

# ADVANCING INTEGRATION OF GENERAL HEALTH IN BEHAVIORAL HEALTH SETTINGS

A CONTINUUM-BASED  
FRAMEWORK

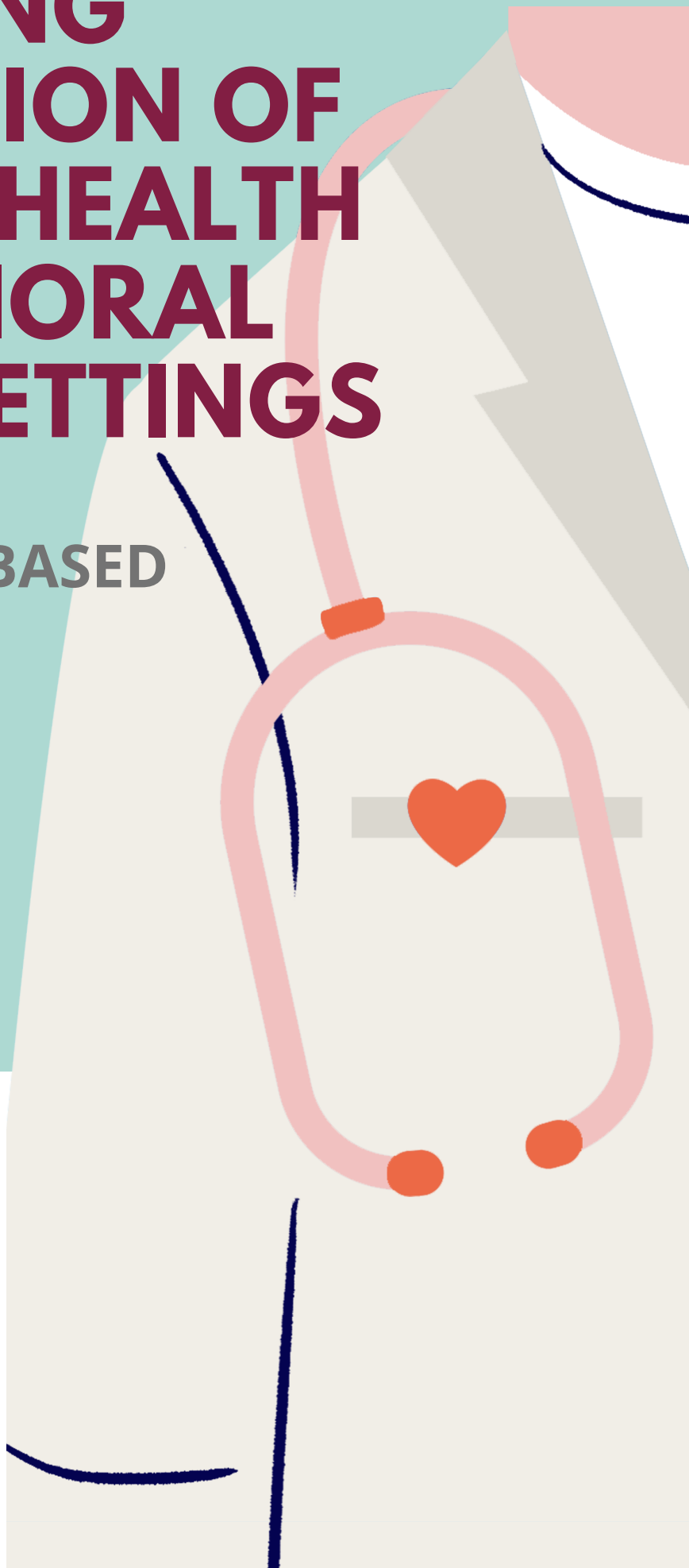
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# **Advancing Integration of General Health in Behavioral Health Settings**

## **A Continuum-based Framework**

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# CONTENTS

<b>05</b>	ABOUT THIS FRAMEWORK
<b>06</b>	EXECUTIVE SUMMARY
<b>08</b>	INTRODUCTION
<b>10</b>	OVERVIEW OF INTEGRATION MODELS AND BEHAVIORAL HEALTH PROGRAMS
<b>11</b>	A CONTINUUM-BASED FRAMEWORK FOR GENERAL HEALTH INTEGRATION IN BEHAVIORAL HEALTH SETTINGS
<b>18</b>	USING THE FRAMEWORK
<b>21</b>	RESULTS OF PILOT EVALUATION OF GENERAL HEALTH INTEGRATION FRAMEWORK
<b>24</b>	OBSERVATIONS AND CONCLUSIONS
<b>25</b>	REFERENCES
<b>28</b>	APPENDICES

# ABOUT THIS FRAMEWORK

People with mental illness and substance use disorders have high rates of medical morbidity and mortality, largely due to significant disparities in access to high quality primary and preventive health care. To address this persistent problem, this report, “Advancing Integration of General Health in Behavioral Health Settings: A Continuum-based Framework,” was developed to enable behavioral health clinics (mental health and substance use) to plan and implement integration to improve patient outcomes. We use the term “general health” to encompass the types of care usually provided by primary care or general medical practitioners and have designed this framework as a roadmap for clinics with a diverse range of resources.

The framework describes a series of concrete implementation steps that behavioral health organizations can employ to advance evidence-based integration practices. New York State stakeholders in practice, policy, advocacy, regulatory and payment arenas provided significant input in its development. Grant support was provided by **The New York Community Trust**. The framework is an example of strategic grant-making that builds on The Trust’s focus areas and program activities, including ongoing efforts to promote an equitable, patient-focused, and cost-effective health and behavioral health care delivery system and ensuring sustainable integrated behavioral health care for all New Yorkers.

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# EXECUTIVE SUMMARY

Mental health and substance use disorders are the leading causes of disease burden in America. This painful reality is exacerbated by the burden of co-morbidities faced by people with mental health and substance use disorders who also suffer from cardiovascular disease, diabetes, asthma, and HIV, among other general health concerns. General health co-morbidities are often not adequately detected or treated in behavioral health (BH) settings due to limited use of general health screening tools, staffing shortages, inadequate training on general health condition management and poorly established relationships between behavioral health and primary care providers. BH clinics require assistance to build capacity to deliver pragmatic interventions that facilitate access to quality medical care through improved linkages, patient education and self-management, risk factor screening and early detection, monitoring of chronic illness indicators and embedding direct provision of medical services in behavioral health settings, when feasible. With the new national challenge of the COVID-19 pandemic, integration is even more important and pressing where primary care access may be more limited.

There is a need for an organizing model that assists practices and policy-makers to prioritize the steps of integration implementation and the need for both technical assistance and funding for key program elements. In order to advance evidence-based integration of general health care in BH settings, clinics have become intensely interested in the underlying steps they can take to implement and advance specific general health practices.

Based on a targeted literature review and input from diverse stakeholders, the framework presented in this report seeks to provide BH clinics and other organizing entities, such as New York State's (NYS) Behavioral Health Care Collaboratives (BHCC) and Behavioral Health Independent Practice Associations (IPA), with practical guidance using a continuum-based road map approach on the intentional and incremental steps to achieve and advance key subdomains of integrated care for community BH clinics.

## **An Evidence-based Continuum Framework for General Health Integration in Behavioral Health**

The framework presented in this guide is intended to help clinics initiate and develop operational plans to achieve effective, evidence-based integration. On the vertical axis are eight key domains of integrated care across integration models (see Appendix A).

The framework identifies preliminary, intermediate and advanced characteristics of each component within a domain (or subdomain) along the horizontal axis. The rows of the framework represent parallel paths toward integration that can be implemented at different speeds that will vary based on strategic priorities and available resources. Designed to convey a sense of movement and momentum, the framework's continuum allows clinics to initially perform a team based self-assessment of their baseline integration status on each domain and subdomain and then setting realistic goals to advance within the domains.

## FRAMEWORK DOMAINS

- Screening, referral to care and follow-up.
- Evidence-based care for preventive interventions and common general medical conditions.
- Ongoing care management.
- Self-management support adapted to culture, local environment, and life experiences of patients.
- Multi-disciplinary team-based care (including patients) with dedicated time to provide general health care.
- Linkages with community/ social services that improve general health and mitigate environmental risk factors.
- Sustainability.

The framework allows clinics to organize their priorities based on existing strengths and resources. Recognizing that clinics will vary depending on their expertise and available resources, the framework provides a roadmap for clinics to make investments in training and workforce development. Clinics are encouraged to choose a specific timeframe (usually six months to one year) and to aim to achieve elements that are feasible and customized to their needs rather than uniformly striving for the most advanced elements within each domain.

We have intentionally named this tool a general health integration (GHI) framework to challenge the traditional divide between BH and non-BH conditions. We seek to frame efforts to integrate services with a mindset that considers all chronic conditions, whether BH or otherwise, as falling within the broad category of improving general health.

### **Results of Pilot Self-assessments using the Framework by NYS Behavioral Health Clinics**

The project team conducted a small pilot study with 11 BH clinics licensed by New York State Office Mental Health or Office of Addiction Services and Supports and located in the New York City metropolitan area. Our goal was to assess its value in a) describing current state of readiness for general health integration at each clinic site and b) informing GHI improvement efforts. The pilot implementation was evaluated by surveying participating clinics about their baseline characteristics (e.g., resources, clinic size, provider mix and state certification), their current state of integration and their experience and feedback using the framework. The results showed strong support for the utility of the framework as a tool to identify evidence-based GHI practices being used at the clinic and for planning to further advance GHI.

Clinic responses about their current state of readiness for GHI varied by domain. Many clinics described relatively advanced capacities for quality improvement, self-management support, trauma-informed care and community linkages. There was room for advancement in the remaining domains, particularly the domains of screening with follow-up, evidence-based approaches and team-based care. These results indicate that in this small pilot sample, BH clinics are in the early stages of delivering prevention and treatment services for general health care. Although most of the clinics in this pilot were already involved in GHI advancement initiatives and were receiving support to invest in integration prior to their participation, there are still important opportunities for improvement. Practices were receptive to receiving technical assistance using the GHI framework described in this report. A more robust evaluation will be needed to evaluate the utility and validity of the framework in a more diverse set of participants.

### **Observations and Conclusions**

Through ongoing New York State and federal initiatives, there are meaningful opportunities to improve the general health status of people with BH disorders; however, significant challenges exist for access, quality of care and sustainability of evidence-based practices in BH clinics. While this framework offers specific guidance for increasing integration of general health services into BH settings, additional considerations will shape pathways to integration success including regulations, reimbursement, workforce and other issues. Fundamental policy changes addressing incentives related to quality and health outcomes measurement are needed if patient morbidity and mortality are to be improved.

This framework is a work in progress and will be improved with further development of operational metrics and incentives for GHI. Given that discussions of value-based payment approaches in BH in NYS remain aspirational, it is crucial for payers and policymakers to consider intermediate financial incentives such as additional or increased fee-for-service payments to help clinics advance. The authors intend to continue to refine the framework and assess its applicability and utility in the transformation already underway in NYS.



# INTRODUCTION

## The Case for Integration

People with mental health conditions and substance use (MHSU) disorders struggle to access quality medical care despite being at increased risk of cardiovascular disease, diabetes, asthma and human immunodeficiency virus (HIV), among other diseases.[1][2] Those with serious mental illness (defined here as recurrent depression or anxiety, bipolar illness and psychotic disorders with a serious functional impairment) have decreased life expectancy because of untreated or undertreated modifiable general health risks such as tobacco, hazardous alcohol and substance use, obesity as well as chronic medical conditions.[3][4] General health conditions are often not adequately detected or treated in behavioral health (BH) settings due to limited use of general health screening tools, staffing shortages, inadequate training on general health condition management and poorly established relationships between BH and primary care providers (PCP).[5] Poverty, limited health literacy, discrimination, co-occurring substance use, cognitive impairment and environmental factors (e.g., distance to health care, language differences) may create additional access barriers for these individuals.[6][7][8]

Without regular primary care, adults with serious mental illness often have more emergency department (ED) visits and potentially preventable medical hospitalizations because chronic conditions are not well controlled.[9] Therefore, there is an urgent need to foster a multidisciplinary team approach from within the BH system to improve access to general health care.[10] To do so, BH clinics require assistance to build capacity to deliver pragmatic interventions that facilitate access to quality medical care through improved linkages, patient education and self-management, critical risk factor screening and early detection, monitoring of chronic illness indicators and embedding direct provision of medical services in BH settings where feasible.[11] These efforts must leverage innovation and use novel technologies, which have the potential to break down the siloed systems of medical care and BH services.

## Public Health Rationale

With the new national challenge of the COVID-19 pandemic, integration is even more important and pressing. With this issue in mind, the framework incorporates guidance to integrate a population health approach for general health screening and care of all patients receiving services in BH clinics and, when appropriate, identifies opportunities for enhanced interventions for targeted groups that have greater needs. We chose not to limit our focus to patients with serious mental or substance use disorders since all patients can benefit from integrated care. Greater access to general health care in BH settings will be needed precisely because most of these patients have greater risks for morbidity and mortality from inequities in social determinants of health, the higher prevalence of chronic health conditions and, more recently, COVID-19. For example, the presence of BH disorders is associated with increased risks and sequelae from respiratory infections, due to higher prevalence of smoking and chronic illnesses. In addition, lower health literacy and mild to moderate cognitive impairment can impact one's ability to understand infection risk and follow preventive guidance such as personal protection, social distancing and adequate hand hygiene.[12] This can be exacerbated by financial concerns, greater difficulty navigating health care system and discrimination and stigma associated with mental illness in health care settings.[13][14] At a time when rising COVID-19 infections rates have challenged access to primary care services in the general population, BH patients may experience even greater disparity. Finally, the COVID-19 epidemic has caused a parallel epidemic of fear, anxiety and depression.[15] People with mental health conditions could be more substantially influenced by the emotional responses brought on by the COVID-19 epidemic, resulting in relapses or worsening of pre-existing medical and behavioral conditions because of high susceptibility to stress compared with the general population.[16] Integrating psychiatric and general health care at a single site or increasing the role of psychiatric providers in general and preventive medical services may be possible solutions to overcoming barriers to general health care and preventive services for patients with mental health disorders. [17]



### **New York State Reform Efforts**

Although NYS's Delivery System Reform Incentive Payment (DSRIP) program specified that integration of general health care in BH settings was a priority, the initial method for integration required achieving a dual medical and behavioral license to provide primary care services in NYS certified BH clinics, though a later update allowed primary care services to be provided if services were less than 50% of all billable services at the clinic.[18] To our knowledge, relatively few community mental health and substance use agencies were able to achieve dual licensure or adopted the option to add primary care services in DSRIP. In 2015, New York was one of seven states selected to participate in the Certified Community Behavioral Health Clinic (CCBHC) demonstration program, which allows participating clinics to receive a Medicaid reimbursement rate based on their anticipated costs of expanding services to meet the needs of these complex populations.[19] CCBHC program requires general health integration (GHI) in community BH as a core criterion and includes quality metrics to improve accountability and monitoring. The CCBHCs are responsible for directly providing or contracting with partner organizations to provide nine types of services, including 24-hour crisis care, utilization of evidence-based practices, care coordination and integration with general health care. [20] However, in our opinion and that of our stakeholders, simply specifying requirements may not be adequate and more guidance to these clinics will be necessary to effectively advance GHI.

### **Building the Continuum-based Framework**

This framework focuses on integration of general health in BH settings for adult patients. We have intentionally named this tool a general health integration framework to challenge the traditional divide between behavioral health and non-BH conditions. We seek to frame efforts to integrate services within a mindset that considers all chronic conditions, whether BH or otherwise, as falling within the broad category of improving general health.

The framework's domains are designed to help prepare BH clinics to address general health risk factors and chronic illness for adults seen primarily in specialty BH settings. It does not specifically address care needed for pediatric populations.

In addition to our review of the literature, this work was informed by a previous framework developed by Henry Chung, M.D., and Harold Pincus, M.D., to integrate BH services into primary care.[21] This original framework was successfully implemented and evaluated in 11 small primary care practices across NYS. It was also adopted by the NYC Department of Health and Mental Hygiene through its Mental Health Service Corps initiative by implementing BH integration in more than 100 primary care practices in NYC, and by some sites participating in the NYS Medicaid DSRIP and Collaborative Care Initiative programs, respectively. This success led key stakeholders to recommend the development of a similar framework to provide guidance on improving general health in BH settings (sometimes referred to as "reverse integration"), which is the product described in this report.

To develop the GHI framework, the authors first performed a targeted literature review (see Appendix B). Interviews were then conducted with key informants and, finally, a stakeholder roundtable meeting was convened with behavioral health specialists, PCPs, payers and New York State policymakers to capture feedback and guidance on the early development of the framework (see Appendix C). Feedback solicited during this roundtable included perspectives on prior models of integration for general health, policy and payer challenges to integration in different BH clinic settings, as well as input on a draft version of the framework, including its overall approach, structure and usefulness. The framework was then revised based on feedback from our stakeholders and presented to a select group of behavioral health clinics to pilot as a clinic self-assessment. The clinics completed the framework to assess their current state of integration and provided feedback on their experience.

# OVERVIEW OF INTEGRATION MODELS AND BEHAVIORAL HEALTH PROGRAMS

Behavioral health staff can play a central role in educating and helping patients navigate and coordinate both their behavioral and general health treatment plans simultaneously.[22] Care management, an approach many BH clinics already use, is one of the central “active ingredients” of multifaceted approaches designed to improve chronic illness care.[23] BH clinics can provide general health integration (GHI) by offering an array of intervention options, separately or in combination, such as the adoption of health risk screening, care management linkage for patients to medical providers, team-based care, patient education and health promotion as well as providing primary care services directly in BH settings, if feasible. The use of certified peer specialists (self-identified mental health care consumers who receive specialized training to provide support to consumers in their recovery process) and wellness groups can support self-management among patients with serious mental illness.[24]

There are other tools that can guide BH organizations on the implementation of GHI. The Integrated Practice Assessment Tool (IPAT), the Organizational Assessment Toolkit (OATI) and Behavioral Health Integration Capacity Assessment (BHICA) are a few that we reviewed.

Our continuum-based framework lays out a visual roadmap of preliminary, intermediate and advanced elements by domain and combines a strengths-based self-assessment and planning features while allowing significant flexibility to set goals and advance integration in an intentional and progressive manner. By making this framework easily accessible for a multidisciplinary group of clinical and administrative leaders, the framework offers concrete implementation steps by domain to help clinics plan for and achieve their integration goals within their current resource and staffing capacity.

## OATI

Provides a compendium of tools that lay out a path for organizations to assess their readiness for integration, as well as benchmarking opportunities for those organizations working on integration efforts.[25] The OATI Administrative Readiness Tool provides a thorough breakdown of integration domains to assess readiness and requires extensive administrative time and effort to complete. These domains are organized into sections of questions for administrators to self-assess their level of challenge per domain on a five point scale from “not a challenge to serious challenge.”

## IPAT

Designed to foster collaboration and integration through a decision tree model that uses a series of yes/no questions that cascade to a specific level of integrated health care status.[26] While it is easy to use, this tool does not provide much guidance on the implementation of achieving its specific levels of integrated care. Further, it mainly prioritizes co-location, potentially discouraging alternate forms of integration.

## BHICA

Focuses on three approaches to integrated care: coordinate care, co-locate care or build primary care capacity in-house. It is also designed to assess existing operational and cultural infrastructure to support greater integration. [27] This tool focuses on target areas for integration with a large number of survey questions and non-uniform response formats in different integration domains which may make it challenging for clinics to complete.

# A CONTINUUM-BASED FRAMEWORK FOR GENERAL HEALTH INTEGRATION IN BEHAVIORAL HEALTH SETTINGS

## How the Framework Facilitates Planning and Implementing Integration

This framework is intended to help BH clinics develop operational plans to achieve effective, evidence-based GHI. It is designed to aid assessment of their current state of integration across a range of operational domains. Users can identify goals for future levels of integration, domain by domain, including the individual steps to be taken along the way. By presenting preliminary, intermediate and advanced elements by specific domain and subdomains, the framework allows for an individual clinic to tailor their goals depending on their population served (e.g., rural or urban, payer mix, mental health or substance use clinic), resources and incentives, space limitations, and workforce capacity. Clinic settings will likely vary in the subdomains they can reasonably expect to advance. For example, clinics with less resources may need to aim for domain elements at the intermediate level, and will likely require near-term payment incentives or direct resources to support this evolution. Well-resourced clinics, those embedded in larger organizational structures and those with flexible value-based reimbursement approaches may achieve advanced elements across many domains more easily. People in need of chronic or preventive health treatment will benefit from clinics implementing even the intermediate elements associated with the framework.

We are not asserting that the ultimate goal is for all clinics to achieve “advanced” states of every individual domain; the optimal state will vary by context. Furthermore, this framework is not currently designed to be used as a basis for scoring clinic performance for quality assessment or reimbursement. Instead, it is intended to provide a road map that can be used by a wide array of BH settings in pursuit of evidence-based GHI.

## Key Domains of Integrated Care

The framework lays out the key domains of integrated care that were identified in the literature review on GHI studies and interventions. A variety of reviews have also identified these key domains,[28] [29][30]

this framework builds upon this literature using expert stakeholder input to synthesize the core domains and subdomains to enable improved accessibility for the user.

We have grouped these components into eight broad domains (vertical axis) and identified preliminary, intermediate I, intermediate II and advanced representations of each (horizontal axis).

## The Framework's Integration Continuum

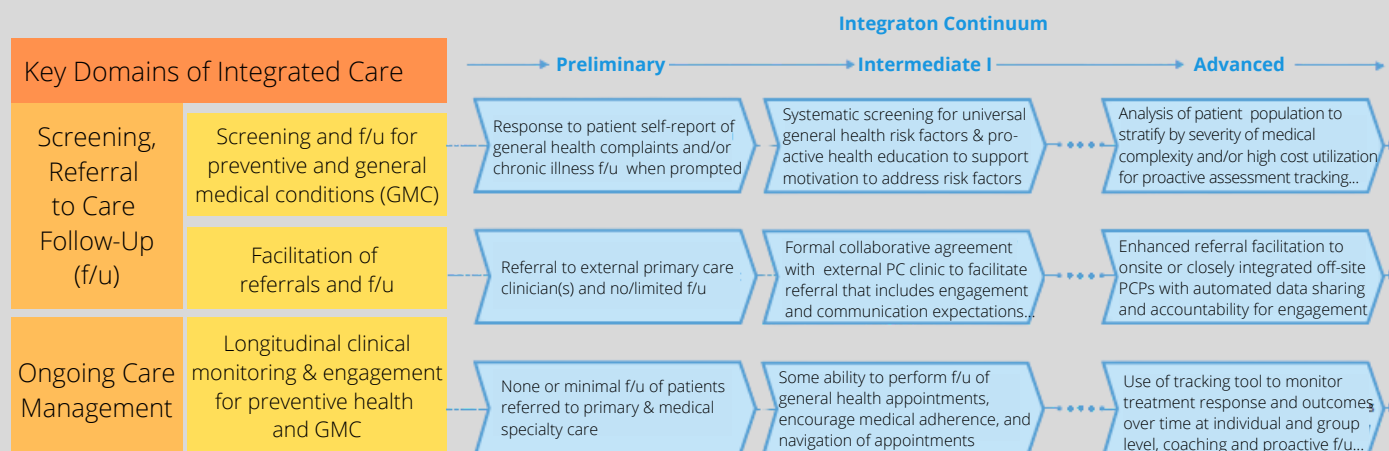
We approach these eight domains not as an either/or set of conditions (i.e., clinic integration must all show a specific number of domains achieved to be effective)—readiness or not in all domains—rather as parallel paths toward integration that can be moved along at different speeds, following a series of incremental steps as described in the individual components. This is a critical point as many clinics seeking to adopt integration models may find they are already achieving some domain elements and partway there on others, or that a particular subdomain does not make sense for their setting.

For each domain of our framework, we have identified preliminary, intermediate I, intermediate II and advanced elements of integration that clinics can move through at an individual and intentional pace (i.e., continuum-based approach).

Conveying a sense of movement and momentum, the framework allows clinics to place themselves along the pathway and identify their status within each domain (see Figure 1) rather than rigidly anchoring clinics to a specific level of integration across domains. In the preliminary stages, a clinic intends to start on or has just begun its journey, tackling initial, incremental steps. Moving along the continuum, toward the intermediate I stage, the activities described in each domain indicate a greater level of integrated care, in which some progress becomes measurable through a quality metric. Finally, the far end of the continuum represents an advanced stage that represents a more population health-focused level of integration.

**Figure 1: The Framework's Structure Illustrated**

An abbreviated version of the framework—not the full working model, only a partial representation of its structure—illustrates two of the eight domains. The complete framework, depicting all domains and elements, appear in Appendix A.



**The eight domains of the framework are:**

## 1. SCREENING, REFERRAL TO CARE AND FOLLOW-UP

This domain encompasses steps to develop methods and systems for identifying patients with preventable risk factors for general health conditions and general medical conditions, assessing their symptoms and effectively referring and/or ensuring engagement in care. The sub-domain for referral to care and follow-up emphasizes strong formal referral relationships in the intermediate and advanced stages including establishing a collaborative agreement between referral sites and implementing on- or offsite integrated primary care. Studies show that BH providers who obtain additional training in general health care improve patient health outcomes. This result is demonstrated by a 42% reduction of ED visits and dramatic increases in screening for hypertension and diabetes.[31] Follow-up is primarily focused on ensuring patients receive appropriate care for risk factors and general medical conditions. The National Committee for Quality Assurance's (NCQA) standards promote improved access to care for patients using consistent communication and follow-up for the prevention and control of chronic diseases, improved coordination of care and linkages with other services (medical, BH and social and economic) and resources to enable patients to better manage their own care.[32]

The evidence base supports screening for general health risk factors and for general medical conditions using universal screening tools implemented as a standard of care.

Screening measures were selected in alignment with the clinical preventive service A & B recommendations from U.S. Preventive Services Task Force (USPSTF).[33] In addition, the framework includes general medical conditions and preventive screening measures supported by expert opinion consensus, stakeholder roundtable discussion, and from relevant studies,[34],[35],[36],[37]

In the framework, examples of general medical conditions include diabetes, hypertension, hyperlipidemia, coronary artery disease, asthma, arthritis, gastrointestinal disease, tooth and gum disease.

Preventive care screening\* is segmented into two levels:

UNIVERSAL GENERAL HEALTH RISK FACTOR SCREENINGS	TARGETED GENERAL HEALTH RISK FACTOR SCREENINGS
<p>Might include: a visit with a PCP (e.g. self-report of a usual source other than emergency care with presence of one or more documented PCP visit during the past year), depression screening, alcohol and substance use (including opioid use), blood pressure measurement, HIV, colorectal screening (age appropriate), cervical cancer screening (age appropriate), overweight/obesity, tobacco use.</p>	<p>Might include: intimate partner violence, Hemoglobin A1c (HbA1c), cholesterol, immunizations (age appropriate), sexually transmitted infection (STI), hepatitis B, hepatitis C, tuberculosis, mammogram (age appropriate), osteoporosis (age appropriate).</p>

*\*Universal general health risk factor screenings incorporate USPSTF A recommendations and targeted general health risk factor screenings incorporate USPSTF B recommendations in addition to the inclusion of screening measures that were recommended in literature.*

Our framework provides some flexibility in choosing recommended preventive care screenings as this can be impacted by resources, proximity to primary care partners, access to phlebotomy services, information sharing as well as health risks specific to individuals and clinic populations and other factors. For example, if primary care is not provided in a BH setting, some preventive care screenings may be referred out for another practitioner to screen or monitor. Nevertheless, BH clinics can be expected to provide education and track and document the results in the patient record. The following table identifies the preventive screenings that can be conducted in BH settings and those that may require referral and tracking by the BH care team.

	UNIVERSAL SCREENING	TARGETED SCREENING
CONDUCTED IN BH SETTING	Visit with a PCP, depression screening, alcohol and substance use (including opioid use), blood pressure, overweight/obesity, tobacco use	Intimate partner violence, HbA1c, cholesterol, mmunizations (age appropriate)
TRACKED† IN BH SETTING	HIV, colorectal screening (age appropriate), cervical cancer screening (age appropriate)	Hepatitis B, hepatitis C, STI, tuberculosis, osteoporosis (age appropriate), mammogram (age appropriate)

† When phlebotomy services and/or when treatment at the site is limited.



## 2. EVIDENCE-BASED CARE FOR PREVENTIVE INTERVENTIONS AND COMMON GENERAL MEDICAL CONDITIONS

This domain covers the use of evidence-based guidelines and treatment protocols, including tools for ongoing symptom monitoring and strategies for intensifying treatment for patients who do not show improvement. [38],[39] Workflows are developed to reduce and mitigate general health risk factors such as smoking, alcohol use and obesity and follow-up mechanisms put in place to track patient outcomes and progress. [40] Use of medications, when appropriate, and coordination of access to evidence-based treatment—whether fully integrated into the BH setting or through offsite partnerships or technology are both key parts of any approach to integrated care.[41] In addition, traumatic events, particularly recurrent trauma over the lifespan, including past and current discrimination, can increase risk for general health symptoms with chronic activation of the sympathetic nervous system and hypothalamus-pituitary-adrenal axis. This overactivity can lead to heart disease and chronic increases in blood sugar, resulting in insulin resistance. Providers' awareness about the health effects of trauma can help increase clinical rapport and deliver general health care in response.[42] Incorporating trauma-informed approaches in to BH settings helps understand how complex traumas affect past and current states of patient access to care and begin to address disparities in health equity. Trauma-informed approaches are a process of organizational change that creates recovery environments for patients, staff, survivors, their friends and allies, with implications for equitable and safe relationships.[43] To effectively implement trauma-informed approaches in integrated settings, principles of engagement are universally implemented for all service users.

## 3. ONGOING CARE MANAGEMENT

Ongoing, proactive, relentless follow-up of patients is essential to decreasing fragmentation between providers and engaging patients in their care.[44] This domain encompasses the development of tools for electronically tracking and coordinating information (e.g., formal patient registries). While tools used for tracking follow-up may vary, ongoing longitudinal assessment and communication with patients, including a focus on both general and behavioral health, are important aspects of an integrated approach. Care managers advocate, educate, and help patients overcome logistical barriers to care.[45] Care coordination strategies need to organize patient care activities across multiple providers and systems of care to meaningfully impact health outcomes and organized models for linking patients from emergency care to outpatient medical follow-up and providing medical consultation in BH in-patient settings is key for improving patient outcomes.[46],[47] At a minimum, care management can be used to facilitate structured symptom and treatment monitoring which may include identifying medication side effects and medication reconciliation. It can also improve communication and coordination between patients and their providers and between mental health or chemical dependency providers and PCPs.[48]

#### **4. SELF-MANAGEMENT SUPPORT THAT IS ADAPTED TO CULTURE, SOCIOECONOMIC AND LIFE EXPERIENCES OF PATIENTS**

Beyond a focus on medication adherence, self-management approaches support active discussion on improving life quality and function, symptom management and behavior change that helps patients and their families understand their general health condition and promotes shared decision-making.[49] This domain describes tools (e.g., treatment plans including diet and exercise, smoking cessation, goal-setting) utilized to promote patient self-management through effective, culturally appropriate communication, greater patient activation, shared goal development and focus on improving overall health and wellness.

In addition, peer-led interventions can be used to deliver wellness services and support self-management to help patients in their recovery process. Peer specialists are self-identified consumers who receive specialized training in self-management of chronic general health conditions and wellness care. Studies show that patient activation, which reflects an individual's confidence in managing their medical conditions, improved significantly with trained peer support. Peers can assist patients set recovery goals and track progress on their outcomes, including diet, medication adherence and confirming a usual source of care.[50]

#### **5. MULTI-DISCIPLINARY TEAM (INCLUDING PATIENTS) WITH DEDICATED TIME TO PROVIDE GENERAL HEALTH CARE**

Integrated settings foster multi-disciplinary teams that include patients themselves, peers, families and their caregivers, as appropriate.[51] Individuals involved in the care team vary depending on a clinic's level of integration. As the care team evolves, changes in workflow are necessary to breaking down the silos that frequently exist, to communicate and exchange information on shared care plans in nearly real time on patient conditions, care and outcomes with other providers, patients and their families. [52] Time constraints in a clinic may necessitate use of multiple methods of information sharing, both formal and informal. Clinic protocols promote the use of shared electronic health record (EHR) systems as well as when and how information is exchanged. Offering continuing education credits or certifications may help ensure receipt of the training and provide opportunities for staff development on integrated general health care.[53]

#### **6. SYSTEMATIC QUALITY IMPROVEMENT**

Effective continuous quality improvement is another key domain to increasing the capacity of general health services in BH settings, and an important aspect of moving toward a population health approach.[54][55] Using quality metrics encompassing both process and outcomes is essential to guiding these efforts. Data from EHRs and other sources, ideally along with the dedication of designated quality improvement personnel, allow for continuous monitoring of performance and development of strategies for improvement.



## 7. LINKAGES WITH COMMUNITY/ SOCIAL SERVICES THAT IMPROVE GENERAL HEALTH AND MITIGATE ENVIRONMENTAL RISK FACTORS

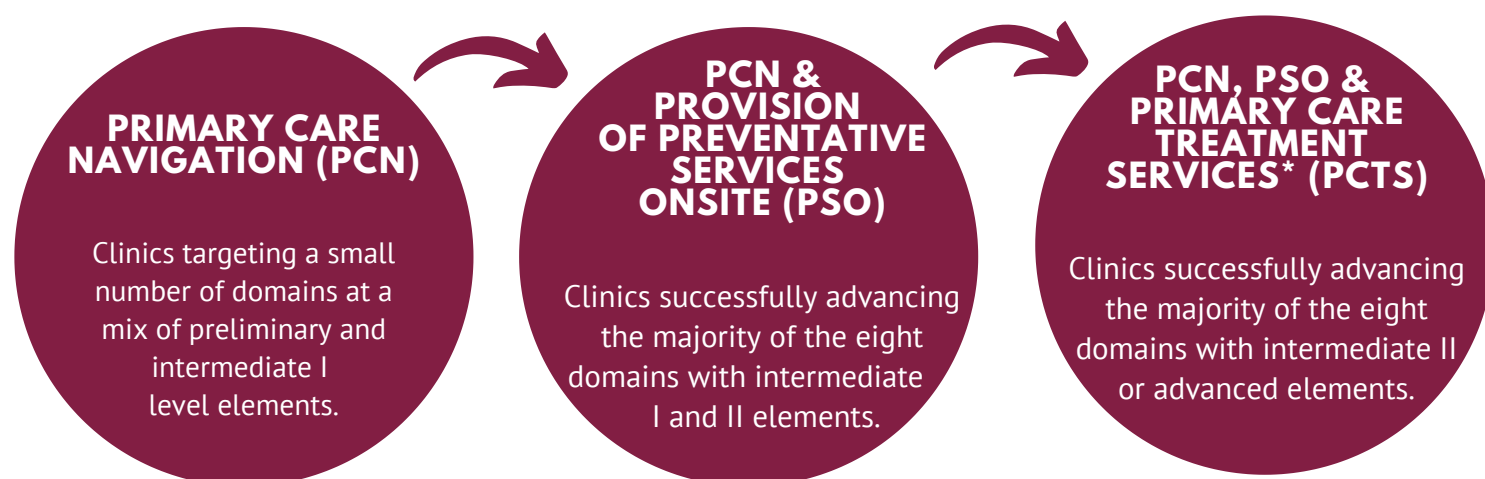
Effective integrated care involves addressing the key social determinants of health, along with general health conditions.[56] This domain focuses on steps for fostering effective linkages to housing, vocational and supportive social services, community organizations and other resources. It also deals with incorporating relevant social determinants into care plans.

## 8. SUSTAINABILITY

To ensure integration efforts are sustained in a clinic setting, billing and outcome reporting processes need to be built out and supported by states with regulatory, payment and licensure reform. Establishing primary care arrangements ensures general health services are available to patients and provide an array of general health integration services (e.g., annual physicals, feedback on engagement, report on required immunizations). The use of enhanced fee-for-service and value-based payments can provide new forms of revenue to support GHI transformation efforts to improve service delivery and workforce.

### Potential GHI Models in Behavioral Health

Enhancing BH and primary care integration is critical to improving patient outcomes and quality of life. Based on our literature review and stakeholder feedback, we identified at least three potential GHI models that we expect to observe in BH clinics:



*\*Few clinics will achieve PCTS this model since it is the most complex and resource-intensive to achieve.*

In our future validation work, this approach will be used to identify which framework domains and sub-domain elements potentially align with these models as well as articulating the process and outcome metrics that are expected in the models. This validation could provide support for policymakers and payers to sustain these models through incentives, fee for service and value-based payments.

## ADVANCING INTEGRATION ALONG THE CONTINUUM

The eight domains of this framework allow clinics to increase their capabilities in different aspects of integrated care at different rates, based on resources and clinic structure. The following examples illustrate how a clinic might progress in two of the domains.

### Screening, referral to care and follow-up

The first domain describes how a clinic can evolve from a strictly clinical case-finding approach to identifying patients to a population health-focused level of systematic case finding. In the preliminary stage, patients with a general health condition are identified only when they present with symptoms; they are then referred to an external PCP. A clinic that wants to make progress toward greater integration might begin by implementing a systematic approach to screening that focuses on universal screening that is performed in BH clinics (see chart on page 13). From this point, the clinic can develop workflow processes for assessing patients with risk factors. For example, if a patient has obesity and is an active smoker, the clinic is expected to provide education and motivational interviewing to assist the patient address these risks. Advancing to the next element would mean patients with risk factors and general health conditions are also being tracked and followed to ensure follow-up monitoring and care. Technology to facilitate monitoring support (telephonically or virtually), for example, can help alleviate geographic or workforce limitations. Finally, at the most advanced stage of integration, data on the patient population is used to flag and outreach to patients before they even present to the BH providers, while the EHR or another tool is employed to facilitate and track referrals.

For many clinics in the preliminary phases of the integration continuum, it will be important to develop enhanced referral arrangements that facilitate strong linkages and patient engagement in primary care referral. Examples of these strategies include coordinating with PCPs who are willing to see patients promptly, sharing accountability for engagement, follow-up between both BH providers and primary/medical specialty providers and sharing information regarding treatment plan updates and consultation actions at timely intervals.

Formalizing enhanced referral arrangements in a written agreement is highly recommended.

Similarly, PCPs may derive benefit through these formal agreements if patients in their setting need timely behavioral health access and follow-up.

### Ongoing care management

The third domain of the framework describes how a clinic can evolve from providing very limited follow-up of patients to advanced care management. In the early stages, proactive communication with patients outside of appointments facilitates patient engagement and ongoing symptom monitoring. At its most basic, general office staff may provide this follow-up. As the clinic becomes more advanced in this domain, care management is provided by designated staff with more formalized training, using a registry that tracks patients and their responses to care and provides reminders to make follow-up more proactive. While available resources may influence how care management is delivered (e.g., face-to-face, by telephone, online), at its most advanced, this ongoing coordination and outreach between clinical visits includes patient activation and relapse prevention, with assertive outreach to patients when necessary. For clinics without the resources to maintain a digital patient registry, some form of paper tracking may be the best option initially. Ultimately, however, this will limit the number of patients these clinics can track and they will need support to implement more advanced technology to maximize care management capabilities.

Progress in the domains described in these examples would support performance metrics outlined in models such as the CCBHC (e.g., monitoring diabetes care for people with serious mental illness to ensure hemoglobin a1c [Hba1c] is controlled below < 9.0% at minimum). While these are important process-related quality metrics, achieving effective integration will improve other patient outcomes, such as alcohol and smoking cessation and weight management, which are critically linked to improving patient quality of life and the potential for cost-savings.

## USING THE FRAMEWORK

The framework provides a way for clinics to organize themselves based on existing strengths while developing resources to advance their integration. We recommend that it be used initially to assess the current state of integration and develop future-state goals. We recognize that there is latitude on how to advance specific integration components, based on individual clinic factors and on what New York State and payers will incentivize through increased fee for service payments and other value-based payment arrangements. In this context the framework can help clinics map the investments they will need to make in time, training, workforce and resources that are necessary to improve the implementation of integration so that it becomes meaningful for patient care and the various aspects of state reform.

### Getting Started: Planning for Change and Implementation

Before using the framework to assess current clinics and set goals for integration, clinics should prepare for the transformation inherent in advancing general health integration.

As a first step, it is essential to ensure that the senior leadership within an organization is committed to integration goals and the underlying work needed to achieve those goals. Clinic champions can influence and amplify the implementation of integrated services to help push adoption of quality initiatives and help co-lead training in integrated settings.[57] Evidence from integration efforts highlights the benefits of clinic non-provider administrative support as champions or co-leaders to tap into their influential position and unique perspective of the challenges faced by the team they manage. [58]

Additionally, preparing staff to change management is important to facilitate relationships between providers and assist with development of new workflows. Evidence indicates that a focus on change management, integration training, in addition to specific changes in clinical care processes, is key for implementing and sustaining improvements. [59]

## ORGANIZATIONAL READINESS CHECKLIST: IMPLEMENTING GHI

### GETTING STARTED: MANAGING CHANGE

- ☐ Establish commitment from senior leadership and identify clinic champions.

### SUMMARY OF USING THE FRAMEWORK STEP-BY-STEP

- ☐ Assemble an appropriately staffed team (ideally a clinic administrator, a psychiatric M.D., D.O. or NP, a nurse or other medically trained professional, a BH specialist/therapist, a peer, a quality improvement specialist and a PCP, if available) to assess the current state of integration.
- ☐ Perform a self-assessment, using data to determine the current status of the clinic in each of the domains and sub-domains of the framework.
- ☐ Each domain is assessed for which element in the domain or subdomain best describes your current status, workflow, etc.
- ☐ Perform an environmental scan to identify potential external resources for facilitating integration efforts.
- ☐ Prioritize and choose domains for change.
- ☐ Based on your current assessment, choose the domains or subdomains for improvement and choose the elements that the team would like to achieve within a 6 to 12 month time frame.
- ☐ Identify existing and necessary resources for achievement of integration goals, including personnel, space and technology costs.
- ☐ Work on processes that will help achieve the desired elements and reassess goals periodically to ensure they are realistic and appropriate.
- ☐ Assess attainment of the elements based on quality improvement (QI) measurement with a standard of performing that element consistently (at least 70% of time within a measurement period).

## Using the Framework Step-by-Step



### ASSEMBLE A TEAM.

A team composed of a clinic administrator, a psychiatric M.D., D.O. or NP, a nurse or other medically trained professional, a BH specialist/therapist, a peer, a quality improvement specialist and a PCP (when available). Where appropriate, incorporate patient and family caregivers in the team to plan the integration strategy.



### INCORPORATE DATA FOR SELF-ASSESSMENT.

To the extent possible, this self-assessment should rely on data to determine the level the clinic is functioning in each of the domains. The authors suggest that clinics completing the self-assessment draw on site specific clinical and quality data to select the subdomain element they are performing at, a minimum threshold of 70% of the time. For example, in the care management domain, a clinic would perform a data review on how often patients receive follow-up according to one of these elements (e.g., limited follow-up, proactive follow-up with tracking, using a tracking tool to track individual and group level outcomes for reminders and analysis). If proactive follow-up is documented for at least 70% of at risk patients within an appropriate timeframe, the site would select this element within the domain in their self-assessment. A model readiness self-assessment tool is presented in Appendix D.



### PRIORITIZE DOMAINS, IF IN PRELIMINARY STAGES OF INTEGRATION.

While clinics are encouraged to develop individualized goals and choose which domains to work on. We do recommend that they prioritize the following domains if not performing at least at the intermediate II state in these domains:

- **Screening, referral to care and follow-up.** Because screening of patients is an initial element to effective integration, moving towards universal screening of patients with follow-up for assessment and engagement should be prioritized. In addition, developing a formal written agreement with a PCP or practice that enhances referral engagement should be included as a key goal for clinics that cannot provide onsite or virtual (online or telephonic) primary care support.
- **Ongoing care management.** Proactive, assiduous follow-up of patients should be prioritized early on to facilitate engagement of patients at risk for poor outcomes, including regular symptom monitoring using tracking tools and/or a formal registry and patient activation and education.
- **Self-management.** Assisting patients in setting and pursuing self-management goals is associated with improved outcomes and should be included as an early goal to empower patients to become more active and partnering with their team to achieve improved outcomes.
- **Linkages to community.** Public health efforts integrate the social determinants of health and a population health approach for general health screening and care of all patients receiving services in BH clinics and where appropriate, identifies opportunities for enhanced interventions for targeted groups that have greater needs. This domain is especially vital in addressing our national challenge of the COVID-19 pandemic.





### **PERFORM AN ENVIRONMENTAL SCAN AND CONSIDER THE POTENTIAL FOR EXTERNAL RESOURCES/FUNDING.**

Clinics should conduct an environmental scan and consider the potential for resources from other partners that might facilitate integration. For example, what supports may be available from participation in a CCBHC, supportive health plan payers or other funding sources such as grants? Can the clinic make arrangements with partner organizations to facilitate shared staffing or implement an enhanced referral process that clearly specifies expectations and time frames for communication on patient engagement and outcomes?



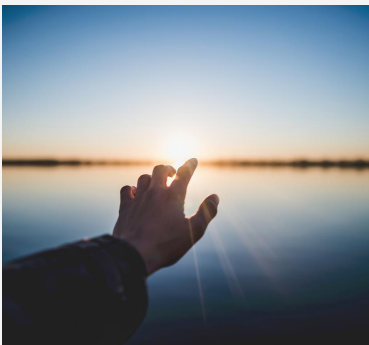
### **SET AND ARTICULATE GOALS FOR THE NEXT SIX TO 12 MONTHS, LAYING OUT EXPECTATIONS BY QUARTER.**

After performing a self-assessment, clinics should use the framework to articulate near-term goals that are measurable and specific for each of the domains/subdomains. We suggest a time frame of six to 12 months for these goals, to help build momentum and focus attention on implementing changes. Clinics should consider their patient population and available resources, to develop goals that are achievable.



### **DETERMINE NECESSARY RESOURCES AND COMMITMENTS.**

Clinics will need to consider resources—existing and potential—necessary for implementation and achievement of goals in the domains selected, including capital investments, technology costs and staff expansion, training and time.



### **DETERMINE ATTAINABILITY OF GOALS AND NECESSARY RESOURCES, ASSESSING THE LEVEL OF CONFIDENCE ON EACH.**

While identifying goals, clinic champion teams should rate their confidence level on how attainable each domain goal is within their six to 12 month timeframes, using a scale of 1 (lowest) to 10 (highest). If a clinic determines that its confidence level in reaching a goal is below 7 (7 on the scale of 1 to 10) then evidence and experience suggest that the goal may be too ambitious and should be reassessed.[60]

# RESULTS OF PILOT EVALUATION OF GENERAL HEALTH INTEGRATION FRAMEWORK

## Description of Participating BH Clinics

We conducted a small pilot study to evaluate the GHI framework for its utility by BH clinics. All clinics consented to participate in the readiness assessment project. Participants agreed to be named in this report, but their clinic characteristics and readiness results have been de-identified and aggregated.

The pilot included 11 BH clinics that serve an average of 649 patients in the metropolitan New York City area. Clinics selected had to be NYS licensed as an article 31 (mental health), article 32 (addiction and substance use) or have dual licensure (article 31 and/or 32 with an article 28) where primary care services are co-located on site. In addition, clinics were required to have an EHR in use for at least one year, committed clinical and administrative leadership with a vision for advancing integration and be willing to identify and provide time to a quality improvement team comprised of at least three individuals (clinical leader, a nurse or a care manager and a prescriber such as an M.D., D.O., NP or PA).

## Readiness Assessment Survey Overview

The GHI Readiness Self-assessment Survey was piloted to evaluate the utility and face validity of the newly developed framework among this select group of NYS OMH and OASAS licensed clinics in the New York City metro-area. Participation in the pilot involved the completion of a self-assessment readiness survey on all the GHI domains, collection of baseline clinic characteristics and feedback on team experience using the framework. Prior to the distribution of the survey, our project team provided a technical assistance webinar to introduce the continuum framework and provide instruction on completion of the readiness survey. The readiness survey was administered using a Survey Monkey tool with a time allotment of three weeks for clinics to gather information and complete the survey.

## Pilot Readiness Assessment Survey Results

Readiness survey results were compiled by the Survey Monkey tool to inform the project on the resource capacity of BH clinics for integration, understand the current state of general health integration in participating clinics, collect feedback from clinics on their experience using the framework and gain insight on how to revise the tool to improve its clarity and usefulness.

Selected GHI Pilot Participating Behavioral Health Practices			
Organization Name (n=6)	Site Name (n=11)	Licensure	
		Article 31 (Mental Health)	Article 32 (Substance use)
Institute for Community Living	Guidance Center Brooklyn Heights	X	
	Highland Park Clinic	X	
	Rockaway Parkway Clinic	X	
NYSPI/Washington Heights Community Service	Audubon Clinic	X	
	Inwood Clinic	X	
OHEL Children's Home and Family Services	Tikvah	X	
Services for the Underserved	Wellness Works/CTI	X	X
	Wellness Works/Fulton Street	X	X
The Guidance Center of Westchester	Mount Vernon Clinic	X	
	Sunrise Program		X
Westchester Jewish Community Services*	Mount Vernon Family Mental Health Clinic	X	

\*Also has intensive outpatient treatment and integrative outpatient services waivers.

# CLINIC CHARACTERISTICS

## NUMBER OF PATIENTS

On average, 7,143 seen annually by all participating clinics.

## PATIENT RACE & ETHNICITY

Black/African American: 45%

Hispanic/Latinx: 28%

## PATIENT AGE & SEX

60% of patients treated range from age 25-64

Female: 51%

## KEY PAYERS

Medicaid Managed Care and Medicare Fee-For-Service: 58%

Vast majority of patients are on government insurance.

## GENERAL HEALTH CARE CAPACITY OF PARTICIPATING CLINICS (N=11)

Majority had prior GHI experience via QI initiatives and received BH Collaborative support.

Majority identified lack of reimbursement and clinic capacity for implementation as persistent GHI barriers.

Seven clinics EHRs able to extract general health data (e.g. blood pressure).

General health staffing primarily comprised of nurse practitioners and registered nurses.

Few clinics have onsite M.D. on staff or available for consult and one clinic had onsite care manager.

Few clinics have onsite credentialed alcoholism and substance use counselor or certified peer counselor.



## GHI Readiness Results

As expected, clinics' current state of readiness for GHI varied by domain. These results indicate that participating BH clinics were generally in the early stages of establishing integrated workflows and delivering general health screening and treatment services. Although most of the BH clinics in this pilot were already involved in GHI advancements efforts and were receiving support to invest in integration prior to their participation, there remain significant opportunities to help BH clinics improve integration using the framework and TA support. A more comprehensive implementation and evaluation study is needed to understand how the framework can more readily advance GHI in various BH clinic settings with an indication of improved patient outcomes.

### Framework Feedback

Overall, the BH clinics described a positive experience using the framework. They reported the framework was easy-to-use to describe their current state of GHI and readily understood the domains and elements within the continuum structure and how it could assist planning. Clinics reported some difficulty deciding which elements to choose within a domain when their processes fell between elements. In these, we asked them to choose the less advanced element. They also requested clarity on the definitions of the expected range of screening and treatment of general health conditions. Lastly, sites identified funding, EHR capability, financial incentives, implementation

### DOMAINS WITH THE MAJORITY OF RESPONSES (>50%) IN THE PRELIMINARY OR INTERMEDIATE I PHASE OF INTEGRATION

- Screening, referral to care and follow-ups.
- Evidence-based care for preventive interventions and common general medical conditions.
- Care management.
- Multidisciplinary team.
- Sustainability (billing and regulatory).

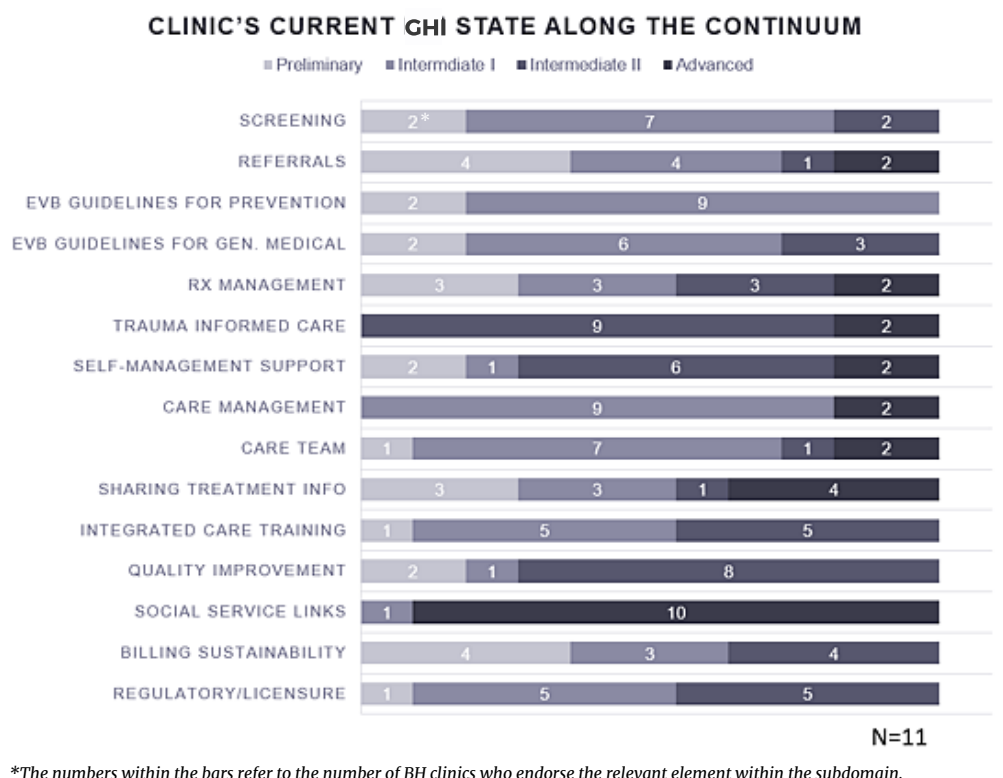
### DOMAINS WITH THE MAJORITY OF RESPONSES (>50%) IN THE INTERMEDIATE II OR ADVANCED PHASE OF INTEGRATION

- Trauma-informed care.
- Self-management supports.
- Quality improvement.
- Social service linkages.

support and technical assistance as the key supports they would need for the robust adoption of the framework for advancement. Using this feedback, we clarified wording in several domains and elements and provided clearer definitions of universal screening and tracking expectations.

The results of the readiness survey support the value of the continuum concept of the framework and underscore the importance of examining its implementation in real-world settings including practices that serve low-income, racially diverse underserved patients with MHSU disorders.

## PILOT RESULT: GHI READINESS ASSESSMENT



## OBSERVATIONS AND CONCLUSIONS

This framework offers operational guidance to BH clinics on increasing integration of general health care in BH settings. The clinic transformation described in the framework requires a fundamental change in clinic culture and structure of care delivery. Delivering treatment and care management for chronic and preventive conditions envisioned in integration models requires BH providers to embrace an expanded scope of work and to increase their collaboration with PCPs – despite both disciplines contending with significant workforce shortages in New York State and nationally. It is critically important that all behavioral clinic staff understand the concepts of integration requiring adoption of a whole person care model and collaboration with community organizations that offer services such as exercise and nutrition programs. Similarly, primary care collaborations need to be built from joint accountability to maintain communication and provide technical assistance on preventive and chronic disease care. The use of technology to support information sharing and virtual or telephonic collaboration can help facilitate patient access to general care by offering services and consultation through virtual platforms. The membership of “care team” must expand and diversify to include patient, peers and family members, as appropriate, in addition to staff trained in chronic disease management to ensure integrated services are delivered appropriately and within a sustainable model of care.

To further advance the successful dissemination and implementation of GHI best practices, significant policy changes will be required in regulation, reimbursement, workforce and other domains. The sustainability of GHI in behavioral health settings will depend on expanding opportunities to incentivize these practices, including alternative rate setting payments and increasing reimbursement of critical services such as smoking cessation, GHI screening and follow-up and exercise and nutrition programs.

This framework may present an opportunity for innovative payment strategies such as value-based payment models, bundled payments for coordinated services and an urgent care and episodic reimbursement model for GHI. The role of health plans is critical to incentivize collaboration and to consider intermediate financial incentives including increased fee-for-service payments for priority GHI services to help clinics advance. Furthermore, clinics will need to have more flexibility to provide general health services within their licensure structures.

Finally, it is worth underscoring that the framework presented here is a work in progress. The authors intend to continue to refine the framework and assess its applicability and utility through additional field testing. Next steps include developing process and outcome metrics that reflect achievement of the key components of integrated care and partnering with payers to advance incentives that can sustain general health integration.

# REFERENCES

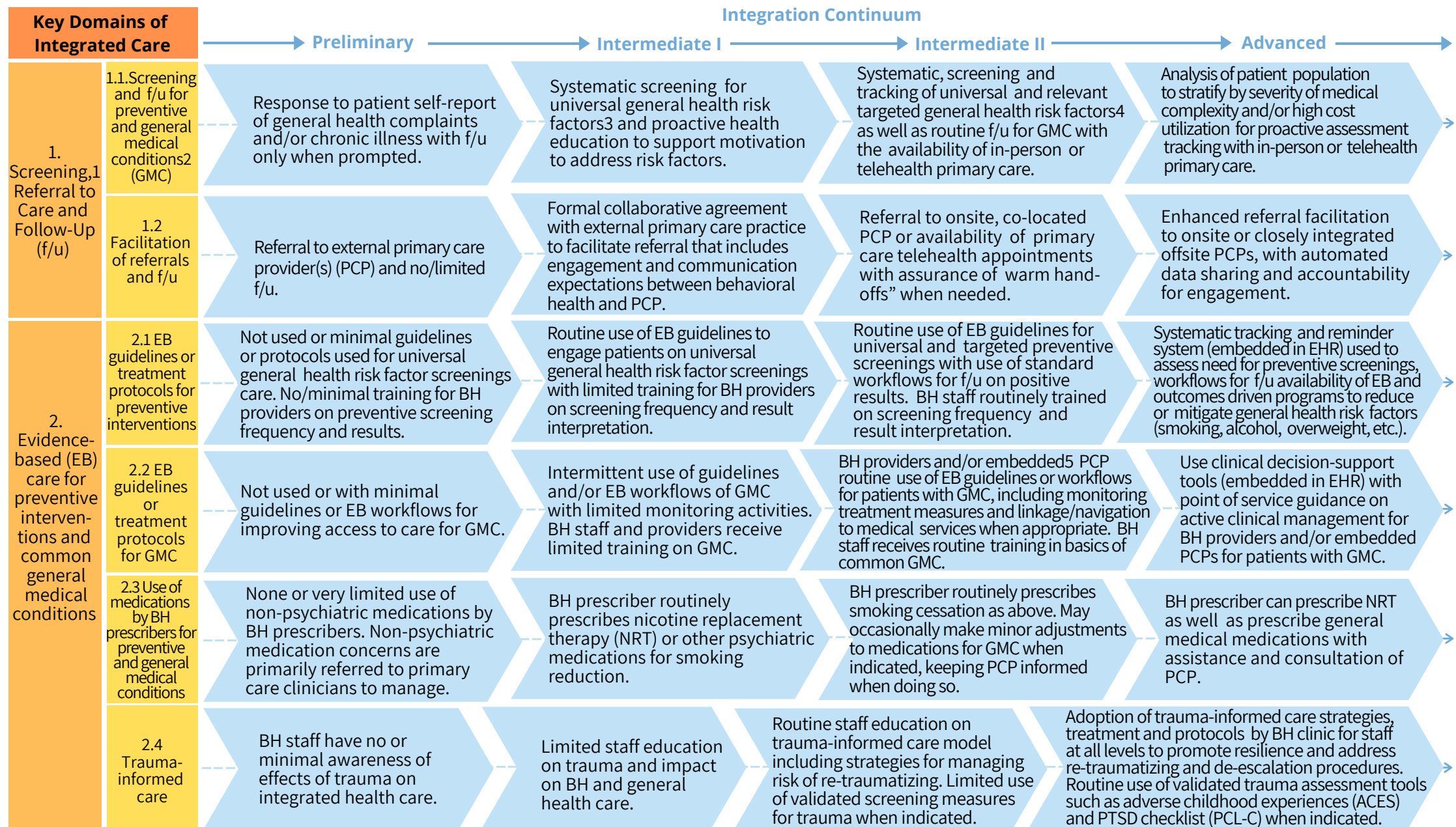
- [1] McClellan, C., Maclean, J.C., Saloner, B., McGinty, E.E., Pesko, M.F. (2020). Integrated care models and behavioral health care utilization: Quasi-experimental evidence from Medicaid health homes. *Health Econ.* doi:10.1002/hec.4027.
- [2] Carney, C.P., Jones, L., Woolson, R.F. (2006). Medical comorbidity in women and men with schizophrenia: a population-based controlled study. *Journal General Internal Medicine*; 21(11):1133–7
- [3] Lutterman, T., Ganju, V., Schacht, L., Monihan, K., et.al. (2003). Sixteen State Study on Mental Health Performance Measures. DHHS Publication No. (SMA) 03-3835. Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.
- [4] World Health Organization. (2014). Information sheet: premature death among people with severe mental disorders. [https://www.who.int/mental\\_health/management/info\\_sheet.pdf?ua=1](https://www.who.int/mental_health/management/info_sheet.pdf?ua=1)
- [5] Bouchery, E. E., Siegwarth, A. W., Natzke, B., Lyons, J., Miller, R., Ireys, H. T., and Doan, R. (2018). Implementing a Whole Health Model in a Community Mental Health Center: Impact on Service Utilization and Expenditures. *Psychiatric Services*, 69(10):1075–1080. doi: 10.1176/appi.ps.201700450
- [6] Lewin Group and Institute for Healthcare Improvement. (2012). Approaches to Integrating Physical Health Services into Behavioral Health Organizations: a guide to resources, promising practices, and tools. Accessible on: <https://www.resourcesforintegratedcare.com/node/33>
- [7] Knickman, J., et al. (2016). Improving Access to Effective Care for People Who Have Mental Health and Substance Use Disorders. National Academy of Medicine’s Vital Directions for Health and Health Care Initiative.
- [8] Druss, B.G., (2007). Improving medical care for persons with serious mental illness: challenges and solutions. *J Clin Psychiatry*; 68(4): 40–4.
- [9] Krupski, A., et al. (2016). Integrating primary care into community health centers: impact of utilization and costs of health care. *Psychiatric Services* 67: 1233–1239
- [10] American Psychiatric Association. (2015) Position statement on the role of psychiatrists in reducing physical health disparities in patients with mental illness. Accessible on: <https://www.psychiatry.org/home/policy-finder>
- [11] Druss, B. G., Von Esenwein, S. A., PhD, Compton, M. T., MD, Rask, K. J., Zhao, L., & Parker, R.M. (2010). The Primary Care Access Referral, and Evaluation (PCARE) Study: A Randomized Trial of Medical Care Management for Community Mental Health Settings. *Am J Psychiatry*, 167(2), 152–159. doi:10.1176/appi.ajp.2009.09050691
- [12] Seminog, O.O., Goldacre, M.J. (2013). Risk of pneumonia and pneumococcal disease in people with severe mental illness: English record linkage studies. *Thorax*; 68: 171–76.
- [13] Firth, J., et al. (2019). The lancet psychiatry commission: a blue print for protecting physical health in people with mental illness. *Lancet Psychiatry* 6(8): 675–712. [http://dx.doi.org/10.1016/S2215-0366\(19\)30132-4](http://dx.doi.org/10.1016/S2215-0366(19)30132-4)
- [14] Bradford, D.W., et al. (2008). Access to medical care among persons with psychotic and major affective disorders. *Psychiatric Services* 59(8): 847–852.
- [15] Li, W., et al. (2020). Progression of mental health services during COVID-19 outbreak in China. *Int J Biol Sci.* 16(10): 1732–1738.
- [16] Yao H., Chen, J., Xu, Y. (2020). Patients with mental health disorders in the COVID-19 epidemic. *The Lancet*; 7(4):e21. doi: 10.1016/S2215-0366(20)30090-0
- [17] Bradford, D. W. et al. (2008). Access to medical care among persons with psychotic and major affective disorders. *Psychiatric Services* 59(8):847–852
- [18] New York State. (2015). DSRIP 3.a.i Licensure Thresholds. [https://www.health.ny.gov/health\\_care/medicaid/redesign/dsrip/regulatory\\_waivers/licensure\\_threshold\\_guidance.htm](https://www.health.ny.gov/health_care/medicaid/redesign/dsrip/regulatory_waivers/licensure_threshold_guidance.htm)
- [19] Farley, R. (2016). SAMHSA Announces States Selected for CCBHC Demonstration. National Council for Behavioral Health. <https://www.thenationalcouncil.org/capitol-connector/2016/12/samhsa-announces-states-selected-ccbhc-demonstration/>

- [20] Miskowiec, D., Rosenberg, L. (2017). New York CCBHC Initiative: early results show expanded access to care, increased scope of practice. The National Council for Behavioral Health. <https://www.thenationalcouncil.org/wp-content/uploads/2017/11/New-York-CCBHC-Impact-Summary-11-28-17.pdf?dof=375ateTbd56>
- [21] Chung, H., Smali, E., Goldman, M., Pincus, H. (2019). Evaluation of a Continuum-Based Behavioral Health Integration Framework Among Small Primary Care Practices in New York State. United Hospital Fund and New York State Health Foundation. <https://uhfnyc.org/publications/publication/continuum-based-bh-integration-among-small-primary-care-practices/>
- [22] Mangurian C. (2017). Patient-Centered Medical Care in Community Mental Health Settings. *PS*; 68(3): 213–213
- [23] Druss, B.G., et al. (2010). PCARE Study. *Am J Psychiatry*; 167(2): 151–159 doi:10.1176/appi.ajp.2009.09050691
- [24] Druss, B.G., Singh, M., Esenwein, S.A., Glick, G.E., Tapscott, S., Tucker, S.J., & Sterling, E.W. (2018). Peer-Led Self-Management of General Medical Conditions for Patients with Serious Mental Illnesses: A Randomized Trial. *Psychiatric Services*, 69(5), 529–535 doi: 10.1176/appi.ps.201700352
- [25] SAMHSA-HRSA Center for Integrated Health Solutions. (2014). Organizational assessment toolkit for primary and behavioral health care integration. [https://www.thenationalcouncil.org/wp-content/uploads/2020/01/OATI\\_Overview\\_FINAL.pdf?dof=375ateTbd56](https://www.thenationalcouncil.org/wp-content/uploads/2020/01/OATI_Overview_FINAL.pdf?dof=375ateTbd56)
- [26] Axis Health System. (2014). Integrated Practice Assessment Tool. Colorado Access, Value Options.
- [27] Resources for Integrated Care. Behavioral health integration capacity assessment. <https://www.resourcesforintegratedcare.com/tool/bhica>
- [28] Pincus, H.A., Jun, M., Franx, G., van der Feltz-Cornelis, C., Ito, H., & Mossialos, E. (2015). How can we link general medical and behavioral health care? *International models for practice and policy. Psychiatric Services* 66(8): 775–777
- [29] Institute for Healthcare Improvement. (2014). Integrating Behavioral Health and Primary Care: 90-Day R&D Project Final Summary Report. Cambridge, MA.
- [30] Peek C.J., National Integration Academy Council. (2013). Lexicon for behavioral health and primary care integration: Concepts and definitions developed by expert consensus. AHRQ Publication No. 13-IP001-EF. Rockville, MD: Agency for Healthcare Research and Quality.
- [31] Health & Medicine Policy Research Group. (2015). Best Practice in PC-BH Integration: a working paper for the Behavioral Health Integration Learning Collaborative.
- [32] Mathematica Policy Research. (2014). Strategies for integrating coordinating care for behavioral health populations: case studies of four states. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, Office of Disability, Aging and Long-Term Care Policy
- [33] U.S. Preventive Service Task Force. USPSTF A and B Recommendations. <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation-topics/uspstf-and-b-recommendations>
- [34] Druss, B.G., et al. (2001). Integrated medical care for patients with serious psychiatric illness: a randomized trial. *Arch Gen Psychiatry*; 58; 861–868.
- [35] Druss, B.G., et al. (2010). PCARE Study. *Am J Psychiatry*; 167(2): 151–159 doi:10.1176/appi.ajp.2009.09050691
- [36] Health Resources in Action. (2018). Improving Access to Integrated Care for Rio Grande Valley Residents with Severe & Persistent Mental Illness. Tropical Texas Behavioral Health. <http://www.mhm.org/library/tropical-report>
- [37] The Commonwealth Fund. Missouri: pioneering integrated mental and medical health care in community mental health centers. <https://www.commonwealthfund.org/publications/newsletter-article/missouri-pioneering-integrated-mental-and-medical-health-care>
- [38] Ward, C.M. and Druss, G.B. (2019). Treatment considerations in severe mental illness caring for the whole patient. *JAMA Psychiatry* 76(7): 759–760
- [39] Lewin Group and Institute for Healthcare Improvement. (2012). Approaches to Integrating Physical Health Services into Behavioral Health Organizations: a guide to resources, promising practices, and tools. <https://www.resourcesforintegratedcare.com/node/33>
- [40] RAND Corporation. (2013). Evaluation of the SAMHSA Primary and Behavioral Health Care Integration (PBHCI) grant program: final report. <https://www.integration.samhsa.gov/about-us/pbhci>



- [41] Wake, L., Balon, R. (2019). Should psychiatrists prescribe nonpsychotropic medications. *Current Psychiatry* 18(11); 52–56
- [42] Raja, S. et al. (2015). Trauma informed care in medicine: current knowledge and future research directions. *Family and community health* 38(3); 216–226. DOI: 10.1097/FCH.0000000000000071
- [43] Sweeney, A. et al. (2018). A paradigm shift: relationships in trauma-informed health services. *BJPsych Adv. Sep*; 24(5): 319–333
- [44] Pincus H.A., Jun, M., Franx, G., van der Feltz-Cornelis, C., Ito, H., & Mossialos, E. (2015). How can we link general medical and behavioral health care? International models for practice and policy. *Psychiatric Services* 66(8): 775–777.
- [45] Druss, B.G., Von Esenwein, S.A., Compton, M.T., Rask, K.J., Zhao, L., & Parker, R.M. (2010). The Primary Care Access Referral, and Evaluation (PCARE) Study: A Randomized Trial of Medical Care Management for Community Mental Health Settings. *American Journal Psychiatry*, 167(2), 152–159. doi:10.1176/appi.ajp.2009.09050691
- [46] Daumit, L.G. (2019). Care coordination and population health management strategies and challenges in a behavioral health home model. *Med Care* 57(1): 79–84. doi:10.1097/MLR.0000000000001023
- [47] Druss, B.G., Von Esenwein, S.A., Compton, M.T., Rask, K.J., Zhao, L., & Parker, R.M. (2010). The Primary Care Access Referral, and Evaluation (PCARE) Study: A Randomized Trial of Medical Care Management for Community Mental Health Settings. *American Journal Psychiatry*, 167(2), 152–159. doi:10.1176/appi.ajp.2009.09050691
- [48] The Milbank Memorial Fund. Integrating Primary Care into Behavioral Health Settings: What Works for Individuals with Serious Mental Illness. <https://www.integration.samhsa.gov/integrated-care-models/primary-care-in-behavioral-health>
- [49] Kilbourne, A.M., Post, E.P., Nosssek, A., Drill, L., Cooley, S., & Bauer, M. S. (2008). Improving Medical and Psychiatric Outcomes Among Individuals with Bipolar Disorder: A Randomized Controlled Trial. *Psychiatric Services*, 59(7), 760–768. doi:10.1176/appi.ps.59.7.760
- [50] Druss, G.B., et al. (2010). The health recovery peer (HARP) program: a peer-led intervention to improve medical self-management for persons with serious mental illness. *Schizophrenia Res.* 118(1–3): 264–270. doi:10.1016/j.schres.2010.01.026
- [51] Health Resources in Action. (2018). Improving Access to Integrated Care for Rio Grande Valley Residents with Severe & Persistent Mental Illness. *Tropical Texas Behavioral Health* <http://www.mhm.org/library/tropical-report>
- [52] Bachrach, D., Anthony, S., & Detty, A. (2014). State strategies for integrating physical and BH services in a changing Medicaid environment. *The Common Wealth Fund*.
- [53] Daumit, L.G. (2019). Care coordination and population health management strategies and challenges in a behavioral health home model. *Med Care* 57(1): 79–84. doi:10.1097/MLR.0000000000001023
- [54] Brown, D.J. (2019). Availability of integrated primary care services in community health care settings. *Psychiatric Services* 70(6); 499–502. <https://doi.org/10.1176/appi.ps.201800448>
- [55] AIMS Center. (2014). Patient-centered integrated behavioral health care principles & tasks checklist. <http://aims.uw.edu/resource-library/checklist-collaborative-care-principles-and-components>
- [56] Pincus, H.A., Jun, M., Franx, G., van der Feltz-Cornelis, C., Ito, H., & Mossialos, E. (2015). How can we link general medical and behavioral health care? International models for practice and policy. *Psychiatric Services* 66(8): 775–777.
- [57] Lewis, C.C., et al. (2019). Implementing measurement-based care in behavioral health: a review. *JAMA Psychiatry*. 76(3):324–335. doi:10.1001/jamapsychiatry.2018.3329.
- [58] Grossman, R., Burke-Smalley L.A. (2018). Context-dependent accountability strategies to improve the transfer of training: a proposed theoretical model and research propositions. *Hum Resour Dev Rev*;28(2):234–247.
- [59] Storholm, E.D., et al. (2017). Barriers to Integrating the Continuum of Care for Opioid and Alcohol Use Disorders in Primary Care: A Qualitative Longitudinal Study *J Subst Abuse Treat*;83:45–54. doi: 10.1016/j.jsat.2017.09.015.
- [60] Bodenheimer, T., Lorig, K., Holman, H., & Grumbach, K. (2002). Patient self-management of chronic disease in primary care. *JAMA* 288(19): 2469–2475.

# APPENDIX A. GENERAL HEALTH INTEGRATION IN BEHAVIORAL HEALTH SETTINGS



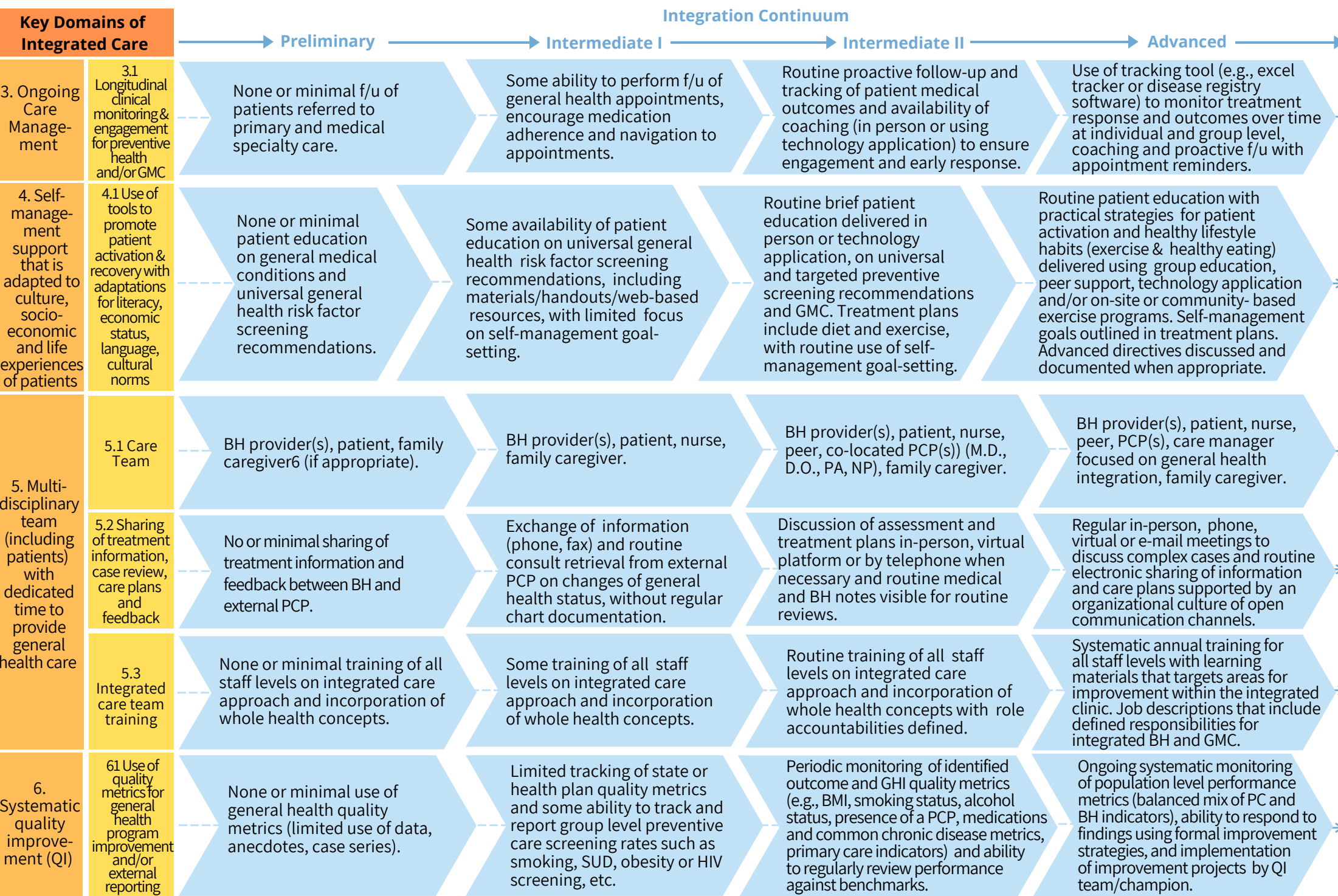
1 Individuals screened must receive follow up by a trained BH provider or PCP (external or co-located). For the purpose of the framework, primary care provider includes M.D., D.O., PA and NP.

2 Common general medical conditions include diabetes, hypertension, hyperlipidemia, coronary artery disease, asthma, arthritis, gastrointestinal disease, tooth and gum disease.

3 Universal general health risk factor screenings might include: visit with a PCP (defined as self-report of a usual source other than ED care with presence of one or more documented primary care visit during the past year), depression, alcohol and substance use (including opioid use), blood pressure measurement, HIV, overweight/obesity, tobacco use and age appropriate screenings for cervical and colorectal cancer.

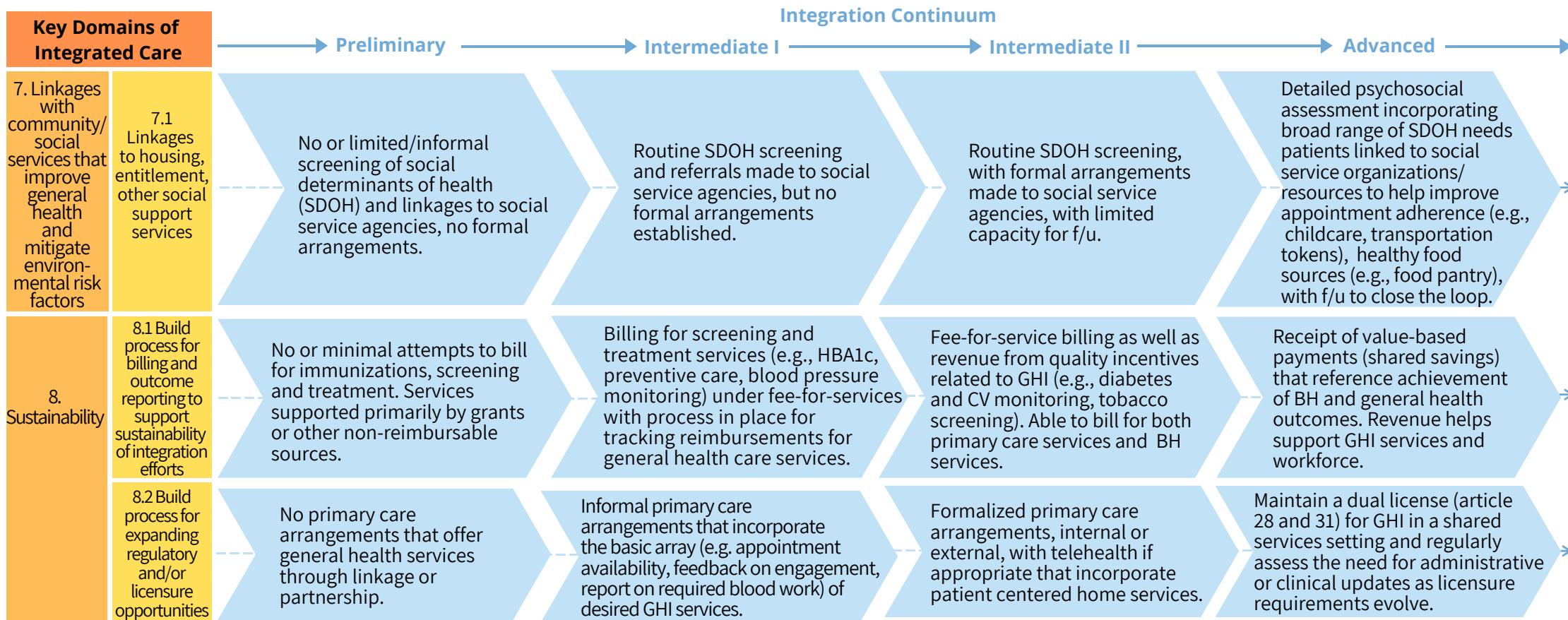
4 Targeted general health risk factor screenings might include: intimate partner violence, HbA1c, cholesterol, STI, hepatitis B, hepatitis C, tuberculosis and age appropriate screenings for immunizations, mammogram and osteoporosis.

5 Embedded and co-located arrangements include PCPs available through telehealth services.



6 Family caregivers are part of team if appropriate to patient care.





Subdomain	Bartels (2018)	Bouchery (2018)	Daumit (2019)	Druss (2001, 2010, 2011, 2018)	Kilbourne (2008, 2016)	Krupski (2016)	Storholm (2017)	Sweeny (2018)
1.1 Screening and follow-up for preventive and general medical conditions			X	X	X			
1.2 Facilitation of referrals and follow-up		X	X	X	X	X		
2.2 Evidence-based guidelines or treatment protocols for preventive interventions			X	X	X			
2.1 Evidence-based guidelines or treatment protocols for general medical conditions			X	X				
2.3 Use of targeted medications by BH prescribers for preventive and general medical conditions							X	
2.4 Trauma-informed care								X
3.1 Longitudinal clinical monitoring and engagement	X	X	X	X	X			
4.1 Use of tools to promote patient activation and recovery with adaptations for literacy, language, local norms	X	X	X	X	X			
5.1 Care team		X	X	X		X		
5.2 Sharing of treatment information			X					
5.3 Integrated care team training		X	X	X	X	X		
6.1 Use of quality metrics for program improvement		X		X	X	X		
7.1 Linkages to housing, entitlement, social support services				X				
8.1 Build process for billing and outcome reporting to support sustainability of integration efforts		X	X	X		X	X	
8.2 Build process for expanding regulatory and/or licensure opportunities		X	X	X		X	X	

## Full Literature Review Reference List

1. American Psychiatric Association. (2015). Position statement on the role of psychiatrists in reducing physical health disparities in patients with mental illness. <https://www.psychiatry.org/home/policy-finder>
2. Bachrach, D., Anthony, S., Detty, A. (2014). State strategies for integrating physical and BH services in a changing Medicaid environment. The Commonwealth Fund. <https://www.commonwealthfund.org/publications/fund-reports/2014/aug/state-strategies-integrating-physical-and-behavioral-health>
3. Bartels, S.J., et al. (2018). Implementation of a Lifestyle Intervention for People with Serious Mental Illness in State-Funded Mental Health Centers. *Psychiatric Services*, 69(6); 664–670 <https://doi.org/10.1176/appi.ps.201700368>.
4. Bartels, S.J., Pratt, S.I., Mueser, K.T., Naslund, J.A., Wolfe, R.S., Santos, M., Riera, E. G. (2014). Integrated Illness Management and Recovery (IMR) for Psychiatric and General Medical Illness for Adults Aged 50 or Older with Serious Mental Illness. *Psychiatric Services*, 65(3), 330–337. doi:10.1176/appi.ps.201300023.
5. Berkowitz, S.A., Parashuram, S., Rowan, K., et al. (2018). Association of a Care Coordination Model with Health Care Costs and Utilization: The Johns Hopkins Community Health Partnership (J-CHiP). *JAMA Netw Open*;1(7): doi:10.1001/jamanetworkopen.2018.4273.
6. Bradford W.D., Kim, M.M., Braxton, E.L., Marx W.C., Butterfield, Marian E.B. (2008). Access to medical care among persons with psychotic and major affective disorders. *Psychiatric Services* 59(8): 847–852 DOI: 10.1176/appi.ps.59.8.847
7. Brown, J.D. (2019). Availability of integrated primary care services in community health care settings. *Psychiatric Services*; 70(6); 499–502 <https://doi.org/10.1176/appi.ps.201800448>
8. Bouchery, E.E., Siegwirth, A.W., Natzke, B., Lyons, J.M., Ireys, H.T., & Doan, R. (2018). Implementing a Whole Health Model in a Community Mental Health Center: Impact on Service Utilization and Expenditures. *Psychiatric Services*; 69(10), 1075–1080. doi:10.1176/appi.ps.201700450.
9. Chen, L., Baker, T., Korpecki, J. Johnson, K., Hook, J., Brownson, R., Bierut, L. (2018). Low-burden strategies to promote smoking cessation treatment among patients with serious mental illness. *Psychiatric Services*; 69:849–851; doi: 10.1176/appi.ps.201700399
10. Connor, K., et al. (2018). Integrating physical health: What were the costs to behavioral health care clinics? *Gen Hosp Psychiatry*; 51: 41–45.
11. Daumit, et al. (2019). Care Coordination and Population Health Management Strategies and Challenges in a Behavioral Health Home (BHH) Model. *Med Care*; 69(2): 147–153. <https://doi.org/10.1176/appi.ps.201700118>
12. Dickerson, F., et al. (2018). Cigarette smoking by patients with serious mental illness, 1999–2016: an increasing disparity. *Psychiatric Services*; 69:849–851; doi: 10.1176/appi.ps.201700399

13. Druss, B.G., Esenwein, S.A., Compton, M.T., Zhao, L., & Leslie, D.L. (2011). Budget Impact and Sustainability of Medical Care Management for Persons with Serious Mental Illnesses. *American Journal of Psychiatry*, 168(11), 1171–1178. doi:10.1176/appi.ajp.2011.11010071.
14. Druss, B.G., et al. (2001). Integrated medical care for patients with serious psychiatric illness: a randomized trial. *Arch Gen Psychiatry*. 58; 861–8688.
15. Druss, B.G., Von Esenwein, S.A., Compton, M.T., Rask, K.J., Zhao, L., & Parker, R. M. (2010). The Primary Care Access Referral, and Evaluation (PCARE) Study: A Randomized Trial of Medical Care Management for Community Mental Health Settings. *Am J Psychiatry*, 167(2), 152–159. doi:10.1176/appi.ajp.2009.09050691.
16. Druss, B.G., Zhao, L., Esenwein, S.A., Bona, J.R., Fricks, L., Jenkins–Tucker, S., Lorig, K. (2010). The Health and Recovery Peer (HARP) Program: A peer–led intervention to improve medical self–management for persons with serious mental illness. *Schizophrenia Research*; 118(1–3), 264–270. doi:10.1016/j.schres.2010.01.026.
17. Druss, B.G., et al. (2018). Psychiatry’s Role in Improving the Physical Health of Patients with Serious Mental Illness: a report from the American Psychiatric Association. *Psych Serv*; 69(3): 254–256. <https://doi.org/10.1176/appi.ps.20170035918>.
18. Druss, B.G., Singh, M., Esenwein, S.A., Glick, G.E., Tapscott, S., Tucker, S.J., & Sterling, E.W. (2018). Peer–Led Self–Management of General Medical Conditions for Patients with Serious Mental Illnesses: A Randomized Trial. *Psychiatric Services*, 69(5), 529–535. doi:10.1176/appi.ps.201700352.
19. Firth, J., et al. (2019). The lancet psychiatry commission: a blueprint for protecting physical health in people with mental illness. *Lancet Psychiatry*; 6(6): doi: 675–712. 10.1016/S2215–0366(19)30132–4.
20. Fortuna, K., et al. (2020). Systematic review of the impact of behavioral health homes on cardiometabolic risk factors for adults with serious mental illness. *Psychiatric Services in Advance* 71(1): 57–74. doi: 10.1176/appi.ps.201800563.
21. Hall, J., LaPierre, T., Kurth K.K. (2019). Medicaid managed care: issues for enrollees with serious mental illness. *Am J Manag Care*; 25(9):450–456.
22. Health & Medicine Policy Research Group. (2015). Best Practice in PC–BH Integration: a working paper for the Behavioral Health Integration Learning Collaborative. <http://www.hmprg.org/programs/behavioral-health-primary-care-integration/>
23. Kilbourne, A.M., Barbaresso, M.M., Lai, Z., Nord, K.M., Bramlet, M., Goodrich, D.E., Bauer, M.S. (2016). Improving Physical Health in Patients with Chronic Mental Disorders. *The Journal of Clinical Psychiatry*; 78(01), 129–137. doi: 10.4088/jcp.15m10301.
24. Kilbourne, A.M., Post, E.P., Nossek, A., Drill, L., Cooley, S., & Bauer, M.S. (2008). Improving Medical and Psychiatric Outcomes Among Individuals with Bipolar Disorder: A Randomized Controlled Trial. *Psychiatric Services*; 59(7), 760–768. doi: 10.1176/appi.ps.59.7.760.
25. Krupski, A., West, I.I., Scharf, D.M., et al. (2016). Integrating primary care into community mental health centers: impact on utilization and costs of health care. *Psychiatric Services* 67(11):1233–1239.
26. Lewin Group and Institute for Healthcare Improvement. (2012). Approaches to Integrating Physical Health Services into Behavioral Health Organizations: a guide to resources, promising practices, and tools. <https://www.resourcesforintegratedcare.com/node/33>
27. Lewis, C.C., et al. (2019). Implementing measurement–based care in behavioral health: a review. *JAMA Psychiatry*; 76(3):324–335. doi:10.1001/jamapsychiatry.2018.3329.
28. RAND Corporation. (2013). Evaluation of the SAMHSA Primary and Behavioral Health Care Integration grant program: final report. <https://www.integration.samhsa.gov/about-us/pbhci>
29. Mathematica Policy Research. (2014). Strategies for integrating coordinating care for behavioral health populations: case studies of four states. Department of Health and Human Services, The Office of the Assistant Secretary for Planning and Evaluation, The Office of Disability, Aging and Long–Term Care Policy. <https://www.mathematica.org/our-publications-and-findings/projects/strategies-for-integrating-and-coordinating-care-for-behavioral-health-populations-in-four-states>
30. Maxwell, J., Bourgoin, A., Lindenfeld, Z. (2020). Battling the mental health crisis among the underserved through Medicaid reforms. *Health Affairs*. <https://www.healthaffairs.org/doi/10.1377/hblog20200205.346125/full/>
31. Ramanuj, P.P., Talley, R., Breslau, J., Wang, S.S., Pincus, H. (2018). Integrating behavioral health and primary care services for people with serious mental illness: a qualitative systems analysis of integration in New York. *Community Mental Health Journal*; 54(8): 1116–1126.
32. Smith, T., Erlich D.M., Sederer, I.L., (2013). Integrating general medical and behavioral health care: the New York State perspective. *Psychiatric* 64(9); 828–831 DOI: 10.1176/appi.ps.201300197.

32. Smith, T., Erlich D. M., Sederer, I. L., (2013). Integrating general medical and behavioral health care: the New York State perspective. *Psychiatric* 64(9); 828–831 DOI: 10.1176/appi.ps.201300197
33. Stanislav, S. et al. (2018). Delays in seeking general medical services and measurable abnormalities among individuals with serious mental illness. *Psychiatric Services*, 69(4), 479–482. <https://doi.org/10.1176/appi.ps.201700327>
34. Stone, E., Daumit, G., Kennedy-Hendricks, A., McGinty, E. (2020). The policy ecology of behavioral health homes: case study of Maryland’s Medicaid health home program. *Administration and Policy in Mental Health and Mental Health Services Research*; 47(1): 60–72. <https://doi.org/10.1007/s10488-019-00973-8>
35. Storholm, E.D., et al. (2017). Barriers to Integrating the Continuum of Care for Opioid and Alcohol Use Disorders in Primary Care: A Qualitative Longitudinal Study. *J Subst Abuse Treat*; 83:45–54. doi: 10.1016/j.jsat.2017.09.015.
36. Sweeney, A., et al. (2018). A paradigm shift: relationships in trauma-informed mental health services. *BJ Psych Adv*; 24(5): 319–333.
37. Health Resources in Action. (2018). Improving Access to Integrated Care for Rio Grande Valley Residents with Severe & Persistent Mental Illness. *Tropical Texas Behavioral Health*. <http://www.mhm.org/library/tropical-report>
38. The Commonwealth Fund. Missouri: pioneering integrated mental and medical health care in community mental health centers. <https://www.commonwealthfund.org/publications/newsletter-article/missouri-pioneering-integrated-mental-and-medical-health-care>
39. The Milbank Memorial Fund. Integrating Primary Care into Behavioral Health Settings: What Works for Individuals with Serious Mental Illness. <https://www.integration.samhsa.gov/integrated-care-models/primary-care-in-behavioral-health>
40. De Hert, M. (2011). Guidelines for screening and monitoring of cardiometabolic risk in schizophrenia: systematic evaluation. *The British Journal of Psychiatry* 199(2), 99–105. doi: 10.1192/bjp.bp.110.084665.
41. Wake, L., Balon, R. (2019). Should psychiatrists prescribe non-psychotropic medications. *Current Psychiatry* 18(11); 52–56.
42. Ward, M., Druss, G.B. (2019). Treatment consideration in severe mental illness caring for whole patient. *JAMA Psychiatry* 76(7); 759–760.

## APPENDIX C. KEY STAKEHOLDERS PROVIDING INPUT IN FRAMEWORK DEVELOPMENT PROCESS

Name	Title	Organization	Key Informant Interviews	Attended Multi-stakeholder Advisory Meeting 7.30.19
Thomas Betzler, M.D.	Executive Director	Montefiore Behavioral Health Community Mental Health Center	X	X
Jean-Marie Bradford, M.D.	Director	Washington Heights Community Service		X
Brian Byrd, MPA	Program Officer	New York State Health Foundation		X
Henry Chung, M.D.	Senior Medical Director and Project Director	Montefiore Care Management Organization		X
Stephanie Cuskley, MBA	President and CEO	Hemsley Charitable Trust		X
Amy Dorin, MS, ACSW	President and CEO	Coalition for Behavioral Health		X
Rose Duhan, MPH	President and CEO	Community Health Care Association of New York State		X
Judith Feld, M.D., MPH, MMM	Vice President, Behavioral Health	MVP Health Plan	X	X
Douglas Fish, M.D.	Medical Director, Division of Program Development and Management	Office of Health Insurance Programs, NYS Department of Health		X
Marcus Friedrich, M.D., MBA	Chief Medical Officer	Office of Quality and Patient Safety, NYS Department of Health		X
Matthew L. Goldman, M.D., MS	Public Psychiatry Fellow, GHI Project Team Member	Department of Psychiatry, University of California, San Francisco		X
Irfan Hasan, MPA	Program Director, Health and Behavioral Health	New York Community Trust		X
Chuck Ingoglia, MS	President and CEO and GHI Project Team Member	National Council for Behavioral Health		X
Sachin Jain, M.D.	Chief CTO and Acting CMO	Community Health Network		X
Patricia Lincourt	Clinical Services Director	New York State OASAS	X	
Patricia Lemp, LCSW	Assistant Executive Director	Westchester Jewish Community Services		X
Juan Martinez, LCSW	Administrative Director	The Einstein Division of Substance Abuse, Montefiore Medical Center	X	
Trish Marsik	Chief Operating Officer	Services for the Under Served	X	X
Keith McCarthy	Director	NYS Office of Mental Health	X	



<b>Robin Melén, MS</b>	Program Officer	Westchester Community Foundation, a Division of The New York Community Trust		X
<b>Robert Myers, Ph.D.</b>	Senior Deputy Commissioner and Division Director	Adult Services, State Hospitals and Managed Care, NYS Office of Mental Health	X	X
<b>Bianca Nguyen, M.D., MPH</b>	Chief Resident, Department of Psychiatry	NYP/Columbia University Medical Center		X
<b>Varsha Narasimhan, M.D.</b>	Director of Ambulatory Consultative Service, GHI Project Team Member	Jacobi Medical Center		X
<b>Tracy Perizzo, MS</b>	Program Officer	Hemsley Charitable Trust		X
<b>Jorge Petit, M.D.</b>	President and CEO	Coordinated Behavioral Care	X	X
<b>Harold Pincus, M.D.</b>	Professor and Vice Chair of the Department of Psychiatry/GHI Project Team Member	Columbia University		X
<b>Amanda Saake, LMSW, CPRP</b>	Special Assistant to Commissioner	Consumer Affairs, Office of Mental Health		X
<b>Chad Shearer, JD, MHA</b>	Vice President for Policy	United Hospital Fund		X
<b>Tara Seeley, JD, M.Div.</b>	Senior Program Officer	Westchester Community Foundation, a division of The New York Community Trust		X
<b>Ian Shaffer, M.D.</b>	Executive Medical Director	Health First Health Plan	X	X
<b>Ekaterina (Katy) Smali, MPH, MPA, PMP</b>	Project Co-Director	Montefiore Care Management Organization		X
<b>Thomas Smith, M.D.</b>	Medical Director	NYS Office of Mental Health	X	
<b>Melissa Stein, M.D.</b>	Internal Medicine	The Einstein Division of Substance Abuse, Montefiore Medical Center	X	X
<b>Rachel Talley, M.D.</b>	Associate Director, Fellowship in Community Psychiatry and Assistant Professor of Psychiatry and Project Team Member	University of Pennsylvania		X
<b>Tony Trahan</b>	Deputy Director	Consumer Affairs, Office of Mental Health		X
<b>Jeanie Tse, M.D.</b>	Associate Chief Medical Officer	Institute for Community Living, Inc.	X	X
<b>David Woodlock, MS</b>	President and CEO, GHI Project Team Member	Institute for Community Living, Inc.		X

## Introduction

This survey is part of the General Health Integration (GHI) Framework project, which supports general and behavioral health integration in behavioral health settings. This survey collects baseline information on your organization, including characteristics of your clinic, patient demographics and current care processes and protocols. We will ask you to describe your site's current level of general health integration using the framework domains and components. In addition, the survey will ask questions about your experience utilizing and interpreting the framework and its components. Please have the project lead and relevant team members at your practice answer all of these questions.

## Background Information

1. Organization Name:
2. Facility Name and Address: For organizations with multiple sites, this would be the participating site's name and address. If the site doesn't have an official name, use a nickname (e.g. a clinic at 123 Tulip St, may be referred to as "Tulip Street,"). NOTE: A survey should be completed for each site at the organization participating in the general health integration project.
3. Integration Lead Contact: Identify the person responsible for submitting this survey and collaborating with the team at your site convened to provide input in the completion of the General Health Integration Framework Readiness Assessment.
4. List Integration Team Members: Full Name, Title and Organization (if different from lead organization)

## Section 1: Baseline Questions

5. Practice description of services and programs (check all that apply)
  - Article 31 (OMH Certification)
  - Article 32 (OASAS Certification)
  - Dual License/Article 28 and Article 31 or 32 (Medical and Behavioral)
  - Personalized Recovery Oriented Services (PROS)
  - Assertive Community Treatment (ACT)
  - Intensive Outpatient Treatment (IOT)
  - Other
6. Number of Staff and full-time equivalents (FTEs). (INDICATE NUMBER OF EACH TYPE OF STAFF IN THIS PRACTICE AND FTE IN A WEEK FOR EACH TYPE). Please Note: FTE is equal to the ratio of the total number of paid hours during a week (part time, full time, contracted) by the number of working hours in an average workweek (typically 40 hours). 1.0 FTE is equivalent to one employee working full-time.

Type of health provider/admin	Indicate Number of Staff	FTE in a Week
Psychiatrist		
Psychologist		
Social Worker		
Care Manager		
Primary Care Physician		
Nurse Practitioner		
Registered Nurse		
Physician Assistant		
Medical Assistant		
Credentialed Alcoholism & Substance Use Counselor (CASAC)		
Certified Peer Counselors		
Reception and Administrative		
Other (please specify)		



7. Does your practice utilize an electronic health record (EHR)? If yes, please provide the name of the EHR vendor and date of initial use.
8. Use and capacity of EHR system: (Select all that apply)
  - No EHR system established.
  - EHR system currently captures and extracts behavioral health clinical data linked to dates of assessment.
  - EHR system currently captures and extracts general health quantitative data such as blood pressure readings and immunization history.
  - EHR system has capability to analyze data across all providers in the practice (e.g., 75% of patients received a flu shot in 2018 for one provider and 25% of patients received flu shot from provider 2).
  - EHR system has capability to analyze practice and patient care outcomes (e.g., number of patients with diabetes whose HbA1C declined to less than 8).
  - EHR system has functionality to track metrics on groups of patients with the same diagnosis (e.g. schizophrenia, diabetes).
  - EHR system has the functionality to create and track referrals to primary care providers (PCP) and specialists
9. How many individual patients are served by this practice annually (not total visits)?
10. What percentage of patients are:
  - White
  - Black or African-American
  - Native American or American Indian
  - Asian/Pacific Islander
  - Other
11. What percentage of patients are Hispanic/Latinx or other?
12. What percentage of patients are:
  - Male
  - Female
  - Transgender
13. What percentage of patients are:
  - Less than age 18
  - Age 18-24
  - Age 25-44
  - Age 45-64
  - Age 65+
14. Please indicate the approximate percentage of patients that that comes from each of the primary payers.
  - Medicare fee-for-service (FFS)
  - Medicare Advantage
  - Medicaid FFS
  - Medicaid managed care
  - Commercial health insurance
  - Other government programs [e.g. veterans, Tricare]
  - Self-paying or uninsured
  - Other
15. What kinds of additional designations does your organization have if any? (Select all that apply)
  - No Additional Designation
  - Federally Qualified Health Centers (FQHCs)
  - Certified Community Behavioral Health Clinics (CCBHCs)
  - Membership in Behavioral health Independent Physician Associations (IPAs)
  - Membership in a Behavioral Health Care Collaborative (BHCC)
  - Membership in an Accountable Care Organization (ACO)
  - Other (please specify)

16. If your organization is participating in the NYS Delivery System Reform Incentive Payment (DSRIP) program, please specify the name of the Performing Provider System (PPS) from which you receive support and/or help in general health integration.
17. What type of support for general health integration do you currently receive from a PPS (e.g., financial, technical assistance), if any?
18. If your practice has added staff to facilitate general health integration, please specify type, discipline and number of staff.
19. If your practice receives payments for quality measures (behavioral or general health), specify measures.
20. Has this practice undergone any recent or new quality improvement projects related to general health integration? Please list relevant projects within past five years.
21. What are some barriers that you have experienced regarding successful integration of general health care into your practice?

## **Section 2: General Health Integration Readiness**

This section requires the completion of a self-assessment readiness survey on the key integration components present or already underway. These questions mirror the continuum domains and subdomains found in the GHI framework. Please answer for each domain and its corresponding element(s) to indicate your level of integration. Please note, the following is a list of key definitions and explanations to clarify the survey (also found in the legend of the framework):

- Individuals screened must receive follow up by a trained BH provider or PCP (external or co-located). Primary care provider designation is inclusive of M.D., D.O., PA, NP.
- General medical conditions include diabetes, hypertension, hyperlipidemia, coronary artery disease, asthma, arthritis, gastrointestinal disease, tooth and gum disease.
- Universal general health risk factor screenings might include: visit with a PCP (defined as self-report of a usual source other than ED care with presence of one or more documented primary care visit during the past year), depression screening, alcohol and substance use (including opioid use), blood pressure measurement, HIV screening, colorectal screening (age appropriate), cervical cancer screening (age appropriate), overweight/obesity, tobacco use.
- Targeted general health risk factor screenings might include: intimate partner violence, HbA1c, cholesterol, immunizations (age appropriate), sexually transmitted diseases (STDs), hepatitis B, hepatitis C, tuberculosis, mammogram (age appropriate), osteoporosis (age appropriate).
- Embedded and co-located arrangements include PCPs available through telehealth services.
- Family caregivers are part of team if appropriate to patient care.

### **Domain #1: Screening, Referral to Care and Follow-up**

22. Please select the statement that best describes your site's screening and follow-up for preventive and general medical conditions at least 70% of the time:
  - Response to patient self-report of general health complaints and/or chronic illness with follow-up only when prompted.
  - Systematic screening for universal general health risk factors and proactive health education to support motivation to address risk factors.
  - Systematic screening and tracking of universal and relevant targeted general health risk factors as well as routine follow-up for general medical conditions with the availability of in-person or telehealth primary care.
  - Analysis of patient population to stratify by severity of medical complexity primary care.
23. Please select the statement that best describes the system your site utilizes for primary care referrals and feedback at least 70% of the time.
  - Referral to external PCP(s) and no/limited follow-up.
  - Formal collaborative agreement with external primary care practice to facilitate referral that includes engagement and communication expectations between behavioral health and PCP(s).
  - Referral to onsite, co-located PCP(s) or availability of primary care telehealth appointments with assurance of "warm handoffs" when needed.
  - Enhanced referral facilitation to onsite or closely integrated offsite PCP(s) with automated data sharing and accountability for engagement.

Domain #2: Evidence-based Care for Common General Medical Conditions

24. Please select the statement that best describes how evidence-based guidelines or treatment protocols for preventive interventions used in your practice at least 70% of the time.
- Not used or minimal guidelines or protocols used for universal general health risk factor screenings. No or minimal training for behavioral health providers on preventive screening frequency and results.
  - Routine use of evidence-based guidelines to engage patients on universal general health risk factor screenings with limited training for behavioral health providers on screening frequency and result interpretation.
  - Routine use of evidence-based guidelines for universal or targeted preventive screenings with use of standard workflows for follow-up on positive results. Behavioral health staff routinely trained on screening frequency and result interpretation.
  - Systematic tracking and reminder system (embedded in EHR) used to assess need for preventive screenings, workflows for follow-up, availability of evidence-based and outcomes driven programs to reduce or mitigate general health risk factors (smoking, alcohol, overweight, etc.).
25. Please select the statement that best describes how evidence-based guidelines or treatment protocols for general medical conditions used in your practice at least 70% of the time.
- None or with minimal guidelines or evidence-based workflows for improving access to care for general medical conditions.
  - Intermittent use of guidelines and/or evidence-based workflows of general medical conditions with limited monitoring activities. BH staff and providers receive limited training on common medical conditions.
  - BH providers and/or embedded PCP routine use of evidence-based guidelines or workflows for patients with general medical conditions, including monitoring treatment measures and linkage/navigation to medical services when appropriate. BH staff receives routine training in basics of common medical conditions.
  - Use clinical decision support (embedded in EHR) with point of service guidance on active clinical management for BH providers and/or embedded PCPs for patients with general medical conditions.
26. Please select the statement that best describes the use of medications by behavioral health prescribers for preventive and general medical conditions at your site at least 70% of the time.
- None or very limited use of non-psychiatric medications by behavioral health prescribers. Non-psychiatric medication concerns are primarily referred to PCP(s) to manage.
  - Behavioral health prescriber routinely prescribes nicotine replacement therapy (NRT) or other psychiatric medications for smoking reduction.
  - Behavioral health prescriber routinely prescribes smoking cessation as above. May occasionally make minor adjustments to medications for general medical conditions when indicated, keeping PCP informed when doing so.
  - Behavioral health prescriber can prescribe NRT as well as prescribe general medical medications with assistance and consultation of PCP.
27. Please select the statement that best describes how you support trauma-informed care at your site at least 70% of the time?
- Behavioral health staff have no or minimal awareness of effects of trauma on integrated health care.
  - Limited staff education on trauma and impact on behavioral health and general health care.
  - Routine staff education on trauma-informed care model including strategies for managing risk of re-traumatizing. Limited use of validated screening measures for trauma when indicated.
  - Adoption of trauma-informed care strategies and trauma informed treatment and protocols by BH clinic for staff at all levels to promote resilience and address re-traumatizing and de-escalation procedures. Routine use of validated trauma assessment tools such as adverse childhood experiences (ACEs) and PTSD checklist (PCL-C) when indicated.

Domain #3: Ongoing Care Management

28. Please select the statement that best describes how patients are monitored and engaged for preventive health and/or general medical conditions by your practice at least 70% of the time.
- None or minimal follow-up of patients referred to primary and medical specialty care.
  - Some ability to perform follow-up of general health appointments, encourage medication adherence and navigation to appointments.
  - Routine proactive follow-up and tracking of patient medical outcomes and availability of coaching to ensure engagement and early response.
  - Use of tracking tool (e.g., excel tracker or disease registry software) to monitor treatment response and outcomes over time at individual and group level, coaching and proactive follow-up with appointment reminders.

Domain #4: Self-management Support that is Culturally Adapted

29. Please select the statement that best describes the tools used to promote patient activation and recovery with adaptations for literacy, economic status, language and cultural norms at least 70% of the time.
- None or minimal patient education on general medical conditions and universal general health risk factor screening recommendations.
  - Some availability of patient education on universal general health risk factor screening recommendations, including materials/handouts, with limited focus on self-management goal-setting.
  - Routine brief patient education delivered in person or technology application on universal and targeted preventive screening recommendations and general medical conditions. Treatment plans include diet and exercise, with routine use of self-management goal-setting.
  - Routine patient education with practical strategies for patient activation and healthy lifestyle habits (exercise and healthy eating) delivered using group education, peer support and/or onsite or community-based exercise programs. Self-management goals outlined in treatment plans. Advance directives discussed and documented when appropriate.

Domain #5: Multi-disciplinary Team (Including Patients) with Dedicated Time to Provide General Health Care

30. Please select the description of a “care team” that best aligns with your practice at least 70% of the time.
- Behavioral health provider(s), patient, family caregiver (if appropriate).
  - Behavioral health provider(s), patient, nurse, family caregiver (if appropriate).
  - Behavioral health provider(s), patient, nurse, peer, co-located PCP(s) (M.D., D.O., PA, NP), family caregiver (if appropriate).
  - Behavioral health provider(s), patient, nurse, peer, PCP(s), care manager focused on general health integration, family caregiver (if appropriate).
31. Please select the statement that best describes how the team shares treatment information, case reviews, care plans and feedback at least 70% of the time.
- No or minimal sharing of treatment information and feedback between behavioral health and external PCP.
  - Exchange of information (phone, fax) and routine consult retrieval from external PCP on changes of general health status without regular chart documentation.
  - Discussion of assessment and treatment plans in-person, virtual platform or by telephone when necessary and routine medical and behavioral health notes visible for routine reviews.
  - Regular in-person, phone, virtual or e-mail meetings to discuss complex cases and routine electronic sharing of information and care plans supported by an organizational culture of open communication channels.

32. Please select the statement that best describes how integrated care training is provided to the team.
- None or minimal training of all staff levels on integrated care approach and incorporation of whole health concepts.
  - Some training of all staff levels on integrated care approach and incorporation of whole health concepts.
  - Routine training of all staff levels on integrated care approach and incorporation of whole health concepts with role accountabilities defined.
  - Systematic annual training for all staff levels with learning materials that targets areas for improvement within the integrated clinic. Job descriptions that include defined responsibilities for integrated behavioral health and general health care.

Domain #6: Systemic Quality Improvement

33. Please select the statement that best describes the use of quality metrics for general health program improvement and/or external reporting.
- None or minimal use of general health quality metrics (limited use of data, anecdotes, case series).
  - Limited tracking of state or health plan quality metrics and some ability to track and report group level preventive care screening rates such as smoking, SUD, obesity, HIV screening, etc.
  - Periodic monitoring of identified outcome and quality general health integration metrics (e.g., BMI, smoking status, alcohol status, presence of a PCP, medications and common chronic disease metrics, primary care indicators) and ability to regularly review performance against benchmarks.
  - Ongoing systematic monitoring of population-level performance metrics (balanced mix of PC and behavioral health indicators), ability to respond to findings using formal improvement strategies and implementation of improvement projects by quality improvement team/champions.

Domain #7: Linkages with Community/Social Services that Improve General Health and Mitigate Risk Factors

34. Please select the statement that best describes your referrals to housing, entitlement, and other social support services made at least 70% of the time.
- No or limited/informal social determinants of health (SDOH) screening and linkages to social service agencies, no formal arrangements.
  - Routine screening of SDOH and referrals made to social service agencies, but no formal arrangements established.
  - Routine screening of SDOH, with formal arrangements made to social service agencies, with limited capacity for follow-up.
  - Detailed psychosocial assessment incorporating broad range of SDOH needs, patients linked to social service organizations/resources to help improve appointment adherence (e.g., transportation tokens, childcare), healthy food sources (e.g., food pantry), with follow-up to close the loop.

Domain #8: Sustainability

35. Please select the statement that best describes your process for billing and outcome reporting to support sustainability of integration efforts at least 70% of the time.
- No or minimal attempts to bill for immunizations, screening and treatment. Services supported primarily by grants or other non-reimbursable sources.
  - Billing for screening and treatment services (e.g., preventive care, HBA1c, blood pressure monitoring) under fee-for-services with process in place for tracking reimbursements for general health care services.
  - Fee-for-service billing as well as revenue from quality incentives related to GHI (e.g., diabetes and CV monitoring, tobacco screening). Able to bill for both primary care services and BH services.
  - Receipt of value-based payments (shared savings) that reference achievement of BH and general health outcomes. Revenue helps support general health integration services and workforce.



36. Please select the statement that best describes your process expanding regulatory and/or licensure opportunities for general health integration.
- No primary care arrangements that offer general health services through linkage or partnership.
  - Informal primary care arrangements that incorporate the basic array (e.g., appointment availability, feedback on engagement, report on required blood work) of desired general health integration services.
  - Formalized primary care arrangements, internal or external, with telehealth if appropriate that incorporate patient centered home services.
  - Maintain a dual license (article 28 and 31) for general health integration in a shared services setting and regularly assess the need for administrative or clinical updates as licensure requirements evolve.

### Section 3: Framework Experience

Please provide feedback on your integration team's experience using the framework during the course of completing the survey. We will use your feedback to further improve on its clarity and ease of use for behavioral health clinics advancing general health care.

37. Please describe your experience using the framework from 1 (least favorable) to 5 (most favorable) on the following dimensions.

	Unfavorable	Somewhat Unfavorable	Indifferent	Somewhat Favorable	Most Favorable
Ease of use of the framework to describe your current general health integration state					
Ease of understanding the domains and subdomains of the framework within a continuum structure					
Ease of using the framework for planning to advance your general health integration					

38. What changes or additions would you like to see to improve the clarity or utility of the framework?
39. What supports would you need to be able to adopt the framework in your organization? Please explain.