

INTEGRATED BEHAVIORAL HEALTHCARE: EXAMINING BARRIERS
AND FACILITATORS TO REFERRING CLIENTS VIRTUALLY
IN A RURAL PRIMARY CARE CLINIC

by

Christian Ghilliam Madson

A scholarly project submitted in partial fulfillment
of the requirements for the degree

of

Doctor of Nursing Practice

in

Psychiatric Mental Health Nurse Practitioner

MONTANA STATE UNIVERSITY
Bozeman, Montana

May 2023

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DEDICATION

They also serve who only stand and wait. It is with my utmost gratitude that I thank the following:

To Greg, this work would not have been possible without you and your unwavering support and belief in my capabilities. As you know, you are the best thing that ever happened to me.

To Gunnar, you are wise beyond your years. Thank you for pushing me to be and do better.

To Lars, your creativity and self-expression are an inspiration to me daily. I love you more.

To Trygve, you encouraged me each day with your kindness and understanding. You are a gift.

To Nicki, who, through years of telephone calls, late-night texts, and letters helped me move forward when I would have preferred to stop.

To my trusted and faithful companion, Oly, who deserves an honorary doctorate for his unrecognized hours of faithful service by my side. You are the best boy.

And finally, to the men and women behind bars who inspired me to pursue this degree: thank you for your truth, your trust, and for allowing me into your world.

ACKNOWLEDGEMENTS

I want to thank the following people for their contributions to my education, this project and for their unwavering support:

Most Reverend Father Oliver J. Doyle, STL, for guiding me to the intersection of my deep gladness and the world's deep hunger.

Dr. Susan Luparell, for her long-standing support and belief in my potential.

Dr. Paul Krogue, for his friendship, academic and professional support, and fearless example.

Dr. Margaret Hammersla, my committee chair, for her assistance at every stage of this endeavor. Dr. Sandra Benavides-Vaello, for sharing her passion for vulnerable populations.

Dr. Elizabeth Johnson, for her patience, insight, and perpetual encouragement.

Dr. Lindsey Grove and Brittney Morris, for their gracious support of this project.

TABLE OF CONTENTS

1. REVIEW OF THE LITERATURE	1
Behavioral Health in Rural America.....	1
The Financial Impact of Untreated Behavioral Health Issues	2
Primary Care Behavioral Health (PCBH) Model	2
Methods.....	4
Results.....	6
Predominant Best Practices for Integrating Virtual Behavioral Healthcare Using the PCBH Model.....	6
Barriers and Facilitators to IBH Implementation.....	9
Limitations	11
Conclusion	11
2. QUALITY IMPROVEMENT PROJECT PROPOSAL	13
Introduction and Problem	13
Problem Statement.....	14
Organizational Microsystem Assessment.....	16
Rationale	18
The Replicating Effective Programs (REP) Framework	18
Specific Aims.....	19
Context.....	21
Interventions and Implementation	21
Evaluation	28
Data, Information, Knowledge, and Wisdom (DIKW).....	28
Staff Check-in Surveys	29
Process Coding.....	29
Versus Coding.....	29
3. QUALITY IMPROVEMENT MANUSCRIPT.....	31
Introduction.....	31
Barriers to IBH Implementation in Rural Settings	32
Facilitators of IBH Implementation in Rural Settings	33
Purpose.....	34
Guiding Conceptual and Implementation Framework.....	35

TABLE OF CONTENTS CONTINUED

Methods.....	36
Sample and Recruitment.....	37
Data Management.....	37
Ethical Considerations.....	38
Procedures.....	38
Phase 1: Pre-Project.....	38
Phase 2: Interventions and Data Analysis.....	39
Phase 3: Evaluation.....	43
Findings.....	43
Discussion.....	45
Limitations.....	48
Conclusion.....	49
 4. A REFLECTION ON THE ESSENTIALS OF DOCTORAL EDUCATION FOR ADVANCED NURSING PRACTICE.....	 50
Meeting the Essentials.....	50
Essential I: Scientific Underpinnings for Practice.....	50
Essential II: Organizational and Systems Leadership for Quality Improvement and Systems Thinking.....	51
Essential III: Clinical Scholarship and Analytical Methods for Evidence-Based Practice.....	52
Essential IV: Information Systems/Technology and Patient Care Technology for the Improvement and Transformation of Health Care.....	52
Essential V: Health Care Policy for Advocacy in Health Care.....	53
Essential VI: Interprofessional Collaboration for Improving Patient and Population Health Outcomes.....	53
Essential VII: Clinical Prevention and Population Health for Improving the Nation's Health.....	54
Essential VIII: Advanced Nursing Practice.....	55
The DNP Essentials and Quality Improvement Project: Implementation, Evaluation, and Leadership.....	56
 REFERENCES CITED.....	 57
 APPENDICES.....	 66

TABLE OF CONTENTS CONTINUED

APPENDIX A: PRIMSA Flow Diagram.....	67
APPENDIX B: Short, Intermediary, and Long-Term Goals	69
APPENDIX C: Informed Consent Statement	78
APPENDIX D: Staff Check-In Surveys	80
APPENDIX E: Scripted Communication Tool (Versions 1 and 2).....	88
APPENDIX F: Workflow for Mood/SUD Screening Process	93

LIST OF TABLES

Table	Page
1. Implementation: Stigma, therapeutic communication, and scripting	25
2. Implementation: Underutilized time and length and number of IBH screening tools	26
3. Implementation: IBH warm handoff workflow and client education regarding IBH offerings	27
4. Survey #1 Likert scale questions and responses	41
5. Survey #2 Likert scale questions and responses	41
6. Conflicts and power struggles.....	42

LIST OF FIGURES

Figure	Page
1. Modified hub and spoke model for remote IBH at the pilot site	15
2. The four phases of the REP framework.....	19
3. Logic Model Integrated Behavioral Healthcare: Examining Barriers and Facilitators to Referring Clients Virtually in a Rural Primary Care Clinic.	20
4. Pre-intervention swim-lane process map demonstrating staff touch points at the pilot site.....	22
5. Pre-intervention process map demonstrating the IBH referral process at pilot site	23
6. Data, Information, Knowledge, and Wisdom (DIKW) pyramid	28

ABSTRACT

Rural primary care providers are considered the first line for behavioral health and substance use disorder (SUD) treatment in Montana, which is designated as a Mental Health Professional Shortage Area (MHPSA). Virtual integrated behavioral health (IBH) is one approach primary care organizations use to support the efficient use of behavioral health resources. This quality improvement (QI) project aimed to examine barriers and facilitators to a current virtual IBH program at a rural Montana primary care clinic. During the pre-project process mapping and narrative member checks, areas of opportunity for improvement were identified. Areas of potential improvement included access to a warm handoff workflow, a desire for a behavioral health scripted communication tool, and modifications to the mood and SUD screening process. Surveys and narrative data from staff were collected weekly and informed ongoing changes to the IBH process, the scripted communication tool, and the mood and SUD screening process. An IBH “super user” was identified and accepted the role. The project resulted in a staff-approved warm handoff workflow and scripted communication tool and the emergence of an unexpected barrier to the IBH process: differences in the lived experiences of salaried versus hourly staff and their impact on the diffusion of change within the organization. The findings of this QI project demonstrate the importance of organizational buy-in among stakeholders and its importance to the success of collaborative projects. Electronic health record (EHR) documentation of mood and SUD screenings, inclusivity in design methods, and recognition of power differentials are recommended to create and sustain workflow and process modifications.

CHAPTER ONE

REVIEW OF THE LITERATURE

Behavioral Health in Rural America

In rural America, more than half of all patients seek behavioral healthcare from primary care providers (Montana Healthcare Foundation [MTHCF], 2022; National Council for Behavioral Health [NCBH], 2020). In addition, 70%–85% of primary care appointments address behavioral health issues, including substance use (Mitchell et al., 2022; Selby-Nelson et al., 2018). These actualities, paired with patient comfort and preference in receiving behavioral health services in primary care settings, support comprehensive single-setting patient care (Mitchell et al., 2022; MTHCF, 2022).

Rural Americans are at an increased disadvantage over their urban peers and are significantly more at risk for chronic illness, substance use disorders (SUDs), and suicide (Mitchell et al., 2022; Selby-Nelson et al., 2018). Poor availability and accessibility to behavioral health services exacerbate the matter, with 80% of social workers and 90% of psychiatrists and psychologists practicing in urban settings (Mitchell et al., 2022). In Montana, all counties experience a profound shortage of behavioral health providers, and the state is designated a Mental Health Professional Shortage Area (MHPSA) (MTHCF, 2019; Rural Health Information Hub [RHIfhub], 2022a).

According to the MTHCF (2019), only 25% of Montana's mental health professional needs were met, placing it in the bottom five of all states. This statistic dovetails with 35% of Montanans reporting symptoms of anxiety or depression, compared with 11% of citizens

nationally (MTHCF, 2021). As the need for rural behavioral health care increases, the chasm between that need and the availability of services widens.

The Financial Impact of Untreated Behavioral Health Issues

The financial impact of untreated behavioral health disorders is felt by patients, their families, and society (The White House, 2022). Not only are untreated behavioral health disorders responsible for poor educational outcomes, they also contribute to decreased earning power, homelessness, incarceration, and premature death (The White House, 2022). The direct and indirect costs are innumerable. Case and Deaton (2020) noted in their book, *Deaths of Despair and the Future of Capitalism*, death by drugs, alcohol, and suicide have not only doubled since 2017, but these deaths disproportionately affect the most vulnerable members of our communities. This burden further strains an already thinly stretched American healthcare system, systems of government assistance, and communities tasked with caring for their own.

Primary Care Behavioral Health (PCBH) Model

Primary care providers are considered the first line for behavioral health care and SUD treatment in Montana (MTHCF, 2021). Integrated behavioral health (IBH) uses a systematic and cost-effective approach to enhance the primary care teams' ability to manage and treat all health conditions, decreasing the number of required patient visits, increasing accessibility to care, and better utilizing scarce resources (NCBH, 2019).

The PCBH model is a brief and time-limited process for screening behavioral health issues and providing care to primary care patients. When using this model, behavioral health appointments range from 15–30 minutes, with a lower frequency, intensity, and duration than traditional psychotherapy (Beehler et al., 2017). The PCBH model aligns with the Institute for

Healthcare Improvement's Triple and Quadruple Aim initiatives, which call for improved patient experience of care, improved population health, and reduction of per capita cost of health care (Beehler et al., 2017; Bodenheimer & Sinsky, 2014; Institute for Healthcare Improvement [IHI], 2022). Specific to behavioral health, the World Health Organization (WHO) (2021) produced the "Comprehensive Mental Health Action Plan 2013–2030" with four specific objectives: strengthening leadership in mental health; providing comprehensive mental health and social services in community-based settings; implementing prevention and mental health promotion strategies; and strengthening research, evidence, and information systems for mental health.

More than 20% of rural residents experience a mental health condition, approximately 7.6 million persons (RHIfhub, 2022b). Additionally, 4.8% of rural adults, or approximately 1.8 million people, reported having serious thoughts of suicide in the last year (RHIfhub, 2022b). Montana experiences high rates of excessive alcohol use and a high number of residents having two or more adverse childhood experiences (ACEs), adding to the pressing charge for a solution (United Health Foundation [UHF], 2021). Such concerning statistics couple with what the National Rural Health Association (NRHA) refers to as the four As that challenge the provision of behavioral healthcare in rural settings: accessibility, availability, affordability, and acceptability (NRHA, 2015; RHIfhub, 2022b). To reform and expand rural behavioral healthcare access, a multipronged approach must address all four challenges (NRHA, 2015).

Rural residents often travel significant distances to receive behavioral health services, and distance decreases realistic access to care. When rural residents do decide to travel for care, an unfamiliar town lacking familiar support systems can be daunting (NRHA, 2015). In hand with accessibility is the poor availability of rural behavioral health services. Behavioral workforce

shortages disproportionately affect rural communities, placing the onus on primary providers to meet the need (NRHA, 2015). Affordability refers to the cost of health insurance and out-of-pocket expenses incurred when health insurance is lacking. Rural behavioral health providers may be out of network, accept limited insurance carriers, or require significant copays (Arledge, 2022; NRHA, 2015). With 15.5% of rural residents living below the poverty line and Medicaid being the primary insurance for 1 in 6 rural adults, nominal extra costs can be prohibitive (Arledge, 2022). Such variables lead many rural residents to enter care later in their course of illness, with more serious and disabling symptoms, and to require more expensive and intensive treatment (NRHA, 2015). Finally, stigma impacts the acceptability of behavioral health services within small rural communities. Rural residents have concerns about confidentiality in settings where vehicles are easily identified and most residents know each other (Arledge, 2022; NRHA, 2015). Rural residents are also likelier to utilize informal supports such as family and clergy and may not relate to providers from urban settings (NRHA, 2015).

With the increasing behavioral health burden on rural citizens and their communities and the co-occurring scarcity of behavioral health providers, we must seek innovative methods to reach the greatest number of patients with the least number of resources. Though IBH settings, provider composition, and financial structures vary, this review aimed to identify predominant best practices for integrating virtual behavioral healthcare using the PCBH model and to identify generalizable barriers and facilitators to IBH implementation.

Methods

An initial literature review was conducted using the database APA PsychINFO with the search terms “integrated behavioral health,” “rural,” “telemedicine,” “staff,” “warm handoff,”

“barriers,” and “primary care behavioral health model.” Studies were limited to those published between 2017 and 2022. Parallel searches were conducted utilizing CINAHL, PubMed Central, and Cochrane Library, applying the same search terms and time frames. These searches yielded various articles independently addressing “integrated behavioral health,” “rural,” “telemedicine,” “staff,” “warm handoff,” “barriers,” and “primary care behavioral health model.” To address article relevance to the aim of the literature review and to condense the exploration, a Boolean search using the operator “AND” was conducted. The chosen search terms were combined in various ways. The combined keywords that generated the most results were “integrated behavioral health AND rural,” “staff AND warm handoff,” “integrated behavioral health AND barriers,” and “integrated behavioral health AND staff.” “Integrated behavioral health AND telemedicine” resulted in numerous articles addressing the COVID-19 pandemic and behavioral health, but no eligible studies specifically addressed IBH and virtual or remote care. The PCBH model was embedded in numerous articles but did not exclusively surface when combined with various search terms. To ensure current and relevant information and attitudes were identified regarding this emerging area of study, qualitative phenomenological studies, practice guidelines, longitudinal reviews, pilot investigations, and workgroup reports were considered for review. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (Page et al., 2020) were used to delineate the search process, identify inclusion and exclusion criteria, and enable future replication if desired. Seventy-four articles were identified through the database search process, and 27 met the inclusion criteria (published in the last five years, full-text, English language, peer-reviewed journals). Two articles with dates outside of inclusion

(2015) were retained due to their relevance to the aims of the review, with a total of 29 articles reviewed.

Results

The articles that met inclusion criteria, with the addition of two from 2015, were majority qualitative studies (7), with several pilot projects/investigations (4), a narrative review (1), a cross-case comparative analysis (1), literature reviews (2), observational studies (2), mixed methods studies (2), systematic reviews (2), exploratory/retrospective studies (3), a descriptive study (1), integrative and longitudinal reviews (2), a phenomenological study (1), and a QI project (1) (see Appendix A). Many articles met the criteria, as the review's aim was rather sweeping. Themes related to integrated behavioral health in rural settings, predominant practice recommendations for IBH, and barriers and facilitators to implementing IBH emerged. Most articles addressed multiple inclusion criteria and were not limited to one aim of the review.

Predominant Best Practices for Integrating Virtual Behavioral Healthcare Using the PCBH Model

None of the reviewed articles specifically addressed best practices or practice recommendations for integrating virtual behavioral healthcare. Additionally, although multiple articles addressed the integration of behavioral health into primary care, not all addressed integration specifically utilizing the PCBH model. Most articles recommended practices for the best integration of behavioral health, which overlapped with the barriers and facilitators of IBH implementation. For the purpose of this review and clarity, the two topics are separated but, in truth, are inseparable. Beehler et al. (2017) addressed a lack of fidelity to the PCBH model, leading to differing provider behaviors while instituting the model. A lack of a consistent

lexicon, IBH treatment guidelines, and provider training contributes to a lack of best practices. A validated adherence questionnaire (the Primary Care Behavioral Health Provider Adherence Questionnaire [PPAQ]) was utilized and found to be promising in assisting with QI within the IBH setting but was not studied in a generalizable setting (the Veteran's Administration) (Beehler & Lilienthal, 2017). QI was recommended as the best practice in any setting (Beehler et al., 2017). Integrating patient screening questionnaires, flags, and clinical prompts into the electronic health record (EHR) is recommended as a facilitator of and best practice for IBH (Chang et al., 2021; Cifuentes et al., 2015). Specifically, a tablet-based system with embedded behavioral health screening tools was found to positively impact workflows and the effectiveness of integrated care (Chang et al., 2021). Additional benefits of well-designed and behavioral health-specific information technology (IT) are enhanced continuity of care and improved provider-patient communication (Segal et al., 2022). Peters et al. (2018) noted that an electronic behavioral health referral adds substantial value to the process of behavioral health integration and increases the rate of initial behavioral health appointments. Cifuentes et al. (2015) noted that a hindrance to this practice, especially in the rural setting, is the cost burden and EHR capabilities. Additionally, Jetelina et al. (2018) noted that health IT must not only fit behavioral health needs but also suit the overall requirements of the clinic. Clark et al. (2021) described additional burdens in the rural community and barriers to seamless IBH implementation: a lack of technology and poor or inconsistent internet access. The triple and quadruple aims of healthcare (Bodenheimer & Sinsky, 2014; IHI, 2022) include the client experience as a best practice metric. Positive engagement, where clients benefit from an ongoing relationship with a high-quality provider, is a significant indicator of a positive client experience (IHI, 2022). The

Institute of Medicine's (2001) six aims for improvement (safe, effective, timely, efficient, equitable, and patient-centered care) assert that, to be effective, healthcare must be delivered within a collaborative, coordinated, emotionally supportive framework. Within the IBH care model, Davidson et al. (2022) found that patients had overwhelmingly positive experiences of IBH, improved patient engagement in care, and the experience of IBH was affiliated with a positive experience. Warm handoffs are a well-documented best practice in the literature concerning IBH and the PCBH model. A warm handoff is a formal introduction to a behavioral health provider by another health professional, typically facilitated in the exam room or via telehealth during the visit (Mitchell et al., 2022; Pace et al., 2018). Warm handoffs were mentioned in many studies relating directly to positive patient experience and engagement (Koehler et al., 2020; Mitchell et al., 2022; Sanderson et al., 2021; Taylor & Minkovitz, 2021). One identified study (Pace et al., 2018) did not provide evidence of increased patient follow-up rates with warm handoffs in an urban setting; however, numerous studies indicate that cultural differences in rural areas should be considered. The purpose of warm handoffs as best practice is not exclusively return rates but to build rapport, decrease the stigma of behavioral health care, and provide cost-effective care (Mitchell et al., 2022; Pace et al., 2018). Workflow and physical space layout were addressed in several studies to enhance IBH integration (Davis et al., 2019; Gunn et al., 2015; Lamson et al., 2022). Well-designed templates for workflow are recommended to integrate and operationalize behavioral healthcare, and they are associated with increased quality, work efficiency, and cost-effectiveness (Gunn et al., 2015). Spatial layout, professional proximity, and designated or swing spaces must be considered for efficient and integrated care (Gunn et al., 2015). In remote IBH, professional proximity is less significant than

the ease of professional connection. There is a need to keep workflow paths barrier free and to plan and provide for additional workforce responsibilities (Davis et al., 2019). Davis et al. (2019) suggested that utilizing protocols and scripts to support IBH workflows assists professionals from various backgrounds in coordinating and collaborating care more readily.

Barriers and Facilitators to IBH Implementation

Patient sentiment can be a significant barrier or facilitator to IBH implementation. Several studies have emphasized the importance of the patient perspective (Koehler et al., 2020; Ogbeide et al., 2018). Significantly, many patients indicated they would not have sought behavioral health care if it had not been offered in the primary care setting. Stigma was noted as the most significant reason (Koehler et al., 2020; Ogbeide et al., 2018). Davis et al. (2018) found that patients perceived integrated care as beneficial, but prior negative experiences with providers presented barriers to trusting the process. Personal growth, improved quality, and access were noted highlights of IBH (Davis et al., 2018). The patient-centered nature of IBH was noted to be a facilitator of integrated care, as seen through the patient lens (Youssef et al., 2020). Yousseff et al. (2020) noted that patient-centered care, which recognizes unique patient attributes in a primary care setting, has the potential to enhance the successful integration of IBH. Staff perceptions of barriers to implementing IBH include staff turnover and resistance to change (Nikolajski et al., 2022). Facilitators and barriers include culture and the integration of IBH processes into daily workflow (Nikolajski et al., 2022). An on-site change or intervention champion who encourages the practice, policies, and procedures of IBH was noted in several studies as a key to IBH success (Lamson et al., 2022; Nikolajski et al., 2022).

An identified barrier to integrating behavioral health was a lack of formal education for primary care providers (Landoll et al., 2019; Sockalingam et al., 2020). Beginning with undergraduate medical education through continuing professional development, incorporating a team-based approach to care requires a fostering environment (Anastas et al., 2018; Sockalingam et al., 2020). Workforce development, culture shifts, well-defined roles, shared team meetings or huddles, and interdisciplinary staff training facilitate IBH (Anastas et al., 2018). In one study, however, Martin (2017) found that a clinical rotation designed to prepare medical residents for collaborative care did not, in fact, enhance beliefs about collaborative practice. Recommendations included curricula based on IBH competencies as a remedy.

In contrast, Ma et al. (2022) reflected on the need for behavioral health providers to integrate with primary care. Of note, behavioral health providers must also receive formal education on collaborative care to succeed in this model. Onboarding culture, professional identity development, and skills modeling emerged as strategies to facilitate IBH (Ma et al., 2022). One recommendation in the literature (Washburn et al., 2020) included virtual patient simulations to increase behavioral health students' self-efficacy and diagnostic accuracy. Though limited, the study indicates a need for continued research into the barriers behavioral health clinicians experience, whether real or perceived, and ways to address them. Muse et al. (2017) noted that collaboration and communication between medical and behavioral health providers are significant indicators of the success and sustainability of team members and the model of care itself.

Limitations

It is important to acknowledge the limitations of this literature review. No studies specifically addressed the issue of providing virtual mental health in a rural integrated practice, which was a specific aim of the review. There is limited quantitative research on integrated behavioral health, and the review entailed a majority of retrospective and qualitative studies. Inherent limitations include human error in locating qualified studies and correctly interpreting located studies. The generalization of conclusions should be made cautiously, as many studies were specific to certain populations, settings, and models of care. Furthermore, a large number of articles met the review criteria, as the review's aim was relatively comprehensive. A future review would benefit from an abridged and more specific search.

Conclusion

This literature review sought to identify predominant best practices for integrating virtual behavioral healthcare using the PCBH model and to identify generalizable barriers and facilitators to IBH implementation. The review suggests that, although confounding variables affect outcomes, themes do emerge. Though few studies specifically addressed the PCBH model by name, it appears to be the predominant model. It is frequently referred to as “integrated behavioral healthcare,” “integrated primary care,” or “collaborative care” in the literature. The inconsistent lexicon and operational model highlight the barriers to quantifiably measuring IBH success.

All reviewed studies concede that PCBH integration is a patient-centered approach to care and reaches populations that otherwise may not receive behavioral health services (Ogbeide

et al., 2018). Patient satisfaction, improved outcomes, reduced cost, and decreased stigma are products of IBH, and there is a consensus that warm handoffs are integral to success. Of importance to this review, however, is that there is little information relating to virtual warm handoffs, although studies suggesting best practices are emerging.

The confluence of the EHR with behavioral health tools and prompts was one of the most significant yet costly disconnects in the integration process. The lack of sufficient technology pairs with a lack of discrete spaces reserved for behavioral healthcare to hinder success (Chang et al., 2021). These two issues are barriers to a seamless patient transition from primary to behavioral healthcare within a clinic setting.

The literature supports the need for pre- and post-professional development for primary care and behavioral health professionals to adapt their current practice to the unique model of PCBH. Providers must receive the correct tools to perform at their highest level and be supported in adapting to new ways of providing care. Evidence demonstrates improved engagement from providers and patients when all parties have been effectively supported and engaged in the health process, resulting in the best outcomes for all. Engaging a change champion, promoting team huddles and collaborative meetings, and consistently performing warm handoffs will provide a strong base from which an emerging IBH team can launch.

CHAPTER TWO

QUALITY IMPROVEMENT PROJECT PROPOSAL

Introduction and Problem

In rural America, more than half of all patients seek behavioral healthcare from primary care providers (PCPs) (MTHCF, 2022; NCBH, 2020). In Montana, PCPs are considered the first line for behavioral health and SUD treatment due to the significant shortage of specialized services (MTHCF, 2016). The behavioral healthcare provider shortage in Montana befalls a state that consistently ranks among the top five with the highest national suicide rate and claims an adult suicide rate twice that of the national average (MTHCF, 2016). Montana's global designation as a Mental Health Professional Shortage Area (MHPSA) further highlights the profound and pressing need for a solution (MTHCF, 2019; RHihub, 2022a).

IBH was conceptualized to meet the increased demands on primary care for behavioral health services (NCBH, 2020). Since 2016, the Montana Healthcare Foundation (MTHCF) and other rural behavioral health stakeholders have diligently worked to improve the quality of and access to integrated healthcare in Montana (NCBH, 2020). The federal Agency for Healthcare Research and Quality (AHRQ) (2022b) defines IBH as whole-person, team-based, patient-centered care that blends medical and behavioral health treatment in one setting. IBH is practical, evidence-based, and cost-conserving (MTHCF, 2016). Identifying and treating patients with behavioral healthcare issues in primary care provides equitable access to scarce resources and reserves the highest levels of care for those most in need (MTHCF, 2016; MTHCF, 2022). Its

success in similar rural settings illustrates its potential to address Montana's behavioral healthcare crisis.

Problem Statement

The central concerns of this QI project are those encountered when identifying and referring behavioral health patients virtually in a rural primary care setting. The author established three main issues requiring consideration as a basis for this project. The first issue identified as a basis for this project concerns best practices for virtual behavioral health. Accelerated adoption of telehealth in all healthcare settings occurred during the COVID-19 pandemic (AHRQ, 2022a). As its use expands, those implementing telehealth must keep apprised of policy, reimbursement, regulatory, and legal implications (AHRQ, 2022a). Virtual behavioral health is an emerging care model that expands the reach of mental health professionals (Williams, 2021). A form of the hub and spoke model of care (see Figure 1), virtual behavioral health has demonstrated parity with face-to-face exchanges in clinical outcomes, including promoting global patient functioning and medication adherence (Williams, 2021). A behavioral health professional (hub) engaging in telehealth increases access to remote locations (spoke) and underserved areas (AHRQ, 2022a). Though still being examined, established best practices include systematic, standardized workflows and evidence-based protocols for screening and interventions (AHRQ, 2022a).

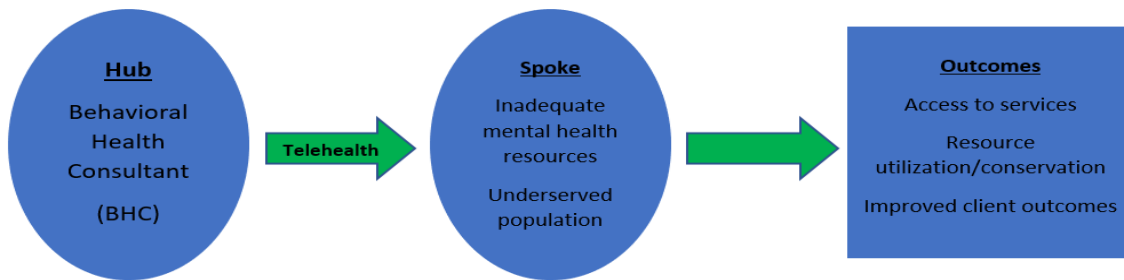


Figure 1. Modified hub and spoke model for remote IBH at the pilot site (Williams, 2021)

The second issue identified as a basis for this project concerns IBH implementation. The Institute of Medicine (IOM) called for interdisciplinary team-based care incorporating information technology in the 2001 report “Crossing the Quality Chasm: A New Health System for the 21st Century” (Maheu et al., 2018). Since then, representation in the literature regarding workforce development and IBH has been limited, specifically relating to virtual behavioral health (Maheu et al., 2018; Selby-Nelson et al., 2018). A lack of clear guidelines addressing virtual IBH in primary care hinders the adoption of best practices. Various barriers and promoters to virtual IBH have been empirically and anecdotally reported and are often site specific. The Behavioral Health Workforce Research Center at the University of Michigan notes that in rural states such as Montana, barriers may include poor technology infrastructure and a lack of a trained workforce (Mace et al., 2018). The attitudes of patients and staff are generally favorable toward IBH and telehealth, especially in rural and underserved areas; however, some in the workforce report a lack of integration and understanding of the importance to the organizational mission (Mace et al., 2018). Promoters and motivators for virtual IBH include improved quality and access to care, operational efficiency, reaching new patients, and provider satisfaction (Mace et al., 2018; MTHCF, 2016).

The last major issue identified as a foundation for this project concerns the organizational structure and core support for virtual IBH. Adding behavioral health to an existing primary care setting can contribute to role strain and workflow overload. Sites implementing IBH, especially in rural settings, have unique cultures, needs, and processes that have yet to be sufficiently studied but necessitate modifications (Selby-Nelson et al., 2018). Community composition, availability of referral-based services, and workforce demands call for flexibility, maximizing team functions, and creative strategies to integrate behavioral health models in rural settings (NCBH, 2020; Selby-Nelson et al., 2018).

Organizational Microsystem Assessment

As noted, in rural America, more than half of all patients seek behavioral healthcare from PCPs (MTHCF, 2022; NCBH, 2020). Additionally, 70%–85% of primary care appointments address issues related to mental and behavioral healthcare (Mitchell et al., 2022; Selby-Nelson et al., 2018). These actualities, paired with patient comfort and preference in receiving behavioral health services in primary care settings, support comprehensive single-setting patient care (Mitchell et al., 2022; MTHCF, 2022).

Rural Americans are at an increased disadvantage over their urban peers and are significantly more at risk for chronic illness, SUDs, and suicide (Mitchell et al., 2022; Selby-Nelson et al., 2018). Poor availability and accessibility to behavioral health services exacerbate the matter, with 80% of social workers and 90% of psychiatrists and psychologists practicing in urban settings (Mitchell et al., 2022). In Montana, all counties experience a profound shortage of behavioral health providers (MTHCF, 2019; RHihub, 2022a).

According to the MTHCF (2019), only 25% of Montana's mental health professional needs were met, placing it in the bottom five of all states. This statistic dovetails with 35% of Montanans reporting symptoms of anxiety or depression, compared with 11% of citizens nationally (MTHCF, 2021). As the need for rural behavioral healthcare increases, the chasm between that need and the availability of services widens.

This process improvement project was conceived and developed through conversations with a behavioral health consultant (BHC) serving five primary care clinics in Montana, four virtually. The parent agency subscribes to the PCBH consultation model and utilizes a behavioral health professional as a consultant to all primary care teams. The consultant is developing and directing IBH programs at each primary care site under their jurisdiction. A seed grant commenced the integration process, and the program has been in place for less than three years. The organization has earmarked funding for IBH and has leadership buy-in. Sustainability is not a pressing issue, but effective program execution and well-considered use of available resources are. At issue are the unique aspects of rural communities, providing in-person consultation at one clinical site while simultaneously attending to other clinics virtually and engaging each site's unique cultures and workflows. Scant literature addresses the challenges and effectiveness of providing IBH virtually in varied settings using diverse or modified models. There is growing support for flexibility in implementing IBH, and frameworks are emerging that measure progress toward integration ("integratedness") and acknowledge the value of growth (National Council for Mental Wellbeing [NCMW], 2022). It is in this spirit that this QI project commenced. The project sought to determine best practices, barriers, and promoters of virtual IBH at one remote pilot site. There is a movement away from the original integrated care metrics developed by the

Substance Abuse and Mental Health Services Administration-Health Resources and Services Administration (SAMHSA-HRSA). In line with the innovative 2022 “Comprehensive Healthcare Integration Framework” (CHI), metrics in this project sought to quantify progress toward integration, not completion (NCMW, 2022).

Rationale

This process improvement project was advanced using a logic model, process maps, staff narratives, and the replicating effective programs (REP) framework for QI (Kilbourne et al., 2007; Nelson et al., 2011).

The Replicating Effective Programs (REP) Framework

The REP framework is uniquely designed to implement effective interventions in community-based settings. The framework strives to maintain the fidelity of the proposed interventions while accommodating unique clinical and community cultures (Kilbourne et al., 2007). Adaption is key to the REP framework, which is well suited to the unique issues encountered when implementing virtual IBH. With the limited literature specifically addressing rural virtual IBH, a framework that maximizes transferability across settings is essential (Kilbourne et al., 2007).

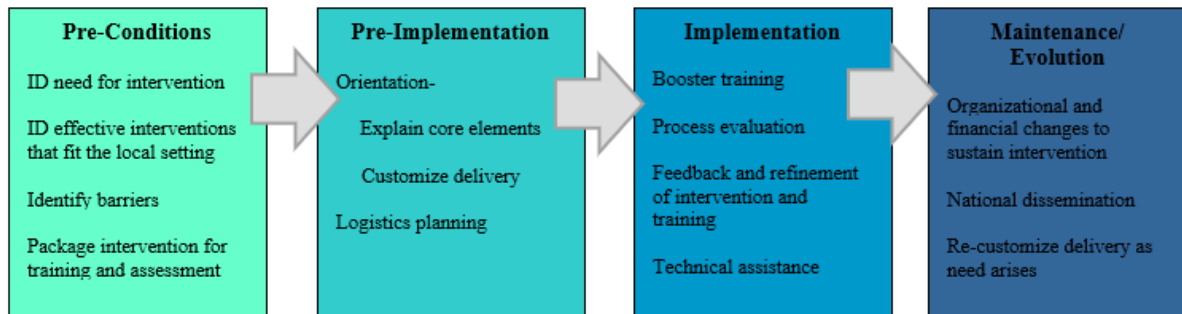


Figure 2: The four phases of the REP framework (Kilbourne et al., 2007)

Pre-conditions of the planned changes developed through discussions with the BHC, process mapping at the pilot site (see Figure 4), and narrative feedback from clinic staff. Barriers to IBH integration at the pilot site include stigma concerns, time constraints on patients and staff, lack of scripting, absence of a decision tree or workflow, and knowledge deficits concerning the behavioral health interventions offered. Noted promotors to IBH integration at the pilot site include staff buy-in, enthusiasm for IBH, and a culture comfortable with addressing stigmatizing topics. The pre-conditions phase sets the stage for pre-implementation and areas of implementation (see Intervention and Implementation). Achieving the full implementation and maintenance and evolution phases are outside the scope of this project.

Specific Aims

The comprehensive goal is to systematically and consistently identify and refer primary care patients to virtual behavioral health resources. Short-, intermediary-, and long-term goals were developed to guide the process (see Appendix B). Though long-term goals are beyond this project's scope, the overarching patient-level goals are to measurably reduce substance use disorder (SUD), depression, and anxiety symptoms by January 1, 2024 (see Figure 3).

Integrated Behavioral Healthcare:
Examining Barriers and Facilitators to Referring Clients Virtually in a Rural Primary Care Clinic

Comprehensive Goal: To systematically and consistently identify and refer rural primary care clients to virtual behavioral health resources

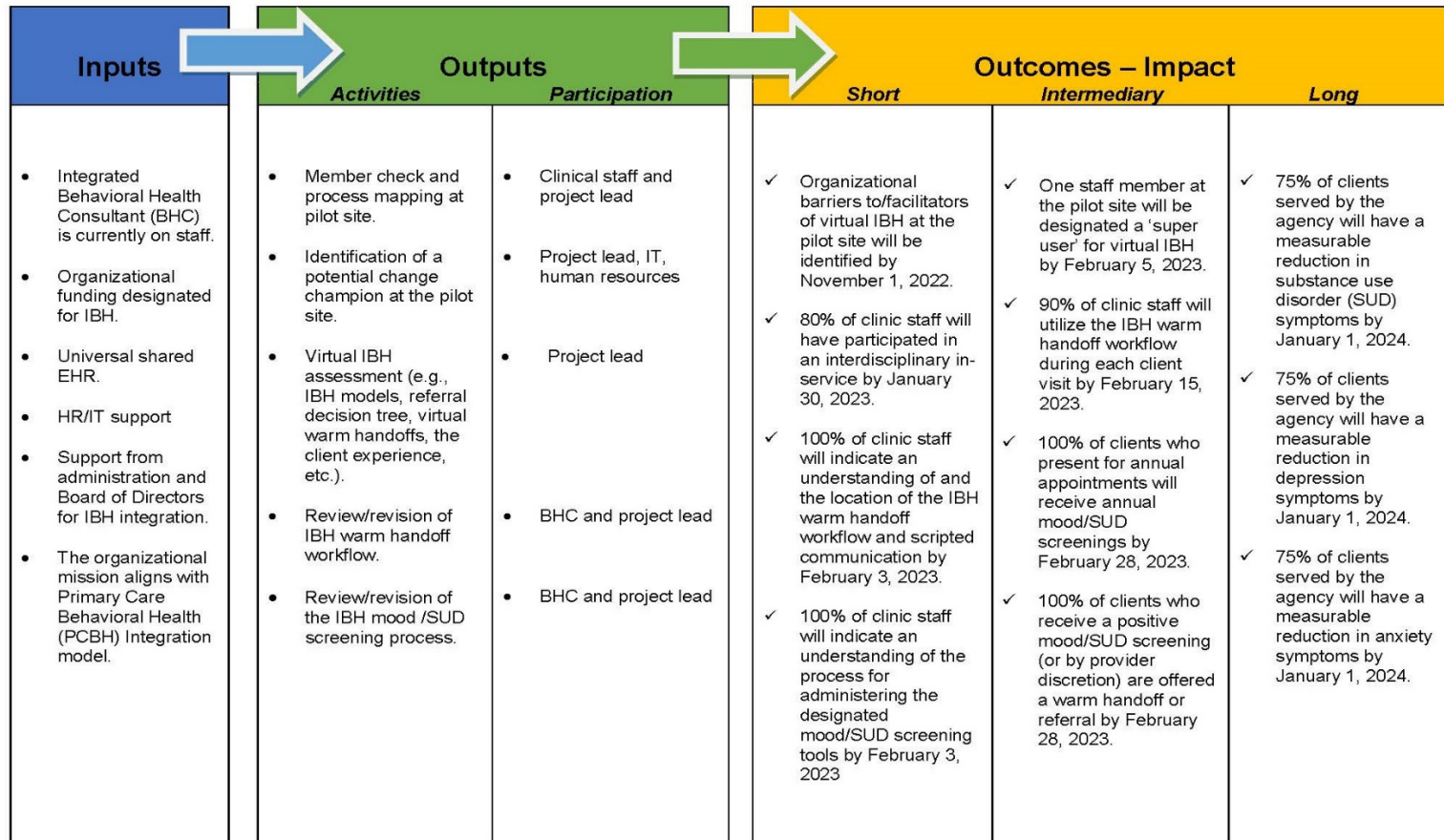


Figure 3. Logic Model Integrated Behavioral Healthcare: Examining Barriers and Facilitators to Referring Clients Virtually in a Rural Primary Care Clinic.

Context

The pilot site is a stand-alone primary care clinic located in Montana. It operates under the auspices of a larger organization that also runs five clinics throughout the state. Patient service areas include a waiting room, four exam rooms, and an unused “swing” room. The BHC visits the site quarterly. Clinic hours are Monday–Friday, 8:30 a.m. to 5:30 p.m., and staff includes three part-time nurse practitioners (NPs), three clinic assistants, one assistant manager, and one clinic manager. Four appointments are scheduled per hour in 10-minute slots, and patients requiring additional time can be scheduled for consecutive 10-minute appointments. Patients are majority female and underserved.

Interventions and Implementation

Access to individual patient data is not required for this project. Interventions to achieve the short and intermediary goals (see Figure 3) focus on the behaviors and beliefs of the clinic staff, and they are the focus of the proposed changes. Data regarding the number of client visits or clients who receive screenings or referrals will be summarized for the time period, free from identifiers. All staff surveys contained a statement of consent (see Appendix C). Process mapping at the pilot site identified staff touchpoints in the patient flow process (see Figure 4) and areas to enhance the IBH process (see Figure 5).

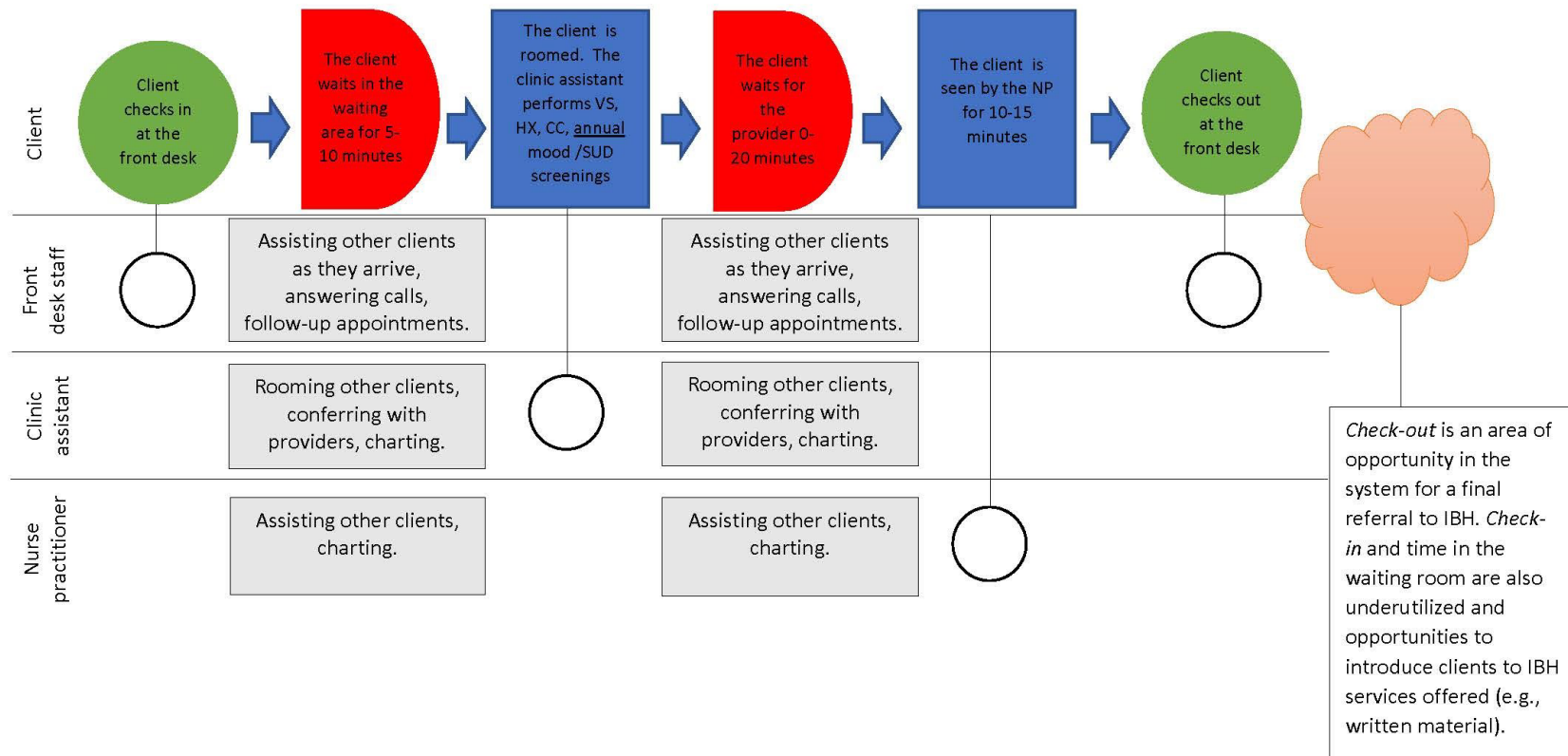


Figure 4. Pre-intervention swim-lane process map demonstrating staff touchpoints at the pilot site

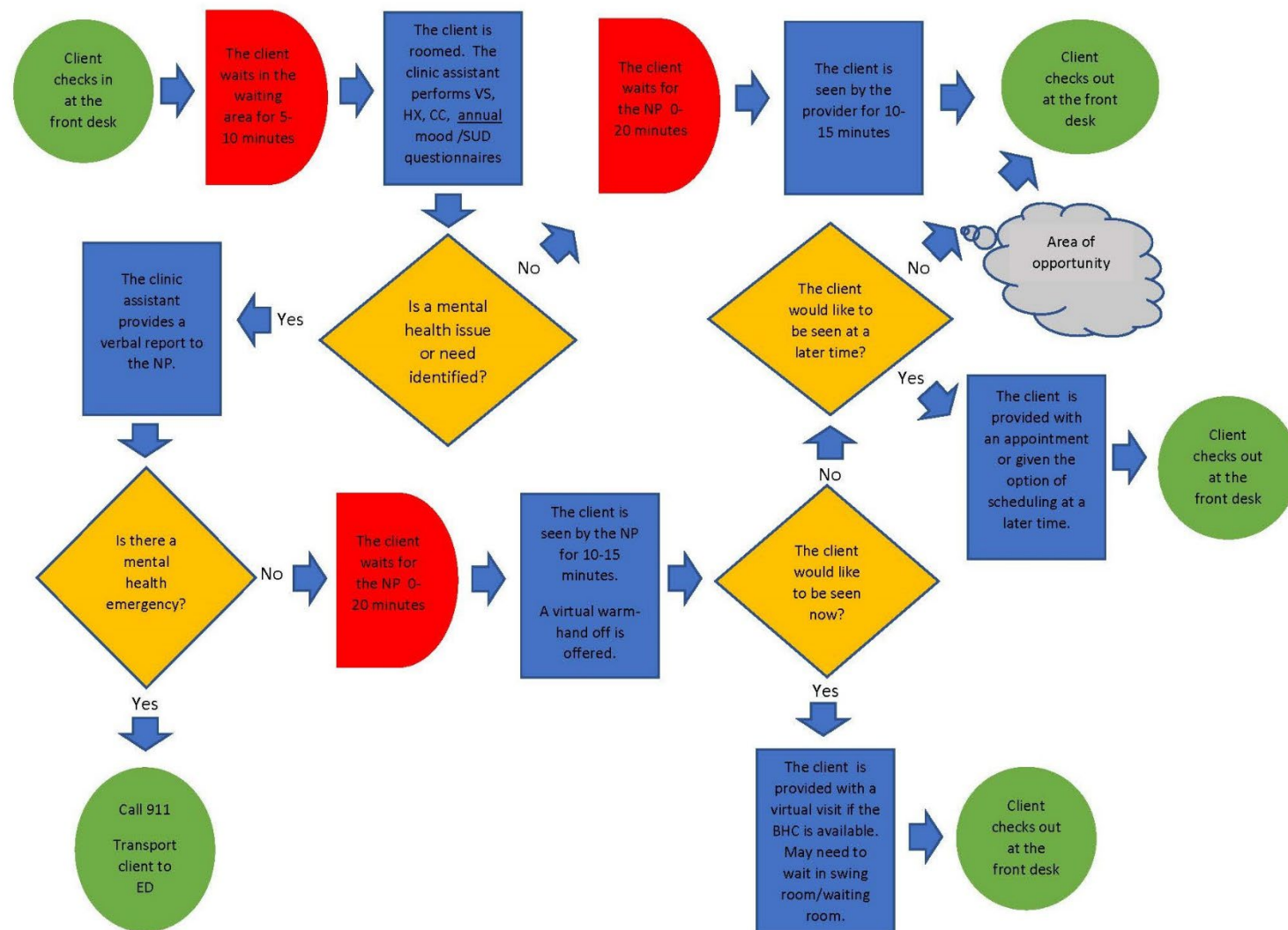


Figure 5. Pre-intervention process map demonstrating the IBH referral process at pilot site

These are the foundation of the proposed project interventions, and several areas of opportunity for change emerged during the process mapping and narrative staff input.

First, staff fears that questions surrounding substance use are stigmatizing. They reported that conversations regarding substance use and behavioral health issues often occur organically, and they are not always confident in their response. Staff report lacking competence in therapeutic communication skills related explicitly to IBH and lament a lack of scripting for IBH patient interactions (“[The organization] has a language for everything else” and “Therapeutic communication can be foreign”). The organization is highly scripted in all other areas of service.

Second, though actual appointment times are brief (10–15 minutes), there are underutilized wait and delay times. Pilot site staff reported that brief visits “can feel overwhelming.” Concerns about the number and length of screening tools were expressed, and staff referred to the stress of adding IBH but not increasing the length of visits. At annual visits, staff administer laminated screening tools in the exam room and manually enter the information into the EHR.

Lastly, staff expressed a desire for a decision tree related to IBH referral, and one team member stated, “I would like everyone on the same page.” Acknowledging that they would retain clinical judgment, a provider reported comfort using care pathways, a familiar tool in nursing and healthcare. There was also a desire for an increased understanding of the offerings of the BHC to enhance patient education. One staff member desired “something tangible” to provide patients regarding IBH offerings, especially those who decline a warm handoff or referral at the time of service. The staff member reported that “patients may feel reticent at the moment [to access IBH services].”

Stigma, therapeutic communication, and scripting				
Proposed practice change	Rationale	Strategies	Budget	Timeline
Utilize new talking points (scripts) regarding SUD and IBH. Utilize new therapeutic communication phrases “cheat sheet.”	Clinic staff report fear that questions surrounding substance use are stigmatizing. There is an expressed lack of competence with therapeutic communication related to IBH and SUD. The organization is highly scripted in all other areas of service.	The BHC and the project lead will create talking points (scripts) regarding SUD and IBH. The BHC and the project lead will create a “cheat sheet” of therapeutic communication phrases.	Cost of paper and lamination (Performed on-site). Nominal.	Create documents with BHC before January 15, 2023. Introduce the new documents to the ‘super user’ prior to the in-service occurring no later than January 30, 2023. Staff assessment will occur before February 1, 2023.

Table 1. Implementation: Stigma, therapeutic communication, and scripting

Underutilized time and length and number of IBH screening tools				
Proposed practice change	Rationale	Strategies	Budget	Timeline
Utilize client-administered mood/SUD screening tools during opportunities in the system (see Figures 4 & 5).	The clinic staff has increased their workload, but the visit lengths have remained unchanged. Staff report feeling overwhelmed at times. Using underutilized delay and wait times in the patient flow process will assist with workload and IBH integration.	The first point of contact, the front desk, will provide the client with mood/SUD screening tools as directed by clinical staff. The patient can continue to complete the tools when roomed as needed. Clinic assistants will then collect the tools, report scores to NP, and retain them to enter into the EHR.	Current laminated tools can be used. No additional cost.	The process will be introduced at an in-service by January 30, 2023. Staff assessment will occur before February 1, 2023.

Table 2. Implementation: Underutilized time and length and number of IBH screening tools.

IBH warm handoff workflow and client education regarding IBH offerings				
Proposed practice change	Rationale	Strategies	Budget	Timeline
Revise and utilize an IBH warm handoff workflow for virtual IBH.	Staff report varied understanding of the current IBH referral process, and NPs are familiar with and comfortable using a care pathway or workflow.	The BHC and/or the project lead will revise the IBH warm handoff workflow.	Cost of paper and on-site lamination. Nominal.	Create documents with BHC before January 15, 2023.
The IBH client education card will be reinforced to staff PRN, and reinforcing of BHC offerings will continue throughout the process.	Providers expressed a desire for a better understanding of IBH offerings and a tangible item to send with patients who decline a warm handoff or referral at the time of service.	The BHC and the project lead will reinforce staff on the currently available client education card, and the BHC will continue education as needed.	None. Currently available.	Reinform the 'super user' prior to the in-service occurring no later than January 30, 2023.

Table 3. Implementation: IBH warm handoff workflow and client education regarding IBH offerings

Anticipated barriers to implementing the proposed project include canceled staff meetings, clinic staff illness, student illness, urgent clinic matters that take precedence over the proposed project, and the busyness of the holidays. Anticipated promotors to implementing the proposed project include a BHC, clinic manager, and staff invested in the IBH process. IBH is currently implemented enthusiastically and potentially needs small process changes to succeed.

Evaluation

Evaluation of process interventions and their outcomes will be informed by the data, information, knowledge, and wisdom (DIKW) hierarchy or pyramid (see Figure 6) and measured using staff check-in surveys and narrative feedback (see Appendix E).

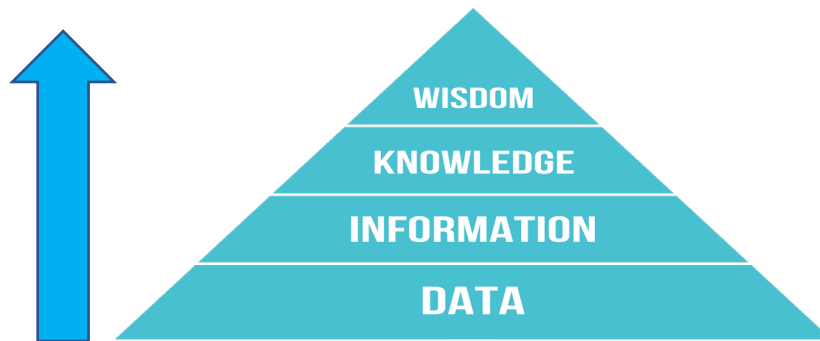


Figure 6. Data, Information, Knowledge, and Wisdom (DIKW) pyramid (Fricke, 2022; Retik, n.d.)

Data, Information, Knowledge, and Wisdom (DIKW)

The DIKW model views tasks as meeting real-world practical challenges involving information (Fricke, 2022). The model process begins at the base, data. It is during this stage that data is collected, and the questions “who,” “what,” “where,” “when,” or “how many” are asked (Fricke, 2022). From this inquiry, data is shaped into the answer to a question and becomes information. Without this transformation, gathered data has no value. Information is relevant or usable data that allows one to transform it into instructions or next steps (Fricke, 2022). Knowledge is understanding or “know-how” and is what makes it possible to transform information into instructions (Fricke, 2022). The final step in the DIKW model, wisdom, can be seen as a shared understanding and adds value and judgment to the previously attained steps

(Fricke, 2022). The interventions of this project aim to accomplish each level of the DIKW pyramid, with the result being a shared understanding of the IBH process, its components, and its significance to the clients served.

Staff Check-in Surveys

Five staff check-in surveys will be administered at three points throughout the project process (see short-term and intermediary goals). Surveys will include open-ended, closed-ended, and 5-point Likert scale questions about the short-term and intermediary goal objectives. Staff responses will be de-identified and provided a position code (primary clinical or primary non-clinical). Measurements of themes emerging from staff check-in surveys and narrative feedback will reinform interventions and will be guided by the concepts of process versus coding.

Process Coding. Process coding uses gerunds or “-ing” words to represent actions suggested by gathered data and transforms raw data into thematic representations that can be analyzed (Saldaña, 2014). Processes may be visible, such as doing, mental, such as thinking, or conceptual, such as believing (Saldaña, 2014). Staff survey responses and narrations will be reviewed for actions relating specifically to each goal, and common facilitators and barriers will be identified. Actions will then be grouped based on analytic reflection to further distill the gathered responses and guide ongoing staff education and clarification (Saldaña, 2014).

Versus Coding. Versus coding identifies conflicts and power struggles observed in social action, reaction, and interaction as an X versus Y code (Saldaña, 2014). Codes can apply to the observable and the conceptual and are applied to data demonstrating tension between parties, within oneself, or with an ideology (Saldaña, 2014). Using versus coding as a guide, survey data

and narrative feedback will be placed in categories, seeking emerging conflicts and power struggles (Saldaña, 2014). This information will inform ongoing staff education and process changes.

CHAPTER THREE

QUALITY IMPROVEMENT MANUSCRIPT

Introduction

More than half of all patients in rural America seek behavioral healthcare from PCPs (MTHCF, 2022; NCBH, 2020). PCPs are the first line for behavioral health and SUD treatment due to the significant shortage of specialized services in rural settings (MTHCF, 2016). Eighty percent of social workers and 90% of psychiatrists and psychologists choose to practice in urban settings, leaving rural Americans at an increased disadvantage over their urban peers as they experience increased chronic illness, substance use, and suicide (Mitchell et al., 2022; Selby-Nelson et al., 2018).

Montana, a frontier state, experiences a profound lack of behavioral health providers, such that the state as a whole is designated a Mental Health Professional Shortage Area (MHPSA) (MTHCF, 2019; RHIhub, 2022a). According to the MTHCF (2019), only 25% of Montana's behavioral health professional needs are met, placing it in the bottom five of all states. The provider shortage in Montana befalls a state that consistently ranks among the top five with the highest national suicide rate and claims an adult suicide rate twice that of the national average (MTHCF, 2016). These statistics dovetail with 35% of Montanans reporting symptoms of anxiety or depression, compared with 11% of citizens nationally (MTHCF, 2021). As the need for rural behavioral healthcare increases, the chasm between that need and the availability of services highlights the profound and pressing need for a solution.

IBH was conceptualized to meet the increased demands on primary care for behavioral health services (NCBH, 2020). Since 2016, the MTHCF and other rural behavioral health stakeholders have diligently worked to improve the quality of and access to integrated healthcare in Montana (NCBH, 2020). IBH is a whole-person, team-based, patient-centered approach to care that blends medical and behavioral health treatment in one setting (AHRQ, 2022b). The model embeds a behavioral health professional, a behavioral health consultant (BHC), within a primary care setting as a consultant to PCPs. Identifying and treating patients with behavioral healthcare issues in primary care settings enhances equitable access to limited resources (MTHCF, 2016; MTHCF, 2022). IBH aims to improve the overall health of a population by delivering fewer intensive services to all patients rather than delivering high-intensity services to only patients with the highest needs who seek care (Beehler et al., 2017). The success of IBH in similar rural settings, leveraging scarce resources, illustrates its potential to address Montana's behavioral healthcare crisis.

Barriers to IBH Implementation in Rural Settings

The most significant barrier to implementing rural IBH is the lack of available behavioral health professionals. One emerging model utilizes telehealth to reach a greater number of patients at a greater number of locations. The hub and spoke model of telehealth fills the gap between areas with existing services with those being underserved, leveraging psychiatric expertise via technology to overcome distance as a barrier (Ratzliff & Sunderji, 2018; Williams, 2021). In the traditional model, the hub site includes behavioral health specialists, administrative personnel, and support staff (Williams, 2021). The spoke site is an underserved or geographically isolated location that utilizes technology to improve access to behavioral health services

(Williams, 2021). This model of care allows clients to receive services within their communities and professionals to remain in their location of choice, optimizing human resources (Fortney et al., 2013; Williams, 2021).

Facilitators of IBH Implementation in Rural Settings

A facilitator in change management is classically an individual who is responsible for systematically initiating and maintaining a change effort (Kendra & Taplin, 2004). Facilitators may also be structural or organizational, such as internal clinic structures, physical space, team relationships, and collaborative support systems (Brady et al., 2021). An on-site change or intervention champion who encourages the practice, policies, and procedures of IBH is key to IBH's success (Lamson et al., 2022; Nikolajski et al., 2022). Onboarding culture, professional identity development, and skills modeling are additional elements that facilitate IBH (Ma et al., 2022). Experiential learning, a hallmark of social and health sciences, increases behavioral health students' self-efficacy and diagnostic accuracy (Washburn et al., 2020). Relevant experiential learning may include patient simulations utilizing actors, peer-to-peer role plays, and virtual patient simulations (Washburn et al., 2020). Muse et al. (2017) noted that collaboration and communication between medical and behavioral health providers are significant indicators of the success and sustainability of team members and the model of care itself. Team structure, degrees of trust and respect between team members, and provider and staff wellbeing were also noted to be foundations for facilitating IBH implementation (Brady et al., 2021; Peer & Koren, 2022).

Purpose

A Montana primary care agency sought to determine internal barriers and facilitators to implementing its current virtual IBH program. The umbrella organization operates five clinics throughout the state, with a BHC operating in a modified hub and spoke model, embedded in one clinic and serving the other four remotely (see Chapter 2, figure 1)).

The agency subscribes to the PCBH consultation model, where a BHC is a full member of the care team and also provides education and training to other care team members (AHRQ, 2021). The PCBH model is a brief and time-limited process for screening behavioral health issues and providing care to primary care patients. When using this model, behavioral health appointments range from 15–30 minutes, with a lower frequency, intensity, and duration than traditional psychotherapy (Beehler et al., 2017). The PCBH model aligns with the IHI’s Triple and Quadruple Aim initiatives, which call for improved patient experience of care, improved population health, and reduction of per capita cost of health care (Beehler et al., 2017; Bodenheimer & Sinsky, 2014; IHI, 2022). The program has been in place for less than three years, and the agency aims to capitalize on the expertise of the one BHC to meet the needs of the greatest number of its clients across the state.

A pilot site was chosen from the four remotely served clinics to assess barriers and facilitators to the virtual IBH process. The pilot site is a modest clinic with four exam rooms and a “swing” room staffed by three part-time NPs, three clinic assistants, one assistant manager, and one clinic manager. Appointments are scheduled in ten-minute increments, though clients requiring additional time can attend consecutive ten-minute appointments, and patients are majority female and underserved.

The need to assess barriers and facilitators at the site stemmed from a newly implemented program without existing outcome measures and a desire by the agency to best utilize its sole BHC. Goals focused on identifying pre-project barriers and facilitators, engaging staff in pre-project learning, identifying a long-term IBH “super user,” utilizing workflows and screening tools, and referring clients to IBH care when indicated (see Chapter 2, figure 3)

Guiding Conceptual and Implementation Framework

The REP framework for healthcare interventions guided the project process (see Chapter 2, figure 2). REP is designed to implement effective interventions in community-based settings, and the framework strives to maintain the fidelity of the proposed interventions while accommodating unique clinical and community cultures (Kilbourne et al., 2007). Adaption is key to the REP framework, which is well suited to the unique issues encountered when implementing virtual IBH in a rural setting. With limited literature addressing rural virtual IBH, a framework that maximizes transferability across settings was essential (Kilbourne et al., 2007). The first three stages of the REP framework were addressed in this project, with the final stage, Maintenance/Evolution, being outside this project’s scope

The DIKW pyramid also guided the stages of the project and informed the interpretation of results. The final goal being a shared understanding of the site’s unique IBH processes and how to best facilitate them (see Chapter 2, figure 6).

The QI project was developed for a primary care clinic served remotely by a BHC in need of maximizing limited behavioral health resources. The project aimed to identify barriers and facilitators to implementing the current IBH program at the pilot site. The comprehensive goal is to systematically and consistently identify and refer primary care patients to virtual

behavioral health resources. Short-, intermediary-, and long-term goals were developed to guide the process. Short-term goals included identifying barriers and facilitators to the IBH process, staff attendance at an interdisciplinary in-service, and staff indications of an understanding of the warm handoff workflow, scripted behavioral health communication, and mood and SUD screening tools. Intermediary goals included the identification of an on-site IBH “super user,” staff utilization of the warm handoff workflow and scripted communication, staff compliance with mood and SUD screening procedures, and all clients who receive positive mood and SUD screenings being offered a warm handoff or IBH referral. Though long-term goals are beyond this project’s scope, the overarching patient-level goals are to measurably reduce SUD, depression, and anxiety symptoms in the agency’s patient population by January 1, 2024 (see Chapter 2, figure 3).

Methods

This QI process project was a five-week assessment, and site-specific data were collected prior to the start of the project and weekly throughout the five-week project period. An evaluation and recommendations were made at the conclusion of the five weeks. Five anonymous paper-based surveys were administered to staff throughout the project, and survey responses informed changes to the overall IBH process, warm handoff workflow, scripted communication tools, and the mood and SUD screening process (see Appendix D).

Sample and Recruitment

The sample comprised current healthcare team members at the pilot site clinic, with eight employees in total. Distinct recruitment was not necessary, and each team member had the ability to opt out of participating per the informed consent statement (see Appendix C).

Data Management

Gathered data was anticipated to include de-identified client-protected health information (PHI) regarding the number of clients screened, the number of clients identified as needing a referral, and the number of those clients receiving a referral. Using a retrospective medical chart review, the investigator anticipated accessing and viewing PHI in collecting the de-identified data, including names, medical record numbers, and addresses, when seeking screening or referral data in the EHR. The PHI itself was not being collected but did have the possibility of being viewed by the investigator. This component of the QI process did not occur, however, due to the lack of EHR capabilities (see Discussion).

Staff survey responses were anonymous, confidential, and accessed only by those directly involved with the project. Staff who chose to respond placed each survey in a plain, self-sealable business envelope and then into a larger manila envelope in the staff break room. Surveys were differentiated solely by the designations of “I mostly provide clinical patient care in my regular role” or “I *do not* mostly provide clinical patient care in my regular role.” Staff members who engaged in the listening session gave consent by way of participation. Members of the listening group were coded by one identifier most common to the group: income designation.

Ethical Considerations

Institutional Review Board (IRB) approval was obtained prior to the commencement of this project. Ethical considerations include the risk of increased staff stress related to implementing new processes. It is also important to consider the small number of staff (n=8) and how role power differentials may impact the perceived ability to disagree or offer forthright feedback. Roles within the small staff grouping may impact the perceived ability to dissent and refuse. Finally, consideration must be given in reporting results that may point to individual employees due to the small staff size.

Procedures

The QI assessment and subsequent interventions were conducted in three phases: pre-project, interventions and ongoing analysis, and evaluation. The specific tasks completed in each phase follow.

Phase 1: Pre-Project

The pre-project phase consisted of a pilot site narrative member check, pilot site process mapping, a review of the current warm handoff workflow, and a review of the current mood and SUD screening process. During the pre-project site visit, staff members were verbally informed of the QI project and their potential involvement. They were given direction regarding their ability to opt out of participation at any time during the project period.

Before the project start date, staff was re-informed via email of the project purpose, timeline, anticipated anonymous surveys, and how survey responses would inform ongoing process improvements. The email identified how preliminary staff feedback and process

mapping informed the development of the proposed project interventions, and the informed consent statement was attached (see Appendix C). During the pre-project phase, three areas of opportunity for improvement emerged: access to a warm handoff workflow, desire for a behavioral health scripted communication tool, and modifications to the mood and SUD screening process. A potential IBH “super user” was identified during this phase of the project and accepted the role.

The week of the project commencement, new processes introduced at a regularly scheduled meeting included a warm handoff workflow designed and provided by the BHC, a scripted communication tool for behavioral health interactions designed by the investigator (see Appendix E, version 1), and self-administration of mood and SUD screening tools by clients upon check-in instead of by staff (see Appendix F). The scripted communication tool and redesigned workflow for mood/SUD screening were designed by the investigator and approved for trial by the BHC. The National Council for Mental Wellbeing (2022), the American Medical Association’s BHI Workflow Guide (2022a) and the BHI Workflow Plan (2022b), and Chang et al. (2021) informed the investigator’s wording and process flow choices.

Paper-based tools were placed at a centrally located computer station, at the front desk, and in the staff break room. The clinic manager identified these locations as easily accessible to staff and areas currently utilized for reference materials.

Phase 2: Interventions and Data Analysis

Emails were sent to the pilot site staff before the beginning and end of each survey period. Emails contained reminders of start and stop dates for the current survey(s), informed staff when the investigator would be available on-site, and reviewed the process for completing

the surveys. Surveys and consent statements were available in hard copy in the staff breakroom. At this time, the plain, self-sealable business envelopes were provided for survey confidentiality, with the larger manilla envelope on hand to collate the business envelopes. The informed consent statement was affixed to the front of each large manilla survey envelope. Surveys and consent statements were also attached to the email reminders, should the staff prefer to receive them electronically. However, staff was required to place a hard copy of their survey responses in the staff break room envelopes.

Survey response evaluation occurred between each survey end date and the next survey period and at the completion of the project. Coding was to be differentiated by primarily providing clinical care or primarily not providing clinical care. However, all staff surveys were identified as providing clinical care or were unidentified (n=2). All surveys contained open-ended narrative questions, and two contained 5-point Likert scale questions. Survey 1 contained six Likert scale questions, and Survey 2 contained three (see Appendix D). Total responses indicated comfort, understanding, and ease of use of the warm handoff workflow and the scripted communication tool. Additionally, responses indicated an understanding of, competence with, and ease of use with the new mood and SUD screening process. This is relevant because these results suggested that processes were not hindering IBH at the pilot sitelocation (see Tables 4 and 5).

n=6 respondents					
Question	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Comfort locating warm handoff workflow			2	4	
Comfort locating scripted communication tool			3	3	
Understanding warm handoff workflow			1	4	1
Understanding scripted communication tool			1	4	1
Warm handoff easy to use		1	2	2	1
Scripted communication tool easy to use		1	3	1	1

Table 4. Survey #1 Likert Scale Questions and Responses

n=2 respondents					
Question	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Understanding of mood/SUD screening tools				2	
Competence with mood/SUD screening process				2	
Mood/SUD screening process is easy			1	1	

Table 5. Survey #2 Likert Scale Questions and Responses

As the project progressed, the investigator examined survey responses and narrative feedback weekly for common processes or actions reported by staff that may indicate themes. Actions were grouped and assessed for repeating events. Recurrent processes included “*offering help* [to clients],” “*caring for patients*,” “*balancing time constraints* [with IBH],” and “*liking giving referrals* [for IBH].” Emerging common themes in surveys and narrations over the five weeks included the following in order of times mentioned: 1.) a desire for remote IBH capabilities in each exam room; 2.) a desire for an IBH provider on-site; and 3.) equally mentioned, a dislike of the scripted communication wording and a desire for more time for the IBH process. Common processes and themes were considered and guided ongoing staff education and process clarification (Saldaña, 2014).

Aspects of versus coding guided the interpretation of identified conflicts and power struggles reflected in survey responses and narrative feedback (Saldaña, 2014). These overlapped with the identified themes and included thanking versus apologizing to clients for handing them off when utilizing the scripted communication tool, offering a warm handoff versus client time constraints, wanting to help versus feeling constrained by time, and unexpectedly, dedication to mission versus unpaid demands on time (see Table 6).

Conflicts and Power Struggles	Description	Exemplar
Thanking <i>versus</i> apologizing (In reference to scripted communication tool)	Staff preferred thanking and acknowledging a client for sharing rather than apologizing to them for interrupting and referring them to IBH.	“We should be thanking people for their time, energy, and vulnerability...Saying ‘Sorry’ puts an emotional burden on the patient.”
Offering a warm handoff <i>versus</i> client time constraints	Staff wants to refer clients to IBH, but clients are often pressed for time.	“Reluctance on pt.’s part to spend more time @ clinic.” “Clients are often on a break from work and don’t have the time for another [IBH] appointment.”
Wanting to help <i>versus</i> feeling constrained by time	Staff want to help clients with behavioral health needs but are pressed for time addressing presenting medical needs.	“I will say, if someone presents with a lot of things going on, that sometimes IBH takes a back seat.”
Dedication to mission <i>versus</i> struggling with unpaid demands on time	Staff expressed dedication to the mission of the organization, but hourly staff expressed concerns related to compensation.	“Every day we are asked to do more with less.” Regarding <i>Lunch and Learn</i> : “We can have a hard time for everyone doing lunch at the same time. People need to leave to take care of [personal concerns] and we also need the down time.” “We don’t get paid extra for new skills sets that we learn.”

Table 6. Conflicts and power struggles

Phase 3: Evaluation

Evaluation occurred weekly with each set of surveys, and modifications and recommendations were made.

The REP framework phase Implementation is most closely aligned with Phase 3 of the project. During Phase 3, feedback refined the interventions, including a reworked scripted communication tool in week two, removing the apology (see Appendix E, version 2), monthly BHC lunch and learns beginning in week three, adding to the quarterly in-person site visits, and IBH telehealth cameras in each patient care room by week four, instead of just one camera in a swing room. These interventions prompted further feedback and recommendations (see Discussion).

Two intermediary goals involved tracking annual clients receiving mood and SUD screening questionnaires and those needing a referral for IBH services receiving one. During the project's first week, the BHC and the investigator met with the EHR liaison. The EHR is new to the organization, and a request was made to build smart sets to track internal referrals and positive mood and SUD screening results. The two goals were 1.) 100% of clients who present for annual appointments will receive annual mood/SUD screenings by the end of the five-week project period, and 2.) 100% of clients who receive a positive mood/SUD screening (or by provider discretion) are offered a warm handoff or referral by the end of the five-week project period.

Findings

Specific short-term goals achieved during this QI project included the identification of barriers and facilitators to virtual IBH at the pilot site and 88% of clinic staff participating in an

interdisciplinary in-service (goal: 80%). Barriers identified pre-project included a lack of a site-specific warm handoff workflow, scripted communication for behavioral health encounters, and time constraints related to the mood/SUD questionnaire administration process. Early site-specific facilitators were an IBH program currently in place, leadership buy-in, a volunteer IBH “super user,” and staff enthusiasm for IBH implementation. As the project progressed, staff identified additional barriers to the IBH process, including a dislike of elements of the IBH scripted communication verbiage, client and staff time constraints, and a lack of telehealth access in each exam room. Requested modifications to the trialed scripted communication tool were noted in three completed surveys. The feedback focused on a desire to thank clients for their vulnerability and not apologize for interrupting to provide a warm handoff (see Table 6, see Appendix E, version 2). Once this change was made, the staff verbalized increased comfort with the script and noted that the wording aligned with existing agency scripting and values.

An introduced facilitator to IBH included adding the BHC’s business cards to each exam room and the front desk. Cards contain the BHC’s direct contact information with a list of addressable issues on the back (e.g., depression, anxiety, sleep, stress, alcohol/drug assessment). This intervention was noted in two surveys to benefit clients who refused an initial referral and was noted to feel “organic and productive” during client interactions.

The short-term goals of 1.) 100% of clinic staff will indicate an understanding of the location of the IBH warm handoff workflow and scripted communication, and 2.) 100% of clinic staff will indicate an understanding of the process for administering the designated mood/SUD screening tools were not identified as being met early in the project process. It is unclear if the goals were initially unmet or underreported due to the low survey response rates as follows:

Survey 1: 75%, Survey 2: 25%, Survey 3: 25%, Survey 4: 50%, and Survey 5: 38%. Mid-project, some staff members verbalized a desire to speak about issues rather than complete the surveys. The clinic manager was consulted, and the staff was notified via email that a brief (15–20 minute) voluntary listening session would occur at the end of a workday. This meeting facilitated an open conversation and helped confirm which processes enhanced or detracted from the virtual IBH process. Feedback included denial of barriers to utilizing the warm handoff workflow, verification that the modified mood/SUD screening process was comfortable, easy to use, and non-stigmatizing, and optimism concerning the IBH telehealth cameras placed in each exam room.

The EHR IT liaison was unable to complete the creation of smart sets by the conclusion of this project. Though staff verbalized adhering to the mood and SUD screening and referral processes, no trackable electronic data was available. Two of the four intermediary goals could not, therefore, be measured (see Chapter 2, figure 3).

Discussion

The comprehensive goals of this project were to systematically and consistently identify and refer primary care clients to virtual behavioral health resources. Specific short and intermediary goals were designed to advance the long-term goals of reducing SUD, depression, and anxiety symptoms in the population served. At the completion of the five weeks, EHR technology was not in place to determine whether the comprehensive goals were met. Tracking of mood/SUD screenings and referrals is essential in providing safe and legally defensive patient care. Behavioral documentation should have parity with physical health documentation.

An unexpected issue was low survey response. Surveys were short in length and split into multiple shorter versions over the five weeks, a practice aligning with recommendations to avoid survey fatigue in respondents (Jeong et al., 2023). Mid-project, after survey responses declined, staff received an email encouraging even partial survey completions. Survey responses increased after this email to 50% and 38%, respectively, though not to the initial level of 75%. The two final surveys were interestingly completed in full and were administered after the listening session. The implication is that being relieved of the expectation to complete a survey in full has the possibility of increasing response levels.

During a weekly site check-in, staff members indicated they were more comfortable speaking about virtual IBH processes, barriers, and facilitators than completing written surveys. While it was believed that surveys would allow for anonymity, staff verbalized a preference for reviewing the processes verbally in a group setting. This feedback indicates that a pre-project assessment regarding stakeholder polling preferences may enhance data gathering during QI projects. Survey and inquiry design methods should also consider site-specific preferred communication patterns.

At staff request, the investigator arranged the mid-project voluntary listening session, which was subsequently attended by non-licensed, hourly staff members. The listening session fostered open dialogue and prompted the unplanned use of appreciative inquiry by the investigator. The appreciative inquiry model focuses on current strengths, shared meaning and purpose, and a collective vision (Tracy & O'Grady, 2019). The investigator spontaneously utilized the last few minutes of the listening session to reinforce staff members' importance to the greater agency mission, the success of virtual IBH at their unique clinic, and the positive

impact they have on community health. Within an agency that employs hourly and salaried employees, it is essential to clarify and amplify the importance of each team member's contributions to the mission. The candid conversation, which recognized the significance of each staff member, led to a final unanticipated revelation.

An unexpected barrier hindering the IBH process at the pilot site surfaced during the listening session and centered around the divergent lived experiences of hourly and salaried staff. Key barriers to an organization's collaborative QI efforts include professional elitism, organizational hierarchy, unrecognized diversity, and professional dissonance (Joel, 2019). In the case of the pilot site, inadvertent elements of disconnected organizational leadership and unrecognized economic diversity surfaced.

Remote lunch and learn sessions with the BHC were initiated mid-project, which stemmed from verbal staff requests for additional behavioral health instruction. Reluctance by hourly staff was unanticipated. During the listening session, hourly staff expressed concerns related to unpaid demands on their time. They reported a strong commitment to the mission of the organization and to IBH while reporting fatigue related to "doing more with less" and conflicts related to required breaks and lunch times (see Table 6). These concerns revealed an unintended disconnect between the leadership creating virtual IBH processes and the hourly staff implementing them. Consideration must be given to an agency's reimbursement structure and the impacts it has on those lower in the organizational hierarchy if new processes are to succeed.

Diversity is complex, and economic diversity is a less recognized barrier to group cohesiveness (Joel, 2019). The agency and the pilot site espouse a culture valuing inclusivity, team support, and heterogeneity. However, those employed in hourly positions may feel

disenfranchised when process changes are made without consideration of their economic impact. Personal errands, medical appointments, and pet care must all occur during very structured times for those being paid hourly. This contrasts with those higher in the organizational structure, who often have the freedom to come and go at will. The issue is also reflected in the behaviors of clients, who were reported as reluctant to accept warm handoffs due to time constraints. A disconnect exists when the organization's stated values do not transfer to those executing the mission or those receiving the organization's services.

Limitations

The QI project was completed with limitations, including a small staff size, a short project duration, and limited IT support.

With eight total staff members, respondent bias was likely influenced by proximity and a desire to conform to the agency culture (Vesely & Klockner, 2020). The possibility of respondents choosing responses they believe are acceptable to their peers cannot be ruled out. The unique composition of the staff at the pilot site may or may not affect transferability to other settings.

The project period was five weeks long, and the time frame hindered assessing staff satisfaction and the usability of the IBH telehealth cameras in each exam room.

Limited information technology (IT) support did not allow for the completion of the EHR smart sets, which would allow documentation of the IBH screening and referral process. Finally, an assessment of the added in-room virtual IBH technology is a necessary next step and outside the scope of this project

Conclusion

The findings of this QI project suggest that unrecognized team diversity, specifically economic diversity, can interfere with project implementation even when staff is enthusiastic and supportive of an intervention. Organizational leadership disconnect, no matter how unintentional, can leave hourly employees feeling disenfranchised. The importance of frontline workers and their contributions to the success of any team should be at the forefront of efforts to effect organizational change. A lack of empathetic awareness and a failure to appreciate the financial impacts process changes may have on hourly team members can and will derail the best-designed project (Joel, 2019). Structures for virtual behavioral health may be in place, but failing to consider the impacts of increased work without increased pay can thwart the best-laid plans.

Based on initial findings, the barriers to virtual IBH in a rural setting have less to do with technology and more with site culture. Although the importance of data collection and EHR documentation cannot be overstated, the upstream decisions made by salaried staff, without the forthright input of hourly staff, appear to be the greatest determinant of process change success. Hourly staff interacting with clients and implementing IBH protocols are the crux of the process for the organization and are critical in successful collaborative projects, particularly in small rural clinic settings. Regardless of the democratic intentions of the administration and their professional authority, those without legitimate authority are, in fact, those with much of the power to effect lasting change within an organization. Though an agency may embrace inclusivity within its's client population, if it does not extend that same positive regard to those within its institution, QI efforts will be frustrated without comprehension of "Why?"

CHAPTER FOUR

A REFLECTION ON THE ESSENTIALS OF DOCTORAL EDUCATION

FOR ADVANCED NURSING PRACTICE

Meeting the Essentials

The Essentials of Doctoral Education for Advanced Nursing Practice address the core foundational competencies of the advanced nursing role (American Association of Colleges of Nursing [AACN], 2006). Eight competencies outline the necessary curricular elements of any program conferring the DNP degree and the required foundational outcomes (AACN, 2006). Though each student arrives at the DNP program from varied educational and experiential backgrounds, all students will share achieved competencies upon completion. These competencies are developed and achieved throughout the DNP program, with didactic and practical curricula moving students toward foundational mastery.

Essential I: Scientific Underpinnings for Practice

Natural and social sciences are at the core of nursing practice. The DNP graduate must demonstrate the ability to translate and implement scientific knowledge for the betterment of patients. The DNP-prepared graduate applies current knowledge and develops and evaluates new concepts and practices.

The author achieved this essential during the DNP program through rigorous coursework in advanced pathophysiology, advanced health assessment, advanced pharmacology, and clinical practicums. Assignments and activities contributing to attaining Essential I include virtual patient

assessment modules, advanced pathophysiology collaborative case studies, the creation of a psychopharmacology portfolio, evaluating emerging issues in nursing science, and extensive preceptor mentorship at various clinical sites.

Essential II: Organizational and Systems
Leadership for Quality Improvement and Systems Thinking

Organizational and systems leadership competencies improve patient and healthcare outcomes (AACN, 2006). Consistent with nursing's history of providing for the underserved, mastery of Essential II equips the DNP-prepared nurse to eliminate health disparities and promote patient safety (AACN, 2006).

Multiple courses contributed to meeting this essential, including Financing and Budget of Healthcare Systems, Healthcare Informatics, and Program Planning and Evaluation, Outcomes, and Quality Improvement. The author increased her comprehension of systems and QI by developing a financial concept project paper that included an application to "real world" healthcare issues such as cost/benefit, risk, budget, and QI outcomes measurements. Healthcare Informatics provided EHR quality measure data flow analysis, assessing health literacy as applied to electronic sources and exploring the optimization of patient portals for engagement and meaningful use. Program Planning and Evaluation, Outcomes, and Quality Improvement provided the opportunity to collaborate within the DNP cohort, assessing program design models and co-creating a recommended QI project for implementation. In conjunction with the College of Engineering, the wholly collaborative course Design of Healthcare Delivery Systems paired engineering students with DNP candidates. Interprofessional teams were charged with redesigning healthcare delivery systems through cooperative learning circles and healthcare

site process assessments. Processes included the creation of fishbone and spaghetti diagrams, 5S method application, and production of A3 reports. The author's QI scholarly project was the most substantial effort toward realizing this essential, in partial fulfillment of the DNP degree.

Essential III: Clinical Scholarship and Analytical Methods for Evidence-Based Practice

Clinical scholarship and methods analysis are hallmarks of doctoral education (AACN, 2006). Translating evidence into practice and disseminating and integrating new knowledge are long-standing features of the nursing profession and are integral to the professional DNP advanced practicing nurse. Nursing is concerned not only with knowledge but also with directing it toward humane ends (AACN, 2006). In Evidence-Based Practice, the author had the opportunity to collaboratively propose a patient-centered practice change, assess guidelines with the AGREE II instrument, and present an oral defense of the proposal. Translational Research for Advanced Practice found the student analyzing critical appraisals of literature, proposing a translational research plan of action for the incarcerated, and presenting that plan to DNP cohorts using a multimedia platform. The DNP Scholarly Project concluded this essential and allowed the author to apply previously attained academic skills to the design and implementation of a comprehensive QI project.

Essential IV: Information Systems/Technology and Patient Care Technology for the Improvement and Transformation of Health Care

The DNP graduate demonstrates the ability to utilize information systems to improve patient care (AACN, 2006). The DNP-prepared, advanced practicing nurse must be able to navigate a changing technological landscape, keeping apprised of shifting regulatory and legal concerns. Healthcare Informatics afforded the author an exploration of optimal patient portals,

EHR quality measurement, analysis of artificial intelligence (AI) algorithms for patient care, telehealth technology, skills and regulations, and electronic health literacy.

Essential V: Health Care Policy for Advocacy in Health Care

Healthcare policy is created through different avenues, including governmental actions, institutional decision-making, and organizational directives (AACN, 2006). These paths can facilitate or hinder healthcare delivery and the autonomy of the advanced practicing nurse (AACN, 2006). Policies for advancing advanced practice nursing and advocating for patients were examined as the author attained a Master of Science in Nursing: Legal Nurse Consultant and within the DNP program. The doctoral course Vulnerability and Healthcare in Diverse Communities addressed vulnerability and disparity related to healthcare access, policy, utilization, and outcomes. Assignments undertaken included a collaborative windshield survey and presentation regarding community mental illness, exploration of policy implications relating to local and state funding for the LGBT community, and identification of state and federal laws affecting transitional-aged youth.

Essential VI: Interprofessional Collaboration for Improving Patient and Population Health Outcomes

Interprofessional collaboration is essential for an effective, efficient, equitable, patient-centered team (AACN, 2006). DNP-prepared advanced practicing nurses are uniquely prepared to facilitate cooperative team functioning and overcome obstacles to interprofessional practice (AACN, 2006). The author engaged in multiple intercollaborative pursuits throughout the DNP program to meet this essential. Design of Healthcare Systems allowed the author to collaborate with engineering students to assess healthcare systems and their reengineering using value

stream mapping, Pareto charts, plan-do-study-act (PDSA) cycles, and Six Sigma. Students observed processes at a clinical site, culminating in specific recommendations for process improvement. Peer review, an important element of fulfilling this essential and building collaborative skills, was integral to several courses, including Scholarly Project Seminar, Advanced Health Assessment, Design of Healthcare Systems, and case study teamwork in Advanced Clinical IV. All courses required evidence-based discourse via discussion boards that promoted the skill of effective communication. The DNP Scholarly Project completed this essential and allowed the author to collaborate with and recommend process changes for an interdisciplinary team at an independent agency.

Essential VII: Clinical Prevention and Population Health for Improving the Nation's Health

Clinical prevention and population health promotion are central to the national goal of improving the health of the populace (AACN, 2006). The assessment of population vulnerabilities and actionable steps toward improving the nation's health is well within the scope and expectations of the DNP-prepared advanced practicing nurse. Core competencies in health promotion and disease prevention are embedded in the DNP curriculum, providing each student with the foundation to engage in evidence-based clinical prevention and population health services for individuals, aggregates, and populations (AACN, 2006). Though the concepts were program-wide, considerable preparation for attaining this essential occurred in several specific courses. Statistical Applications provided the foundation for the informed analysis of relevant health data. Article critiques and concepts, such as hypothesis testing, determining the relevance of effect size, and relative risk and odds ratios contributed to the DNP student's ability to

interpret and critique research for its relevance and significance to practice. Vulnerability and Healthcare in Diverse Communities utilized the ABCDE tool (availability to healthcare, behavioral patterns, cultural influences, determinants of socioeconomic origin, and environmental factors) to identify barriers to local community health (Crosby et al., 2012). Privilege, generational trauma, and advanced practice strategies to address disparities were discussed and explored via collaborative forums. Each clinical site, Advanced Clinicals I-IV, contributed to an in-depth appreciation for the importance of interprofessional collaboration in rural and underserved communities faced with scarce resources.

Essential VIII: Advanced Nursing Practice

Advanced practicing nurses cannot master all advanced roles or have the knowledge to execute them (AACN, 2006). DNP programs prepare the graduate for specialized practice within the greater domain of nursing, a distinction unique to the DNP degree (AACN, 2006). The DNP program prepares the graduate to consider comprehensive health and illness concerns, design and implement therapeutic interventions, build therapeutic patient and colleague relationships, perform at the advanced level regarding clinical judgment, educate, mentor, and operate within the organizational and political realms to effect change (AACN, 2006). Essential VIII is the culmination of the DNP program in its entirety. Each course and clinical opportunity have led the student to the program's purpose: a doctorally prepared nurse ready for independent practice. Though the DNP program builds upon each semester's didactic offerings, Advanced Clinicals I-IV solidified previous learning and elevated the student's practical abilities. Pairing clinical hours with the DNP Scholarly Project, the student employed cumulative knowledge and practical

experience to complete the VIII Essentials of Doctoral Education for Advanced Nursing Practice and make ready to enter the profession of advanced practice nursing well-prepared.

The DNP Essentials and Quality Improvement Project:
Implementation, Evaluation, and Leadership

Implementing and evaluating the DNP QI project was the capstone of the author's DNP education. The QI project brought the author's prior didactic work to fruition through the pre-project site assessment, project implementation, and process improvement assessment and recommendations. The effort allowed the author to promote the profession of nursing as a means to effect change within an organization. Taking the lead in an all-encompassing QI project allowed the author to gain valuable experience in identifying a practice problem, researching and proposing evidence-based solutions, utilizing frameworks, applying process improvement methods, and working interprofessionally to affect sustainable change. The skills and experience gained through this experience will inform this author's future confidence in proposing evidence-based change and collaborative process improvement. Whether future issues are related to direct healthcare, policy, or legislature, the final DNP project prepared the author to tackle issues systematically and thoroughly while engaging and involving stakeholders at every level.

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APPENDICES

APPENDIX A

PRISMA FLOW DIAGRAM

PRISMA Flow Diagram

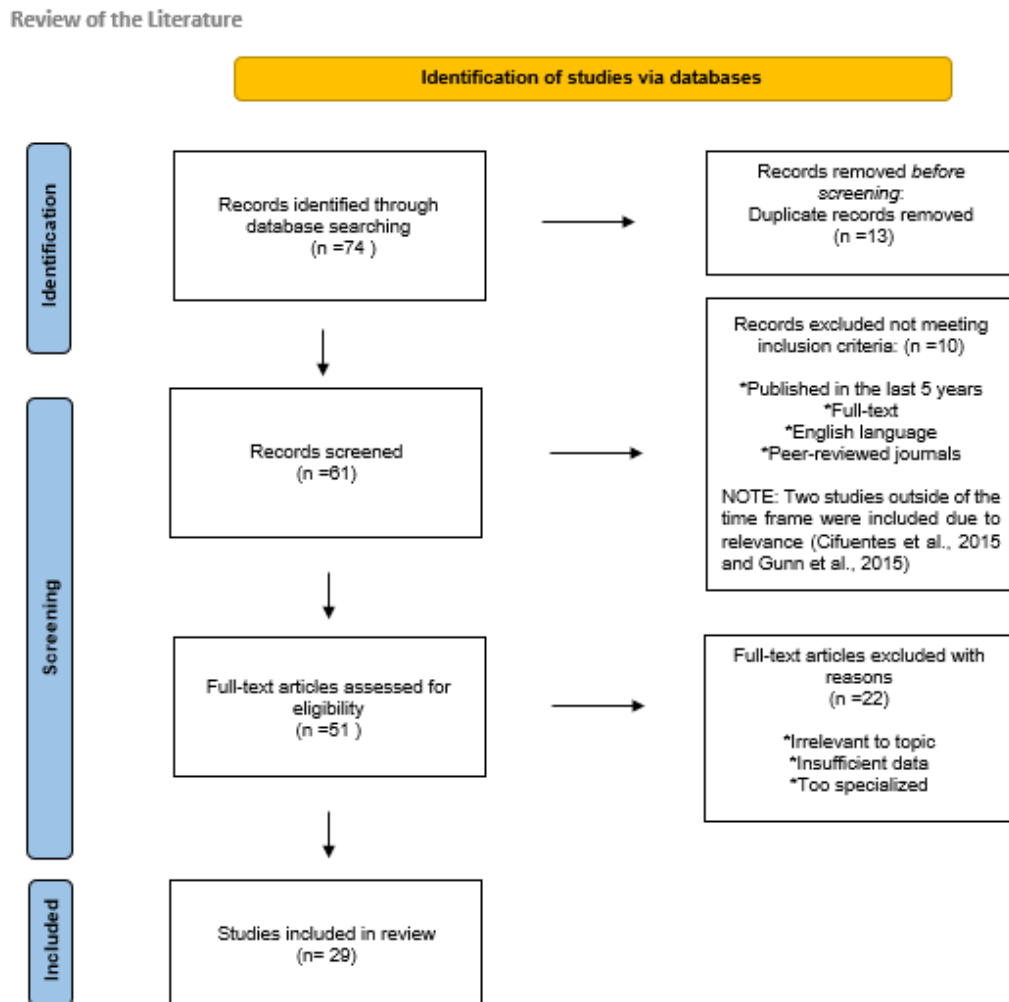


Figure 1. Review of the literature using PRISMA (The Preferred Reporting Items for Systematic Reviews and Meta-Analyses) flow diagram (Page et al., 2020).

APPENDIX B

SHORT, INTERMEDIARY AND LONG-TERM GOALS

Short, Intermediary and Long-Term Goals

SMART Goal (Short Term) #1

Organizational barriers to/promoters of virtual IBH at the pilot site will be identified by November 1, 2022.

In order to advance the process improvement project, needs, barriers, and promoters must first be determined.

Strategies to accomplish goal:

A site visit will be conducted no later than November 1, 2022 and coordinated with the clinic manager.

The project lead will shadow clinic staff through their unique IBH touchpoints, and all will be queried regarding attitudes, barriers, and promoters of virtual IBH implementation at the pilot site.

Data to be collected	Method of collection	Planned data analysis
Narratives and workflow observation	Site visit, member check, shadowing, process mapping	Process map construction Consideration of emerging themes

SMART Goal (Short Term) #2

80% of clinic staff will have participated in an interdisciplinary in-service by January 30, 2023.

This goal is set at less than 80% as it is expected that not all employees will be present or available at the in-service times.

Strategies to accomplish goal:

The project lead and the BHC will develop a revised care pathway and scripted therapeutic communication.

The project lead and the BHC will schedule no less than one virtual in-service by January 30, 2023.

The in-service will attempt to coincide with a scheduled staff meeting, mindful of time demands on clinic staff.

The project lead will be present at the pilot site during the in-service.

The in-service will center on the revised care pathway and scripted therapeutic communication. It will also include reinforcing of the currently available IBH client education card and IBH offerings.

The use and location of the tools will be reviewed.

Data to be collected	Method of collection	Planned data analysis
Total number of clinic staff	Clinic manager to provide the total number of clinic staff	Calculate the percentage of clinic staff participating in the in-service
Total number of staff participating in the in-service	Attendance sheet/visual count	

SMART Goal (Short Term) #3

100% of clinic staff will indicate an understanding of and the location of the IBH decision tree/care pathway and scripted communication by February 1, 2023.

This goal is set at 100%, as there should be no barriers to the knowledge or location of the IBH care pathway by February 1, 2023.

Strategies to accomplish goal:

The project lead will visit the site after the first in-service has occurred.

The staff unable to attend the in-service will receive one-on-one education.

The project lead will administer a check-in survey (a combination of closed-ended, open-ended, and Likert scale questions) to measure staff understanding of the IBH decision tree/care pathway and scripted communication.

Data to be collected	Method of collection	Planned data analysis
The number of clinic staff The number of clinic staff completing the check-in survey. The number of clinic staff indicating an understanding of and the location of the IBH decision tree/care pathway and scripted communication.	Clinic manager to provide the total number of clinic staff Check-in survey to inform process 	Calculate the percentage of clinic staff who complete the survey. Examine themes that indicate an understanding of and location of the IBH decision tree/care pathway and scripted communication.

SMART Goal (Short Term) #4

100% of clinic staff will indicate an understanding of the process for administering the designated mood/SUD screening tools by February 1, 2023.

This goal is set at 100%, as there should be no barriers to understanding the process for administering mood/SUD screenings by February 1, 2023.

Strategies to accomplish goal:

Education will be presented during the in-service regarding new processes.

Reinforming and clarification will be provided during weekly check-ins.

The in-service will attempt to coincide with a scheduled staff meeting, mindful of time demands on clinic staff.

The project lead will be present at the pilot site during the in-service.

The project lead will be on-site weekly during implementation to answer questions and provide education for staff who were absent for in-services or have additional questions.

The project lead will administer a check-in survey (a combination of closed-ended, open-ended, and Likert scale questions) to measure staff understanding of the process.

Data to be collected	Method of collection	Planned data analysis
The number of clinic staff	Clinic manager to provide the total number of clinic staff	Calculate the percentage of clinic staff who complete the survey
The number of clinic staff completing the intercept check-in survey		
The number of clinic staff indicating an understanding of and the process for administering the designated mood/SUD screening tools	Check-in survey to inform process 	Examine themes that indicate an understanding of and the process for administering the designated mood/SUD screening tools

SMART Goal (Intermediary) #1

One staff member at the pilot site will be designated a 'super user' for virtual IBH by February 1, 2023.

This goal is to provide clinic staff with one on-site individual who will spearhead the virtual IBH process and troubleshoot staff issues. They will communicate directly with the BHC as needed on behalf of their team.

Strategies to accomplish goal:

The clinic manager will be queried no later than January 1, 2023, regarding their recommended virtual IBH 'super user.'

The recommended virtual IBH 'super user' will be queried no later than January 10, 2023, regarding their willingness for the role.

The designated virtual IBH 'super user' will be reformed of the new IBH processes from the student and BHC as needed before February 1, 2023.

Data to be collected	Method of collection	Planned data analysis
'Super user' recommendation	Verbal report	None
Acceptance of role by recommended 'super user'	Verbal report	None

SMART Goal (Intermediary) #2

90% of clinic staff will utilize the IBH decision tree/care pathway during each client visit by February 15, 2023.

This goal is set at less than 100%, as it is anticipated that some clinic staff will need additional time and training to gain comfort and competence with the modified IBH decision tree/care pathway process.

Strategies to accomplish goal:

The project lead will administer a check-in survey (open-ended questions) to measure barriers and facilitators to IBH decision tree/care pathway utilization no later than February 15, 2023.

The project lead will be on-site weekly during implementation to answer questions and provide ongoing education and process support.

The project lead will consider barriers and any need to modify the IBH decision tree/care pathway process

Data to be collected	Method of collection	Planned data analysis
Number of client visits	Verbal and EHR reports providing the number of clients and the number of times the IBH decision tree/care pathway was utilized	Calculate the percentage of clients with whom the IBH decision tree/care pathway was utilized
Number of visits where the IBH decision tree/care pathway was utilized		
Narratives regarding process barriers and facilitators	Check-in survey to inform process 	Examine themes that indicate barriers and facilitators to improving workflow/using the IBH decision tree/care pathway

SMART Goal (Intermediary) #3

100% of clients who present for annual appointments will receive mood/SUD screening by February 28, 2023.

This goal is set at 100%, as there should be no barriers to administering annual mood/SUD screening tools by February 28, 2023.

Strategies to accomplish goal:

The project lead will perform weekly member checks throughout the process.

The project lead will administer a check-in survey (open-ended questions) to measure barriers to administering annual mood/SUD screening tools.

The project lead will consider barriers and any need to modify the mood/SUD screening process.

Data to be collected	Method of collection	Planned data analysis
The number of clients presenting for annual appointments between February 1 and February 28, 2023 The number of these clients receiving annual mood/SUD screening Narratives regarding barriers and facilitators to administering mood/SUD screening tools	Verbal and EHR reports providing the total number of annual visits Verbal and EHR reports providing the total number of these clients who received annual mood/SUD screenings Check-in survey to inform process 	Calculate the percentage of clients presenting for annual appointments who also received annual mood screening Examine themes that indicate barriers and facilitators to the administration of mood/SUD screening tools

SMART Goal (Intermediary) #4 100% of clients scoring positive on mood/SUD screening (or by provider discretion) are offered a warm handoff or referral by February 28, 2023. This goal is set at 100%, as there should be no barriers to warm handoffs or referrals by February 28, 2023.		
Strategies to accomplish goal: The project lead will perform weekly member checks throughout the process. The project lead will administer a check-in survey (open-ended questions) to measure barriers to offering warm handoffs or referrals. The project lead will consider barriers and any need to modify the <u>warm-handoff</u> /referral process.		
Data to be collected	Method of collection	Planned data analysis
The number of clients receiving positive mood screens or identified by a provider between February 1 and February 3, 2023 The number of these clients receiving a warm handoff/referral.	Verbal and EHR reports providing the total number of identified clients Verbal and EHR reports providing the total number of these clients who received a warm handoff/referral	Calculate the percentage of clients identified or determined to need a warm handoff/referral who also received a warm handoff/referral
Narratives regarding barriers to warm handoffs/referrals.	Check-in survey to inform process 	Examine themes that indicate barriers to warm handoffs/referrals

SMART Goals (Long Term) #1, #2, #3 (Beyond the scope of this project)

- ✓ 75% of clients served by the agency will have a measurable reduction in substance use disorder (SUD) symptoms by January 1, 2024.
- ✓ 75% of clients served by the agency will have a measurable reduction in depression symptoms by January 1, 2024.
- ✓ 75% of clients served by the agency will have a measurable reduction in anxiety symptoms by January 1, 2024.

APPENDIX C

INFORMED CONSENT STATEMENT

Informed Consent Statement

My name is Christian Madson, and I am a doctoral student in the Mark and Robyn Jones College of Nursing at Montana State University Bozeman.

I am inviting you to participate in a process improvement project.

This project aims to identify barriers and facilitators to integrated behavioral healthcare, specifically virtual integrated behavioral healthcare. I will be collecting information on staff opinions, suggestions, and recommended changes.

Participation is voluntary; you can choose not to answer any questions you do not want to answer and/or stop at any time.

All responses to surveys/interviews/questionnaires will be kept confidential and deidentified and only those directly involved with this project will have access to collected information.

Proceeding with the surveys/interviews/questionnaires during this project indicates your consent to participate.

You must be 18 years or older to participate.

If you have any questions about the study, please contact:

Christian Madson, christian.madson@ecat1.montana.edu

[Margaret Hammersla, faculty advisor, margaret.hammersla@montana.edu](mailto:margaret.hammersla@montana.edu)

This project has been reviewed and approved by the Montana State University-Bozeman Institutional Review Board. Questions concerning your rights as a participant in this research may be addressed to Montana State University Office of Research Compliance, E-mail: irb@montana.edu

APPENDIX D

STAFF CHECK-IN SURVEYS

Survey #1: Staff Check-In Surveys

Staff Survey #1

☐

I mostly provide clinical patient care in my regular role.

☐I do not mostly provide clinical patient care in my regular role.

1. I feel comfortable locating the IBH warm handoff workflow.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

2. I feel comfortable locating the IBH scripted communication.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

3. The IBH warm handoff workflow is understandable to me.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

4. The IBH scripted communication is understandable to me.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

5. The IBH warm handoff workflow will be easy for me to use.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

6. The IBH scripted communication will be easy for me to use.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

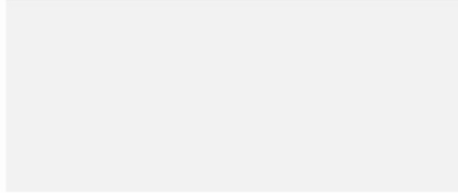
7. From your perspective, what is the easiest part of accessing the

IBH Warm Handoff Workflow

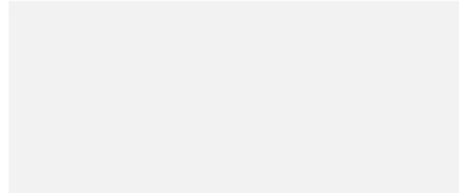
IBH Scripted Communication

8. From your perspective, what is the most challenging part of accessing the

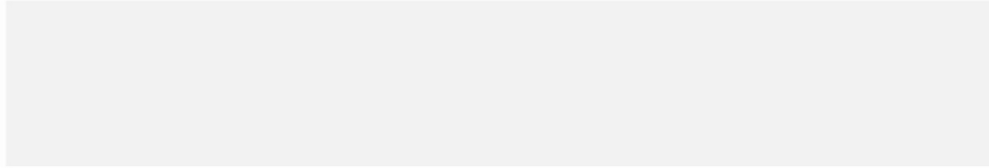
IBH Warm Handoff Workflow



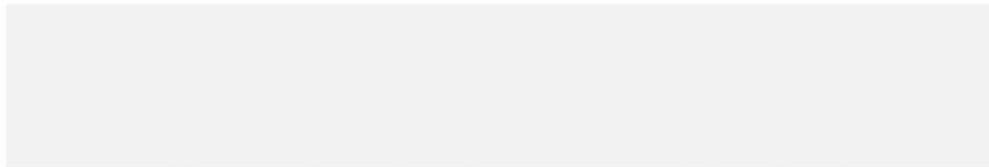
IBH Scripted Communication



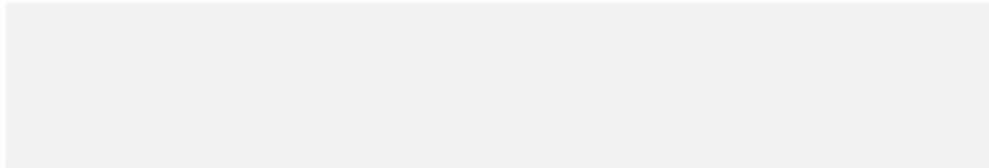
9. What would you change about the IBH warm handoff workflow?



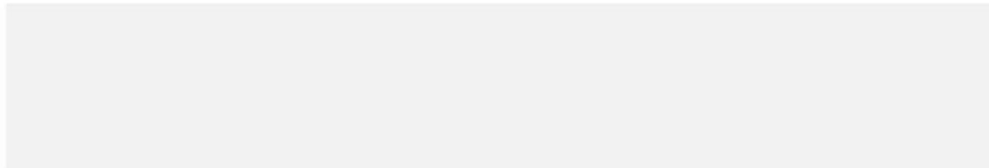
10. What would you change about the IBH scripted communication?



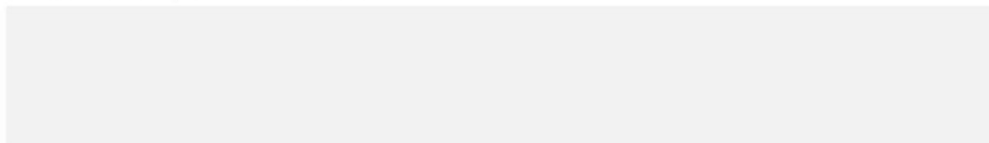
11. What would you not change about the IBH warm handoff workflow?



12. What would you not change about the IBH scripted communication?



13. Do you have any other comments regarding the IBH warm handoff workflow or the IBH scripted communication?



Survey #2: Staff Check-In Surveys

Survey #2

☐

I mostly provide clinical patient care in my regular role.

☐I do not mostly provide clinical patient care in my regular role.

1. I understand the process of administering the mood/SUD screening tools.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

2. I feel competent in performing the mood/SUD screening process.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

3. The screening tool process is easy for me to use.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

4. From your perspective, what is the easiest part of mood/SUD screening process?

5. From your perspective, what is the most challenging part of the mood/SUD screening process?

6. What would you change about the mood/SUD screening process?

7. What would you not change about the mood/SUD screening process?

8. Do you have any other comments regarding the mood/SUD screening process?

Survey #3: Staff Check-In Surveys

Survey #3

☐
☐

I mostly provide clinical patient care in my regular role.

I do not mostly provide clinical patient care in my regular role.

1. From your perspective, what is the easiest part of utilizing the IBH warm handoff workflow?

2. What makes it easy for you to use the IBH warm handoff workflow?

3. What prevents you from using the IBH warm handoff workflow?

4. What would you recommend to improve the IBH warm handoff workflow?

5. Do you have any other comments regarding the IBH warm handoff workflow?

Survey #4: Staff Check-In Surveys

Survey #4

☐

I mostly provide clinical patient care in my regular role.

☐I do not mostly provide clinical patient care in my regular role.

1. What prevents you from administering annual mood/SUD screening tools to clients attending annual appointments?

2. What helps you administer annual mood/SUD screening tools to clients attending annual appointments?

3. What would you change about the process of administering the mood/SUD screening tools?

4. What would you not change about the process of administering the mood/SUD screening tools?

5. Do you have any other comments regarding the process of administering the mood/SUD screening tools?

Survey #5: Staff Check-In Surveys

Survey #5

☐
☐

I mostly provide clinical patient care in my regular role.

I do not mostly provide clinical patient care in my regular role.

1. What prevents you from offering a warm handoff or referral?

2. What helps you offer a warm handoff or referral?

3. What would you change about the process of warm handoffs or referrals?

4. What would you not change about the process of warm handoffs or referrals?

5. Do you have any other comments regarding the process of warm handoffs or referrals?

APPENDIX E

SCRIPTED COMMUNICATION TOOL (VERSIONS 1 AND 2)

Scripted Communication Tool (Version 1)

Scripted communication for client interactions when introducing ourselves and our services to each client:

"Every client at _____ has access to behavioral health care. It's part of our care for the whole person. There doesn't need to be anything wrong for you to access these services. Would you like more information on the services we offer?"

When asking about a substance use or behavioral health issue:

"Would it be alright with you if I asked you some questions about your (substance use, mental health, mood)?"

When a CA is faced with a client sharing significant and lengthy distress and in need of a higher level of care:

The key message is "You are important, and I see you."

- ✓ Use the client's name
- ✓ Make culturally appropriate eye contact.
- ✓ Use open body language (hands open, arms uncrossed)
- ✓ You may need to interrupt the client to provide them a warm handoff. That's ok.

Example:

"Leticia, I apologize for interrupting. I see how upset you are. I have a team member who can best help you with this issue. Let me pull them in so we can help."

- ✓ Locate the provider
- ✓ Facilitate/offer a warm handoff to IBH
- ✓ Risk assessment by provider

Scripted Communication Tool (Version 2)

VERSION 2 (2/8/23)**Scripted communication for client interactions when introducing ourselves and our services to each client:**

"Every client at _____ has access to behavioral healthcare. It's part of our care for the whole person. Would you like more information on the services we offer?"

When asking about a substance use or behavioral health issue:

"Would it be alright with you if I asked you some questions about your (substance use, mental health, mood)?"

When a CA is faced with a client sharing significant and lengthy distress and in need of a higher level of care:

The key message is "You are important, and I see you."

- ✓ Use the client's name
- ✓ Make culturally appropriate eye contact.
- ✓ Use open body language (hands open, arms uncrossed)
- ✓ You may need to interrupt the client to provide them a warm handoff. That's ok.

(Flip over)

Example:

"Leticia, thank you for (being vulnerable/opening up to me). I have a team member who can best help you with this issue. Let me pull them in so we can help."

- ✓ Locate the provider
- ✓ Facilitate/offer a warm handoff to IBH
- ✓ Risk assessment by provider

APPENDIX F

WORKFLOW FOR MOOD/SUD SCREENING PROCESS

Workflow for Mood/SUD Screening Process

The front desk is informed of annual visits for the day



Each annual visit patient is provided with MOOD/SUD screening tools at front desk check-in and asked to complete them while waiting. Tell them they will be collected by the CA when they are roomed



The CA collects completed screening tools when rooming the patient



Tools are totaled outside the room, and the scores are provided to the provider before they enter the patient room



A warm handoff or referral is offered to the patient if MOOD/SUD scoring indicates or at provider discretion