Approaches to Integrating Physical Health Services into Behavioral Health Organizations


Prepared for:
Centers for Medicare & Medicaid

Submitted by:
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July 16, 2012
The goal of the Medicare-Medicaid Coordination Office (MMCO) in the Centers for Medicare & Medicaid Services (CMS) is to ensure beneficiaries enrolled in Medicare and Medicaid have access to seamless, high quality health care that includes the full range of covered services in both programs. To support these efforts, MMCO contracted with The Lewin Group, along with the Institute for Healthcare Improvement, to investigate provider-led practices that show promise in increasing provider capacity to deliver integrated care to Medicare-Medicaid enrollees. Based on its research, the Lewin team developed four guides that present resources, examples, and tools for providers interested in enhancing their ability to deliver integrated and coordinated care, including this one on Approaches to Integrating Physical Health into Behavioral Health Organizations.

MMCO directed the Lewin team to focus its investigation of promising practices on providers that serve individuals with physical disabilities, dementia or Alzheimer’s disease, or serious mental illness. The team selected several provider-led practices through an iterative process based on an environmental scan and guidance from numerous experts. It also conducted site visits to selected practices to understand the core components that contributed to their success.

Based on the site visits and input from a Technical Evaluation Panel, the Lewin team identified four inter-dependent, high-level concepts that support the delivery of integrated, coordinated care:

- Integrating physical health services into behavioral health organizations
- Supporting self-management for adults with serious mental illness
- Workforce development to support care management
- Navigation services for individuals with severe mental illness

Approaches to Integrating Physical Health into Behavioral Health Organizations is based largely on information from the Greater Nashua Mental Health Center, a community mental health center that has partnered with a Federally Qualified Health Center to embed a nurse practitioner, develop a report card tool to assess and monitor member’s health, and implement a variety of wellness programs through a Substance Abuse and Mental Health Services (SAHMSA) grant. The concepts that were found to underpin the Healthy Connections approach were supplemented with a thorough scan and expert reviews, including in-depth conversations with a number of other organizations that have incorporated physical health into behavioral health settings.
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Approaches to Integrating Physical Health Services into Behavioral Health Organizations

Introduction

Behavioral health (BH) and physical health (PH) services are typically delivered by different providers in separate settings, often with little coordination or integration. This fragmented delivery of care can be particularly problematic for individuals with serious mental illness (SMI) because of their behavioral health needs and their often significant physical health problems. The term SMI is broadly defined to include individuals diagnosed with a “mental, behavioral, or emotional disorder and resulting in substantial impairment in carrying out major life activities”\(^1\). Individuals with SMI are at greater risk for complex physical health problems, may face more barriers in accessing PH care, and on average die 25 years earlier than those without SMI.\(^2\) While some premature deaths among individuals with SMI are related to complex mental health issues, a significant proportion are due to comorbid conditions such as cardiovascular disease, diabetes, respiratory disease, or infectious diseases. At the same time, the mental illness itself may interfere with individuals’ ability to receive appropriate care.

Because of the relationships among physical, mental, and social factors and high rates of comorbid physical illness, increased integration of care could significantly improve the care of people with SMI.\(^3,4\) New health care delivery models, such as accountable care organizations (ACOs) and health homes, and changes to health care financing may enable more providers to incorporate practices that increase the integration of physical and mental health services, particularly the integration of physical health into behavioral health settings to help address the needs of individuals with SMI.

This document describes the importance of integrating physical health into behavioral health settings, introduces core elements and ideas organizations can adopt to introduce physical health into a behavioral health setting, and provides guidance and strategies for implementing one or more of those elements into a behavioral health organization.

What is integrated physical and behavioral health care?

Integrated care is comprehensive, personalized, and consumer-centered. Comprehensive care encompasses mental, behavioral and physical health conditions and considers the influence of multiple conditions, social factors, social functioning, and consumer preferences to personalize assessments, treatments, and goals of care. Health homes and the Program of All-Inclusive Care for the Elderly (PACE) are models that aim to integrate care. These models are distinguished from most health care delivery in the US by the presence of a multi-disciplinary team that shares

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information and collaborates to deliver a holistic, coordinated plan of care.\textsuperscript{1,2} In these models, the multi-disciplinary team shares the same physical working space. These models are often described as fully integrated models of care.

Short of fully integrated models, providers can aim to increase communication across multi-disciplinary providers in multiple settings. Behavioral health providers can adopt these models and deliver increasingly integrated care by incorporating assessment and referral services, holistic care coordination or care management, navigation services, robust support for consumer participation in care and self-management, peer support, and co-location of primary care services within specialty behavioral health agencies.

\textbf{Why is integrated care important?}

Behavioral health and physical health services for adults with SMI are typically provided by multiple providers in separate care settings with little coordination. This fragmentation can be particularly problematic for individuals with SMI for two reasons. First, individuals with SMI are often affected by chronic medical illnesses (such as diabetes and hypertension) and conditions (such as obesity and tobacco dependence), requiring care from multiple providers and settings.\textsuperscript{5} Second, individuals with SMI often face difficulties in accessing high quality care. Poverty, discrimination, cognitive impairment, and environmental factors (e.g., distance to health care, language differences) may create access barriers for these individuals.\textsuperscript{6}

The lack of coordination or integration of care and services across providers is associated with increased morbidity (i.e., poor health), premature mortality, and adverse outcomes, including emergency room visits and ambulatory care-sensitive hospital admissions.\textsuperscript{7,8} Increased morbidity and premature mortality are linked to the complex interactions between mental illness and common comorbid conditions including cardiovascular disease, diabetes, respiratory disease, or infectious diseases.\textsuperscript{9} Moreover, episodes such as emergency room visits and hospital admissions increase the risk of adverse outcomes and account for a significant portion of the medical expenditures for individuals with SMI and comorbid medical illness.\textsuperscript{10}

\textbf{Why Integrate Physical Health Into Behavioral Health Organizations?}

Integrating physical health care into BH organizations results in increased access to care and improved care experiences for individuals with SMI.\textsuperscript{11} More integrated care also contributes to

\begin{itemize}
  \item\textsuperscript{6} Kilbourne AM, Greenwald DE, Bauer MS, Charns MP, Yano EM. Mental Health Provider Perspectives Regarding Integrated Medical Care for Patients with Serious Mental Illness Administration and Policy in Mental Health Research, DOI 10.1007/s10488-011-0365-9, 2011.
  \item\textsuperscript{7} Parks J, et al.
  \item\textsuperscript{8} Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality.. The NSDUH Report: Physical Health Conditions among Adults with Mental Illnesses. Rockville, MD, 2012.
  \item\textsuperscript{9} Parks J, et al.
  \item\textsuperscript{10} Chen HY, Baumgardner DJ, Rice JP. Health-related quality of life among adults with multiple chronic conditions in the United States, Behavioral Risk Factor Surveillance System, 2007. Preventing Chronic Disease, 8(1):A09, 2011.
\end{itemize}
improved health and decreases the risk of adverse outcomes, including hospital admissions.\textsuperscript{12,13,14} Some evidence indicates that integrated care for this population is associated with lower health care costs due to reductions in high-costs episodes because of greater access to primary care, less duplication in services, and coordinated follow-up care.\textsuperscript{15,16}

Veterans with SMI who received primary care services embedded in Veteran’s Affairs (VA) mental health clinic more often attained care goals for blood pressure, body mass index, triglycerides, and cholesterol levels than Veterans who received care in traditional primary care settings.\textsuperscript{9,10} Greater integration in care can also be achieved via care coordination and care management. Nurse care managers in an urban community mental health center coordinated the primary care their consumers received in primary care settings, which was associated with increase access to outpatient primary care and led to significant improvements in mental health functioning for individuals with SMI.\textsuperscript{17} Navigator programs for individuals with SMI to coordinate their care and support engagement for physical health concerns have reduced emergency department use, crisis services, and hospital admissions.\textsuperscript{18,19,20}

The Improving Mood Promoting Access to Collaborative Treatment (IMPACT) care management model for major depression in primary care settings demonstrated cost savings.\textsuperscript{12} In the PCARE model, a medical care management model of integration, average costs per individual were reduced.\textsuperscript{14} A 2001 study of veterans attending an integrated primary care-mental health clinic found that the mean cost per consumer in the integrated mental health clinic was $1,533 less than in the general VA medical clinic.\textsuperscript{10}

Specialty behavioral health providers play a vital role in improving the health of individuals with SMI. In the current health care delivery environment, there will increased opportunity to organize and pay for care that encompasses physical health concerns. Providers who can expand their capacity to deliver more integrated care will effectively position themselves to serve SMI consumers who may already have greater connection to specialty behavioral health settings and providers than to primary care.\textsuperscript{21,22,23}

\textsuperscript{13} Druss BG, Rohrbaugh RM, Levinson CM, Rosenheck RA. Integrated Medical Care for Patients with Serious Psychiatric Illness. \textit{Archives of General Psychiatry}, 58:861-868, 2001.
\textsuperscript{17} Druss BG, et al., 2010.
\textsuperscript{18} Magellan Health Services.
\textsuperscript{21} Alakeson V, Frank G, and Katz R. Specialty Care Medical Homes For People With Severe, Persistent Mental Disorders. \textit{Health Affairs}, 29: 867-873, 2010.
Approaches to Integrating Physical Health within Behavioral Health Organizations

The Collaborative Family Health Care Association (CHFA) describes five levels of integration that may be present between physical and behavioral health systems, ranging from minimal integration to full integration (see Figure 1).

**Figure 1. Levels of Integration adapted from CHFA.**

- Minimal Collaboration
- Basic Collaboration at a Distance
- Basic On-site Collaboration with Minimal Integration
- Close Collaboration On-site in a Partly Integrated System
- Close Collaboration Approaching a Fully Integrated System
- Full Collaboration in a Fully Integrated System

There are several approaches behavioral health providers can adopt to move toward full integration. These include, from least to greatest level of integration:

- Assessment and referral services for physical health conditions
- Care coordination and care management
- Peer support for holistic self-management and recovery
- Navigation services
- Co-located primary care in behavioral health agency
- Fully integrated SMI health homes.

Greater Nashua Mental Health center, a community mental health center (CMHC), integrates primary care and wellness services within using several of these approaches including on-site primary care and wellness programs and peer support for self-management and recovery.

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25 This is not an exhaustive list of approaches.
Some of the approaches above may already have been explored or implemented by your organization. The following sections describes these approaches and offers ideas and strategies to achieve them.

**Assessment and Referral Services for Physical Health Conditions**

Because of their frequent interaction and strong rapport with clients, behavioral health providers have opportunities to identify and address physical health problems and concerns facing individuals with SMI. Physical health assessment and screening provides an opportunity for early identification and monitoring of physical health problems. Health screening sends a strong cultural message to consumers about the importance of all aspects of their health care.

**Ideas to consider**

- **Take vital signs.** For organizations beginning this work, even measuring height and weight for individuals with high body mass index (BMI) sends a message that behavioral health providers care about a consumer’s overall health. Screening for something as basic as obesity can indicate which individuals may be at higher risk for comorbid conditions such as hypertension and diabetes.
  - The New York State Office of Mental Health (NYS OMH) requires all outpatient adult mental health clinics to collect data on three health indicators: BMI, blood pressure, and smoking status. The NYS OMH provides the necessary supplies and training to encourage sites to collect data. Participating clinics screened 50 percent of all NYS OMH outpatients in the four months after the protocol was implemented.

- **Ask consumers about preventive screening and visits.** An organization can emphasize the importance of physical health services by, for example, asking consumers about whether they have received flu shots or mammograms. Identify relevant preventive activities for your consumers and include a prioritized list as a trigger in the office visit protocol or medical record for providers to ask clients about specific services.
  - At Cambridge Health Alliance, an integrated academic health care system, psychiatry staff are prompted by the electronic medical record to ask about routine health maintenance (e.g., mammogram) and maintenance related to their current medication list (e.g., take weight).

- **Make appropriate referrals.** Organizations can make referrals to community health and wellness programs, physical health providers, and other health resources. In advanced settings, individuals can be referred to in-house wellness educators or an embedded physical health provider. Be sure to train staff on how to respond to screening results. Staff should know how to effectively converse about physical health conditions or make appropriate referrals to health or wellness materials or providers.

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Approaches to Integrating Physical Health Services into Behavioral Health Organizations

- **Assess and monitor physical health indicators over time.** This may be accomplished by asking consumers about their physical health at every visit. Focus on common comorbid conditions (e.g., hypertension and diabetes) or key risk factors (e.g., high BMI or smoking). Provide behavioral health providers with appropriate questions or prompts (e.g., are you trying to quit smoking?) and provide them with guidance on how to constructively respond to a variety of answers.
  - In New York State, behavioral health providers are given a list of questions to measure health indicators and are trained on managing their response.
  - **Greater Nashua Mental Health Center**, program and clinical leaders also designed a paper-based report card tool that gives health information specific to an individual consumer including healthy weight goals, his or her last weight measurement, a definition of normal blood pressure, and his or her last blood pressure measurement. The report card is provided to consumers as a way to provide tailored information to consumers about their health.

Useful tools for screening for physical health conditions in a behavioral health setting can be found under [Consumer Health Assessments](#) in Tools and Resources Section.

**Care Coordination and Care Management**

Care coordination and care management enables sharing of clinically relevant information (within confidentiality laws) across providers and can increase the receipt of appropriate services by making and follow-up on appointment for needed services. Care coordination or management staff also build relationships with community physical health providers and can increase the degree of a team-based approach to care.

**Ideas to consider**

- **Train or hire existing staff to function as care coordinators.** Care coordinators can establish formal relationships with primary care providers or organizations that serve a high numbers of individuals with mental illness.
  - The Providence Center, a community mental health center (CMHC) in Providence, Rhode Island, believes the strong relationship with a federally qualified health center (FQHC) has been essential to their success at integration. Other CMHCs have worked to build a robust rolodex of physical health providers that are likely to see their consumers.

- **Use case managers to make connections between physical and behavioral health providers.** Mental health agencies traditionally have case managers whose responsibilities include working with consumers on developing plans of care. Use case managers as a resource for incorporating preventive and primary care treatment goals. If given training to deliver self-management support, case managers can help consumers to develop self-management goals, manage chronic conditions, and promote wellness by supporting tobacco cessation, nutrition, and exercise.

- **For individuals without a primary care provider, provide information about local providers who are accepting new consumers.** Establishing a relationship with a
primary care provider will be an important step for continued integration of physical and behavioral health services.

- **Share abnormal physical health vitals with primary care providers.** Develop a template for obtaining informed consent and displaying physical health data. At a minimum, send abnormal physical indicators to your consumers’ physical health providers.
  - The Greater Nashua Mental Health Center mails a Report Card which contains physical health indicators tracked over time to consumers’ physical health providers.

Useful tools for building relationships and exchanging information with physical health providers can be found under Operational and Administrative Tools and Education and Training Tools in: Tools and Resources.

**Peer Support for Holistic Self-management and Recovery**

Engaging consumers in regular conversations about their overall health will support holistic recovery and independence. Behavioral health providers can use strong relationships and understanding of their client’s mental health challenges to frame and discuss issues in a client-centered way. Wellness activities can support adoption of health behaviors an essential component of consumer self-care and self-management. In addition, providing wellness activities on-site can reinforce the importance of taking a holistic approach to health to both staff and clients.\(^27,28\)

**Ideas to consider**

- **Place brochures in exam rooms to encourage consumers to ask any provider (physical or behavioral health) about physical health problems.** Be sure to provide corresponding training and support to providers about how to address individual’s questions about health.

- **Use mental health clinicians or peers to work with consumers to identify goals.** Organizations that are further along in this work might ask consumers about life goals without distinguishing among physical, behavioral, spiritual, personal, or professional goals.
  - The Greater Nashua Mental Health Center partnered with a neighboring peer support organization, Hope, Empowerment, Advocacy, Recovery, Towards Support (H.E.A.R.T.S), to offer consumers peers support for wellness and recovery.

- **Use an evidence-based intervention such as the Illness Management and Recovery Program (IMR).** The IMR program provides consumers with skills and problem-solving approaches to manage mental illness symptoms and can be delivered by peers or mental health clinicians.
  - Greater Nashua Mental Health Center (GNMHC) began using the IMR. GNMHC found that these evidence-based practice manuals and materials were


\(^{28}\) Bartels S, et al.
dauntingly large. The GNMHC medical director distilled the information into a manageable and easily portable binder for consumers.

- **Identify appropriate wellness programs.** Survey consumers on what wellness activities they would enjoy or find useful. Use health screenings to identify the most pressing health needs of the population.

- **Partner with other organizations to offer wellness activities to members.** Consider partnering with local community organizations such as the YMCA and farmers markets. Generate a list of wellness resources available to clients.
  - The **In SHAPE program** offered through The Providence Center works with the YMCA to offer consumers activities such as yoga, water aerobics, and weight training. Health Mentors who are both certified personal trainers and experienced case managers work with participants to achieve individualized wellness goals through programs at the YMCA.

- **Offer wellness activities at the community mental health center.**
  - **The Providence Center and Greater Nashua Mental Health Center** both offer a variety of onsite wellness programs for members. Both programs offer nutritional education, coaching, and smoking cessation. Programs do not have to be expensive. Healthy Connections offers a Saturday morning “walk with a doc” where the CEO and psychiatrist, Dr. Hafez, walks around the area with clients. Tools and resources for self-management support can be found under [Wellness Tools](#) in Tools and Resources Section and in the *Approaches to Self-management for Individuals with Serious Mental Illness* guide.

### Navigation Services

Navigation, a less integrated model than co-location, aims to increase coordination and integration of services. Navigators can offer a range of services including health assessment, self-management support, consumer engagement in care, medication reconciliation, coordination of services across, and personalized care planning across multiple providers and settings. Navigators are mobile and often outreach and interact with consumers face-to-face; navigators also monitor the receipt of care and services.

- **Use professional navigators to integrate services and coordinate care for consumers with complex medical needs.**
  - The **Montgomery County HealthConnections** navigation program in Pennsylvania used navigator teams consisting of a registered nurse and master’s level mental health clinician to provide a high degree of integration of care and support for consumers.
  - The HealthConnections navigation program, with support from Keystone Mercy Health Plan and Magellan Behavioral Health Plan of Pennsylvania, Inc., developed an integrated member profile using claims data that includes medications, hospitalizations, and recent office visits. (For more information on the Montgomery Country program and integrated member profile, please see the *Navigation Services for Individuals with Serious Mental Illness*).
Co-located Primary Care or Limited Primary Care Services in Behavioral Health Organization

Organizations that have not yet adopted co-location or full integration models can still find ways to offer some physical health services with minimal resources. Organizations can partner with health care providers (e.g., nurse practitioners or urgent care settings) to identify the most appropriate services to offer onsite.

Ideas to consider

- **Offer vaccinations at behavioral health centers.** Individuals may feel more comfortable receiving vaccines at a familiar place and are more likely to get vaccines if they do not have to go to more than one location. Partner mobile providers to offer on-site preventive screenings, such as mammograms.

- **Offer lab services to clients.** Consumers are less likely to follow through on lab work if they need to go to another clinic for blood work. Work with local laboratories or within your integrated system to bring lab services to the organization a particular day of the week.

- **Increase Opportunities for Warm Hand-Offs.**
  - **Creative Health Service**, a CMHC in Montgomery County, Pennsylvania, rents space to an FQHC and has worked closely with leaders and staff at both organizations to encourage warm hand-offs — physically walking individuals to the appropriate provider within the agency.

- **Set up a walk-in clinic staffed by a nurse or nurse practitioner in the behavioral health practice.**
  - At **Greater Nashua Mental Health Center**, consumers can walk in during clinic hours for basic physical health problems such as ear aches or sore throats.
  - At **Health and Education Services**, a non-profit full-service mental health organization on the North Shore of Massachusetts that serves a high percentage of Latino consumers, a Spanish-speaking nurse practitioner, who has expertise in both primary care and psychiatry, regularly visits three clinics. The nurse is available on a walk-in basis to see consumers for a range of medical issues.

Tools and resources to co-locate physical health care providers into behavioral health practices can be found under Operational and Administrative Tools and Education and Training Tools and Strategic Development and Financial Planning Tools in Tools and Resource Section.

Full Integration

The ultimate aim of this document is to support organizations on the path toward fully integrated systems where physical health services are integrated into a behavioral health setting and team-based care that supports individuals in their physical and behavioral goals is provided. The features and functionalities of a fully integrated specialty provider as outlined by the Substance Abuse and Mental Health Services Administration are:

- All health information is accessible to the full care team in a central place.
- Health professionals coordinate diagnoses and treatments so that they complement each other.
- Physical and behavioral health providers periodically reconcile medications.
- Individuals cannot tell the difference between behavioral health and physical health practices.
- There is a single consumer reception area and one visit addresses all needs.
- Funding is integrated and maximizes shared resources (e.g., billing staff).
- There is one board and governance system.
- Care teams use best practices and evidence to jointly assess, prioritize, and respond to consumers’ care needs.  

Tools and resources to support implementation of full integration can be found under Full Integration Tools in Tools and Resource Section.

Context and Considerations

In considering whether to integrate physical health services, behavioral health providers may benefit from first determining where they are on the integration spectrum. Organizations may develop a vision of full integration, incorporating clinical, operational, and financial capabilities. This vision will likely vary across providers, depending on their goals, consumers, and resources. The appropriate level of integration and the level that is achievable will reflect all of these factors. After identifying their current and desired states of integration, organizations can select which components explore further for adoption.

The tools described below can help organizations to assess their current situation and activities to identify next steps:

- **Organizational Assessment of Physical-Behavioral Health Integration**: This assessment tool developed by IHI was adapted from the Assessment of Chronic Illness care tool (ACIC) designed for primary care organizations to assess the degree to which they incorporate to elements of the Chronic Care Model (CCM). The CCM consists of community linkages, self-management support, decision support, delivery system design, information systems, and organization of care. This tool may be appropriate for specialty behavioral health providers because SMI is similar to other chronic illness. Specialty behavioral health providers may use the tool to focus their pursuit of greater care integration in one of the six areas. The assessment and two other assessments that use a similar approach can be found under Assessments in Tools and Resources Section.

- **Comparison of your organization’s processes to those of fully integrated settings**: Instead of identifying a specific model that will increase the degree of care integration, organizations may consider the extent to which key features of full integration are present or absent in their practice For example, organizations can ask themselves, “What is the likelihood that physical health comorbidities will be detected in our behavioral health setting?” In a co-located model, providers may be able to detect some physical health comorbidities (indicated by a “+”); however, in a fully integrated system, all comorbidities should be detected (indicated by a “++”). This emerging approach is modeled after a framework used to assess the integration of physical health into behavioral health settings and requires organizations to make modifications in order to apply the model. A sample of this approach used for integration of behavioral health into physical health settings can be found under Assessments in Section 6: Tools and Resources.

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31 Based on Wagner’s Assessment of Chronic Illness Care (ACIC)
Tools and Resources

This section compiles tools and resources that may be valuable to organizations implementing this integration strategy. The tools and resources below include assessments, consumer health assessments, consumer engagement tools, operational and administrative tools, education and training tools, wellness activity tools, strategic development and financial planning tools, operational tools, consumer health assessments, and education and training tools for staff. Tools and resources are organized by component.

Assessment and Referral Services

**Health Care Practitioner Physical Assessment Form**

This physical health assessment form from the Maryland Department of Health and Mental Hygiene may assist BH organizations in identifying questions that practitioners can ask clients.


**Heart Attack Risk Calculator**

This calculator developed by the American Heart Association and American Stroke Association will aid BH providers in assessing a consumer’s risk for heart disease.


**Consumer Health Assessment**

This sample hospital health assessment used by Abingdon Memorial Hospital and may serve as a useful guide for BH care staff looking to monitor specific aspects of a consumer’s PH.


**Consumer Health Assessment**

This sample hospital health assessment from Mission Health may be useful for BH entities looking to monitor aspects of PH.


**Consumer Health Questionnaire™**

This a sample health assessment used by Department of Defense to improve deployment related health may be used by BH organizations, specifically providers, looking to implement some elements of PH in consumer care.


**Physical Health Questionnaire**

This sample physical health questionnaire used by Littleton Regional Hospital may be useful to a BH organization looking to identify PH indicators to screen for in consumers.

http://www.littletonnhhospital.org/pdf/physical_health_questionnaire.pdf
**Prediabetes Risk Screening Tool**

This pre-diabetes risk screening tool from the Kentucky Diabetes Network, Inc. may allow BH providers to assess the risk of diabetes in a consumer.


**The Health Assessment Questionnaire©**

This sample health assessment developed by the Stanford University School of Medicine can be used by BH providers and their staff to evaluate aspects of PH.


**Vital Signs Checklist**

This vital signs checklist from Pfizer for Professional may assist BH care staff in obtaining and recording basic PH information about consumers such as vital signs.


**Self-management Support and Recovery**

**Learners Manual for Motivational Interviewing**

This manual created by One Sky National American Indian Alaska Native Resource Center for Substance Abuse Services and the Urban American Indian Practice Improvement Collaborative at Oregon Health and Science University may be useful in training BH staff in communicating with consumers about their health.

**Motivational Interviewing Training Resources**

These resources provided by the Clinical Training Institute may be useful in training BH staff in communicating with consumers about their health.

[http://www.motivationalinterviewing.info/mi_resources.html](http://www.motivationalinterviewing.info/mi_resources.html)

**Activities for Addressing Morbidity and Mortality in People with Serious Mental Illness**

This document from the Oregon Department of Human Services provides a list of activities for providers for addressing morbidity and mortality in individuals with SMI that may be useful to BH providers.


**Addictions and Mental Health Services Wellness Initiative**

This webpage from the Oregon Health Authority Department of Addictions and Mental Health Services provides a listing of wellness initiative goals and resources that may be useful to BH staff looking to recommend wellness activities.


**In SHAPE Initiative**

These documents from the Robert Wood Johnson Foundation and AHRQ provide descriptions of a wellness program aimed to improve the health of adults with SMI, which may be a useful guide for BH providers looking to recommend wellness activities.


http://www.innovations.ahrq.gov/content.aspx?id=2444

**Care Coordination and Care Management**

**Authorization to Disclose Health Information**

This document from the state of New York is a sample protected health information release for BH organization looking to share information in an integrated care model.

http://www.chcs.org/usr_doc/NY.pdf

**Authorization to Disclose Protected Health Information to Primary Care Physician**

This document from Magellan Health Services is an authorization to disclose protected health information that BH and PH providers could use to authorize the exchange of consumer information.

http://www.magellanprovider.com/MHS/MGL/forms/clinical_forms/PCPAUD.pdf

**Certificate Program in Primary Care Behavioral Health**

This program from the University of Massachusetts Medical School prepares mental health professionals for success as primary care BH clinicians.

http://www.umassmed.edu/uploadedFiles/fmch/Education/Primary_Care_Behavioral_Health/PCBH%20Brochure_Final%205%2011%202011.pdf

**Clinician Communication Form**

This document from Magellan Health Services is a sample communication form for BH and PH providers with mutual consumers.


**Consent to Release Protected Health Information**

This sample consent form from the Montgomery County HealthConnections program illustrates for BH organizations how consumers should be informed of the integrated care process and providers should obtain consent for information sharing in an integrated care model.

http://www.chcs.org/usr_doc/Consent_Form_FINALPA.pdf
**Integrated Case Management Training**

This training developed by the Case Management Society of America is an advanced program for case managers from either a PH or BH background, which provides education for carrying out integrated care.


**Co-locate Physical Health Care Providers into Behavioral Health Practices**

**Assessing and Addressing Legal Barriers to the Clinical Integration of Community Health Center and Other Community Providers**

This review from the Commonwealth Fund describes barriers to integration and provides guidance on creating a work plan for integrated care, which may be useful to BH organizations looking to implement a co-location model.


**Affiliation Agreement**

This document from the Center for Integrated Health Solutions is a sample affiliation agreement that can be adapted and populated by a BH organization looking to integrate with a FQHC.


**Billing Worksheets**

This webpage from the Center for Integrated Health Solutions provides links to state-by-state billing worksheets for BH organizations that identify existing billing opportunities for integrated care.

http://www.integration.samhsa.gov/financing/billing-tools

**Data Template**

This document from the Connected Care Pilot is a sample web-based care plan for a PH and BH integrated care setting that may be used by BH organizations looking to co-locate.


**Environmental Assessment Tool: State Level Policy and Financing**

This guide from the National Council for Community Behavioral Healthcare aids agencies and providers in reviewing their respective state policy and financial environment and its ability to support integration for Medicaid populations.

**Integrating Behavioral Health and Primary Care through Affiliations with FQHCs**

This document from the National Council For Community Behavioral Health Care provides a guide for the development of affiliation agreements among community BH providers and FQHCs.


**Joint PH/BH Shared Savings Pool**

This document from the Serious Mental Illness Innovation Project discusses the structure of shared savings pool for integrated care for both BH and PH entities.


**Member Profile**

This sample member profile from HealthChoices HealthConnections illustrates what BH organizations information would collect for consumers in a co-located system in order to facilitate care across PH and BH entities.

[http://www.chcs.org/usr_doc/SampleMember_Profile3.pdf](http://www.chcs.org/usr_doc/SampleMember_Profile3.pdf)

**Memo of Understanding**

This document from the Center for Integrated Health Solutions is a sample memo of understanding that can be adapted and populated by a BH organization looking to integrate with a primary care or other PH entity.


**Partnership Agreement**

This document from the Center for Integrated Health Solutions is a sample partnership agreement that can be adapted and populated by a BH organization looking to integrate with a FQHC.

[http://www.integration.samhsa.gov/a_partnership_agreement.pdf](http://www.integration.samhsa.gov/a_partnership_agreement.pdf)

**Consumer Tracking Form**

This webpage from IMPACT provides a sample consumer tracking form that could be adapted by BH organizations for keeping track of BH and PH information.


**Consumer Tracking Template**

This webpage from IMPACT provides a sample Excel spreadsheet that is used for consumer tracking under the IMPACT model and could be adapted by BH organizations for keeping track of BH and PH information.

**Toolkit of Promising Practices for Financing Integrated Care in the California Safety Net**

This guide from the California Institute of Mental Health outlines policies that manage health center collaborations and includes examples of health centers that have developed partnerships. This document may be useful for BH organizations looking to implement a co-location model.

http://www.cimh.org/LinkClick.aspx?fileticket=fkUQHHCCP4w%3d&tabid=489

**Organizational Guidance Tools**

**Assessment of Physical-Behavioral Health Integration**

This tool developed by the Institute for Healthcare Improvement describes a series of functionalities allowing organizations visualize their current level of integration and the path forward in their care of individuals with SMI. Organizations can then assess which components to focus on based on their desired level of integration.

**Comparison of Implementation Models and Deconstructed Process Metrics**

This tool allows BH organizations to consider the extent to which key elements of integration are present or absent in their practice instead of identifying a specific “level of integration”.

**Integrated Treatment Tool**

This tool developed by Case Western University helps organizations evaluate the presence and extent of a Person-Centered Healthcare Home Model that integrates primary and behavioral healthcare services.

**Levels of Systematic Collaboration/Integration**

This document developed by the Collaborative Family Health Care Association (CHFA) outlines the five levels of integration and be useful to BH organizations looking to assess their capabilities to treat PH in a BH setting.

**Methods: Adult Physical Health Indicators**

This list developed by the New York State Office of Mental Health provides basic health indicators such as BMI and smoking status that BH may be able to use to assess PH.

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32 Based on Wagner’s Assessment of Chronic Illness Care (ACIC)
**MH/Primary Care Integration Options**

This document developed by SAMHSA is an assessment and options for physical and behavioral health integration that may be used by BH organizations looking to incorporate PH care.


**Systematic Review and Analysis of the Evidence Base in Published Research Literature on Exercise and Nutrition Programs**

This document is a systematic review of wellness programs of people with SMI a may be a useful guide to BH providers looking to recommend wellness activities or design a wellness program.


Summary: [http://www.integration.samhsa.gov/health-wellness/wellnesswhitepaper](http://www.integration.samhsa.gov/health-wellness/wellnesswhitepaper)

**Fully Integrate Behavioral Health and Physical Health Services within the Care Setting**

**Evolving Models of Behavioral Health Integration in Primary Care**

This report from the Milbank Memorial Fund highlights several different practice models for integrated care including a fully integrated system. In addition, the document reviews important considerations for implementing a fully integrated practice model.

[http://www.milbank.org/reports/10430EvolvingCare/EvolvingCare.pdf](http://www.milbank.org/reports/10430EvolvingCare/EvolvingCare.pdf)

**SAMHSA-HRSA Center for Integrated health Solutions**

Run by the National Council for Community Behavioral Health Care, this site provides valuable information and tools for integrating PH into BH organizations. Resources of interest include links to multiple care models and a list of Primary and Behavioral Health Care Integration (PBHCI) Program grantees who may serve as useful examples in pursuing a fully integrated model.

Acknowledgements

The Lewin Group is a premier national health and human services consulting firm with more than 40 years of experience delivering objective analyses and strategic counsel to public agencies, non-profit organizations, and private companies across the US. We support our clients with policy research and data analysis on Medicare, Medicaid and CHIP, health care financing, strategic workforce planning, health program evaluation, comparative effectiveness research and other important areas of the public health policy arena.

The Institute for Healthcare Improvement (IHI) is an independent not-for-profit organization that works with health care providers and leaders throughout the world to achieve safe and effective health care. IHI focuses on motivating and building the will for change, identifying and testing new models of care in partnership with both consumers and health care professionals, and ensuring the broadest possible adoption of best practices and effective innovations. Based in Cambridge, Massachusetts, IHI mobilizes teams, organizations, and increasingly nations, through its staff of more than 100 people and partnerships with hundreds of faculty around the world.

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Appendix

- Full Description of CHFA’s Levels of Systematic Collaboration/Integration
- Case Western Reserve University Integrated Treatment Tool
- Organizational Assessment of Physical-Behavioral Health Integration
- Comparison of Implementation Models and Deconstructed Process Metrics
Full Description of CHFA’s Levels of Systematic Collaboration/Integration

Level 1: Minimal Collaboration

Description: Behavioral health and other health care professionals work in separate facilities, have separate systems, and communicate about cases rarely and only under compelling circumstances. Where practiced: Most private practices and agencies.

Funding Mechanisms: Retains funding and reimbursement strategies for each entity.

Regulatory Implications: Readily understood as practice model. No challenge to existing regulatory structure.

Advantages: Allows each system to make autonomous and timely decisions about practice using developed expertise; readily understood as a practice model.

Disadvantages: Service may overlap or be duplicated; uncoordinated care often contributes to poor outcomes; important aspects of care may not be addressed.

Level 2: Basic Collaboration at a Distance

Description: Providers have separate systems at separate sites, but engage in periodic communication about shared consumers, mostly through telephone, letters and increasingly through e-mail. All communication is driven by specific consumer issues. Behavioral health and other health professionals view each other as resources, but they operate in their own worlds, have little sharing of responsibility, little understanding of each other’s cultures, and there is little sharing of authority and responsibility.

Where practiced: Settings where there are active referral linkages between facilities.

Funding Mechanisms: Retains funding and reimbursement strategies for each entity.

Regulatory Implications: Collaboration is through agreement (formal or informal) with implications for confidentiality but no substantive regulatory implications.

Advantages: Maintains each organization’s basic operating structure and cadence of care; provides some level of coordination of care and information sharing that is helpful to both consumers and providers.

Disadvantages: No guarantee that shared information will be incorporated into the treatment plan or change the treatment strategy of each provider; does not impact the culture or structure of the separate organizations.

Level 3: Basic On-Site Collaboration with Minimal Integration

Description: Behavioral health and other health care professionals have separate systems but share the same facility. They engage in regular communication about shared consumers, mostly through phone, letters or e-mail, but occasionally meet face to face because of their close proximity. They appreciate the importance of each other’s roles, may have a sense of being part of a larger, though somewhat ill-defined team, but do not share a common language or an in-depth understanding of each other’s worlds. This is the basic co-location model. As in Levels One and Two, medical physicians have considerably more authority and influence over case management decisions than the other professionals, which may lead to tension between team and single professional leadership.
Where practiced: HMO settings and rehabilitation centers where collaboration is facilitated by proximity, but where there is no systemic approach to collaboration and where misunderstandings are common. Also, within some School Based Health Centers (SBHCs) and within some medical clinics that employ therapists but engage primarily in referral-oriented co-located services rather than systematic mutual consultation and team treatment.

Funding Mechanisms: Retains funding and reimbursement strategies for each entity.

Regulatory Implications: This model can lead to a multi-use facility where all components may not be subject the same or some regulatory entity creating a challenge for state licensing structures.

Advantages: Increased contact allows for more interaction and communication among professionals that also increases potential for impact on consumer care; referrals are more successful due to proximity; systems remain stable and predictable; opportunity for personal relationships between professionals to grow and develop in the best interest of consumer care.

Disadvantages: Proximity may not lead to increased levels of collaboration or better understanding of expertise each profession brings to consumer care. Proximity does not necessarily lead to the growth of integration – the transformation of both systems into a single healthcare system.

Level 4: Close Collaboration On-Site in a Partly Integrated System

Description: Behavioral health and other health care professionals share the same sites and have some systems in common, such as scheduling or charting. There are regular face-to-face interactions about consumers, mutual consultation, coordinated treatment plans for difficult cases, and a basic understanding and appreciation for each other’s roles and cultures. There is a shared allegiance to a biopsychosocial/systems paradigm. However, the pragmatics are still sometimes difficult, team-building meetings are held only occasionally, and there may be operational discrepancies such as co-pays for behavioral health but not for medical services. There are likely to be unresolved but manageable tensions over medical physicians’ greater power and influence on the collaborative team.

Where practiced: Increasingly practiced within Federally Qualified Community Health Centers (FQHC), some Rural Health Clinics (RHC) and especially Provider (hospital operated) RHCs, as well as some group practices and SBHCs committed to collaborative care.

Funding Mechanisms: Retains funding and reimbursement strategies for each entity but in closely shared cases the line can blur (e.g., physician/behavioral health treatment of depression). In a fee-for-service (FFS) environment this model begins to bring same-day billing issues to the table.

Regulatory Implications: There is an increasing likelihood that this model will result in a multi-use facility where all components may not be subject the same or some regulatory entity creating a challenge for state licensing structures. Entities retain separate identities, but may require an additional organizational licensing category and cross-training of staff may challenge current professional licensing structures (especially in nursing).

Advantages: Cultural boundaries begin to shift and service planning becomes more mutually shared, which improves responsiveness to consumer needs and consequent outcomes. There is a strong opportunity for personal relationships between professionals to grow and develop in the best interest of consumer care.

Disadvantages: Potential for tension and conflicting agendas among providers or even triangulation of consumers and families may compromise care; system issues may limit collaboration.
**Level 5: Close Collaboration Approaching a Fully Integrated System**

**Description:** Behavioral health and other health care professionals share the same sites, the same vision, and the same systems in a seamless web of biopsychosocial services. Both the providers and the consumers have the same expectation of a team offering prevention and treatment. All professionals are committed to a biopsychosocial/systems paradigm and have developed an in-depth understanding of each other’s roles and cultures. Regular collaborative team meetings are held to discuss both consumer issues and team collaboration issues. There are conscious efforts to balance authority and influence among the professionals according to their roles and areas of expertise.

**Where practiced:** In a small number of well-developed FQHC, RHC and SBHC settings.

**Funding Mechanisms:** Team care crosses professional boundaries and blurs unit of service funding structure. Most compatible with new funding models such as Healthcare Home, Healthcare Neighborhood and case rate shared risk. This strategy requires a larger organizational structure to manage. Same-day billing is essential in a FFS environment.

**Regulatory Implications:** Requires a multi-use facility where all components may not be subject the same or some regulatory entity creating a challenge for state licensing structures. Entities retain separate identities, but may require an additional organizational licensing category and cross-training of staff may challenge current professional licensing structures (especially in nursing).

**Advantages:** High level of collaboration contributes to improved consumer outcomes; consumers experience their care provided by a collaborative care team in one location, which increases likelihood of engagement and adherence to treatment plan; provides better care for consumers with chronic, complex illnesses, as well as those needing prevention/early intervention.

**Disadvantages:** Services may still be delivered in traditional ways for each discipline; separate system silos still operate to limit flexibility of the delivery of care that best meets the needs of the consumer as a whole person.

**Level 6: Full Collaboration in a Fully Integrated System**

**Description:** Providers have overcome barriers and limits imposed by traditional and historic service and funding structures. Antecedent system cultures and allegiances dissolve into a single transformed system. Practice boundaries have also dissolved and care teams use newly evolved methodology to jointly assess, prioritize, and respond to consumers’ care needs. Providers and consumers view the operation as a single health system treating the whole person. One fully integrated record is in use.

**Where practiced:** In established clinics that have united the resources, not just to augment the service array, but also as partners in the conceptual leadership of the service structure and design. This is also practiced in a very small number of localized centers of excellence designed and established expressly to achieve a fully integrated service environment.

**Funding Mechanisms:** Team care crosses professional boundaries and blurs unit of service funding structure. Most compatible with new funding models such as Healthcare Home, Healthcare Neighborhood and case rate shared risk. Requires a larger organizational structure to manage. Same-day billing is essential in FFS environment.

**Regulatory Implications:** Requires a multi-use facility and a regulatory structure that supports all uses. Entities merge and dissolve into one corporate entity, but may require an additional organizational licensing
category. Cross-training of staff will challenge current professional licensing structures (especially in nursing).

**Advantages:** The consumer’s health and well-being becomes the focus of care. Care can occur in brief episodes and is sustained over time.

**Disadvantages:** There are currently no financial mechanisms to support integrated care that combines healthcare disciplines. Because this model is new and very limited in its implementation, there is less research currently available to support the value of it.
Case Western Reserve University Integrated Treatment Tool

Integrated Treatment Tool.pdf
## Organizational Assessment of Physical-Behavioral Health Integration

<table>
<thead>
<tr>
<th>Component</th>
<th>Level 1 (Minimal)</th>
<th>Level 2 (Basic at a Distance)</th>
<th>Level 3 (Basic On-site)</th>
<th>Level 4 (Partly Integrated/Co-located)</th>
<th>Level 5 (Full Integration)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screen for physical health conditions</td>
<td>Document physical health conditions on medical record</td>
<td>Screen for prevalent conditions (diabetes, smoking and hypertension)</td>
<td>Screen for wider variety of conditions that are comorbid with SMI</td>
<td>Co-location of full-time NP within mental health center. Care management for chronic disease</td>
<td>Full integration of primary care services within behavioral health care settings</td>
</tr>
<tr>
<td>Referral system to primary care and specialists</td>
<td>None</td>
<td>Alert PCP to results of the screening that may merit follow-up</td>
<td>Refer to PCP and specialists if need to treat condition that is out of scope and confirm follow-up</td>
<td>Full management of chronic diseases Cannot tell difference between behavioral health and physical health practices</td>
<td></td>
</tr>
<tr>
<td>Engage individuals in conversation about physical health conditions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide treatment for physical health conditions</td>
<td>Provide information about healthy eating and exercise</td>
<td>Provide individual with appropriate self-care (self-management) information</td>
<td>Part-time NP does prescribing for comorbid conditions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Offer self-management and wellness activities</td>
<td>None</td>
<td>Provide individuals with information about available local wellness classes (at YMCA, hospitals, health centers)</td>
<td>Test one or two self-management support groups and wellness activities</td>
<td>Offer regular self-management support groups and wellness activities</td>
<td></td>
</tr>
</tbody>
</table>
### Comparison of Implementation Models and Deconstructed Process Metrics

<table>
<thead>
<tr>
<th>Measure/factor</th>
<th>Referral-based</th>
<th>MH co-located</th>
<th>BH care Mgr</th>
<th>Therapist-on-staff</th>
<th>BH consultant</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Usual care</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Percent detected</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood of detection</td>
<td>+</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>All patients screened</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Periodic screening (e.g., annual)</td>
<td>+</td>
<td>+</td>
<td>++</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actionable screening results</td>
<td>+</td>
<td>+</td>
<td>++</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range of conditions detected</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>++</td>
<td></td>
</tr>
<tr>
<td>PCP training side-effect</td>
<td>+</td>
<td>+</td>
<td>++</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Percent treated</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood of treatment</td>
<td>+</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>+++++</td>
</tr>
<tr>
<td>Trust—PCP to MH/BHP</td>
<td>+</td>
<td>+</td>
<td>++</td>
<td></td>
<td>+++++</td>
</tr>
<tr>
<td>Process integration</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust transfer for patient</td>
<td>+</td>
<td>+</td>
<td>++</td>
<td></td>
<td>+++++</td>
</tr>
<tr>
<td>MH stigma—social</td>
<td>+</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td></td>
</tr>
<tr>
<td>MH stigma—education</td>
<td>++</td>
<td>+</td>
<td>++</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overcoming denial</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>++</td>
<td></td>
</tr>
<tr>
<td>Patient's logistics</td>
<td>++</td>
<td>+</td>
<td>+</td>
<td>++</td>
<td></td>
</tr>
<tr>
<td>Patient's ability to pay</td>
<td>++</td>
<td>+</td>
<td>++</td>
<td>++</td>
<td>+++++</td>
</tr>
<tr>
<td>Seamless with medical</td>
<td>+</td>
<td>+</td>
<td>++</td>
<td></td>
<td>+++++</td>
</tr>
<tr>
<td><strong>Percent improvement</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall efficacy</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>++</td>
<td></td>
</tr>
<tr>
<td>Protocol-based</td>
<td>++</td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
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<tr>
<td>Treatments used</td>
<td>+</td>
<td>+</td>
<td>++</td>
<td></td>
<td></td>
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<tr>
<td>Tailored to patient</td>
<td>+</td>
<td>+</td>
<td>++</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuity of care</td>
<td>+</td>
<td>+</td>
<td>++</td>
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<tr>
<td><strong>Cost to the PC practice</strong></td>
<td></td>
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<tr>
<td>Professional training/salary</td>
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<td>--</td>
</tr>
<tr>
<td>PCP involvement required</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td></td>
<td>--</td>
</tr>
<tr>
<td>PCP time saved</td>
<td>+</td>
<td>++</td>
<td>++</td>
<td></td>
<td>+++++</td>
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<tr>
<td>Use of brief interventions</td>
<td>+</td>
<td>+</td>
<td>++</td>
<td></td>
<td></td>
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<tr>
<td>Common sched/billing</td>
<td>+</td>
<td>+</td>
<td>++</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common facilities</td>
<td>+</td>
<td>+</td>
<td>++</td>
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</tr>
<tr>
<td>Common EMR/IT</td>
<td>+</td>
<td>+</td>
<td>++</td>
<td></td>
<td></td>
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<tr>
<td>PCP coverage</td>
<td>+++</td>
<td>+</td>
<td>++</td>
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</tbody>
</table>
### METHODS: ADULT PHYSICAL HEALTH INDICATORS

Defining, measuring & monitoring the three health indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Definition</th>
<th>Classification</th>
</tr>
</thead>
</table>
| BMI             | [Weight (lbs)/height (inches)]²/703                                       | - Underweight: <18.5 kg/m²  
- Normal weight: 18.5-24.9 kg/m²  
- Overweight: 25-29.9 kg/m²  
- Obesity (class 1): 30-34.9 kg/m²  
- Obesity (class 2): 35-39.9 kg/m²  
- Extreme obesity (class 3): ≥40 kg/m² |
| Blood Pressure  | Systolic/Diastolic reading in mmHg                                       | - Normal: SBP <120 and DBP <80  
- Prehypertension: SBP 120-139 or DBP 80-90  
- Stage I HTN: SBP 140-159 or DBT 90-99  
- Stage II HTN: SBP ≥160 or DBP ≥100 |
| Smoking Status  | Have you had a puff of a cigarette or more in the past month (Yes/No)?    | - Non-smoker  
- Smoker (prior)  
- Smoker (current) |