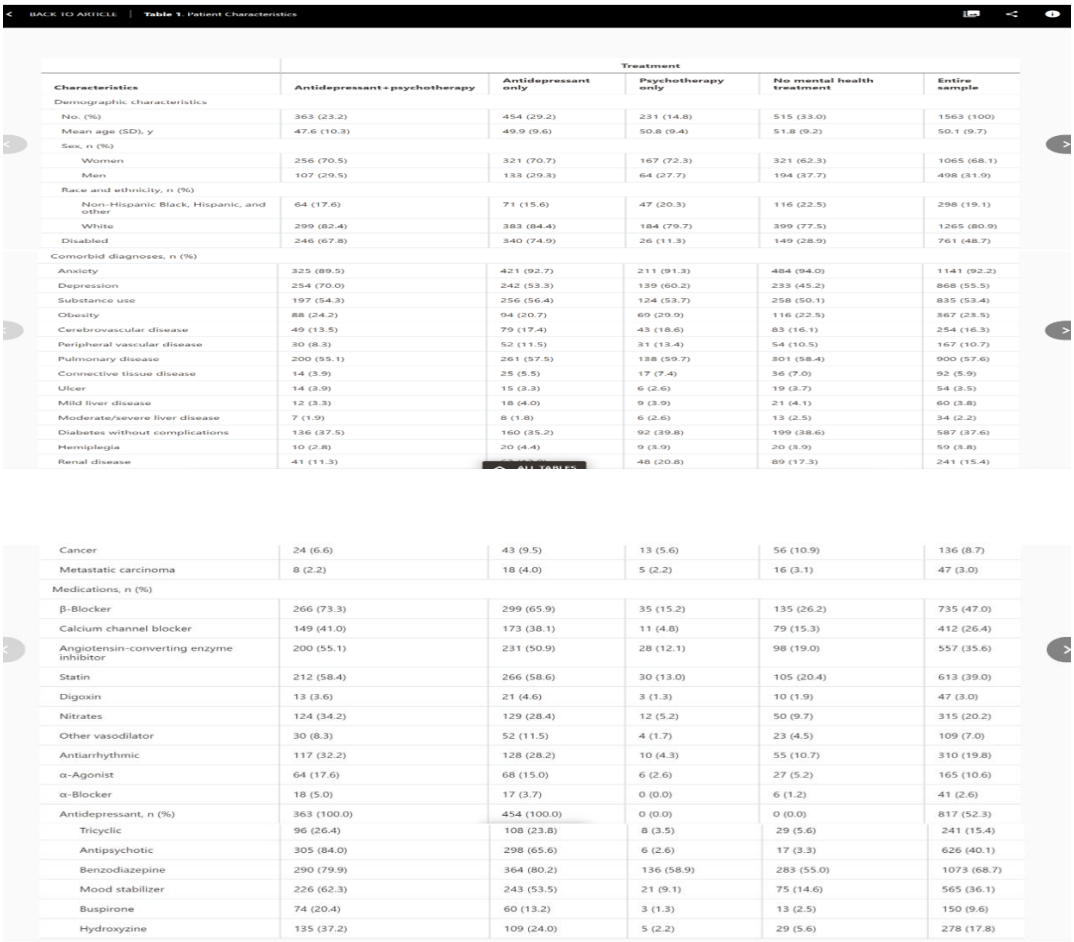
Fig. 3 (ALPHA, 2024).

| Suggestions for overcoming barriers: |
| --- |
| **Advocacy for policy changes:** Healthcare systems and organizations can advocate for policy changes that prioritize and support the integration of behavioral health screenings in chronic disease management. This includes campaigning for reimbursement policies that recognize the value of mental health screenings and ensuring adequate resources for implementation. |
| **Increased funding for mental health services:** Adequate funding for mental health services is essential to provide access to necessary care for patients in need. Allocating funds towards expanding mental health services and resources can help overcome barriers such as limited access to specialized care. |
| **Improved coordination:** Enhancing collaboration and coordination between healthcare providers and community organizations is crucial. This ensures a holistic approach to chronic disease management, with mental health support being integrated seamlessly into the overall care plan. |

Advocating for policy change, increasing funding for mental health services, and improving overall coordination in health and treatment plans can help improve implementation and lead to more positive outcomes (ALPHA, 2024). To further aid healthcare professionals in understanding their role in the treatment of mental health issues, institutions must aid in the improvement of communication skills, behavioral health assessment training, counseling techniques, and collaboration with mental health specialists (ALPHA, 2024). To aid with the de-stigmatization of mental health facilities must improve access to mental health services, advocate for change in reimbursement policies, and facilitate a multidisciplinary approach among healthcare providers (ALPHA, 2024). All of these will aid in improving health outcomes for patients suffering from chronic disease and/or illness. One particular study conducted in

coordination with the American Heart Association sought to determine the effect of anxiety and depression treatment on patients suffering from chronic heart disease. The study considered many different patient characteristics as well as different treatments utilized such as anti-depressants, psychotherapy, a combination of the two, or no treatment at all. The patient characteristics of the study are outlined in Figure 4.

Fig. 4 (Carmin et al., 2024).



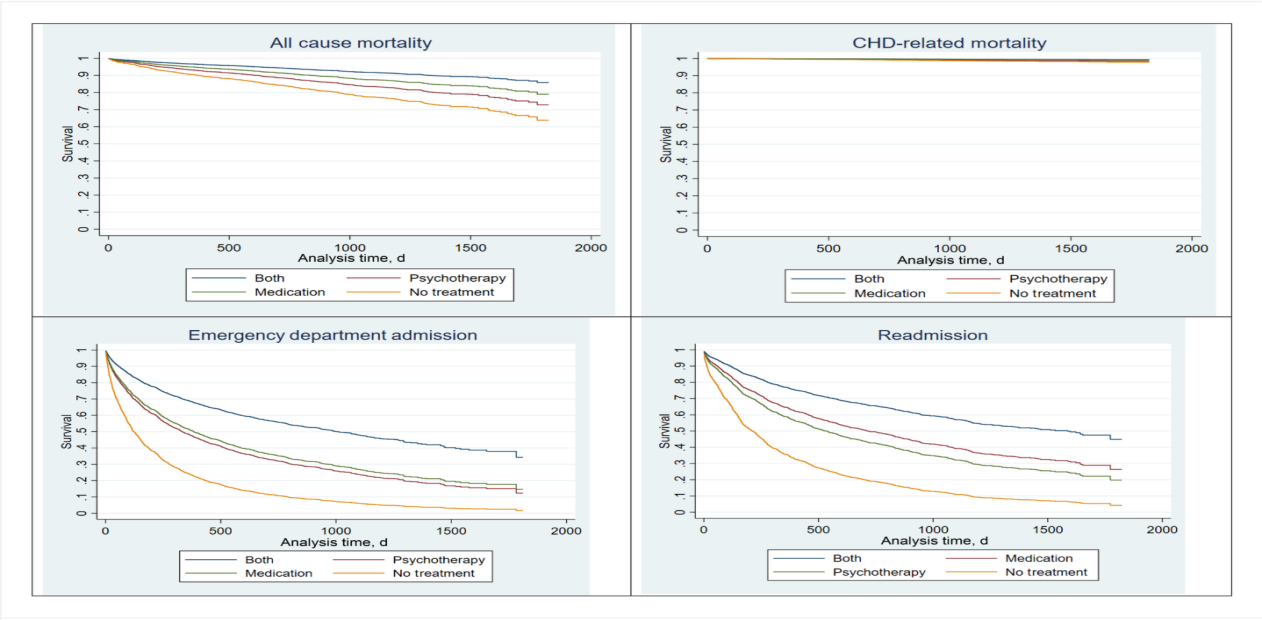
BACK TO ARTICLE | Table 1. Patient Characteristics

| Characteristics | Treatment: Antidepressant + psychotherapy | Antidepressant only | Psychotherapy only | No mental health treatment | Entire sample |
|---|---|---|---|---|---|
| Demographic characteristics | | | | | |
| No. (%) | 363 (23.2) | 454 (29.2) | 231 (14.8) | 515 (33.0) | 1563 (100) |
| Mean age (SD), y | 47.6 (10.3) | 49.9 (9.6) | 50.8 (9.4) | 51.8 (9.2) | 50.1 (9.7) |
| Sex, n (%) | | | | | |
| Women | 256 (70.5) | 321 (70.7) | 167 (72.3) | 321 (62.3) | 1065 (68.1) |
| Men | 107 (29.5) | 133 (29.3) | 64 (27.7) | 194 (37.7) | 498 (31.9) |
| Race and ethnicity, n (%) | | | | | |
| Non-Hispanic Black, Hispanic, and other | 64 (17.6) | 71 (15.6) | 47 (20.3) | 116 (22.5) | 298 (19.1) |
| White | 299 (82.4) | 383 (84.4) | 184 (79.7) | 399 (77.5) | 1265 (80.9) |
| Disabled | 246 (67.8) | 340 (74.9) | 26 (11.3) | 149 (28.9) | 761 (48.7) |
| Comorbid diagnoses, n (%) | | | | | |
| Anxiety | 325 (89.5) | 421 (92.7) | 211 (91.3) | 484 (94.0) | 1141 (92.2) |
| Depression | 254 (70.0) | 242 (53.3) | 139 (60.2) | 233 (45.2) | 868 (55.5) |
| Substance use | 197 (54.3) | 256 (56.4) | 124 (53.7) | 258 (50.1) | 835 (53.4) |
| Obesity | 88 (24.2) | 94 (20.7) | 69 (29.9) | 116 (22.5) | 367 (23.5) |
| Cerebrovascular disease | 49 (13.5) | 79 (17.4) | 43 (18.6) | 83 (16.1) | 254 (16.3) |
| Peripheral vascular disease | 30 (8.3) | 52 (11.5) | 31 (13.4) | 54 (10.5) | 167 (10.7) |
| Pulmonary disease | 200 (55.1) | 261 (57.5) | 138 (59.7) | 301 (58.4) | 900 (57.6) |
| Connective tissue disease | 14 (3.9) | 25 (5.5) | 17 (7.4) | 36 (7.0) | 92 (5.9) |
| Ulcer | 14 (3.9) | 15 (3.3) | 6 (2.6) | 19 (3.7) | 54 (3.5) |
| Mild liver disease | 12 (3.3) | 18 (4.0) | 9 (3.9) | 21 (4.1) | 60 (3.8) |
| Moderate/severe liver disease | 7 (1.9) | 8 (1.8) | 6 (2.6) | 13 (2.5) | 34 (2.2) |
| Diabetes without complications | 136 (37.5) | 160 (35.2) | 92 (39.8) | 199 (38.6) | 587 (37.6) |
| Hemiplegia | 10 (2.8) | 20 (4.4) | 9 (3.9) | 20 (3.9) | 59 (3.8) |
| Renal disease | 41 (11.3) | [illegible] | 48 (20.8) | 89 (17.3) | 241 (15.4) |
| Cancer | 24 (6.6) | 43 (9.5) | 13 (5.6) | 56 (10.9) | 136 (8.7) |
| Metastatic carcinoma | 8 (2.2) | 18 (4.0) | 5 (2.2) | 16 (3.1) | 47 (3.0) |
| Medications, n (%) | | | | | |
| β-Blocker | 266 (73.3) | 299 (65.9) | 35 (15.2) | 135 (26.2) | 735 (47.0) |
| Calcium channel blocker | 149 (41.0) | 173 (38.1) | 11 (4.8) | 79 (15.3) | 412 (26.4) |
| Angiotensin-converting enzyme inhibitor | 200 (55.1) | 231 (50.9) | 28 (12.1) | 98 (19.0) | 557 (35.6) |
| Statin | 212 (58.4) | 266 (58.6) | 30 (13.0) | 105 (20.4) | 613 (39.0) |
| Digoxin | 13 (3.6) | 21 (4.6) | 3 (1.3) | 10 (1.9) | 47 (3.0) |
| Nitrates | 124 (34.2) | 129 (28.4) | 12 (5.2) | 50 (9.7) | 315 (20.2) |
| Other vasodilator | 30 (8.3) | 52 (11.5) | 4 (1.7) | 23 (4.5) | 109 (7.0) |
| Antiarrhythmic | 117 (32.2) | 128 (28.2) | 10 (4.3) | 55 (10.7) | 310 (19.8) |
| α-Agonist | 64 (17.6) | 68 (15.0) | 6 (2.6) | 27 (5.2) | 165 (10.6) |
| α-Blocker | 18 (5.0) | 17 (3.7) | 0 (0.0) | 6 (1.2) | 41 (2.6) |
| Antidepressant, n (%) | 363 (100.0) | 454 (100.0) | 0 (0.0) | 0 (0.0) | 817 (52.3) |
| Tricyclic | 96 (26.4) | 108 (23.8) | 8 (3.5) | 29 (5.6) | 241 (15.4) |
| Antipsychotic | 305 (84.0) | 298 (65.6) | 6 (2.6) | 17 (3.3) | 626 (40.1) |
| Benzodiazepine | 290 (79.9) | 364 (80.2) | 136 (58.9) | 283 (55.0) | 1073 (68.7) |
| Mood stabilizer | 226 (62.3) | 243 (53.5) | 21 (9.1) | 75 (14.6) | 565 (36.1) |
| Buspirone | 74 (20.4) | 60 (13.2) | 3 (1.3) | 13 (2.5) | 150 (9.6) |
| Hydroxyzine | 135 (37.2) | 109 (24.0) | 5 (2.2) | 29 (5.6) | 278 (17.8) |

The primary purpose of the study was to examine whether individuals who received mental health treatment for anxiety or depression after being hospitalized for ischemic disorders or heart failure had a reduced frequency of rehospitalizations, emergency department visits, or mortality

compared with those who did not receive treatment (Carmin et al., 2024). Figure 5 shows the mortality rate for these patients based on the prescribed treatments.

Fig. 5 (Carmin, et al., 2024).




All treatments showed reductions in all-cause mortality, ED admissions, and ED readmissions compared to patients with no treatment. Significant reductions in the risks associated with chronic heart disease were seen in this study with the inclusion of treatment for anxiety and depression. More studies need to be completed concerning other chronic diseases and illnesses. The existing evidence supports the need to expand the use of and inclusion of mental health treatment into the care plans for patients suffering from chronic disease/illness. The inclusion of mental health care into the primary care model could also lead to improved prevention of chronic disease/illness.

## Implementation of Integrated Behavioral Health (IBH)

The following building blocks of IBH are each elements that are foundational to providing integrated primary health treatment into primary care plans. Regardless of how IBH is implemented in your facility, these building blocks can be used across the integration spectrum.

• Offer routine, universal, and age-appropriate screening

• Establish clear assessment, response, and scheduling processes

• Provide same-day access to BH services via “warm handoffs”

• Enable patient-centric scheduling. An integrated care team establishing a unified care team to positively affect rates of engagement and effectiveness of the BH clinician

• Commit to a culture of teamwork with regular communication in pursuit of unified treatment plans and documentation

• Clearly define roles for all team members. Accessibility and sharing of patient information. Rich information sharing for coordination of care within the team, with the patient, and with specialty services

• Ensure shared access to patient health information and treatment plan

• Encourage patient access to their medical information to build trust and promote engagement

• Protect adolescent confidentiality per state-level confidentiality laws. Practice access to specialty services, reducing unnecessary specialty referrals and ineffective patterns of health care utilization by using specialist consultation and clear referral processes

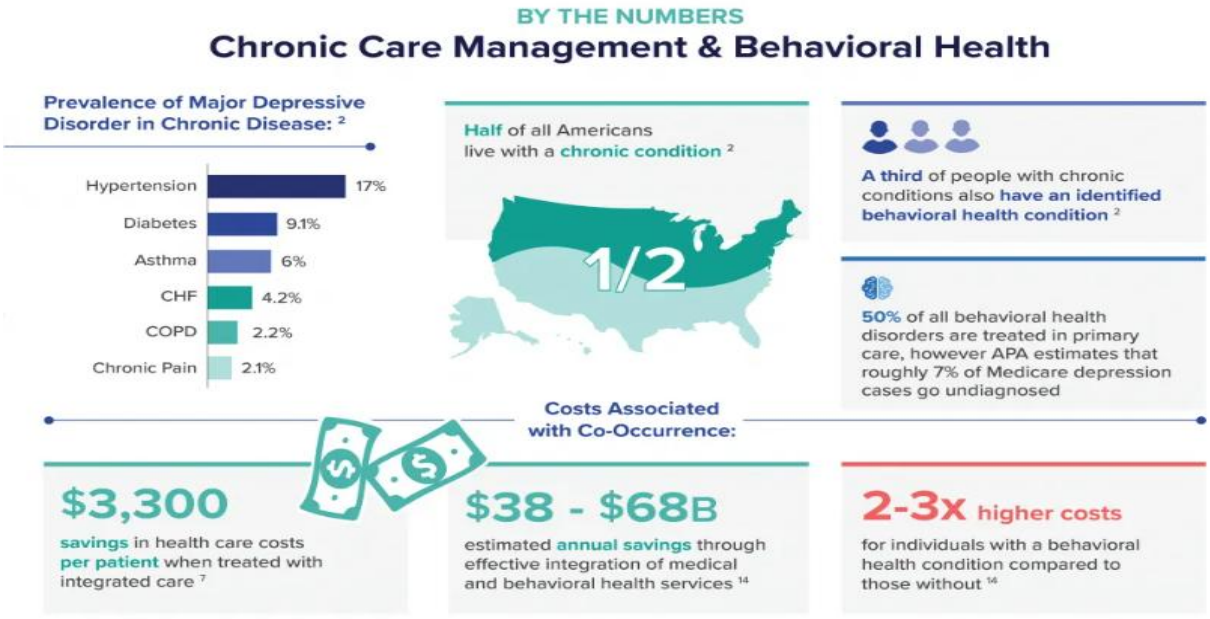
• Establish a clear referral and coordination process to specialty care for patients who require specialty care

• Build protocols for physician access to psychiatric consultation services (on-site/virtual). Workflows to support population-based care: identifying designated populations by weaving BH services into the flow of care

• Define the population to be served by your IBH program and a reliable screening method for identifying potential members of the designated population (Crocker et al., 2021).

Early recognition of mental health issues as a result of successful IBH implementation has the potential to improve outcomes in several ways. These include improving prognosis and long-term outcomes, minimizing the risk of secondary complications, enhancing social and emotional development, promoting family well-being, and promotion of patient-provider trust (Pennsylvania Psychiatric Institute, 2025).

Fig. 6 (Crowley, 2022).




Some of the more common mental health screening tools for depression, anxiety, suicide risk, substance abuse, and eating disorders include:

**Depression:**

Beck Depression Inventory (BDI-II)

Patient Health Questionnaire (PHQ-9)

Edinburgh Postnatal Depression Scale (EPDS)

**Anxiety:**

Generalized Anxiety Disorder-7 (GAD-7)

Hamilton Anxiety Rating Scale (HAM-A)

Beck Anxiety Inventory (BAI)

**Suicide Risk:**

Columbia Suicide Severity Rating Scale (CSSRS)

Suicide Safety Assessment (SSA)

**Substance Use:**

Alcohol Use Disorders Identification Test (AUDIT)

Drug Use Questionnaire (DUQ)

**Eating Disorders:**

Bulimia and Anorexia Nervosa Association (Binge Eating Disorder Association) Screening Tool (BEDAS)

Eating Disorder Inventory (EDI)
(Celestine, 2021).

Through the effective and proper use of screening tools, mental health issues can be recognized early in the early stages of chronic disease/illness treatments, and increase the probability of positive outcomes. As shown in Figure 6, half of all Americans live with some type of chronic illness, and one-third of those have an identified behavioral health condition (Crowley, 2022). The implementation of IBH can have a significant positive impact on health outcomes for these individuals. IBH is not just a solution to behavioral health challenges, it is **THE** solution (Fiel, 2024).

## Summary and Conclusion

Mental health care as a part of primary treatment plans for chronic disease/illness is growing in use. We are seeing this trend due to the increase of education and training related to the field of mental health, the de-stigmatization of mental health, and the amount of research now available showing the positive effects of including mental health treatment as a part of initial treatment plans. Healthcare and mental health professionals are working more closely together as the benefits of mental health treatment are becoming more evident. Administrators are also seeing cost savings due to improved patient outcomes and prevention programs through mental health treatments. Studies showing the positive outcomes are becoming more available and as result the incorporation of IBH is expanding. It is important that both administrators and healthcare professionals remain active in policy formation to ensure that the benefits of IBH are shared with professional healthcare organizations and local, state, and federal political bodies. When we consider the fact that the human mind is the catalyst for all thought and action, we would be remiss to not continue building on the foundational belief that addressing mental health should be the first step in addressing all physical ailments of the body.

## Introduction to Literature Review

All of the literature has been used to determine if the inclusion of mental health evaluations or treatments implemented at the beginning of treatment plans for chronic diseases will improve overall patient outcomes during and after treatment. An attempt to analyze all data is being made to ensure a thorough evaluation of results is completed. All sources have been used to support or disprove the problem statement. Some information has been used for informational purposes only while others have been used to show that through various research and studies IBH incorporation into treatment plans for patients diagnosed with chronic disease/illness have produced improved outcomes. Seven sources are within the last five years while eleven sources are within the last 2 years. One source was undated. The availability of current sources shows the trend toward IBH inclusion in all areas and levels of treatment plans. Research has shown an increase in the amount of study being committed to the effects of mental treatment on chronic disease/illness treatment plans and outcomes and more extensive research is expected in the near future.

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