Designing, Implementing and Sustaining
Physical Health-Behavioral Health Integration

THE COMPREHENSIVE HEALTHCARE
INTEGRATION FRAMEWORK

NATIONAL COUNCIL
for Mental Wellbeing

April 2022

Preamble:

About the National Council for Mental Wellbeing and the Medical Director Institute

The National Council for Mental Wellbeing, a membership organization that drives policy and social change on behalf of nearly 3,100 mental health and substance use treatment organizations and the more than 10 million children, adults and families they serve, established the Medical Director Institute (MDI) to convene medical directors from member organizations to contribute their expertise on clinical practices and policy priorities to enhance mental health and substance use services. Each year the MDI establishes priorities and develops a publication and supporting resources to help advance the field. Previous topics have included Access to Psychiatric Care, Adherence to Medications and Mass Violence and Mental Health.

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I. Commonly Used Acronyms in this Document

BH	behavioral health	**MCO**	managed care organization
BHC	Behavioral Health Consultant	**MDI**	Medical Director Institute
BPCR	Bipartisan Policy Center report	**PCP**	primary care provider
CCBHC	Certified Community Behavioral Health Clinic	**PH**	physical health
CHI	Comprehensive Healthcare Integration	**PPS**	prospective payment supports
COCM	collaborative care management	**QI**	quality improvement
CPT	current procedural terminology	**SAMHSA**	Substance Abuse and Mental Health Services Administration
FFS	fee-for-service	**SBIRT**	Screening, Brief Intervention and Referral to Treatment
FQHC	Federally Qualified Health Center	**SDOH**	social determinants of health
GHI	General Healthcare Integration	**SUD**	substance use disorder
HEDIS	Healthcare Effectiveness Data and Information Set	**TCM**	transitional care management
HTN	hypertension	**VBP**	value-based payment

II. Executive Summary

PURPOSE OF THIS PAPER

The purpose of this paper is to present the Comprehensive Healthcare Integration (CHI) Framework, a new framework for guiding implementation of integration of physical health (PH) and behavioral health (BH) (mental health and substance use conditions), that can help providers, payers and population managers to measure progress in organizing delivery of integrated services – referred to in this report as "integratedness" – demonstrate the value produced by progress in integrated service delivery and provide initial and sustainable financing for integration. Integration as used herein is also inclusive of attention to social determinants of health (SDOH) and health equity for underserved populations.

This paper utilizes "patient-centered" definitions:

Integrated Services: In any physical health (PH) or behavioral health (BH) setting, "integrated services" means the provision and coordination by the treatment team of appropriately matched interventions for both PH and BH conditions, along with attention to SDOH, in the setting in which the person is most naturally engaged.

- **Bidirectional Integration:** Integration of PH services into BH settings and integration of BH services into PH settings

The CHI Framework is intended to advance beyond current commonly used frameworks, such as the SAMHSA Six Levels and use of the Integrated Practice Assessment Tool and to guide bidirectional integration. It is applicable to child and adult populations, small and large providers, rural and urban locations and organizations with varying levels of resources.

WHY NOW?

During the past several decades, there has been considerable progression of knowledge on integration, including research defining different methods or models of service delivery, research delineating tools and procedures that support these models, and evidence demonstrating improved outcomes and value for diverse populations.

The evidence strongly suggests that people of all ages living with co-occurring PH, BH and SDOH needs have higher health costs, yet experience poorer health outcomes. Additionally, these individuals and families are faced with significant inequities based on racial, ethnic and economic challenges in both PH and BH settings and are likely to benefit from evidence-based integrated interventions in whatever setting they are best engaged, with more complex and high-cost populations generally requiring higher levels of service intensity.

Nonetheless, despite extensive progress in recognizing the value of integrated services and demonstrating approaches for implementation, broad uptake of integrated services for people with co-occurring PH/BH/SDOH needs remains much more limited than the need for those services would suggest.

The CHI Framework is intended to address the following implementation barriers:

- **Lack of flexibility in implementation of integrated services.**

- **Lack of appropriate bidirectional measures of "Integratedness."**

- **Lack of metrics connecting progress in Integratedness to value.**

- **Lack of financing to support either implementation or sustainability.**

The Comprehensive Healthcare Integration Framework: Charting a Path Forward

The new CHI Framework described in this paper concretely addresses the barriers mentioned above. It is an adaptation and expansion of the previously published General Health Integration (GHI) Framework for BH organizations, (Chung, 2020). In CHI, there are eight evidence-based Domains of integration processes or services applicable to both PH and BH settings and to adult, adolescent and child populations. Measurement of progress across the Domains correlates to three "Integration Constructs" which each demonstrates value. The CHI Framework can function as a measurement tool for integratedness that permits practices, programs and provider organizations to delineate to themselves, payers and population managers their progress in delivering integrated services to people served. See Characteristics of the CHI Framework here.

The Eight Domains of Integration

Available evidence on the contributors to successful integrated service delivery is used to create eight Domains of integratedness to guide service design. These Domains incorporate best practices in integrated services and are designed to be consistent with a wide range of "integrated service models."

Each of these broad Domains specifically addresses PH and BH and SDOH issues in an integrated manner:

1. **Screening, Referral and Follow-up**

2. **Prevention and Treatment of Common Conditions**

3. **Continuing Care Management**

4. **Self-management Support**

5. **Multidisciplinary Teamwork**

6. **Systematic Measurement and Quality Improvement**

7. **Linkage with Community/Social Services for Social Determinants of Health**

8. **Financial Sustainability**

For each Domain and subDomain, the CHI Framework adds four columns, ranging from historical practice through three progressive Integration Constructs, each with specific markers for achievement of the standard in that Integrated Construct. See here for an example.

The CHI Framework helps PH and/or BH providers to measure and improve integratedness across one or more Domains using continuous quality improvement.

Definition of Value:

Measurable improvement in individual or population health, BH or PH outcome measures and/or increased equity and quality in relation to expenditure.

The Three Integration Constructs

The Integration Constructs provide guidance on achievement of benchmarks of progress, while still permitting flexibility in the implementation process. Each describes an organized approach that has several evidence-based or consensus-supported core service elements for integratedness that can be implemented flexibly depending on the capabilities of a provider organization. The three are:

1. **Screening and Enhanced Referral**

2. **Care Management and Consultation**

3. **Comprehensive Treatment and Population Management**

The names of the Constructs are descriptive of the primary integratedness workflows which the provider organization implements within one or more of the Domains to be successful. They allow a provider organization to select one or more of the Domains for a focused effort to advance their integration state and to identify one or more issues or conditions for which metrics can be selected to demonstrate the value of the integrated services provided. The optimal choice of a specific construct for a particular organization will vary by its current development, resources, capacity and incentives.

Specific implementation examples of the three Integration Constructs can be found in Appendix 6 – Table and Charts of Integrated Programs and Measures.

Using the CHI Framework: Improving Integratedness

Measuring integratedness using the Domains of the CHI Framework allows for demonstration of progress in implementation of Constructs that can guide identification of improvement targets and objectives (for providers) as well as provide objective indication of implementation success (for payers and regulators).

For a description of the recommended steps in using the Framework, see Appendix 4 – Getting Started With CHI Framework: Planning for Change and Implementation.

Integration Constructs: Demonstrating Value

The key connection between "integratedness," the three Constructs and payment is that EACH Integration Construct incorporates an organized set of integrated services and metrics that provides the capacity to demonstrate value.

The CHI Framework provides the opportunity to demonstrate value to population managers or payers on addressing key physical health and/or behavioral health and/or social determinant conditions for the population served within each Construct.

Implementation of measurable indicators of integratedness provides the foundation with which a provider organization, practice or program can identify one or more co-occurring conditions and/or populations to address through integrated service delivery. They can then demonstrate value of those integrated services through ongoing measurement and reporting on the relevant outcome metrics for those conditions in the populations receiving integrated services within that Construct.

Each of the three Constructs relies on a different set of the eight Domains to achieve integratedness and create value. For **each** Construct it is necessary to define **how value is produced and what metrics are used to demonstrate value**, as detailed in Section VI, Integrated Services and Integration Constructs: Financing Implementation and Sustainability.

Integrated Services and Integration Constructs: Financing Implementation and Sustainability

The final section of the report examines how the value produced by each Construct is connected to financing the implementation and sustainability of that Construct. Firstly, it looks at the two types of financing goals:

4. **Financing implementation:**

   a. Initial implementation or strengthening of an Integrated Construct.

   b. Incentivizing progress from one Construct to the next.

5. **Financing sustainability:** Financing or payment methodologies that provide continued support for maintaining current provision of a specific Integrated Construct for a particular set of issues in a defined population.

The section then goes on to present three broad categories of **payment methodologies** (also summarized in Appendix 5):

6. **CPT Service Code Payments (usually fee-for-service).**

7. **Care Enhancement Payments (usually per member per month or prospective payment).**

8. **Value-based Payments (VBPs.)**

All financing and payment methodologies are tied to value produced, and each type of payment methodology can be used to incentivize implementation. For each Integration Construct there is a payment methodology, justified by the value produced, that is particularly suited for its sustainability.

The matching of payment methodologies to the implementation and sustainability of each Construct is presented in a section of the paper entitled "Integrated Services and Integration Constructs: Financing Implementation and Sustainability."

RECOMMENDATIONS

The CHI Framework presented in this paper represents a significant step forward in guiding broad dissemination and implementation of integrated services. It provides a common language to guide the next generation of implementation research. Our Expert Panel recommends broad adoption of the CHI Framework to the current efforts in implementation, dissemination and sustainability of integrated service delivery nationwide as well as the future knowledge base. Specific recommendations for providers, payers and policymakers are summarized below:

Providers (individual PH and/or BH provider organizations) should utilize the CHI Framework to:

- **Measure their current baseline state of integratedness.**

- **Identify their next steps regarding their chosen Integration Construct(s).**

- **Delineate relevant metrics for demonstrating value.**

- **Define quality improvement process to achieve their integratedness targets.**

Providers should improve their ability to measure performance and costs related to integratedness not only to improve performance, but in order to have the ability and confidence to contract utilizing the payment methodologies described in this report.

Collectively, providers, provider networks and provider associations should advocate for public and private payers and policymakers to adopt the CHI Framework in order to create a common language for improving integration more widely.

Payers (public or private, including grant makers) should formally recommend the CHI Framework for measuring integratedness and demonstrating value across their networks. Payers and grant makers should:

- **Engage in partnership with their provider networks and grantees to delineate current baseline state of integratedness.**

- **Identify recommended targets for improvement.**

- **Outline implementation of specific elements within the CHI framework to improve the health of populations served.**

- **Define appropriate consensus metrics for accountability, value and outcomes.**

Payers should implement both initial implementation funding and, where applicable, sustainable reimbursement to support providers making progress using the CHI Framework. They should support start-up costs for achieving desired Integration Constructs, as well as providing for sustainability through reimbursement of support services with CPT codes and building a VBP foundation, including bundled payments that reflect all provider costs. Payers should strengthen their oversight by training utilization review staff in the CHI framework and best practices. Network management can include training of providers in CHI framework and expanding current arrangements in integrated care.

Policymakers should adopt the CHI Framework as a guide for measuring and implementing progress in integrated service delivery for payers and providers at the state and local level. The CHI Framework should be used to guide policy development and published regulations to support progress through the Domains and Constructs to make it easier to align reimbursement mechanisms for integration activities. The Center for Medicare and Medicaid Services should review the degree to which existing regulations can support or inhibit implementation of progress using the CHI Framework and subsequently reduce existing barriers around billing prohibitions and site limitations for certain services. Federal and national entities such as National Quality Forum should simplify the many measurements of healthcare services by selecting key measures of integration aligned with the eight Domains and three Integrated Constructs supported by the CHI framework.

III. Introduction

PURPOSE OF THIS PAPER

The purpose of this paper is to advance the integration of physical health (PH) and behavioral health (BH) services across the nation through presenting a new framework for implementation of integration, the Comprehensive Health Integration (CHI) Framework, that can help providers, payers and population managers measure progress in organizing delivery of integrated services – referred to in this report as "integratedness," demonstrating the value produced by progress in integrated service delivery and providing initial and sustainable financing for integrated services.

In this paper, although "integration" can refer to many aspects of health and human services, the term is used exclusively to refer to integration of PH and BH. PH refers to primary and specialty medical services for all types of physical health conditions for adults and/or children and adolescents, and BH refers to services for mental health and/or substance use conditions. Integration as used herein is also inclusive of attention to social determinants of health (SDOH) and health equity for underserved or marginalized populations.
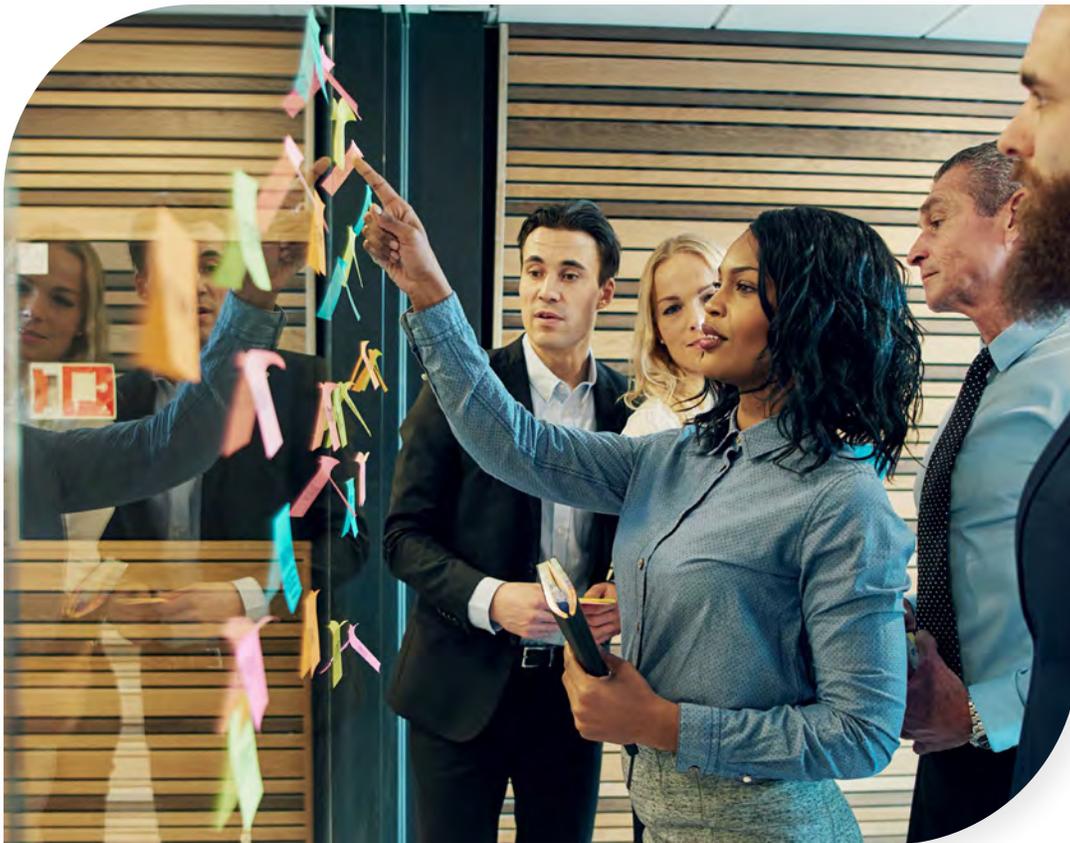
Further, this paper utilizes "patient-centered" definitions of "integrated services" and "integrated programs" as delineated in the **KEY DEFINITIONS** text box:

Key Definitions

Integrated Services: In any PH or BH setting, "integrated services" means the provision and coordination by the treatment team of appropriately matched interventions for both PH (including dental) and BH conditions.

Integrated Program/Practice: An integrated program is one which is organized so that all people served by that program (team, practice) receive a comprehensive array of integrated services and interventions (including primary and secondary prevention) for their PH and BH needs.

Integratedness: The degree to which programs or practices are organized to deliver integrated PH and BH prevention and treatment services to individuals or populations, as well as to address SDOH. Integratedness is a measure of development of both structural components (e.g., staffing) and care processes (e.g., screening) that support the extent to which "integrated services" in PH or BH settings are directly experienced by people served and delivered by service providers.

Exclusions

Integration as used here is not produced or defined by:

- Consolidating separate funding for PH and BH care.

- Putting PH and BH services under the same lines of authority in the table of the organization. Co-locating PH and BH services in the same building.

- Contracting with a managed care organization to manage both PH and BH services.

None of the above is either necessary or sufficient to produce meaningfully integrated services. Policymakers and payers should **NOT** assume that if they consolidate funding and authority at either the payer or provider level, integration will somehow occur due to market forces.

The CHI Framework is intended to build on and advance comprehensive application of previously used frameworks:

a. **Four Quadrant model** (2006, revised)

b. **SAMHSA Six Levels of collaboration/Integration** (SAMHSA, 2013)

c. **IPAT**: Integrated Practice Assessment Tool (Michigan Health Endowment Fund, 2019)

d. **AHRQ**: Agency for Healthcare Research and Quality – A Framework for Measuring Integration of Behavioral Health and Primary Care https://integrationacademy.ahrq.gov/products/behavioral-health-measures-atlas/integration-framework

e. **MeHAF**: Site Self-Assessment Survey (Maine Health Access Foundation, [n.d.])

f. **PCMH**: Patient Centered Medical Home https://www.ncqa.org/ programs/health-care-providers-practices/patient-centered-medical-home-pcmh/distinction-in-behavioral-health-integration/

g. **GHI Framework:** General Health Integration (GHI) Framework for BH organizations - Eight Domains (Chung, 2020) https://www.thenationalcouncil.org/resources/advancing-integration-of-general-health-in-behavioral-health-settings-a-continuum-based-framework/

The CHI Framework is intended to be responsive to the aspirations, concerns and challenges facing people served, providers, public/private payers and population health managers with regard for how to best meet the needs of individuals with complex PH, BH and SDOH challenges in a clinically effective and cost-effective manner.

Definition

Comprehensive Healthcare Integration (CHI) Framework

The CHI Framework is an adaptation and expansion of the previously published General Health Integration (GHI) Framework for BH organizations (Chung, 2020). In CHI, the eight evidence-based GHI Domains have been updated to be applicable to both PH and BH settings and to both adult and child populations, and measurement of progress has been organized through defining three "Integration Constructs" with performance metrics that provide opportunity to demonstrate value. The CHI Framework can function as a measurement tool for integratedness that permits practices, programs and provider organizations to delineate to themselves, payers and population managers their progress in delivering integrated services to people served.

The purpose of the CHI Framework is to establish a broad and practical framework to guide bidirectional integration (integration of PH into BH settings and BH into PH settings), as well as be applied and/or adapted to child and adult populations, small and large providers, rural and urban locations, and organizations with varying levels of resources.

WHY NOW?

During the past several decades, there has been considerable progression of knowledge on PH/BH integration, including research defining different methods or models of service delivery, research delineating tools and procedures that support these models, evidence demonstrating improved outcomes and value for diverse populations and in multiple settings, and expanded understanding of both facilitators and barriers to implementation of integrated services in different types of programs, practices and organizations.

The evidence strongly suggests that people of all ages living with co-occurring PH, BH and SDOH needs have higher health costs yet experience poorer health outcomes. Emerging evidence suggests that more coordinated or integrated oral, mental health and substance use treatment services can increase access to needed care, improve patient outcomes and potentially reduce healthcare costs (Bowling, 2020). Additionally, these individuals and families are faced with significant inequities based on racial, ethnic and economic challenges in both PH and BH settings. The evidence further suggests that populations with co-occurring PH, BH and SDOH needs are likely to benefit from evidence-based integrated interventions in whatever setting they are best engaged, with more complex and high-cost populations generally requiring higher levels of service intensity. As one example, people with severe mental illness (SMI) with unmet PH needs can achieve demonstrably improved health outcomes if evidence-based PH interventions are integrated into BH service settings (Cook, 2021). Further, there have been numerous demonstration projects that have illustrated successful implementation of various types of PH and BH integrated services and programs in a variety of PH and BH practice settings, systems and populations such as the SAMHSA Primary Care Behavioral Health Integration (PCBHI) grant programs and the Missouri's Health Home model (Parks, 2014; Cook, 2021).

Nonetheless, despite extensive progress in recognizing the value of integrated services and demonstrating approaches for implementation, broad uptake of integrated services for people with co-occurring PH/BH/SDOH needs remains much more limited than the need for those services – and the human and financial costs of not providing those services – would suggest.

The recent 2021 Bipartisan Policy Center Report (BPCR) (Barton, 2021) recognized policy barriers that prevent the advancement of integrated care, and recommendations to address those barriers. The CHI Framework presented in this paper provides more specific guidance to address many barriers identified by the Bipartisan Policy Center barriers including:

- **Define a set of core service elements necessary for provision of integrated PH and BH services.**

- **Identify a set of standardized quality and performance metrics for practices/programs integrating PH and BH services.**

- **Incentivize Certified Community Behavioral Health Clinics (CCBHCs) and FQHCs to strengthen integration of PH and BH services.**

- **Incentivize Medicaid and Medicare (including through contracted managed care organizations [MCOs]) to strengthen funding and regulation to support implementation and sustainability of integrated PH and BH services.**

- **Develop core integrated care measures and ensure accountability, particularly with respect to health disparities.**

This paper endorses this broad policy guidance. The CHI Framework is intended to address the following policy and implementation barriers identified in the BCPR and summarized below:

- **Lack of flexibility in implementation of integrated services:** Many grant-funded PH/BH implementation projects require implementation of specific evidence-based "models" to fidelity. However, sustainability is difficult once the grant or other special funding ends because adequate continuing financing and reimbursement are not available. Further, improving integratedness requires a significant cultural adaptation – and significant "non-billable" time and resource commitment to achieve that adaptation – among clinicians and administrators in most PH and BH organizations. In addition, "fidelity to model" implementation can be challenging because provider configurations vary greatly by geography, payor mix and payment options, as well as federal, state and other regulatory support. **Pathways for improving integrated services are needed that are both specific enough to operationalize and flexible enough to adapt to each organization's resources and populations served.**

- **Lack of appropriate evidence-based bidirectional measures of progress in integratedness:** While existing tools for measuring progress in integration such as the. SAMHSA Six Levels, (SAMHSA, 2014) the Integrated Practice Assessment Tool (IPAT) (Michigan Health Endowment Fund, 2019), [NCQA's Patient-Centered Medical Homes (PCMH) Integration Checklist](#), SAMHSA's Organizational Assessment Toolkit (OATI) (SAMHSA, 2014), MeHAF Site Self-Survey Assessment Survey (Maine Health Access Foundation) and [Behavioral Health Integration Capacity Assessment (BHICA)](#). The recent 2021 Bipartisan Policy Center Report (Barton, 2021) recognized policy barriers that prevent the advancement of integrated care and made recommendations to address those barriers. The CHI Framework presented in this paper provides more specific guidance to address many barriers identified by the Bipartisan Policy Center barriers. **Consequently, an improved tool is needed for measuring integratedness in adult, adolescent and child, PH and BH, and rural and urban settings.**

- **Lack of connection of integratedness to value:** Existing tools for measurement of integratedness do not build in measurable indicators to document progress while also tracking process and outcome metrics relevant to demonstrating value. Thus, payors are reluctant to fully commit to investing in processes measured by these tools. Providers and payers may be focused on reporting on external requirements (e.g., HEDIS measures) that are not directly relevant to successful outcomes related to integration activities. Accountability and attribution of patients to responsible providers can also be unclear. For example, is a BH provider or PH provider responsible for monitoring HBA1c for patients on atypical antipsychotic medications when these patients are assigned to PCPs in risk-based relationships? **Relevant metrics tied to value of developing integrated services for defined populations in each type of PH and BH setting are needed in order to demonstrate value and justify payment.**

- **Lack of financing to support either implementation or sustainability:** While there is growing policy support for integration, opportunities for sustainable operations remain limited. For example, transitory grant funding, low reimbursement rates and lack of an all-payer reimbursement approach has resulted in limited utilization of the Collaborative Care Management (CoCM) codes that can pay for the evidence-based CoCM care coordination, consultation and service packages (Phelps et al., 2020). Complex documentation requirements for billing of screening, care management and care coordination activities, in addition to varying requirements among PH and BH payors and regulators, increase administrative costs and prevent providers from developing an efficient integrated services infrastructure. This may be especially true in settings serving children and adolescents. Further, current available payment methodologies often cannot support including important team members such as Certified Peer Specialists and Community Health Workers. Innovative funding models, like the prospective payment system that can be used in certain state Medicaid programs to fund CCBHC implementation have demonstrated value (See [Appendix 6 – Table and Charts of Integrated Programs and Measures](#)). However, these programs have limited reach and applicability at present. **Improved methods are needed for all payers to finance both implementation efforts and sustainable integrated service provision in all types of settings.**

CHARTING A PATH FORWARD

The new CHI Framework described in this paper supports broader efforts to disseminate integration by providing a structure for implementation of integrated services, demonstration of value of integrated services through relevant process and outcome metrics, and payment methodologies for improving and sustaining integrated services. Together, these elements translate to practical and progressive guidance for providers, payers and population managers and can thus guide improved performance of the system to better serve children, adolescents, adults and their families with co-occurring PH, BH and SDOH needs.

In the following sections of this paper, we will describe CHI in more detail and show how it concretely addresses the barriers referenced earlier in this report.

Characteristics of the CHI Framework

- **Broad application to adult and child PH and BH settings:** Allows a range of providers to match community needs, payer priorities and organizational capacity to implement meaningful improvements regardless of size, stage of integration and type of payer. Can be applied to all settings and populations: PH/BH, adult/child, rural/urban.

- **Evidence-based Domains of integration:** Available evidence on the contributors to successful integrated service delivery is used to create eight Domains of integratedness to guide service design. These Domains incorporate best practices in integrated services and are designed to be consistent with a wide range of "integrated service models."

- **Measurable standards for integration:** Defines progressive and measurable "core service elements" for each of the eight Domains that permit measurement of organizational progress.

- **Self-assessment tool:** Can be used to assess the current state of integration in a program/clinic as well as to plan improvement and measure progress in integration and plan improvement.

- **Flexibility of achieving successful progress in integration:** Identifies three "Integration Constructs" – each of which has the capacity to demonstrate value – in order to provide flexible targets of progress.

- **Connection of progress in integration to metrics demonstrating value:** Delineates metrics that can be measured and utilized by providers to demonstrate value for each level of progress in integratedness (i.e., each Integration Construct) in a range of settings.

IV. The Comprehensive Healthcare Integration Framework

The CHI Framework consists of eight evidence-based "Domains of Integration" and associated subDomains along with Constructs of progressively advancing implementation elements by specific Domain and subDomains (Chung, 2020 and 2016).

The Domains are evidence-based in that there is published evidence for most of individual integration interventions within the eight Domains showing that each of the several particular interventions increasing integration results in improved quality of care and/or outcomes. A general reading of the literature suggests that multicomponent models generally are more effective than single intervention models, but they are more difficult to implement with fidelity. As expert consensus in this paper, we are reasserting that combining multiple integration interventions is highly likely to improve the quality of care and/or outcomes more than relying on a single integration intervention.

Each Domain represents structural and process elements within a program, practice or provider organization that support delivery of integrated services to people served (see Appendix 3 for a full depiction of the CHI Framework tool). The Domains emphasize integrated service processes that are directly connected to the services that people experience. Progression in each Domain or subDomain thus improves the integratedness of the program, practice or organization. Full definitions are in Appendix 2.

Eight Domains of Integration *(See Appendix 3 for detailed descriptions)*

The processes identified in each Domain are all related specifically to addressing PH and BH issues in an integrated manner. The eight broad Domains:

1. **Screening, Referral and Follow-up**

2. **Prevention and Treatment of Common Conditions**

3. **Continuing Care Management**

4. **Self-management Support**

5. **Multidisciplinary Teamwork**

6. **Systematic Measurement and Quality Improvement**

7. **Linkage with Community/Social Services for SDOH**

8. **Financial Sustainability**

CHI Framework Domains & subDomains

1.

Screening, referral to care and follow-up

1.1. Screening and follow-up

1.2. Facilitation of referrals

2.

Prevention and treatment of common conditions

2.1. Use of screening and prevention guidelines protocols

2.2. Use of treatment guidelines or protocols

2.3. Use of medication for common PH and/or BH condition

3.

Continuing care management

3.1. Longitudinal clinical monitoring and engagement

4.

Self-management support

4.1. Use of tools to promote patient activation and recovery

5.

Multi-disciplinary teamwork

5.1. Care team

5.2. Sharing of treatment information, case review, care plans and feedback

5.3. Integrated care team training

6.

Systematic measurement and quality improvement

6.1. Use of quality metrics for physical health program improvement and/or external reporting

7.

Linkages with community/social services for social determinants of health

7.1. Linkages to housing, entitlement and other social support system

8.

Financial Sustainability

8.1. Process for billing and outcome reporting

8.2. Process for expanding regulatory and/or licensure opportunities

The CHI Framework presented in this paper advances the previously published GHI Framework based on these eight Domains. These advances are intended to produce a framework that is more broadly applicable to supporting progress in integration nationally by addressing the barriers identified by the BCPR and others and described above. These advances are described in more detail in Appendix 3.

The CHI Framework identifies "core service elements" as recommended by BPCR in the eight Domains that permit measurement of progress in "integratedness."

Since there is more than one way to deliver integrated services that represent measurable improvement compared to historical practice, different provider organizations have implemented integrated services in different ways due to differences in organization size, resources and local healthcare environment. Using expert clinical consensus to review the evidence associated with each Domain, we have specified three Integration Constructs to delineate how organizations can progress on each Domain and that allow for flexible targets of progress in integratedness for providers of different levels of development, resources and capacity. For each Domain and subDomain there are four columns ranging from historical practice to more comprehensive integration, and for each column, there are specific markers for the types of structures and processes that would represent achievement of the standard in that column. Figure A illustrates how this works for Domain 1: Screening, Referral and Follow-up. For a more complete picture of all eight Domains in the Framework, go to Appendix 3.

Figure A: The CHI Framework tool Domain 1 – Integrated Screening, Referral to Care and Follow-up and the First of Two subDomains: Screening and Follow-up for Co-occurring Conditions.

KEY ELEMENTS of Integrated Care		PROGRESSION to Greater Integration			
DOMAINS	**SUBDOMAINS**	**HISTORICAL PRACTICE**	**SCREENING AND ENHANCED REFERRAL**	**CARE MANAGEMENT AND CONSULTATION**	**COMPREHENSIVE TREATMENT AND POPULATION MANAGEMENT**
1. Integrated Screening1, referral to care and follow-up (f/u).	**1.1** Screening and follow-up for co-occurring behavioral health (Mental health, SUD, nicotine), PH conditions and preventive risk factors. **1.2** Facilitation of referrals and f/u.	Response to patient self-report of co-occurring behavioral health and/or PH and/or chronic illness with f/u only when prompted. Referral to external BH or primary care provider(s) (PCP) and no systematic f/u.	Systematic screening for high prevalence BH and/or PH conditions and risk factors3 and proactive health/BH education to support motivation to address risk factors and positive screenings. Includes patient engagement in these processes. Identify PCP and BH provider (if any) for all. Formal agreement between PH practice and BH providers to routinely facilitate referrals and share information about progress. Measurement of referrals to assess show rate and information exchange with the referral source.	Systematic screening and education for BH and/or PH conditions and risk factors PLUS systematic data collection and tracking of positive results to ensure engagement in appropriate services. Capacity for integrated teamwork, such as a nurse or care coordinator for a BH team, or a BHC for a primary care team, to ensure follow up and coordination re positive screenings, with access to well-coordinated referrals to internal or external PH and/or BH service providers.	Systematic screening and tracking for BH and/or PH conditions PLUS routine capacity for registries and more comprehensive analysis of whole patient population to stratify by severity of PH/BH complexity and/or utilization to match to level of intensity of integrated care coordination needed. In addition to integrated teamwork, there is a systemic collaborative and consulting partnership with PH and BH services in one or more locations that can help meet population needs internally through both integrated service delivery and enhanced referral facilitation to both internal and external partners, with automated data sharing and accountability for engagement.

See Appendix 3 for the full tool that lists all eight Domains and subDomains.

THREE INTEGRATION CONSTRUCTS

Each Integration Construct describes an organized approach that has several evidence-based or expert-consensus supported core service elements drawn from the eight Domains for "integratedness" that can be implemented flexibly depending on the mission, resources, incentives and capabilities of a provider organization. The term "CONSTRUCT" is defined as an idea or theory containing various conceptual elements and implies that the core elements of integratedness in each Construct can be adapted with some degree of consistency by organizations whose initial targets may range more basic to more advanced integratedness based on available resources.
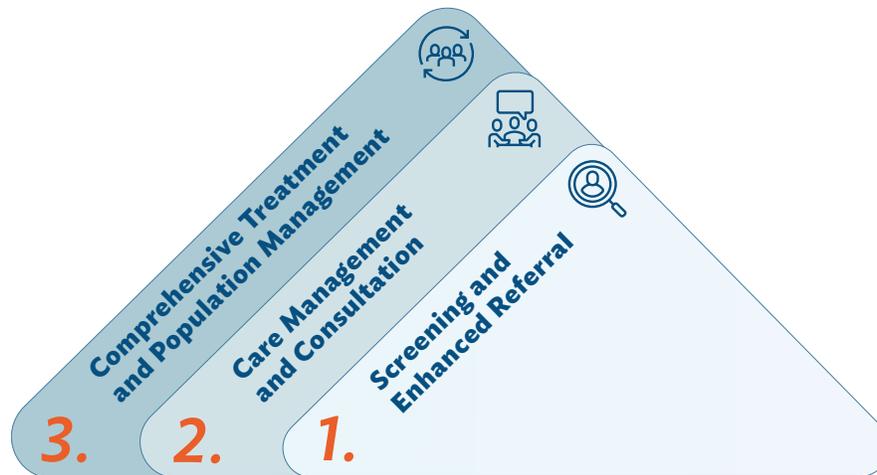
The Three Integration Constructs are:

1. **Screening and Enhanced Referral**

2. **Care Management with Consultation**

3. **Comprehensive Treatment and Population Management**

The names of the Constructs are driven by the Domains' primary integratedness workflows which the provider organization must implement to be successful in demonstrating value through either demonstrating measurably improved health outcomes or implementing measurable processes that have been shown to directly result in improved health outcomes. Each of the three Constructs is connected to specific progress within the Domains and has measurable standards that are identified in one of the four columns in the CHI Framework tool, the fourth column being "historical practice." See definition and discussion of measuring value for each Integration Construct in this section.

Each Construct provides "more" integratedness than historical practice and, as described below, is associated with evidence demonstrating that implementation of that Construct produces the organizational processes needed to demonstrate measurable value with regard to specific co-occurring conditions, interventions and/or populations. Further, the Integration Constructs are progressive: Each progressively advancing Integration Construct from 1 to 3 requires the implementation of the elements of the prior Construct. That is, if an organization rates itself as achieving Integration Construct 3 (Comprehensive Treatment and Population Management), it is expected to have exceeded or accomplished the elements of the preceding Integration Constructs 1 and 2 for each Domain.

However, although the Constructs are progressive, this paper is NOT asserting that for a particular organization, one Integration Construct is necessarily more desirable than another. The optimal choice for a particular organization at a particular point in time will vary by its current development, resources, capacity and incentives. The best match for an organization may be to implement Integration Construct 1 if it is able to demonstrate measurable value for people served as well as for payers and population managers. In this way, the CHI Framework, utilizing the eight Domains and the three Integration Constructs, provides a roadmap for improvement in integratedness that can be applied by a wide variety of organizations and systems.

Examples of Program Implementation Within the Three Integration Constructs

SCREENING AND ENHANCED REFERRAL	CARE MANAGEMENT AND CONSULTATION	COMPREHENSIVE TREATMENT AND POPULATION MANAGEMENT
• PCare (Druss, 2010) • PRISM-e (Krahn, 2006; Bartels, 2004) • Primary Care Case Management	• Primary Care Behavioral Health Model • ACA Section 2307 health homes for chronic conditions • CoCM • CCBHCs	• Primary Care-Mental Health Integration (PC-MHI) in the U.S. Veteran's Administration • Montefiore Health System ACO • Services for the Underserved (New York City) – combining FQHC and Community Mental Health Center (CMHC) programs

INTEGRATION CONSTRUCT 1: SCREENING AND ENHANCED REFERRAL

This construct optimizes screening and "enhanced" referral processes. Implementation of this Construct using the specific services appropriate to it from the eight Domains results in improved routine screening of basic PH or BH conditions and - when those conditions are present -improved navigation and enhanced referral to ensure that referrals are tracked, appropriate high-quality treatment is provided and results communicated. Enhanced referral requires developing a purposeful and planned partnership between PH and BH practices with a guarantee to work together to improve referrals.

The express purpose of the partnership is to collaborate on shared patients to improve access, timeliness and quality of care. This Integration Construct is often a good place to begin, as it does not require significant investment in on-site PH in a BH setting or on-site BH in a PH setting. This can be the best practice Construct for smaller practices/programs that may have fewer resources for expanded staffing or infrastructure.

Patient Experience: In Integration Construct 1, patients and their families will experience providers in different locations working as an "integrated team" to address co-occurring needs. In the PH setting, the adult, adolescent or child patient and their family experience the provider as being interested in identifying the BH condition, facilitating connection to a BH partner and ensuring proactive communication and follow-up with the BH partner to be sure that the BH condition is being addressed successfully. In the BH setting, the corresponding experience can occur for identification, connection, communication and follow-up for assessment, prevention and treatment of relevant PH conditions.

INTEGRATION CONSTRUCT 2: CARE MANAGEMENT AND CONSULTATION

This Integration Construct includes robust program commitment to a set of screening and tracking processes with associated on-site care coordination and care management. It also includes an integrated teamwork that involves routine consultative collaboration with a PH specialist in a BH setting (or a BH specialist in a PH setting) that allows for the practice/program to be routinely providing integrated prevention and treatment services and interventions for common conditions – and monitoring outcomes of those interventions – for a significant cohort of its population. This Construct typically requires some in-organization PH (if BH) or BH (if PH) infrastructure support (e.g., access to consultation, additional staff resources for care coordination, registries) for treatment and care management with an emphasis on certain prevalent conditions that can be prevented from emerging (primary prevention) or if present, can be stabilized and prevented from worsening (secondary prevention or basic treatment). Examples may include (but are not limited to) major depression, alcohol use disorder, opioid use disorder (OUD), anxiety disorder and ADHD as applicable in adult or child and adolescent PH settings, and diabetes, HTN, childhood obesity, asthma, tobacco cessation and colon cancer screenings as applicable in adult or child BH settings.

Patient Experience: In Integration Construct 2, patients and their families will experience integrated teamwork in a single location (a behavioral health consultant in the PH setting; a nurse and/or care coordinator in the BH setting) as well as a designated person or team (which may include a peer or a community health worker) that establishes a caring relationship with them to help them follow through with needed services, track whether the services are working and assist with service improvements if needed. Patients and families in Integrated Construct 2 have regular and proactive outreach by their "integrated team members" (who often will include peers and/or community health workers) to address prevention and treatment of a more comprehensive set of co-occurring conditions, as well as issues related to improving overall wellness, such as addressing lifestyle changes (diet, exercise) and social determinants (food insecurity, housing). This type of outreach and engagement may in turn contribute to an experience of being cared for in a truly integrated "health care home (HCH)." This additional level of integrated service complements the communication and coordination between BH and PH providers (some of whom may be in different locations or organizations), which is particularly helpful for those whose level of need or complexity makes it harder for them to follow through with all the needed services without additional support, encouragement, monitoring and coordination of care.

INTEGRATION CONSTRUCT 3: COMPREHENSIVE TREATMENT AND POPULATION MANAGEMENT

This Construct typically requires comprehensive PH and BH staffing in a single organization such as a hospital, independent clinical practice, FQHC or large community mental health center or by two partnering organizations (FQHC and CMHC, or within a large health system, particularly one that is managing a defined population, such as an Accountable Care Organization) in very close proximity with shared protocols and information systems. This Construct implies a high level of shared accountability for a population with complex needs, with the organization(s) taking primary (or shared) responsibility for PH and BH care for a significant number of people in the community. In this Construct almost all people served receive appropriately integrated PH and BH primary prevention services as well as integrated treatment by the organization(s) for a wide range of PH and BH conditions (e.g., HIV, diabetes, CAD, HTN and asthma, as well as depression, anxiety, ADHD, substance use disorder (SUD), schizophrenia and bipolar disorder). An organization at Integration Construct 3 is addressing more issues for more people and providing more integrated treatment services than an organization at Integration Construct 2. Organizations that have achieved some level of implementation of Integration Construct 3 have demonstrated their ability to measure improved overall health outcomes for their populations along a variety of Domains, as well as being able in some instances to take shared risk for cost and outcomes and demonstrate improvements in both for identified populations with very complex needs who are utilizing high levels of acute services but not making progress in health and wellbeing (Chang, 2020; Cook, 2021).

Patient Experience: In Integrated Construct 3, patients and their families experience a higher level of integrated teamwork and more proactive engagement and coordination of care. BH and PH treatment providers (not just consultants and care coordinators) function as a complete team, often in a single location, so that patients and families experience everyone working together and having access to shared information and service plans on a routine basis for co-occurring conditions. Patients and families in Integrated Construct 3 (like Construct 2) have regular and proactive outreach by their "integrated team members" (who often will include peers and/or community health workers) to address prevention and treatment of a more comprehensive set of co-occurring conditions, as well as issues related to improving overall wellness, such as addressing lifestyle changes (diet, exercise) and social determinants (food insecurity, housing). This type of outreach and engagement may in turn contribute to an experience of being cared for in a truly integrated HCH. Finally, patients and families in Integrated Construct 3 experience the care team as reaching out to them proactively in a caring manner even when they do not show up or are at risk of losing contact entirely, rather than letting them drop out and wait for a crisis before they are re-engaged. This experience of engagement in Integrated Construct 3 is particularly valuable for individuals and families who experience overwhelming challenges, great difficulties in participating in routine (vs. emergency) services and high levels of marginalization and/or geographic, cultural, racial and linguistic barriers to receiving needed help and support.

Broad Application to Adult and Child PH and BH Settings: The CHI framework is designed to be applicable to all settings and populations. It can be utilized by both PH and BH service settings, by settings serving children and adolescents as well as adults and by settings that are smaller or larger, in various geographies (rural, urban) and with varying levels of resources. Having a unitary framework has significant advantages, as many PH organizations are increasingly adding BH services and vice versa. Using a framework that can be used by multiple types of PH and BH programs or practices, whether in the same or different organizations, has advantages for integratedness goal-setting and for providing a common language for communicating value internally and externally, with the potential to simplify and accelerate integration adoption.

Flexibility of Achieving Successful Progress in Integration: One of the most important advances of the CHI Framework is intentionally identifying different degrees of progress in integratedness as having the capacity to demonstrate value – both for people served and payers – thereby providing all stakeholder partners sharing responsibility for populations, including funders, with flexible markers of success that are adaptable to local priorities and needs. This adaptability addresses some of the barriers previously identified by the BPCR.

V. Using the CHI Framework:

Improving Integratedness and Achieving Implementation of Integration Constructs

Measuring integratedness using the eight Domains of the CHI Framework allows for demonstration of progress in implementation of Integration Constructs that can guide identification of improvement targets and objectives (for providers) as well as provide objective indication of implementation success (for payers and regulators).

Using the CHI Framework helps address the following questions for a program, practice or provider organization:

- **For the eight Domains:** What is the program/clinic level of measurable progress in each Domain? What improvement targets (e.g., increasing capacity for integrated structure, care processes and measurement and tracking) are most appropriate for guiding progress in that Domain?

- **For the three Integration Constructs:** Which Integration Construct currently best represents the program/clinic across all the Domains? Which Construct goal is likely to be the best fit? What improvement steps help the program/practice/provider organization either strengthen the delivery of its current Integration Construct or help it to progress from one Construct to the next, depending on its goal?

Eight Evidence-based Integration Domains Within Each of the Three Integration Constructs

SCREENING & ENHANCED REFERRAL	CARE MANAGEMENT & CONSULTATION	COMPREHENSIVE TREATMENT & POPULATION MANAGEMENT
Achievement of early phase components of the eight Domains	Achievement of intermediate phase components of the eight Domains	Achievement of advanced phase components of the eight Domains
Quality metrics that confirm achievement	Quality metrics that confirm achievement	Quality metrics that confirm achievement

For payers and regulators, the CHI Framework can help answer similar questions regarding baseline level of integratedness of both individual providers and programs, as well as potentially the entire network. It can then subsequently guide discussions with providers regarding the appropriate Domain targets for progress in integratedness, the desired Integration Constructs to be achieved to meet standards and/or receive payment incentives and the relevant metrics to be utilized by providers in each Integration Construct to demonstrate value.

These measurable standards of progress can provide a common language not only for provider organizations, but also for payers and population managers wanting to have confirmation that the services they are funding or regulating can demonstrate achievement of standards at identified levels of progress in each Domain.

Further, the CHI Framework offers a structure within which each organization or stakeholder is prompted to begin to collect more detail on the "reach" of efforts to improve integratedness. For each Domain of integratedness in the Framework, a program, practice, provider organization, payer or population manager has opportunity to ask the following questions:

What level of progress has the organization made generally in the process addressed by this Domain? And what level of progress more specifically as follows:

- **For which target populations? (Adults, children and adolescents, Medicaid, indigent, homeless, vulnerable minorities, etc.)**

- **For what percentage of those populations?**

- **For which issues? (Mental health [MH], SUD, diabetes, hypertension, prevention, treatment, etc.)**

For example, if rating the Domain of Screening, Referral and Follow-up: Potential markers that would contribute to a program or practice performing better than "historical practice" and achieving the standard defined by the next higher column are the ability to report the screening rate for depression, track follow-up for those with a positive screen and perform these processes at a reasonable standard (e.g., meet or exceed a local benchmark).

For a complete description of the recommended steps in using the CHI Framework, please see Appendix 4. Getting Started with CHI Framework: Planning for Change and Implementation.

The key connection between integratedness, the three Integration Constructs and payment is that **EACH** Integration Construct incorporates organized processes to support integrated services that can demonstrate value, as discussed next.

INTEGRATION CONSTRUCTS: DEMONSTRATING VALUE

Using the CHI Framework Domains to guide measurement of the eight Domains of integratedness to identify achievement of one of the three Integration Constructs in any practice or program is associated with the ability to demonstrate value to population managers or payers for the issues addressed and the population served. Although moving from Integration Construct 1 – Screening and Enhanced Referral, to Construct 2 – Care Management and Consultation, to Construct 3 – Comprehensive Treatment and Population Management represents a progression in the depth and breadth of integrated services, one important new assertion in the CHI Framework is that implementation of ANY of the Constructs can produce value for the people and populations receiving services in that Construct.

A practice that provides only Integrated Construct 1 is still capable of producing value. Practices, programs and organizations that provide Integrated Construct 2 or Integrated Construct 3 can provide value as well, usually impacting more complex populations plus addressing a greater number of clinical issues and/or issues related to SDOH and/or health equity.

Demonstration of value within each Integration Construct will usually require shared identification and selection of metrics that are relevant both to the priorities of the payer system and the needs of the population served by the provider. For each Construct, the selected metrics and targets can be utilized to demonstrate the value of the integrated services provided and thereby support implementation of payment methodologies, which in turn support implementation and sustainability of the Integration Construct. When progress on the issues addressed for those populations is measured and reported, payers and population managers can use the demonstration of measurable value to support investments in implementation, infrastructure and sustainability. Providers sharing with payers the appropriately matched process and outcome metrics associated with each Construct are then in position to demonstrate that measurable efforts to improve integratedness are consistent with payer/ regulator priorities for demonstrating value within the larger healthcare management structure. Working within the CHI Framework will allow payers and population health managers to have a better way of understanding and justifying resource allocations and regulatory frameworks that support integrated services.

Defining How Each Integration Construct Produces Value
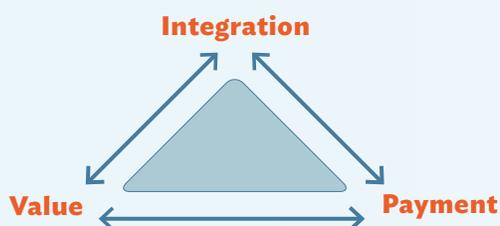
Definition of Value:

A measurable improvement in individual or population health and/or BH outcome measures in relation to expenditure. For most services and populations, integrated services may involve increased cost, but the improved health outcomes from Integrated Care outweigh the additional payment and therefore provide value. For populations that already have high cost and poor outcomes, value may include both improved health outcomes and equivalent or reduced spend.

Provider and patient satisfaction and experience can also be incorporated into value-based arrangements. All providers are accountable for identifying and addressing disparities in both BH and PH outcomes, as appropriate to the Integration Construct provided, preferably aligned with efforts targeted to improve equity for traditionally marginalized populations.

Defining how EACH Integrated Construct produces value also provides guidance on what to measure (in terms of process measures or health outcome measures) and how to finance the implementation and sustainability of that Integrated Construct most effectively.

For **each** Integration Construct, therefore, it is necessary to define:

- **How is value produced?**

- **What metrics are used to demonstrate value?**

- **How is the value produced by each Construct connected to financing the implementation and sustainability of that Construct?**

The first two of these questions will be addressed in this section of the paper. The third question will be addressed in the next section, on Financing and Sustainability.

Answering this question for any Integration Construct first requires a general discussion of identifying and tracking outcome metrics in ANY PH or BH setting and then a discussion of the application of those metrics for each Construct.

IDENTIFYING AND USING METRICS TO DEMONSTRATE VALUE: GENERAL DISCUSSION

There is an important difference between measuring progress in integration using the CHI Framework and identifying and using targeted quality metrics to demonstrate value for people served, population managers and payers.

- **When using the CHI Framework to measure and improve integratedness and identify achievement of Integration Constructs,** the focus is on demonstrating implementation of integration staffing patterns and care processes.

- **When identifying and using metrics to demonstrate value,** the focus is on results of the integrated services (in any Integration Construct) on the health and resource utilization specific to the issues addressed and the people who benefit from these services, whether through improved care processes (Did you see the primary care provider or the BH specialist? Did you receive the colorectal or Hepatitis C screen?) or improved results (Did you receive the appropriate intervention, and do you demonstrate improved health as a result, as measured by changes in your PHQ-9, BAM, weight or HbA1c?).

It is important to note that measures of structure and process to attain a certain level of integratedness within an Integrated Construct are the means **but not the end (necessary, but not sufficient)** to demonstrating value as reflected in improved outcomes for members. For payers, the connection of improved care processes to metrics that demonstrate value provides the support needed to justify the necessary investments in financing providers to improve and sustain integrated service delivery.

CHOOSING METRICS THAT DEMONSTRATE VALUE

Ideally, selection of metrics and targets for those metrics will be a shared process between providers and payers. In many instances, however, providers or payers may begin by selecting metrics unilaterally and then work to have those metrics adopted by others.

In either case, selection of metrics for demonstrating value through provision of an Integrated Construct in any setting should include:

1. **One or more metrics focusing on prevention and/or treatment of PH conditions.**

2. **One or more metrics focusing on prevention and/or treatment of BH conditions.**

3. **One or more metrics that may apply to both (e.g., follow-up within seven days of hospital discharge, all-cause readmissions, medication reconciliation and cross-communication).**

Practices, programs and provider organizations should choose measures appropriate to issues relevant to the needs of the population served (including population disparities), aligned with priorities of payers and population managers in their community and matched to implementation of whichever Integration Construct(s) they have selected and the associated Domain-specific care processes they are choosing to improve.

PH providers must hold themselves accountable for demonstrating value by measuring BH outcomes and BH providers must hold themselves similarly accountable for PH outcomes. Through identifying and achieving metrics of accountability for the results of integrated service delivery, there can be a strengthening of the processes needed to establish and maintain achievable standards of care for all providers.

Many providers and payers try to simplify this process by choosing measures reflective of external reporting requirements, such as National Quality Forum (NQF), National Committee for Quality Assurance (NCQA), or the Healthcare Effectiveness Data and Information Set (HEDIS). However, providing any Integrated Construct usually requires staffing and work process changes that do not have standard NQF or NCQA defined performance measures. While payers may often only incentivize based on such measures, it is important to recognize that such metrics are often not well-suited for operational management. **Therefore, from a provider or payer perspective, it may be better to start with identifying metrics that fit the needs of the local population rather than starting with metrics that fit external quality organizations.** Further, if using the latter metrics, it may be easier to ignore many of the exclusions in these "formal" measures and apply them more generally. For example, screen all persons for Hepatitis B, C and HIV instead of only persons with SUD, screen all patients for metabolic syndrome instead of just patients on antipsychotic medications with schizophrenia and persons with diabetes.

Metrics that reflect value produced by each of the three Integration Constructs require:

- **Identification of relevant PH, BH or other health issues/conditions to measure:** For example, diabetes, childhood asthma, preventive colonoscopy screenings, depression, opioid use disorders, SDOH and health equity. Start with the issues that are most relevant and achievable and continue to add other issues within the current Integration Construct, or within the next higher Integration Construct as integratedness progresses.

- **Identification of relevant Domains in which to measure progress that is connected to improvement:** Screening, enhanced referral, prevention and treatment interventions, resource coordination and self-management, among others.

- **Identification of achievable processes for systematic measurement and tracking of metrics (for each issue and/ or Domain) across settings:** Completing the measures, aggregating them, tracking the results and initiating efforts to improve the results within key Domains will provide more robust evidence of the provider's progress in demonstrating the value of the Integration Construct that has been implemented.

- **Progression of metrics through the Integration Constructs:** Each higher Integration Construct will require new and expanded metrics, as well as the expectation to continue to utilize and demonstrate value through the metrics for the preceding Construct. For example, Integration Construct 2 metrics would include attention to measures from continuing processes consistent with Integration Construct 1.

METRICS FOR EACH INTEGRATION CONSTRUCT

The following are illustrations of how each Integration Construct is supported by evidence of how it produces value and examples of metrics that could be used to demonstrate that value. See Appendix 6, Table 2. The metrics selected as examples for each of the three Constructs are based on a combination of metrics for use in evidence-based processes for care and some elements of Core Quality Measures Collaborative metrics, HEDIS, NQF and CMS Meaningful Measures Hub. The metrics are not intended to be inclusive of all possibilities. Systems will have to select from a broad array of similar metrics based on their current internal baseline capacities, the populations they are serving (adult, child and adolescent, substance use, mental health, primary care, specialty care) and the issues being prioritized for attention. Once metrics are identified, providers, payers and population managers can work collaboratively to set quality benchmarks according to local baseline data as well as published national guidelines. Benchmarks should be set through the lens of health equity, with proactive measurement of disparities in achievement of each benchmark.

METRICS FOR INTEGRATION CONSTRUCT 1 – SCREENING AND ENHANCED REFERRAL:

The key strategy of this Construct is systematic identification of co-occurring issues of concern and ongoing tracking of connection to care, participation in care and progress in care for those issues by either the PH or BH provider, or both, rather than just referral without active tracking should a problem emerge. The research demonstrates that with additional investment to produce the relatively small infrastructure support for these processes, many individuals served have overall better engagement with PH or BH care and better corresponding outcomes. That is, the improvement in health is worth the investment of additional resources to get there. For example, in the Primary Care Access, Referral and Evaluation (PCARE) study (Druss, 2010), patients living with SMI served by BH clinics who had navigation support to access primary care provider (PCP) appointments to ensure adherence compared to those who received advice to seek PCP appointments with a list of available providers (historical practice) had greater engagement with PCPs and received more recommended preventive services and lowered their cardiovascular risk score compared to usual care. Moreover, in a multisite study comparing primary care integrated care sites to behavioral health clinics for depressed older adults, patients randomized to BH specialty sites had 49% engagement rates compared to 71% engagement in primary care. The relatively high engagement rate in BH specialty care after referral was attributed to the enhanced navigation protocols put in place by the primary care sites. Patients referred and engaged for depression treatment in behavioral health clinics were more likely to be improved (Bartels, 2004; Krahn, 2006).

The process measure of establishing a screening and referral workflow is a first step; the tracking and measurement of effective referrals and engagement is the pathway to demonstrate value to payers.

METRICS FOR INTEGRATION CONSTRUCT 2 – CARE MANAGEMENT AND CONSULTATION:

The additional strategy of this Construct is that rather than just systematic screening and tracking, the program/practice has a robust care coordination infrastructure for a defined population, covering multiple co-occurring prevention and intervention targets, possibly including social determinants and using registries to track progress in an organized way. Further, there is an integrated team in the program or practice that provides at least consultation such as a nurse care coordinator in a BH program or a BH Consultant in a PH program and supports some direct treatment of co-occurring conditions within that setting. The research demonstrates that with additional investment to produce the more robust teamwork and associated infrastructure support for these integrated services, targeted individuals with multiple complex conditions who may not do well with less support have better overall PH and/or BH outcomes and more efficient utilization of PH and/or BH expenditures. Examples of this Construct include the widely cited and replicated the Improving Mood — Promoting Access to Collaborative Treatment model (often referred to as

IMPACT/Collaborative Care) which results in improved depression, anxiety, SUD outcomes (Unutzer, 2002). In addition, programs that have provided improved PH care coordination in BH settings have been shown to improve overall health screenings and outcomes such as the award-winning Missouri Health Homes program (Missouri Community Mental Health Center Health Home Program, 2015; Parks, 2014; Raney, 2015).

The presence of a behavioral health consultant or nurse care coordinator is a structural improvement, but measuring the outcome of their participation in interventions addressing co-occurring PH and BH issues can demonstrate value to payers as well as to primary care and/or BH providers.

INTEGRATION CONSTRUCT 3 – COMPREHENSIVE TREATMENT AND POPULATION MANAGEMENT:

The key to this Construct is that each program/practice (usually within a larger organization) includes a greater number or more advanced integration services from each of the eight Domains providing routine capacity for integrated teamwork that involves not only care coordinators and BH Consultants, but also both comprehensive BH (MH and SUD) and PH prevention and treatment (prescribers and non-prescribers). This teamwork can be either on site or virtually connected, but it creates an integrated experience for people served and for the people serving them. Further, in addition to the Integration Construct 2 care coordination infrastructure for a designated health home population, there is commonly expanded infrastructure capacity to address a broader population in the community, and a broader range of issues relevant to that population, including assigned individuals who do not show up for recommended wellness visits. With additional investment to produce robust teamwork and associated infrastructure support, populations with any range of multiple complex conditions (beyond the specific designations covered by - for example - an Integrated Construct 2 health home) have better overall PH and/or BH outcomes and more efficient utilization of PH and/or BH spend. For those that are high cost and poor outcome when assigned, this may save money, but for others with complex needs, this may simply produce better health for relatively cost-effective additional investment.

Although evidence for this type of construct improving population health is limited and still emerging, there are some promising signals that integrated and comprehensive care for common co-occurring BH and PH conditions can yield improved outcomes. In the cost-effectiveness of a multicondition collaborative care intervention: a randomized controlled trial (commonly referred to as the TEAMcare mode), comprehensive care was provided to patients with depression, anxiety and chronic medical conditions by both internal medicine specialists and psychiatrists with nurse care managers providing care between visits with emphases on treatment adjustments provided by PCPs and psychiatrists and structured patient self-management to improve adherence and patient activation (Katon, 2012). Results were impressive, yielding improved outcomes for patients with depression, diabetes, dyslipidemia and HTN, with cost savings from reduced ED and inpatient utilization. Some emerging real world comprehensive treatment models are integrated partnership models between a comprehensive primary care center (FQHC) and a community mental health organization (CMHC). These partnerships, whether occurring through evolution, mergers or alliances have significant potential to advance population health, provided that the organizational partnership is more than just a change in ownership or structure and is utilized to improve all the necessary care processes identified in the eight Domains of the CHI Framework. One example is the NYC HUB program in East New York where ICL (the CMHC) and CHN (the FQHC) have joined forces to provide comprehensive care in shared space with progressive advancement of the elements in the CHI Domains (Kingman, 2021).

VI. Integrated Services and Integration Constructs:

Financing Implementation and Sustainability

BACKGROUND

Effective financing can be a powerful force for achieving implementation and sustainability of integrated services. A major reason that greater advances in integration have not yet been achieved is due to inadequate and ineffective payment methodologies to incentivize implementation and sustain integration after implementation. Time-limited grant funding has shown itself to be effective for implementation of integration efforts but usually ineffective at maintaining sustainability. As noted earlier in this report, one of the barriers to effective financing has been the inability of payers to justify investments in integrated service delivery by connecting financing methodologies to demonstrable measures of progress in integrated service delivery (integratedness) and to the corresponding value produced by integrated services provided. The **CHI Framework** offers an organized approach to connecting progress in integratedness and implementation of Integration Constructs to the measurable demonstration of value for EACH Construct and the justification of financing and payment strategies to help achieve and sustain each Construct.

This section of the paper focuses on tying financing to value and integratedness, addressing the question:

How is the value produced by each Construct connected to financing the implementation and sustainability of that Construct?

To address this question, we have identified two major financing or payment goals and three types of payment methodologies, as follows:

TYPES OF FINANCING GOALS FOR INTEGRATION

Financing implementation: This refers to financing or payment methodologies that incentivize or support providers to make progress in integratedness to achieve or strengthen provision of one or more Constructs in various programs or practices. This includes any or all of the following:

- **Initial implementation of an Integrated Construct:** As an example, this could be incentives to help a program or practice move from historical practice to implement the necessary CHI Framework Domain-specific staffing, care processes and infrastructure needed to provide Integration Construct 1 (Screening and Enhanced Referral).

- **Strengthening an existing Construct:** This would commonly involve supporting a provider to expand the reach of an Integration Construct by adding more types of conditions or interventions, expanding access of those interventions to a higher percentage of the population served and/or increasing the outcome targets for the interventions provided.

- **Incentivizing progress from one Construct to the next:** This would commonly involve incentivizing or funding a provider to move from Integration Construct 1 to Integration Construct 2, or from Integration Construct 2 to Integration Construct 3 through supporting investment in necessary staffing, technology, infrastructure and change management to make progress in the relevant CHI Framework Domains.

Financing sustainability: This refers to financing or payment methodologies that provide continued support for maintaining an existing level of integratedness via current provision of a specific Construct for a particular set of issues in a defined population.

TYPES OF PAYMENT METHODOLOGIES FOR INTEGRATION

Payment methodologies can be usefully categorized into three broad categories, each with different advantages and disadvantages:

Current Procedural Terminology (CPT) Service Code Payments (usually fee-for-service). These can include either:
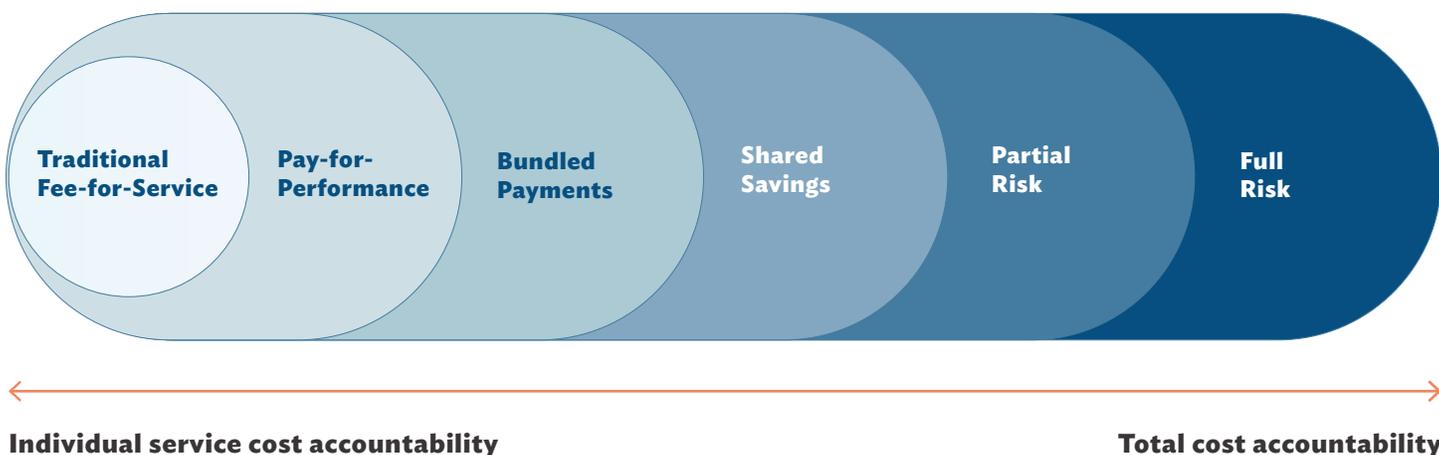
- **Single Service payment codes:** (e.g., screening, individual care coordination, etc.)

- **Bundled service payment codes:** (e.g., COCM, Medication treatment for opioid use disorder, etc.)

Care Enhancement Payments (usually per member per month or prospective payment): This ties an aggregated payment methodology to the demonstration of provision of specific service structures and processes by the provider organization or program, for the entire population served or (for per member per month) for a defined population.

Value-based Payments (VBPs) (usually a supplemental payment for achieving a prospectively determined value target): This usually connects opportunities for reward (and sometimes penalty) to achieving clinical quality process or outcome goals and/or cost savings goals. For entities engaged in population management, this approach usually also involves capitation payments with some level of risk sharing.

Note: Although only the last methodology is commonly referred to as VBP, from a payer perspective all financing and payment methodologies are tied at some level to value produced for the payer. That is why the CHI Framework's ability to connect value to all types of payment is so important.

Types of Payment Methodology:

Traditional Fee-for-Service · Pay-for-Performance · Bundled Payments · Shared Savings · Partial Risk · Full Risk

Individual service cost accountability ← → **Total cost accountability**

PAYMENT METHODOLOGIES TO FACILITATE IMPLEMENTATION OF INTEGRATED CONSTRUCTS

As will be described in the next section, each Integration Construct has a recommended predominant payment methodology to support sustainability. For financing any of the three types of implementation improvement listed above, however, any of the three payment methodologies can be utilized – and should be considered by payers – as an opportunity to collaborate with providers to incentivize progress to achieve improvements in value. A "readiness" approach helps payers and providers work together to prepare to utilize all three complementary payment approaches for flexibility, particularly as provider organizations work on improving the necessary CHI Framework Domain processes to advance or achieve a particular Integration Construct desired by the payer.

The following examples illustrate a progression of complexity in the application of the various payment methodologies to incentivize progress along the Integration Constructs.

- **Incentivizing Progress with CPT Code Payments**

Providers that are either relatively small with limited resources, or are new to implementing integrated services, will usually focus initially on the implementation of Integration Construct 1 (Screening and Enhanced Referral) using CPT code payments. (See Appendix 5.) In these situations, payers desiring providers to make progress in this Construct to increase value for people served should set relevant CPT code rates high enough to incentivize uptake, understanding that small practices lack economies of scale. To this end, setting rates above simple "break even," to facilitate investments in staffing and infrastructure, may be necessary to incentivize wary practices into action. Unbundling fees for particular services that are deemed to provide the most value, setting an attractive and effective rate and allowing that code and rate to be separately billed can result in faster and broader uptake. An example of this would be offering separate payment for the code for developmental/behavioral health screens (96127) rather than expecting that it be done as part of an overall initial assessment. Successful implementation of capacity to improve integratedness using specific individual code service payments can set the stage for the provider to advance Integration Constructs by using care enhancement or VBPs in the future. Once the new care process attached to the code is fully implemented and mature it may be appropriate to reduce the rate to "break even" since less resource investment will be needed for sustainability than for initial implementation.

- **Incentivizing Progress with Care Process Payments**

Implementing systematic integrated care coordination and care management for individuals with both PH and BH conditions (Integrated Constructs 2 and 3) almost always requires developing multidisciplinary teamwork (CHI Framework Domain 5) and data systems (CHI Framework Domains 3 and 6) that are best supported by Care Enhancement Payments, as well as continued support of other Domain processes through CPT Code Payments. For provider organizations that are on the journey to achieve Integrated Construct 2 and/or 3, it will therefore be appropriate and useful for payers to help them implement a mix of all three payment methodologies. For example, a practice may combine a health home for chronic conditions per-member per-month (PMPM) bundled payment with incentive bonuses for initiation of substance use disorder (SUD) treatment within 30 days of diagnosis (process) and reduction of emergency room utilization (outcome). To help achieve the SUD treatment process target, the provider may need a separate fee at an attractive rate for CPT Code Payment for initial implementation of Screening, Brief Intervention and Referral to Treatment (SBIRT). Taken together, this package of payment methodologies focuses the provider organization's attention on implementing more services for persons needing integrated interventions for SUD and provides the necessary resources to deliver those interventions successfully and set the stage for sustainability.

- **Incentivizing Progress with Value-based Payments**

In most situations, VBPs, usually in combination with Care Enhancement and CPT Code payments, are a useful tool for implementation across any of the three Integration Constructs. Since the VBP goals or targets commonly change or are readjusted over time, they are well-suited to addressing the start-up cost problem by providing a substantial incentive to undertake changes of work process and retraining whenever a particular new aspect of integration is desired. Further, VBPs for structure and process measures can be extremely

useful when providers are still implementing new care integration processes and learning to optimize them. Referring again to the example of SBIRT, instead of using the CPT Code Payment methodology described above, a payer could leave SBIRT provision as part of a bundled Care Enhancement Payment and instead offer a VBP performance bonus for delivering the service to a given percentage of patients in the practice. Note that incentivizing providers based on outcomes alone is usually not effective until the providers have implemented and optimized the care processes expected to achieve the desired outcomes. This is why it is important for both payers and providers to use the CHI Framework to identify and operationalize necessary care processes, rather than trying to pay for outcomes alone.

Case Study: VBP Payer Innovation

As health plans further mature into physical-behavioral integration, they are looking at alternative payment models with innovative providers not only for BH savings, but medical as well. One health plan has contracted with an innovative substance use provider that utilizes a multi-disciplinary team providing continuity of care – including integrated care coordination - through multiple levels of SUD care in a one-year program for persons with SUD who have been high utilizers of both health and BH services. Acknowledging that individuals with SUDs who frequently access services also have medical costs at least two times greater than non-SUD members, the health plan has established a VBP that assesses overall improvement that includes improved physical health costs. The SUD provider also recognizes the total cost of care for this population is excessive and employs an RN to coordinate care with the patient's PCP and other medical specialists. The patient's willingness to sign a Release of Information for all their providers is key to admission into the program, which has had outstanding results compared to other SUD treatment for this level of acuity. Provider and patient satisfaction and experience can also be incorporated into value-based arrangements. All providers are accountable for identifying and addressing disparities in both BH and PH outcomes, as appropriate to the Integration Construct provided, preferably aligned with efforts targeted to improve equity for traditionally marginalized populations.

Implementing VBPs for process measures will result in a provider becoming more skilled in collecting, aggregating, analyzing and using data to make treatment and management decisions, which over time will have a ripple effect on improving the quality and efficiency of care throughout the organization.

For payers and providers that have a bit more sophistication in both integrated service delivery and in more innovative payment methodologies, CPT Code Payments and Care Enhancement payments can be combined with VBP performance incentives to facilitate progressive progress through the Integrated Constructs. In this approach, sometimes termed Enhanced Care Bundled Payment, an increasingly substantial portion of the total payment varies based on performance as the provider makes continued progress in integratedness. These types of bundled payments reduce implementation barriers and provide "creative latitude" for adapting activities and staffing to best fit an organization/region/population. The medication assisted treatment bundled payments recently introduced by Medicare are an example of this approach.

When the payer designs the bundle, it can lay out the necessary components of care and set the total payment rate and the performance incentives (ideally using real baseline data) to drive quality. This enables the provider to have flexibility with how to implement services and workflows for staff and patients, but also ensures program quality by requiring "minimum necessary components of care" which can be service specific (for MAT or Health Home, for example), but can also (for integratedness) be tied to measurable progress on the Domains of the CHI Framework.

MATCHING PAYMENT METHODOLOGY TO SUSTAINABILITY OF EACH INTEGRATION CONSTRUCT

For each Integration Construct there is a payment methodology, justified by the value produced, that is particularly suited for its sustainability. As described in the above examples for implementation, sustainability for Constructs 2 and 3 incorporate the payment methodologies utilized to sustain the preceding Constructs.

Integration Construct 1 – Screening and Enhanced Referral:

Screening and Enhanced Referral benefits from a time-limited start-up grant to cover initial implementation costs. Early implementation should utilize CPT code services that specifically support integration with rates set to adequately cover costs and incentivize uptake. A value-based incentive payment for timely implementation of the necessary screening and referral structures should also be considered. This facilitates implementation for provider organizations that have more limited fiscal infrastructure resources or are just getting started. Sustainability of Construct 1 is best done by a combination of offering rates adequate to incentivize provider utilization for screening CPT codes (CPT 96110, 96127, 96160 and others) in conjunction with value-based payments for performance measures related to screening and referral (NQF 0421, 0418, 1932, 0004 and others).

Integration Construct 2 – Care Management and Consultation:

 Care Management and Consultation also benefits from a time-limited start-up grant to cover initial implementation costs in evidence-based integration programs. Sustainability of this Integration Construct requires using bundled care enhancement payments with rates set to adequately costs of the specified staffing and integration processes required, along with CPT code payments. VBPs are useful to support and focus efforts implementing specific high-value processes initially and important outcomes as the program matures. For example, key Domain 3 care coordination activities in Integration Construct 2 cannot typically be captured or billed using CPT codes; in addition, the current rate for CPT code billing for activities such as chronic care management and transitional care management (TCM) is usually not adequate to cover the staffing required to carry out these care processes at an Integration Construct 2 level. One exception is the CPT codes for Psychiatric Collaborative Care Management when adequately funded (at or above the Medicare rate) has demonstrated the ability to cover costs at least payment incentives for selected quality process metrics tied to Care Management and Consultation (as defined in the Domains of the CHI Framework), along with the outcome metrics for demonstrating value in Appendix 6, Table 2, are usually essential in sustaining this Construct.

Integration Construct 3 – Comprehensive Treatment and Population Management:

 Sustainability of this Construct usually requires sophistication in maximizing revenue from CPT code payments, substantial access to Care Process payment methodologies for various issues (e.g., SUD as described in the earlier text box) or populations (e.g., an assigned Health Home population under the state's Medicaid plan) AND a robust VBP component with various forms of shared savings models and/or limited or full risk capitation. Once care processes are in place and performance and financial data aggregation and proficiency has been achieved, the organization is ready to be switched to partial or full capitation with a value-based performance incentive payment for selected outcomes or new services. Overall, a provider organization demonstrates through the CHI Framework that they have implemented a program structure within Integration Construct 3 to manage a complex population with a shared risk or sub-capitation payment arrangement and demonstrates the value metrics described in Appendix 6, Table 2. This provides evidence to payers that the health spend investment in this provider is associated with better clinical outcomes and more efficient resource utilization. Showing the improvement in value is worth the investment of resources for both implementation and sustainability.

Construct 2 Case Study

CCBHC Prospective Payment Methodology Supports Integration

The CCBHC Demonstration states using prospective payment methodology (PPS) supports and incentives multiple integration requirements with both care enhancement payments (the PPS) and VBPs based on performance. CCBHC integration requirements include:

- **CCBHC coordinates care across the spectrum of health services, including physical and behavioral health and other social services.**
- **Enhanced screening requirements.**
- **Partnerships or care coordination agreements with:**
  - » FQHCs/rural health clinics.
  - » Inpatient acute care hospitals and hospital outpatient clinics.
  - » Department of Veterans Affairs facilities.
  - » Inpatient psychiatry and detoxification.
  - » Post-detoxification or withdrawal management step-down services.
  - » Residential programs.
  - » Other social services providers, including:
    - » Schools.
    - » Child welfare agencies.
    - » Juvenile and criminal justice agencies and facilities.
    - » Indian Health Service youth regional treatment centers.
    - » Child placing agencies for therapeutic foster care service.
- **CCBHC establishes or maintains electronic health records (EHR).**
- **CCBHC Health IT system is used for conducting population health management, improving quality, reducing disparities and for research and outreach.**
- **CCBHC required integration performance measures:**
  - » All-cause readmission rate.
  - » Preventive care BMI screening and follow-up.
  - » Weight assessment and counseling for nutrition and physical activity for children/adolescents.
  - » Diabetes screening for people with schizophrenia or bipolar disorder who are using antipsychotic medications.

VII. Recommendations for Action

The CHI Framework presented in this paper represents a significant step forward in guiding broad dissemination and implementation of integrated services. It also provides a common language to guide the next generation of implementation research, including more detail on the connection of the eight Domains and three corresponding Integration Constructs with specific co-occurring PH/BH/SDOH conditions and interventions, selected outcome metrics connected to those conditions, demonstration of value to payers, population managers and people served and further refinement of payment methodologies for initiation and sustainability.

The Expert Panel overall recommends broad adoption of the CHI Framework to advance both the future knowledge base as well as the current efforts in implementation, dissemination and sustainability of integrated service delivery nationwide.

The recommendations are subdivided and prioritized to specific stakeholder groups but can be wholly useful to providers, policymakers and payers generally to inform system, practice and payment design.

These recommendations may not reflect – and should not be construed as representing – the views of each individual on the Expert Panel nor the organizations to which they belong.

Providers (healthcare treatment organizations and their state and national trade organizations) should utilize the CHI Framework to measure their current baseline state of integratedness, to identify their next steps regarding their chosen Integration Construct(s), to delineate relevant metrics for demonstrating value and to define quality improvement process to achieve their integratedness targets.

Collectively, providers, provider networks and provider associations should advocate for public and private payers and policymakers to adopt the CHI Framework to create a common language for improving integration more widely.

- **Utilize the CHI framework at a program/population level to assess your current state of integration across all the Domains and subDomains and with trusted community partners who provide PH and BH services.** Assess your current "fit" within the illustrated constructs (historical practice to population health) and then prioritize and use quality improvement methods to advance and achieve the desired construct Domains and associated elements/stages.

- **Improve proficiency in quality metric selection relevant to Framework Domains and Constructs, workflow improvements and progress to goal.** For a selected performance measure, providers must both be proficient in implementing improved or new workflows, using the data collected for both patient and group level improvement and then reporting the data for both internal monitoring as well as to relevant external parties to report aspects of quality treatment and incentives.

- **Implement BH and PH enhanced referral pathways per the CHI Framework screening and referral Domain.** Develop and implement standardized referral/engagement/consultation mechanisms within EHRs, paired with workflows to follow-up on patients that fall through the cracks.

- **Improve proficiency in using the available billing and coding procedures and visit types.** Providers should review and use available billing codes for integration services (screening, treatment, monitoring, care management) and reimbursement requirements.

- **Include primary care and behavioral staff in joint integration training.** Use the framework to prioritize the training topics and implement workflows resulting from the training with quality improvement (QI) monitoring processes in place. This will require dedicated time for training and some staff accountability to lead and monitor integration improvements.

- **Proactively exchange PHI with other healthcare providers to assure integration of care to the extent allowable under current regulation.** The persons most in need of integration of care have multiple chronic conditions and see multiple providers. Providers should educate and encourage patients/consumers to permit sharing their PHI to better integrate their care.

Payers (public or private, including grant makers) should formally identify the CHI Framework as the recommended approach to measuring integratedness and demonstrating value across their networks. Over time, the utility of the CHI Framework will increase with further evaluation and refinement, and other Frameworks and tools will likely be phased out.

- **Utilize the CHI Framework to organize continuous quality improvement for integrated services delivery.** Engage in mutual discussions with their provider networks and grantees to delineate current baseline state of integratedness, identify recommended targets for improvement, outline implementation of specific elements within the CHI framework to improve the health of populations served, define appropriate consensus metrics for accountability, value and outcomes and correspondingly provide both initial implementation funding and, where applicable, sustainable reimbursement to support providers making progress using the CHI Framework.

- **Utilize payment methodologies that cover integration start-up costs.** There are a range of mechanisms to support start-up costs for achieving desired Integration Constructs, as well as providing for sustainability through reimbursement of support services with CPT codes and building a VBP foundation including bundled payments that reflect all of the provider costs. Getting providers to implement and sustain a new service (for example Health Behavior Assessment Interventions or health home for chronic conditions bundled PMPM) requires offering a more attractive rate with a better margin than is required for providers to sustain an existing traditional service or treatment. Implementing integration, particularly through care enhancement and VBPs, has significant start-up costs, including both training and infrastructure. Provider rate negotiations with payers should calculate the time and effort necessary to repaying the initial start-up investment costs.

- **Utilize payment methodologies that provide sustainability of integration:**

  - » **Build upon the funding of time-limited grants.** Integration initiatives are commonly funded – in part or entirely – through time-limited grants. Providers cannot fully commit to reorganizing their staffing, care processes, documentation and data collection for time-limited initiatives. This leads to superficial implementation dependent on provider unfriendly workarounds and temporary staff reassignments, making the integration implementation more difficult to sustain beyond grant funding.

  - » **Set care management and/or bundled rates that are adequate to cover costs.** Rate setting is too often done by benchmarking against prevailing historical rates for similar services. Often the historical rates for similar services are less than the actual cost of delivering service. Rate setting for bundled services should be based on a specific staffing and caseload ratios that account for the prevailing salaries of the particular staff required, the local prevailing fringe and overhead costs and any new IT infrastructure and training required. Like much of the history of payment innovation, payer "discounting" (almost reflexive in payer cultures) detracts from the optimal outcomes of innovative payment methodologies.

  - » **Match payment methodology to the Integration Construct.**

  - » See Reimbursement section above.

- **Improve network management to support integration.** Payers can strengthen oversight by training utilization review staff in the CHI framework and best practices. Network management can include training of providers in CHI framework and expanding current arrangements in integrated care.

- **Eliminate or reduce patient co-pays that obstruct integration.** Because integrated care needs to be embedded in workflows onsite at clinic offices, integrated care services are not necessarily perceived as distinct billable services separate from a routine primary care or behavioral health visit. Yet, most FFS payment methods for integrated care come with co-pays separate from those of the primary care visits. Understandably, patients are confused and object to receiving bills for co-pays for these payments when they occur – such as co-pays by some payers for administration of screening and measurement tools such as the PHQ-9. This can result in them refusing to engage in integrated services in the future. We recommend that payers educate and work with state authorities and employers to reduce co-pays that create barriers to patients who receive integrated care. Both MCOs and the large employers designing their own plans should lower these barriers. Co-pays for high value integration services are problematic in terms of keeping costs down and improving the quality of care.

- **Proactively exchange relevant Protected Health Information (PHI) with your contracted healthcare providers to support integration efforts as allowable under current regulation.** The persons most in need of integrated care have multiple conditions and see multiple providers. Payers should proactively share information (e.g., lab, medication, treaters, recent acute [ED and inpatient] events, etc.), to assure integrated care. Payers should rely on coordination of care provisions of HIPAA to share PHI and should educate patients about the value for proactively sharing such information to improve integration of care and improved health outcomes.

- **Provide equity in eligibility for integration payments.** Some codes, enhanced care payments and VBPs are designed or paid for only certain providers, often PCPs, but not BH providers even though integration tasks can be similarly implemented by both provider groups.

- **Educate providers on billing codes available to support integration.** Payers should clearly communicate to providers what services and codes are reimbursable in the realm of integrated care (e.g., codes that BH providers can use to monitor the health status and provide PH preventive services as detailed in CHI Constructs 2 and 3). Payers can benefit from increased and more accurate diagnosis coding of both BH and PC conditions which supports both integrated care and accurate risk adjustments for premiums paid to plans.

- **Expand implementation of integrated care models that align with CHI Constructs.** Payers should encourage their BH and PCPs to utilize the CHI framework and help the providers to review incentives/payments that will advance to one of the CHI Constructs that is realistic to attain to provide value for patients and to payers.

Policymakers (federal and state governments, other regulators and system leaders) should adopt the CHI framework as a guide for measuring and implementing progress in integrated service delivery at the federal, state, tribal and local level for payers and providers. All stakeholders should receive consistent education on the value of the CHI Framework and guidance for how to use it under federal, state and other system leadership. Over time, the utility of the CHI Framework will increase with further evaluation and refinement, and other Frameworks and tools will likely be phased out.

- **Guidance for policy development and regulatory support.** The CHI Framework can guide development of robust published policies and regulations to support progress through the eight Domains and corresponding three Integration Constructs, which in turn can make it easier to align reimbursement mechanisms for integration activities. The Center for Medicare and Medicaid Services (CMS) and corresponding state Medicaid programs and Medicare intermediaries can review the degree to which existing regulations inhibit implementation of progress using the CHI Framework and subsequently reduce existing barriers around billing prohibitions and site limitations for certain services.

- **Use the CHI Framework at the state and local level to understand and remove challenges to integration (integratedness implementation) and revise regulatory requirements obstructing integration.** Some states have separate program licensure requirements for programs providing PH, MH or SUD treatment. This creates additional administrative burden and expense to undergo multiple requirements with separate reviews. At times, some of the specific licensure requirements can be mutually exclusive of each other. Licensure requirements should be designed to foster integrated service delivery for each person with co-occurring needs, as well as improved access, consistent data sharing, care management continuity and achievement of quality outcome measures across PH and BH, including SUD.

- **Eliminate policy and regulatory barriers to integrated services.** Eliminate all prohibitions on billing for a primary care and BH service on the same day. Some payers prohibit billing for a primary care and BH service on the same day, presenting a major obstacle to implementing the CHI framework and the more advanced Integration Constructs.

- **Use the CHI Framework as guidance for measuring progress.**

  » CMS should establish a core set of integration measures for use in Medicaid and Medicare.

  » Federal and national entities such as the NQF can simplify the many measurements of healthcare services by selecting key measures of integration aligned with the eight Domains and three Integration Constructs supported by the CHI framework.

  » Include CHI Framework–aligned measures of network integratedness in the Medicaid managed care and Medicare Advantage quality rating systems and recommend that states set a minimum rating for MCOs on performance measures.

  » Adopt all-payer integration initiatives using the CHI Framework to improve evaluation of processes and outcomes and reduce variability across payers. Use care enhancement payments (for both PC and BH providers) in these all-payer initiatives improve and simplify standards of documentation and outcomes.

- **Use the CHI Framework to improve regulatory guidance for FQHCs and CCBHCs.**

  » Review, enhance and align FQHC and CCBHC integrated care services and measures according to the CHI Framework and Constructs. Ensure accountability, particularly with respect to health disparities.

  » Using the CHI Framework, incentivize CCBHCs and FQHCs to strengthen integration of behavioral health and primary care with clear standards and measure reporting through a voluntary integration bonus payment.

- **Improve standards for CPT code payments that support integration.** CMS should require broader coverage of Medicare and Medicaid CPT codes and enhanced care payments at rates adequate to support integration, including:

  » Collaborative Care model CPT codes

  » CCBHC PPS payment methodology including converting grant-based CCBHCs to full PPS-based CCBHCs for improved integration and sustainability.

- **Incorporate the CHI Framework into consultation and technical assistance at the federal, state, tribal and local levels.** Continue and expand technical assistance for integrating care to primary care providers and BH providers using the CHI framework and Integration Constructs.

- **Enhance regulatory support for telehealth in integrated service delivery.** Promote the use of electronic health records, telehealth and other technology using additional incentives to support integrated care health providers. These supports are critical to advancing integration; paired with the CHI framework approach, these supports can advance organizations towards the population health Construct.
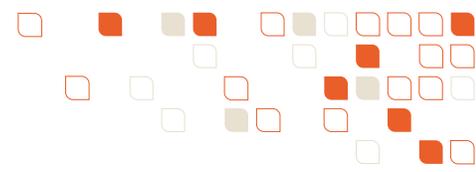
VIII. Conclusions and Next Steps

Even with scattered and uneven implementation, integrated care delivery has demonstrated improved access, better quality of patient care, lower utilization of more restrictive services and reductions in total cost of care based on specific processes of care. Adoption and use of the Comprehensive Health Integration (CHI) Framework provides a roadmap to deliver evidence-based practices in integrated services validated by metrics that are directly related to the value of services. Delivering services within this framework will help providers, payers and policymakers in measuring progress in integration, demonstrating the value of integration. Adoption of the related recommendations regarding regulatory barriers and financing methodology recommendations will support robust implementation of sustainable integration models that can be flexibly optimized to the specific needs of individual practices, providers and the patients they care for.

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Case Studies

ILLUSTRATED APPLICATIONS OF THE COMPREHENSIVE HEALTHCARE INTEGRATION FRAMEWORK

The Comprehensive Healthcare Integration (CHI) Framework can be utilized to improve integrated services delivery simultaneously by behavioral health (BH) and physical health (PH) providers, applied to both adult and child service settings, and have utility for both providers and payers.

Consider same community with a BH clinic and PH clinic serving overlapping populations. Each one serves both adults and children. Each one is seeking to meet incentives for integrated service delivery from Medicaid and commercial payers. These incentives are tied to addressing anxiety, depression, smoking, diabetes and obesity among adults and ADHD, anxiety, asthma, substance use initiation and obesity among children. However, each one is in a different starting place for integrated service delivery, and those differences extend to different levels of development for their adult and child populations.

The two clinics can work as partners to use the CHI Framework to help them improve both individually and collectively. They can use the CHI Framework to perform a baseline assessment using the eight Domains and can target that assessment separately to adult and child services, as well as targeting the health outcomes of most interest to their payers. Then, each clinic can identify (ideally, in collaboration with the payer) which Constructs they will achieve for adults and children respectively. Note that the BH clinic might choose a different Construct for adults than for children, and a different Construct for either population than the PH clinic. Nonetheless, they can work collaboratively to help each one be successful.

The following illustrates how each clinic might operationalize each Construct for a typical adult being served in either setting. A similar approach could be provided for children, but this is omitted due to space limitations.

ILLUSTRATED APPLICATIONS OF THE COMPREHENSIVE HEALTHCARE INTEGRATION FRAMEWORK FOR SERVING AN ADULT IN EACH INTEGRATED CONSTRUCT:

Examples for both behavioral health and physical health settings

Presentation: Middle-aged female patient/consumer presents in a **BH setting** complaining of low energy and frequent anxiety that leaves her unable to attend to daily tasks. She complains that her low energy has resulted in her falling behind in paying her rent and fear of losing her housing. Her stated goals at intake are to resume her social contacts in the community and have a clean and tidy house where she can invite friends and family.

The BH assessment identifies prominent symptoms of depression and anxiety, as well as a family history of manic-depressive illness. The patient smokes up to one pack per day and was told two years ago by her PCP that she may be developing "early" diabetes. Upon further assessment, the patient also expresses concerns about maintaining her housing, thus creating more anxiety.

When presenting in a BH setting, the patient can expect these interventions to occur in programs organized under each construct following a standard intake, psychosocial intake and Mental Status Exam by the BH clinician.

APPLICATION OF THE THREE CONSTRUCTS IN A BEHAVIORAL HEALTH SETTING

Integrated Construct 1 – Screening and Enhanced Referral

The patient can expect to receive standardized screenings for depression, anxiety, alcohol use and a tobacco assessment. The prescriber will provide the patient with a handout describing diabetes risk factors and how to take steps to basic self-management. Office staff will work with the patient to make a specific appointment within four weeks with the patient's PCP – or help in finding a PCP if the patient needs a new one – for a wellness visit with full exchange of information from the BH provider upon the patient's signed consent prior to her PCP visit. The PCP will also be informed about the potential prediabetes history and current smoking and a request to provide diagnosis/treatment plan and bloodwork values including a HbA1c back to the BH clinic. Aligning with the patient's goal of improving energy and expanding social contacts, the clinician will reinforce how the integrated approach benefits the patient's healthcare. The clinician records his/her initial diagnostic impression of depression, with a PHQ9 score of 12, negative MDQ , GAD score of 10 and elects to start brief therapy.

Follow-up: The patient is seen by the off-site PCP provider, who notes the MDD and GAD dx and care plan. Exam and bloodwork indicate diabetes with a HbA1c of 8.5 and a diagnosis of obesity. She also agrees to start nicotine replacement trial to attempt to cut down on smoking. She is started on diabetes medication with a recommendation to see a nutritionist and follow-up by the PCP in six weeks. The BH care plan is provided to the patient and also faxed to the BH agency. The BH clinician, prescriber and office staff apply Motivational Interviewing techniques to reinforces the PCP care plan with patient as a pathway to achieve her goals. The clinician updates the BH care plan to include the focus on diabetes med adherence, reinforce adherence to the nutrition appointment and the smoking reduction trial. The BH office staff record the appointments with the PCP, and the clinician reinforces the adherence in line with the patient's stated goals.

Under Integrated Construct 1, the BH provider follows up on a referral to the PCP, ensures that the appointment is kept, coordinates the work of PCP with the BH treatment plan, documents the patient's attendance at the PCP appointment, obtains the PCP records of the visit and supports continuing adherence as part of the patient's stated goal at intake.

Integrated Construct 2 – Care Management and Consultation

The patient is introduced to her healthcare team which could include a support staff person (community health worker/care coordinator/peer navigator), nurse, the prescriber and the BH clinician and, when needed, a health educator to support her in reaching her wellness goals. There is also direct linkage to a PCP. The team can address her concern about losing her housing and how this may be contributing to her anxiety with follow-up by the support staff to develop a plan to maintain her housing.

All activities undertaken in Construct 1 are initiated with additional screen for risk of housing instability, income stability and food insecurity. In Construct 2, the nurse completes a medical history, takes vital signs and draws bloodwork including relevant general health labs such as HbA1c, thyroid, vitamin levels, etc., ordered by the psychiatric provider. The nurse develops a general healthcare plan with the patient that includes the patient's goals for wellness and needs for support from the team to meet the goals. The peer/community health worker (CHW) provides coordinates referral to the PCP who is directly affiliated with a partner Federally Qualified Health Center that has electronic access to the BH record and vice versa. Based on the wellness plan, a member of the team can provide education on diabetes, obesity and smoking reduction as a follow-up to the patient's self-management care plan. The CHW/peer works with the patient on a referral to a social service agency to work on potential housing need identified on screening.

Ongoing care coordination includes a review of the assessment and plan by the clinic psychiatrist with a summary email as an e-consult to the PCP who, in turn, supports the psychiatrist initiating metformin as well as nicotine replacement with bupropion ruled out because of the family history of bipolar diagnosis. The team members work with the patient to align her wellness goals to understand that her HbA1c and her weight will be routinely monitored to achieve a response goal much like what she is told about trying to lower her PHQ9 to an achievable target. The plan is recovery-oriented and customized to the patient's wellness goals.

Follow-up: The team conducts a formal review after six weeks with notes from the PCP visit. The peer/CHW reports that through his/her weekly contact the patient is taking her prescribed metformin but having trouble following through on her diet and exercise regimen and also reports that the nicotine replacement therapy is also not helping with smoking reduction. The CHW reviews the wellness plan and discusses how to align better with the patient's strengths and goals to revise the wellness goal for exercise and diet to make them more achievable. This also includes making sure there is alignment with the patient's cultural preferences. The psychiatrist decides to offer varenicline to the patient to help with her smoking reduction program.

Under Integrated Construct 2, the patient has the involvement of a full care team with clear accountability from each member for carrying out her treatment and wellness plan; the role of each team member is matched to her needs and preferences. The peer/CHW provides additional support to address social determinants of health related to housing insecurity. There is also more direct communication with the PCP through emails and electronic record sharing.

Integrated Construct 3 – Comprehensive Treatment and Population Management

The patient can expect all of the screens in Constructs 1 and 2 with the possibility of a team member assisting the patient in filling them out prior to their upcoming visit via the BH clinic portal. At her intake appointment, the nurse will provide education on her risk factors for diabetes and an approach to smoking education and is then introduced to a care manager and peer/CHW who will work together to develop a goal-based self-management plan for her depression, anxiety, diabetes and smoking reduction that can address her chief complaint of low energy, feeling paralyzed at home and fear of losing her housing and help her attain her goal of increasing social contacts and having a tidy household.

The team will encourage the patient to fill out relevant symptom questionnaires monthly through a portal or smartphone reminders to measure her progress and help the team address any new issues based on the symptom scores. Measures will be tracked in a registry or other data base to insure engagement. They can aggregate each patient's documented progress to measure population health improvement as progress toward internal QI and payor performance benchmarks. Her PCP appointment is provided within the same organization and shared electronic health record (EHR) makes it easy for all to track appointments and adherence. Her housing need is addressed directly by social services that is also available in the clinic organization and the practice, and progress in obtaining housing is tracked through the shared care plan visible to all care team members. Her diabetes treatment is mainly provided by the PCP in the organization, while the psychiatrist provides smoking cessation treatment since the motivational support is best provided by the BH team.

Follow-up: As part of routine follow-up, the patient shares with the care manager that she is having difficulty taking her diabetes meds as it causes some side effects, including times when she reports "foggy memory." The care manager reports this to both the PCP and psychiatrist. The PCP and psychiatrist exchange messages in the EHR and agree that the PCP needs to see the patient next to rule out hypoglycemia and/or worsening diabetes. Once bloodwork is completed and patient assessed, the psychiatrist can assess mental status and see if a new psychiatric syndrome is developing. Shared treatment and care management plans are available for review and updating by both PCP and the BH clinicians, as any adjustments to the diabetes medications or new psychotropic medication may alter the patient's blood glucose and weight. The team reviews the self-assessments and progress of the peer/CHW in addressing the housing instability to determine if resolution of the social determinant reduces anxiety and other psychiatric symptoms and if the patient has improved social contacts.

Under Integrated Construct 3, the patient takes a more active role in monitoring and measuring improved health, and the documentation is aggregated for the provider to report on population health improvements, rates of adherence and utilization of more restrictive services. The communication between the BH provider and PCP occurs within one electronic medical record with more frequent and effective information sharing to address new concerns. Data for the patient population is addressed at the individual, provider and organizational levels to demonstrate progress towards established goals and improve care pathways as needed.

APPLICATION OF INTEGRATED CONSTRUCTS IN A PHYSICAL HEALTH SETTING

A middle-aged patient/consumer presents with a chief complaint of low energy and discomfort that prevents her from attending to daily tasks and self-acknowledged poor diet. She smokes up to one pack per day and was told two years ago by her PCP that she may be developing "early" diabetes. The patient's stated goals are to keep a clean house and see her friends in the community.

If presenting in primary care setting, the patient can expect the following to occur in each Construct in addition to standard history and physical exam and bloodwork by the PCP:

Integrated Construct 1 – Screening and Enhanced Referral

The patient can expect to receive screening for depression and anxiety using validated screening tools along with an alcohol screen and tobacco assessment. When the results of the depression and anxiety scores indicate high likelihood of meeting diagnostic criteria, the nurse can provide education about the conditions and assess if the patient is willing to accept a referral to a BH provider. Within the next two weeks, a complete a diagnostic assessment is performed then the findings shared with the PCP. Assessment for tobacco cessation/reduction occurs, and although the patient is interested, the PCP holds off on potential cessation interventions until the patient is assessed by a BH professional. The patient also has an abnormal HbA1c; further workup and initial treatment begins.

Follow-up: The office staff follow up to verify that the patient is seen by an off-site BH provider who reports a diagnosis of Major Depression Disorder and General Anxiety Disorder with initiation of antidepressant medication treatment. After eight weeks of treatment, the BH provider reports improvement based on the patient's improved activity at home and reduction in PHQ9 score. When she returns back to the PCP, she appears to show signs of increased irritability and decreased need for sleep. The PCP informs the BH provider, who assesses the patient over the phone and in person/video the following day. The MDD diagnosis is updated to bipolar disorder and medications adjusted to prevent development of full mania. The BH provider report is faxed to the PCP and included in the PCP care plan.

Under Integrated Construct 1, the patient is screened for BH conditions in the primary care setting. The results are interpreted by the PCP, and the scores trigger a referral to a BH provider who initiates treatment and maintains contact with the PCP, including an adjustment to the diagnosis and medications. The PCP office ensures that the patient keeps the appointment with the BH provider and documents the follow-up in the patient's PCP EMR. Records from the BH provider visit are received and reviewed by the PCP.

Integrated Construct 2 – Care Management and Consultation

The patient can expect to receive all the screens, assessments and education above with the addition of social needs screening and bipolar disorder screening. In this model, the patient is introduced to a care team that could include a care manager, care coordinator, peer/CHW or BH consultant and assigned nurse who work with the PCP. The BH consultant can speak to the PCP in an informal consult and explore the BH symptoms with the patient during the PCP visit .

The care coordinator and peer/CHW introduce themselves to the patient to further explore her wellness goals and to assess any environmental stressors that may impact her health. The patient shares that she has fallen behind in her rent and growing anxiety about losing her housing. These staff provide education on community resources in support of her goals. Based on the screens and BH provider assessment the team develops an initial self-management care plan for the patient that includes a referral to a social service agency to work on potential housing and a plan to support her in the process.

With no prior history of mania in the patient and a bipolar screen that suggests a low probability of bipolar symptoms and history of past use of antidepressants that have helped the patient, the PCP initiates low-dose antidepressant treatment to help with depression and anxiety symptoms and also sends an e-consult request through the shared EHR to a psychiatric consultant who works with the care manager and is part of the PCP practice team. The consultation allows the PCP to be the ongoing prescriber of the psychiatric medications. The patient also understands that her symptoms will be routinely monitored to achieve a response target much like what she is told about trying to lower her HBa1c to an achievable target. Measurements are tracked in a registry to monitor engagement and progress. The BH provider also works with the PCP to actively support tobacco cessation/reduction treatment. The peer/CHW supports the patient through motivational interviewing and continually assists her to recognize and access her strengths as part of her recovery.

Follow-up: As in Construct 1, through routine follow-up, the care manager identifies a new onset of hypomanic symptoms; the BH provider and PCP are alerted and the psychiatric consultant recommends to the PCP adjustment in medications and a visit in next 48 hours with the BH provider. The BH provider provides a consult and recommends that the patient will benefit from BH specialty care over the longer term and begins to work with the care manager to expedite an external referral.

Under Integrated Construct 2, the patient has the support of a team that includes a care manager, a peer/CHW and/or a BH provider consultant who work in the same program as the PCP and coordinate care that includes addressing social determinants of health. The ongoing monitoring provides an early identification of new symptoms and results in timely intervention to adjust the medications and avert an Emergency Department or inpatient admission. The care manager and peer/CHW provide ongoing support to the patient on their wellness goals and self-management plan utilizing motivational interviewing skills to help the patient access her strengths.

Integrated Construct 3 – Comprehensive Treatment and Population Health

The patient can expect all of the screens in Integrated Construct 2 and may fill out the surveys prior to her visit to the PCP via data entry in the practice portal. At the appointment, she is given wellness education and introduced to a care manager as well as a peer/CHW who will work together to develop a goal-based self-management plan for depression and anxiety and how to self-monitor for signs and symptoms such as for emergence of any hypomanic/manic symptoms. The patient can expect to routinely fill out relevant symptom questionnaires monthly through portal or smartphone reminders with symptom scores used both for her clinical care as well as in aggregate for quality improvement by the practice to meet performance benchmarks. The plan also addresses her housing need with a referral and follow-up support by team members to social services that are available through the practice. Progress in obtaining housing is tracked through the shared care plan visible to all care team members. Her depression and anxiety treatment are mainly provided by the PCP with the support of the integrated BH team. Her tobacco cessation/reduction efforts are also managed collaboratively by the practice team. With regular reports on wellness entered into the agency portal, the provider is able to aggregate results for the full population of patients managed in this Construct and report outcomes to payers.

Follow-up: As part of routine follow-up, the care manager suspects an onset of hypomanic symptoms. The BH provider and PCP are alerted and the psychiatric consultant recommends to the PCP an adjustment in medications and a visit in next 48 hours with the team BH provider. The team BH provider provides a consult and recommends that the patient will benefit from BH specialty care over the longer term and starts an expedited transfer process to the organization's BH specialty department, where her entire treatment record can be reviewed by the BH specialty team and the patient is accepted into the BH treatment program where psychotherapy and med management can be provided (along with group therapy offered for patients with bipolar disorder). Shared treatment and care management plans are available for review and updating by both the PCP and the BH specialty department, as medication adjustment may alter the patient's blood glucose and weight. The patient's care manager and peer/CHW remain as part of the team and continue to support her self-management plan and follow through with the social service referral for housing support.

Under Integrated Construct 3, the patient is more actively involved with the care team in tracking progress on standardized questionnaires and in developing their own self-management plan. The provider collects more data on the patient's improvement and aggregates it for similar patients to demonstrate an improvement across a broader population and to identify opportunities for improvement in service delivery.

X. Appendices:

Appendix 1. Expert Panel

A small group of co-editors who are leading experts in integration assembled an Expert Panel made up of providers, fellow MDI members, trade association representatives, researchers in behavioral health, federal policy experts and payors over five sessions from August to December 2020 in virtual conferences. The co-editors also facilitated three subgroups with several members of the Expert Panel to further develop content in "Integratedness," Measurement of Quality and Outcomes, and Finance and Billing for

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Appendix 2:

Definitions

OVERVIEW

The definitions provide guidance on using the framework and include key terminology as part of the guidance to providers, payers and regulators in design, implementation and evaluation of individual integration programs.

Comprehensive Healthcare Integration (CHI) Framework: The CHI Framework is an adaptation and application of the previously published general health integration (GHI) Framework in BH (Chung et al., 2020). In CHI, the eight evidence-based GHI Domains and the integration elements have been revised be applicable to PH and BH settings and to both adult and child populations. The Framework is a roadmap that can function as a measurement tool for "integratedness" that permits PH and/ or BH programs, practices and provider organizations to rate their progress in delivering integrated services along eight evidence-based Domains.

Eight Domains of the Bi-directional Framework:

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 and medical conditions in BH settings and risk factors and conditions for BH disorders in physical health settings, assessing their symptoms and effectively referring and/or ensuring engagement in care.

2. **Evidence-based Care for Preventive Interventions and Common Medical and Behavioral Health 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. Workflows are developed to reduce and mitigate general health risk factors such as smoking, alcohol use and obesity as well as common disorders such as depression, anxiety, substance use, diabetes and hypertension with follow-up mechanisms put in place to track patient outcomes and progress.

3. **Ongoing Care Management.** Ongoing, proactive and relentless follow-up of patients is essential to decreasing fragmentation between providers and engaging patients in their care. This Domain encompasses the development of tools for electronically tracking and coordinating information including the use of tracking tools and patient registries.

4. **Self-management Support That is Adapted to Culture, Socioeconomic and Life Experience 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 and self-manage their condition and promotes shared decision-making.

5. **Multi-disciplinary Team (With Patients) With Dedicated Time to Improve Healthcare.** Integrated settings foster multi-disciplinary teams that share responsibility for treatment which include patients themselves, peers, prescribers, therapists, families and their caregivers, as appropriate. Individuals involved in the care team vary depending on a clinic's level of integration. As the care team evolves (including members who work with the patient across different sites), changes in workflow are necessary to break 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. These changes are not just about breaking down siloes, but about adapting to and evolving individual roles within the team, which requires everyone to think differently about their clinical and practice identity. Teams often need dedicated time to review the management plans and share information as well as recommend changes to treatment when indicated.

6. **Systematic Quality Improvement.** Effective continuous quality improvement is another key Domain to increasing the capacity and competence of integrated settings. These Domain elements are important aspects of moving toward a population health approach. Using and monitoring quality metrics encompassing both process and outcomes is essential to guiding these efforts.

7. **Linkages with Community Social Services for the Patient and the Family That Improve Overall Health and Mitigate Environmental Risk Factors.** Effective Integrated Care involves addressing the key social influences and determinants of health, along with general health conditions. 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 addressing and incorporating relevant social determinants and addressing disparities into care plans and helping to mitigate the impacts of systemic discrimination.

8. **Sustainability.** To ensure integration efforts are sustained, billing and outcome reporting processes need to be built out with progression to value-based arrangements with support by states and payers for regulatory, payment and licensure reform as needed.

Integrated Program or Practice: An integrated program is one which is organized so that all people served by that program (team, practice) receive a comprehensive array of integrated services and interventions for their PH and BH needs including both primary and secondary prevention and which in its most advanced form provides comprehensive treatment.

NOTE : There is no one approach to designing a successful integrated program. In fact, there are a variety of organizational and program quality improvement and practice improvement strategies which can be successfully applied to match the needs of the individuals served within the structure, resources and mission of the program.

Integration is not...

- **Consolidation of separate funding for general medical care and BH care.**

- **Putting general medical care and BH care under the same lines of authority in the table of the organization.**

- **Having a contract with a managed care organization to manage both PH and BH services.**

These structures are neither necessary nor sufficient to produce meaningful Integrated Care. This frequently results in policymakers and payers assuming if they consolidate funding and authority at either the payer or provider level, integration will somehow simply occur due to market forces.

Integratedness: The degree to which programs or practices are organized to deliver integrated PH and BH prevention and treatment interventions to individuals or populations, as well as to address social determinants of health. Integratedness is a measure of integrated service delivery structural components (e.g., staffing) and processes directly experienced by patients and providers in PH or BH care settings, which is not limited to a measure of organization such as administrative hierarchy or even shared physical location (co-location).

Integration Construct: Three Constructs are presented by utilizing the evidence-based and conceptual elements of successful Integrated Care integration within the eight Domains of the Framework. PH and BH settings can strive to advance their integration by choosing a Construct for which to aim. Progress in implementation of each Construct can be measured using the Construct-aligned elements in each of the Domains. The Constructs are:

1. **Integration Construct 1: Screening and Enhanced Referral**

2. **Integration Construct 2: Care Management and Consultation**

3. **Integration Construct 3: Comprehensive Treatment and Population Management**

Constructs 2 and 3 generally requires evidence of proficiency of the elements of the preceding Construct (e.g., Construct 2 is achieved when all the elements of the eight Domains are achieved for both Construct 1 and 2). While the Framework does not require organizations who are implementing Integrated Care to actively choose to aim for a particular Construct, we believe that the articulation of integration progress in the context of these Constructs could provide value for patients, providers and payers in terms of improved quality in structures, processes and outcomes.

Person-centered Definition of Integrated Services: Patient-centered care begins with a provider commitment to knowing their patient and aligning care with the preferences of the patient and his/her family and accessing their strengths and skills. Patient-centered Integrated Care is defined by the person with PH and BH (and related human services) needs receiving "integrated" interventions in any setting in which they are regularly engaged, where their trust of the provider is greatest and where they feel that their strengths are best acknowledged. In a PH setting, the integration emphasis is defined by the level of BH services received. In a BH setting, the integration emphasis is defined by the level of PH services received. BH and PH services include efforts to match to the needs of the populations served (e.g., depression, anxiety, ADHD, substance use, tobacco use, overweight and obesity, diabetes, hypertension and other conditions).

Delivery of patient-centered integrated services means the provision of interventions that are matched to the member's strengths and preferences for prevention and/or treatment of a spectrum of PH and BH health conditions and address related human services needs in settings in which the person prefers to receive available integrated services.

Payment Methodologies for Each Integration Construct: Each Integration Construct requires adequate financing for initial implementation, continued improvement and sustainability. Providers are given options on specific payment methodologies that can support each Construct with an emphasis on how integration activities associated with each Construct can produce value for payers and population managers.

Physical Health-Behavioral Health Integration (Integrated Care): Integrated Care denotes PH-BH integration. PH refers to the prevention and/or treatment of physical conditions (e.g., HTN, diabetes, access to age-appropriate cancer screenings and immunizations) and disorders, including attention to physical disabilities and challenges. BH refers to mental health, substance use disorders and neurodiversity (including I/DD, ASD, brain injury) and trauma. Integrated Care includes attention to human service needs and social determinants of health and efforts to address health disparities that are barriers to PH and BH treatment and promotes justice and equity in health services.

Quality Measures: Quality measures are standards for measuring the performance of healthcare providers to care for patients and populations. Quality measures can identify important aspects of care like safety, effectiveness, timeliness and fairness. The following terms are intended to be applied consistently throughout this paper:

- **Structural measure** – a measure of the environment in which care is delivered (e.g., physical location, virtual/digital and telehealth access, organizational structure, resources, staffing).

- **Process measure** – a measure of a desirable clinical process or practice such as follow-up within seven days of hospital discharge, most screening measures or adherence to the frequency of measuring treatment response over time (e.g., obtaining HBA1c measures).

- **Outcome Measure** – a measure of individual clinical health, treatment or wellbeing such as diabetes control, BP control or depression response and remission.

Value: Value is defined by measurable improvement in individual or population health (and/or BH) **outcome measures** in relation to expenditure. Relevant outcomes for determining value include quality of care, cost of care, patient experience and provider experience. For most services and populations, value may involve increased cost but the improved health outcomes from Integrated Care "outweigh" the additional payment. For populations that already have "high cost" and "poor outcomes," value may include both improved health outcomes and equivalent or reduced spend. Provider and patient satisfaction and experience can also be incorporated into value-based arrangements.

Value Metrics for Each Integration Construct: To demonstrate value for patients, payers and population managers, the Framework provides a self-rated measures of integratedness in each Domain and also by Integration Construct if desirable. Selected metrics drawn from publicly available measure stewards (NQF, NCQA) are provided that link to each of the Constructs to more easily support QI processes and measures that translate to value to key stakeholders such as payers, state authorities and consumers.

Appendix 3:
The New Comprehensive Healthcare Integration Framework

NOTE: For BH settings, emphasis is on co-occurring PH, and for PH settings, emphasis is on co-occurring BH. Prioritized issues will vary based on age and other population variables.

KEY ELEMENTS of Integrated Care		PROGRESSION to Greater Integration →			
DOMAINS	**SUBDOMAINS**	**HISTORICAL PRACTICE**	**SCREENING AND ENHANCED REFERRAL**	**CARE MANAGEMENT AND CONSULTATION**	**COMPREHENSIVE TREATMENT AND POPULATION MANAGEMENT**
1. Integrated Screening, referral to care and follow-up (f/u).	**1.1** Screening and follow-up for co-occurring behavioral health (MH, SUD, nicotine), PH conditions and preventive risk factors. **1.2** Facilitation of referrals and f/u.	Response to patient self-report of co-occurring behavioral health and/or PH complaints and/or chronic illness with f/u only when prompted. Referral to external BH or primary care provider(s) (PCP) and no systematic f/u.	Systematic screening for high prevalence BH and/or PH conditions and risk factors and proactive health/BH. Identify PCP and BH providers (if any) for all. Formal agreement between PH practice and BH providers to routinely facilitate referrals and share information about progress. Measurement of referrals to assess show rate and information exchange with the referral source.	Systematic screening and education for BH and/or PH conditions and risk factors PLUS systematic data collection and tracking of positive results to ensure engagement in appropriate services. Capacity for integrated teamwork, such as a nurse or care coordinator for a BH team, or a BHC for a primary care team, to ensure follow-up and coordination re positive screens, with access to well-coordinated referrals to internal or external PH and/or BH service providers.	Systematic screening and tracking for BH and/or PH conditions PLUS routine capacity for registries and analysis of patient population stratified by severity of PH/BH complexity and/or utilization and measuring the level of intensity of integrated care coordination. In addition to integrated teamwork, there is a systemic collaborative and consulting partnership with PH and BH services in one or more locations that can help meet population needs internally through both integrated service delivery and enhanced referral facilitation to both internal and external partners, with automated data sharing and accountability for engagement.

KEY ELEMENTS of Integrated Care		PROGRESSION to Greater Integration →			
DOMAINS	SUBDOMAINS	HISTORICAL PRACTICE	SCREENING AND ENHANCED REFERRAL	CARE MANAGEMENT AND CONSULTATION	COMPREHENSIVE TREATMENT AND POPULATION MANAGEMENT
2. Evidence-based (EB) care for prevention/ intervention for common PH and/or BH conditions.	**2.1** EB guidelines or protocols for preventive interventions such as health risk screenings, suicide risk screening, opioid risk screening, developmental screening. **2.2** EB guidelines or treatment protocols for common PH or BH conditions (as well as for addressing relevant health behaviors that affect the conditions being addressed). **2.3** Use of medications by prescribers for common PH and/or BH conditions, including tobacco cessation. **2.4** EB or consensus approaches to addressing trauma and providing trauma-informed care.	Not used or minimal guidelines or protocols used for universal PH or BH preventive screenings. No/ minimal training for providers on recommended preventive screening frequency and response to results. Not used or with minimal guidelines or EB workflows for improving access to care for PH and/or BH conditions. None or limited use by prescribers of medications for co-occurring PH or BH conditions. Medications for co-occurring PH or BH conditions are primarily referred to other type of prescriber to treat. Staff have no or minimal awareness of effects of trauma on PH and BH care and do not have systematic application of person-centered trauma-informed practice.	Routine use of EB or consensus guidelines for performing or referring for risk factor screenings with basic training for providers on screening frequency and result interpretation. Coordination with outside providers for any preventive activities. Intermittent or limited use of EB/ consensus guidelines and/or workflows for treatment of common PH and/or BH conditions with limited monitoring. Team receives basic training on PH and/or BH interventions. Prescribers routinely provide NRT or other medications for tobacco cessation and will continue to prescribe stable medications for co-occurring PH or BH conditions for a limited number of individuals. Coordinate referrals to outside providers otherwise. Basic education of provider team on impact of trauma on PH and BH and initiation of basic welcoming, person-centered, trauma-informed approaches to engaging people with complex needs. Coordinate referrals for trauma services.	Routine use of EB or consensus guidelines for universal and targeted preventive screenings with use of standard workflows for f/u on positive results. Provider team monitored on screening frequency and follow up on results. Demonstrated use of common preventive screening guidelines to screen for at least one BH or PH condition. Provider team, including embedded BH or PH consultant if any, routinely use EB/consensus guidelines or workflows for patients with PH and/or BH conditions. Systematic measurement of symptoms completed for percentage of patients. In addition to Integration Construct 1: Prescribers will occasionally initiate medications for selected co-occurring conditions, including medication treatment for SUD, and will consult with "co-occurring" prescriber for assistance with ongoing management. Evidence of initiation of first line antidepressants, anti-anxiety and attention deficit disorder medications by most PCPs in a practice. Documentation or formal contract with psychiatric consultant. In addition to Integration Construct 1: Ongoing implementation of person-centered trauma-informed care models.	Prescribers more regularly initiate and manage a range of medications for common co-occurring PH or BH conditions, including medication treatment for SUD, with routine consultation and collaboration with "co-occurring" consultant. See Integration Construct 2 plus evidence of treating more than one condition (in collaboration with a consulting psychiatric or physical health provider). In addition to Integration Construct 2: Adoption of trauma-informed care strategies, treatment and protocols by treatment team at all levels. Routine use of validated trauma assessment tools.

DOMAINS	SUBDOMAINS	HISTORICAL PRACTICE	SCREENING AND ENHANCED REFERRAL	CARE MANAGEMENT AND CONSULTATION	COMPREHENSIVE TREATMENT AND POPULATION MANAGEMENT
3. Ongoing Care Coordination and Care Management.	**3.1** Longitudinal clinical monitoring and engagement for addressing prevention and intervention for co-occurring PH and/or BH conditions.	None or minimal mechanisms for routine coordination and f/u of patients referred to PH or BH care.	Provider team has a basic mechanism for tracking f/u to appointments with PH or BH referrals, navigating or assisting with appointments and encouraging/prompting adherence to medications and other co-occurring treatment recommendations.	Team members who can provide data analysis to guide care and plan. Assigned team member(s) who can provide routine care coordination and monitor routine proactive follow-up and tracking of patient engagement, adherence and progress in co-occurring PH and/or BH services, whether provided by the team or by referral. Availability of coaching by assigned care coordinator or others to ensure engagement and early response.	In addition to Integration Construct 2: Availability of a continuum of care coordination, involvement of consulting specialists like a BHC or RN care manager based on stratification of need across the full range of populations served. Use of tracking tool to monitor treatment response and outcomes over time at individual and group level, coaching and proactive f/u with appointment reminders.
4. Self-management support that is adapted to culture, socio-economic and life experiences of patients.	**4.1** Use of tools to promote patient activation and recovery from co-occurring PH and/or BH conditions with adaptations for literacy, economic status, language, cultural norms.	None or minimal patient/family education on PH and/or BH conditions, PH and/or BH healthy behavior skills and PH and/or BH risk factor screening recommendations.	Some availability of patient/family education on PH and/or BH conditions, PH and/or BH healthy behavior skills and PH and/or BH risk factor screening recommendations. Includes materials/handouts/web-based resources, with focus on referral to outside resources.	Routine brief patient/family education delivered in-person or technology application on selected PH and/or BH conditions, PH and/or BH healthy behavior skills and PH and/or BH risk factor screening recommendations. Treatment plans include diet and exercise, with common but not routine use of self-management goal setting for both PH and BH conditions.	Routine and ongoing patient/family education on PH and/or BH conditions, PH and/or BH healthy behavior skills and PH and/or BH risk factor screening recommendations throughout the service continuum, with practical strategies for patient activation and healthy lifestyle habits. Self-management skills and goals routinely outlined and monitored in treatment plans. Advance directives discussed and documented when appropriate.
5. Multi-disciplinary team (including patients) with dedicated time to provide integrated PH/BH care.	**5.1** Care team. **5.2** Sharing of treatment information, case review, care plans and feedback. **5.3** Integrated care team training and competency development.	Provider team, patient, family caregiver (if appropriate). No or minimal routine sharing of treatment information and feedback between BH and PH providers in different settings. None or minimal training of all staff levels on integrated care approach and incorporation of PH/BHI concepts.	Provider team patient, family caregiver. Possibly care coordinator or manager. Routine release and exchange of info (phone, fax) between PH and BH referral providers on PH and BH issues, without regular chart documentation. Basic training of all staff levels on integrated care approach and incorporation of Integrated Care concepts and screening/referral workflows.	BH consultant(s) and care coordinators available to PH team. PH consultant (nurse/care manager) available to BH team. Should be access to a BH psychiatrist/NP or a PCP. Discussion of assessment and treatment plans in-person, virtual platform or by telephone when necessary and routine PH and BH notes visible for routine reviews. Routine training of all staff levels on integrated care approach and incorporation of Integrated Care activities into integrated teamwork, with role accountabilities defined for each team member.	PH/BH staff, with care managers, peers/CHWs, working as integrated teams throughout the continuum with patients/families. 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. Routine integrated team processes like huddles and care meetings. Systematic annual and continuing training for all staff levels with learning materials that target areas for improvement with integrated teamwork for all categories of staff.

KEY ELEMENTS of Integrated Care		PROGRESSION to Greater Integration →			
DOMAINS	SUBDOMAINS	HISTORICAL PRACTICE	SCREENING AND ENHANCED REFERRAL	CARE MANAGEMENT AND CONSULTATION	COMPREHENSIVE TREATMENT AND POPULATION MANAGEMENT
6. Systematic quality improvement (QI).	**6.1** Use of quality metrics for PH/BH integration improvement and/or external reporting. Ability to measure baselines for processes and outcomes and apply QI activities to demonstrate improvements for one or more co-occurring PH and/or BH Domains.	None or minimal use of PH and/or BH quality metrics (limited use of data, anecdotes, case series).	Limited tracking of co-occurring PH and/or BH quality metrics for people served and/or for state or health plan reporting. Some ability to report and track improvement for group level issues. Include tracking of disparities in metrics as relates to marginalized and underserved populations.	Routine periodic QI monitoring of identified PH and/or BH quality process and outcome metrics, ability to regularly review performance against benchmarks and attempt to improve performance as needed. Include tracking of disparities in metrics as relates to marginalized populations with targeted efforts to address disparities as a key part of performance improvement.	Routine incorporation of PH/BH measurement into organizational QI with ongoing systematic monitoring of population level performance metrics, ability to respond to findings using formal improvement strategies and routine implementation of improvement projects by QI team/champions, with demonstration of progress. Include tracking of disparities in metrics as relates to marginalized populations with routine implementation of QI efforts specifically targeted to address disparities.
7. Linkages with community and social services that improve BH and PH and/or mitigate environmental risk factors.	**7.1** Linkages to housing, employment, education, DD/BI, child/adult protective, domestic violence, financial entitlement, home care, immigration, other social support services.	No or limited/informal screening of social determinants of health (SDOH) and linkages to social service agencies, no formal arrangements.	Routine SDOH screening and referrals made to social service agencies. Some referral and follow-up, but few if any formal interagency arrangements established.	Routine SDOH screening, with formal collaboration arrangements and contacts established with commonly used social service agencies. Some capacity for follow-up tracking and service monitoring as part of team-based care and care coordination functions.	Detailed psychosocial assessment incorporating broad range of SDOH needs. Patients and families routinely linked to collaborating social service organizations/resources to help improve appointment adherence, healthy food sources, with f/u to close the loop. Routine meetings with "complexity care" partners to continuously improve collaborative efforts.
8. Sustainability	**8.1** Build process for billing and – where applicable – process and outcome reporting to support financial sustainability of integration efforts. **8.2** Build process for expanding regulatory and/or licensure opportunities.	No or minimal attempts to bill for co-occurring PH and/or BH screening, prevention, intervention conducted on site. May have "special" services supported by grants or other non-sustainable funding. Licensed and/or regulated as a PH OR BH provider with no or limited understanding of how to provide or document integrated interventions for co-occurring diagnoses.	Billing for PH or BH screening and treatment services under fee-for-services with process in place for tracking reimbursements for PH and/or BH services. Established procedures for providing and documenting integrated screening and interventions, whether on-site or through collaboration, that support what is allowed within single license.	Revenue from payments for developing capacity or for improving processes through quality incentives related to PH or BH. Able to bill some bundled rates for specialized services such as COCM or MAT. Formalized ability to provide some level of integrated PH and BH services within a single license, as well as to coordinate and document internal or external service provision by a provider with the "other" license. Meets PCMH or BH Health Home standards.	In addition to Integration Construct 2: Receipt of value-based payments that reference achievement of BH and PH outcomes for the population served. Revenue helps support necessary staffing, services and infrastructure to support the continuum. Provides licensed PH and BH services in shared services settings throughout the continuum and regularly works to improve design and application of administrative or clinical licensure requirements and regulatory standards to meet evolving capacity to support integrated care for the population served.

Appendix 4:

Getting Started With CHI Framework: Planning for Change and Implementation

Using the CHI Framework as a measurement tool for program or practice assessment is intended to generate an open quality improvement conversation in the context of a quality improvement team that includes representatives from different programs or service components, as well as from different levels of the organization. The team uses the Framework to discuss the organization's level of progress for the structure and process elements in each Domain and subDomain, using the descriptors in the Domain (see example of Domain One at Figure A and view the whole tool in Appendix 3).

Although this discussion on planning change is focused primarily on providers, it is recommended that payers and regulators wishing to use the CHI Framework participate in a quality improvement partnership with their provider networks as well. This creates the opportunity for open discussion about administrative, clinical and financial barriers to progress and provides much more honest and collaborative assessment of both current state and achievable targets of progress.

To set the stage for this quality improvement process, provider organizations should prepare for the transformation inherent in advancing integration before using the CHI Framework for self-assessment.

As a first step, it is essential to ensure that senior leadership within the organization is committed to improving integratedness and the underlying work needed to achieve that improvement. In addition, it is important to educate staff on how to engage in organized quality improvement and change management and to establish structures and processes to support success. For example, provider champions from different disciplines can influence and amplify the implementation of integrated services by pushing adoption of quality initiatives, co-leading integration training and helping to organize the CHI Framework self-assessment discussions. Evidence from organizational stories of success in integration highlights the benefits of non-provider administrative support staff as champions or co-leaders as well, tapping both their influence and unique perspective that contribute to overcoming organizational challenges on the integration journey.

Developing inclusive quality improvement teams to address change is not only valuable for using the CHI Framework tool itself, it also facilitates relationships between providers and assists with successful development of new workflows by involving those who are directly affected by those changes. The CHI Framework team self-assessment discussions will identify the need for specific changes in care processes in each Domain as key for implementing and sustaining improvements in integratedness, and those improvement recommendations can then ideally be addressed by inclusive QI teams as well.

USING THE FRAMEWORK TO MEASURE INTEGRATEDNESS

The CHI Framework not only delineates measurable standards, it is also designed as a structured self-assessment tool by which all types of providers can delineate progress in integratedness in a way that is transparent to other stakeholders. This tool can also be adapted to be utilized by external reviewers.

Scoring the Domains (see example using Domain 1 in the Inset Box 1): Using the CHI Framework tool, the representative QI team reviews each Domain and subDomain in turn, identifying by consensus which set of structure and process indicators of integratedness in the tool best fit their program, practice or organization. Note that ratings for each Domain (and subDomain) are not numerical per se. Rather, each Domain is rated according to whether the integration process is more reflective of historical practice or, Integration Construct 1 – Screening and Enhanced Referral or, Integration Construct 2 – Care Management and Consultation or, Integration Construct 3 – Comprehensive Treatment and Population Management. Because this is a quality improvement conversation, identifying an "honest baseline" for each Domain is important; there is no advantage to scoring the program higher than it is. In addition, it is important to remember that different programs or practices within the SAME organization may likely score in different Integration Constructs. This is important information that should be recorded to guide further improvement, not just blended to get a single "average" score for the organization.

Note as well that identifying which Integration Construct best fits that Domain involves selecting the predominant workflow descriptors for that Domain or subDomain (some scatter is likely because most organizations are not uniform in their implementation of integrated practices). Further, within each Domain and Construct, there is likely to be a continuum of progress, from just getting started to more complete implementation. This should be recorded as well. In addition, each Construct builds on the others, so scoring within Integration Construct 2 requires evidence of significant progress in Integration Construct 1 as well. Finally, note that the CHI Framework tool does not provide specific numerical anchors, such as what percentage of people receive this level of integration, for which issues and for what results. Development of more specific anchors for each Domain within each Integration Construct will require further research and evaluation of the CHI Framework. In the meantime, users of the CHI Framework desiring more specificity have options for how to adapt the assessment process accordingly. See sections below for Options for Increasing Specificity.

Example: Scoring Domain 1 (See Figure A)

In the first Domain (Screening, Referral and Follow-up), there are two subDomains – one related to screening and one related to referral.

- For Integration Construct 1 (Screening and Enhanced Referral), mapping as operating on the "screening" subDomain is by providing systematic screening for high prevalence BH and/or PH conditions and risk factors and proactive health/BH education to support motivation to address risk factors and positive screens and includes patient engagement in these processes.

- For Integration Construct 2 (Care Management and Consultation), the requirement is the Integration Construct 1 criteria plus systematic utilization of registries for tracking progress of patients they treat.

- For Integration Construct 3 (Comprehensive Treatment With Population Health), the requirement is the Integration Construct 2 criteria plus extending Construct 1 and 2 to services to patients attributed to their practice but not directly receiving care and capacity for risk stratification to match interventions to level of need.

As noted in the text, mapping within each Domain is likely to be on a continuum and may vary across programs in an organization. Note whether each Domain in each program is in "early" or "late" stages of development for each Integration Construct. For example, an Integration Construct 1 primary care clinic may give itself credit for having routine screening for depression for 80 of patients, or for screening 40 for both depression and SUD. While the goal may be 100 screening for all relevant issues, it is important for programs to recognize progress and give appropriate credit for the progress while continuing to improve.

Identifying Integration Constructs: Scoring a program or practice as achieving one of the Integration Constructs ideally reflects being able to meet the Construct standard for each Domain (and subDomain) required for that Construct. However, most programs will not be uniform in their level of progress, so the Integration Construct achieved by a particular program or practice should reflect the predominant Integration Construct achieved across multiple Domains. Note again that different components of the same organization may be providing different Integration Constructs, and even different components providing the same Integration Construct may be at earlier or later stages of development.

This exercise provides a level of specificity that is helpful for the organization in defining its targets or objectives for integratedness for various programs and practices and for defining next steps in its CQI process for making further progress. For payers it provides a level of specificity in understanding what each program is doing and what results are likely to be produced.

Guidance on Identifying Integrated Constructs

- Although the CHI Framework mapping identifies the Integration Construct for each Domain, there is no expectation that a program of organization will perform equally in each Domain.

- Each program rates the Integration Construct provided based on the Predominant Integration Construct across all the Domains.

- Different program units withing one large organization may be providing different Integration Constructs.

- Even within one organization, different subpopulations may be in different Integration Constructs. For example, in a large health center serving 20,000 people, there may be a population that has a value-based incentive contract with a particular payer to provide Integration Construct 3; meanwhile, there may be another population that is part of an Integration Construct 2 Primary Care Health Home under the state Medicaid program, and the remainder of the population may receive some combination of Integration Construct 1 and 2 services.

- Organizations are advised to identify progress in the provision of Integration Constructs with as much specificity as possible, both to guide improvement efforts for the organization, as well as to provide transparency for payers and regulators.

Increasing Specificity: The flexibility of the CHI Framework allows for an individual PH or BH program, practice or organization to tailor its goals and specific implementation steps according to resource capacity, population needs, payer incentives and regulatory requirements.

Many providers, payers and population managers will desire additional specificity regarding implementation of integratedness, whether to guide improvement efforts or to determine the extent to which current efforts are sufficient in scope to match the needs of the population served.

Measuring Reach: One area where more specificity may be desired is in measuring the degree to which the Integration Construct performs regarding:

What issues are addressed? In what percentage of the population? And with what degree of progress?

Providers, payers and population managers should negotiate agreement on a list of key issues for prevention and intervention then track of the numbers of people identified and outcomes.

Measuring Disparity and Equity: Another component of successful integrated service delivery for an organization or a system is ensuring that the benefits of integration are experienced by all populations served, with specific attention to those marginalized populations traditionally most impacted by inequity and disparity (e.g., racial and ethnic minority populations). The first step towards this goal is proactively identifying disparities in outcomes, allowing the provider to identify areas where the implementation of Domain elements is unintentionally producing inequity or disparity. As providers identify Domain elements and associated metrics to track and improve, this tracking can (and should) include proactive measurement of disparity across all metrics. Such tracking can provide the initial data needed to facilitate targeted efforts to improve experience and outcomes for vulnerable populations.

Developing Improvement Plans: The CHI Framework is designed primarily to support continuous quality improvement for integratedness. Based on the baseline scoring and mapping, each organization should develop a formal measurable QI plan that addresses specific achievable opportunities (SMART Goals) for progress. As noted previously, it is strongly recommended that organizations using the CHI Framework map their actual status with as much sensitivity as possible at the appropriate program and population level, rather than trying to just pick one number to represent the whole organization. Part of the utility of the framework is to develop a common language for providers, payers and regulators to describe and measure integratedness on a continuum of progress across multiple Domains, issues and populations. Providers should engage in a conscious QI effort to measure the baseline, set targets for improvement, measure progress over time and report results to individual providers, agency leadership, community stakeholders, regulators and payors to improve understanding and promote better outcomes for people served.

Successful implementation of integratedness in the context of the CHI Framework supports flexibility of QI planning. Planning for progress for any program, practice or organization may involve one or more of the following:

- **Strengthening the current Integration Construct:** An example would be strengthening Integration Construct 1 by screening for more issues in a greater percentage of people served or strengthening Integration Construct 2 by adding additional issues to care coordination, registry and outcome tracking.

- **Advancing from one Integration Construct to the next:** An example would not only be strengthening Integration Construct 1, but actively seeking to develop processes in several Domains that would permit movement of that program or practice from Integration Construct 1 to Integration Construct 2, or from Integration Construct 2 to Integration Construct 3.

- **Multiple targets of progress:** It is likely that a complex organization with multiple programs, practices, payers and populations may have an improvement plan that includes multiple different targets for different components.

Further, payers, regulators and providers in any system should work collaboratively to identify the best improvement targets for each program/practice, as well as for the provider network and population. Based on types of issues (e.g., rural vs. urban, payer mix, MH, SUD, diabetes, hypertension, etc.), resources, incentives, space limitations and workforce capacity, providers will likely vary in the Domains and subDomains they can reasonably expect to advance. Similarly, payers and population managers may vary in the issues that are most important to prioritize based on overall data on cost and outcomes in the population served (endemic diabetes, childhood asthma, high prevalence of opioid overdose, significant homelessness with active BH conditions and frequent ED visits, etc.). This may in turn determine which Integration Constructs are appropriate for which providers in the network, as well as what types of processes for which prioritized PH or BH issues or conditions will be incentivized. For example, providers with fewer resources may need to aim for Domain elements and associated value metrics within Enhanced Screening and Referral (Integration Construct 1) and may benefit from near-term payment incentives or direct resources to implement the required interventions for issues or populations (e.g., OUD) that are prioritized by their payer partners. In the same geography, more well-resourced clinics, such as those embedded in larger organizational structures and those with existing capacity for flexible value-based reimbursement approaches, may be incentivized to achieve more progressed elements (Integration Construct 2 or 3) across more Domains – and more types of PH or BH issues – more readily.

Appendix 5:
Payment Methodology Concepts

CPT CODE SERVICE PAYMENTS

There are CPT Code Service Payments that cover a limited number of specific integrated services (either direct patient care or care coordination) that take place either on a specific date or within a certain time period. Their implementation does not require a practice-wide infrastructure or a minimum patient volume. These services are usually assigned codes and billed in the same way as other fee-for-service codes. Their specificity allows payers the opportunity to incentivize or prioritize the particular integration interventions they see as most valuable. Additionally, payers and providers alike can easily track utilization of these codes across their client population by provider and by patient cohort, providing a simple baseline for quality improvement efforts within any of the integration Domains.

Yet, their specificity to a direct service can be a barrier to effective dissemination of evidence-based, effective Integrated Care. The single code, or even the combination of all specific codes currently available, does not commonly cover costs of many essential elements of integrated service delivery. Meanwhile, the rates are often too low to justify the added documentation and billing burdens. Finally, even when the rates are potentially sustainable, there are regulatory, contractual or vendor-specific limits on billing which create burdens that disincentivize providers from implementing or maintaining integrated care services in the first place.

Examples of currently available CPT codes relevant to integration include:

- **E&M codes - CPT 99211-99215**

- **Psychotherapy codes – CPT 90832-90838**

- **HBAI codes – CPT 96156- 96171**

- **SBIRT CPT - codes 99406-99409**

- **Preventive Medicine (99401-99412)**

- **BH screens and repeat measures (96127)**

- **Developmental/Behavioral screens (96127)**

- **Adaptive Behavior Services (97151-97158)**

- **General Behavioral Health Integration Care Management – CPT 99484**

- **CPT codes for specialist consultation (99241-99245)**

- **CPT codes for health education, wellness coaching**

- **Collaborative Care codes**

- **Bundled payment for MAT**

- **Medicare – Chronic Care Management, Complex CCM, Principal CM, Transitional Care Management TCM**

- **Interprofessional Telephone/ Internet/Electronic Health Record Consultations codes 99446, 99447, 99448, 99449, 99451 to report interprofessional telephone/ Internet/electronic health record consultations**

CARE ENHANCEMENT PAYMENTS

Here we group together payments that are for a bundle of services, processes, capacities or improvements to the way a practice operates under the name "Care Enhancement Payments." In addition to reimbursing for specific services or treatments, they are also intended to improve the overall quality of care. They are useful for ensuring that infrastructure for necessary staffing and IT capabilities that are typically not covered through specific service individual payments are funded. They support a wider and more flexible range of specific processes essential for integration such as care coordination, team-based care and the presence of BH staff in primary care or non-reimbursable peer counselors and recovery coaches in a BH clinical setting. Because the payments support a wider range of services/functions with fewer specific requirements, they allow for opportunity for innovation. The provider has a great deal of flexibility to use resources creatively based on the population being served, allowing them to allocate the right level of resources to the right patients at the right time, based on need.

But this also allows implementations to vary greatly across providers. The variability makes it difficult for payers to assure the payments have been used as intended or to benchmark process indicators across providers. Because the intricacies of upstream improvements to care pathways are not captured by specific codes, connecting specific changes to improved outcomes or reduced costs downstream can be difficult or impossible. Meanwhile, documentation or periodic reporting to assure compliance to delineated components can add new or different burdens.

Currently available examples of Care Enhancement Payments may include:

- **Per-member, per-month (PMPM) payments**

    » Person Centered Medical Home (PCMH)

    » Medicaid Primary Care Management (PCCM)

    » Section 2703 health home for chronic conditions (behavioral health and physical health as well as SUD and child and adolescent populations)

- **Prospective Payment System (PPS)**

    » Certified Community Behavioral Health Center (CCBHC)

    » FQHC in some states

    » Primary Care First (Medicare)

- **Grant funding methodologies**

VALUE-BASED PAYMENTS

Value-based Payments (VBPs) reward providers for improved quality in processes or outcomes and reduced costs (or the combination of the two) and are assessed independently from the direct services provided and billed for by a provider. This is typically accomplished through successful demonstration of a minimum set of quality standards. Notably, few providers carry downside risk presently – in which they would lose money for failing to demonstrate minimum standards of quality or exceeding preset spending caps – but can achieve significantly higher reimbursement for improved value. Glide paths for moving providers toward downside risk are seen as the evolutionary destination of VBP models, thus transferring responsibility for achieving better quality at lower costs from the payer to the provider.

Currently, all VBPs are rewarded supplementally to individual service payments or care enhancement payments. Providers continue to bill codes or collect payments as usual, and this continues to constitute the majority of provider income. The total VBP being rewarded is often (though not always) codified in a value-based contract, with defined "floors" and "ceilings" limited to around 10% of total cost of care as being eligible for additional VBP or subject to penalties. VBP arrangements are limited to an "attributed" population of patients, which can encompass all patients covered by a specific payer or attributed to an entire practice or to a carved out sub-population defined by risk, complexity or specific diagnoses (e.g., severe mental illness or SUDs).

On the upside, payers can choose to incentivize adoption of specific care processes that they believe are particularly valuable for integration, or they can reward specific outcomes on which they are most focused (usually those they believe will provide the biggest bang for their buck). The provider, meanwhile, has substantial flexibility to use whatever portion of the payment is in excess of the actual cost of care to further innovation and improvements in whatever way they see fit. The VBP methodology pushes providers into becoming more skilled in collecting, aggregating, analyzing and using data to make treatment and management decisions, which, over time, will have a ripple effect improving the quality and efficiency of care throughout the organization. Essentially, they are rewarded not just for achieving specific outcomes in the present, but also for becoming more skillful and competent in care delivery in the future.

VBPs have unique disadvantages as well. Substantial time lags between service delivery and performance payments – which are delayed sometimes more than a year while payers collect and aggregate all paid claims from the entire prior year – can dampen enthusiasm and blunt the impact that such models could have. These lags may create financial hardship on primary care and BH providers who traditionally operate on slim margins. Such lags sap the motivation of providers to perform the extra work involved in pursuing process or outcome metrics, while inhibiting innovation and risk taking by provider entities who can't know if or how much money they will receive in the future to justify expanding valuable services in the present. The rate-methodologies to set baseline costs, measure impact and calculate savings and value are extremely complicated, making the administrative burden significant for both payers and providers. Because most value-based contracts are individually negotiated with each payer and because measures of these costs and quality outcomes, as well as the size of the reward itself, may vary across populations and among payers, providers can be overwhelmed and unable to meet the standards of the contracts. Many providers will not have the financial or data analytic expertise to participate, and payers will be unable to support this detailed level of management with more than a small subgroup of their contracted providers. Since the performance measures vary widely and are highly specific to each VBP contract, providers will not be able to focus management enough to be effective unless it is a contract covering a relatively large share of their overall patient population. Payers are unlikely to find this method effective in improving provider performance outside of communities where they have a large market share of all covered lives. There are inefficiencies and ambiguities inherent to both attribution of clearly defined patients and of how data is collected and analyzed that can leave providers without a clear sense of who they serve or by what standard they are being measured.

Currently available payment methodologies that include a value-based component include:

- **Accountable Care Organizations (ACO) including sub-capitation**

- **Medicare Shared Savings Plan (MSSP)**

- **State-based Medicaid Savings Initiatives**

- **Merit-based Incentive Payment System (MIPS)**

- **Bundled or Episode-based Payments**

- **Performance-based Incentive Payments (PBIP), which are frequently included in the following programs:**

    » Person-Centered Medical Home (PCMH) PMPM

    » Medicaid Primary Care Care Management (PCCM) PMPM

    » Certified Community Behavioral Health Center (CCBHC) PPS

    » FQHC

    » Section 2703 health home for chronic conditions – PMPM

Appendix 6:

Table and Charts of Integrated Programs and Measures

Table 1 – Examples of Metrics to Each Integration Construct

Table of Examples of metrics for each Integration Construct:

CONSTRUCT	TITLE	BH SETTING EXAMPLE	PH SETTING EXAMPLE
1.	**Screening and Enhanced Referral**	Screening rates for cardiovascular disease or diabetes in people with serious mental illness (per ADA/APA guidelines and HEDIS). Demonstration of at least one Care Compact or MOU with a PH provider to provide PH care and percent with completed referral (clinical documentation of lab, notes) received from referral organization.	Screening rates for select groups – depression in adults and adolescents, attention deficit disorder in children and adolescents, anxiety disorders in children, adolescents and adults. Substance use disorders in adults and adolescents (SBIRT approach). Demonstration of at least one Care Compact or MOU with a BH provider to provide BH care and percent with completed referral (clinical documentation of notes) from referral organization.
2. **Includes metrics** **from Construct 1**	**Care Management and Consultation**	Percentage of child and adolescent patients with elevated BMI offered nutritional counseling. The percentage of patients with OUD prescribed MAT with six, 12, 18 months (could be in PH or BH column). Percentage of patients with SMI and diabetes demonstrating control (A1c < 9).	Percentage of patients (adult and adolescent) diagnosed with depression with a 50% reduction in depression symptoms utilizing a validated too (PHQ9 for example) at six and 12 months (NQF 1884 and 1885). Percentage of the above that reach remission by six and 12 months (NQF 710 and 711).
3. **Includes metrics from Constructs 1 and 2**	**Comprehensive Treatment and Population Health**	Reduced utilization of ED and inpatient, improved follow-up post ED and inpatient reduction in 30-day readmissions, total cost of care.	Reduced utilization of ED and inpatient, improved follow-up post ED and inpatient reduction in 30-day readmissions, total cost of care.

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Table 2 – Alignment of Integration Constructs in the CHI Framework for all Ages and Populations

INTEGRATION CONSTRUCT	1- SCREENING AND ENHANCED REFERRAL	2- CARE MANAGEMENT AND CONSULTATION	3- COMPREHENSIVE TREATMENT AND POPULATION MANAGEMENT
Service scope	Interventions and practices	Program/team	Organization
People served	Individuals	1 + cohorts	2 + populations
Co-occurring issues addressed	At least one (prevention and/or treatment)	Several, according to design	All relevant
Measurement	Mainly screening and referral process measures	Process and some outcome measures	Comprehensive process and outcome measures
Value (health)	Improved health for individuals	Improved health and equity for cohort with complex needs	Improved population health and health equity
Value (cost)	Cost neutral or slightly higher	Reduced cost for high complexity cohorts	Reduced per capita cost
Payment	Enhanced FFS and quality incentives	1 + Care management payment	2 + Shared risk