Behavioral Health/Primary Care Integration

The Four Quadrant Model and Evidence-Based Practices

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National Council for Community Behavioral Healthcare

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This discussion paper has been prepared under the auspices of the National Council for Community Behavioral Healthcare. It is a work in progress, reflecting the participation of NCCBH staff, NCCBH consultants and external reviewers. Comments are welcomed and should be directed to the NCCBH offices at Suite 320, 12300 Twinbrook Parkway, Rockville, MD 20852 or www.nccbh.org.

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Purpose

This discussion paper has been prepared for policy makers, planners and providers of healthcare and behavioral healthcare services. It is intended to provide a conceptual model for the integration of behavioral health and healthcare services. The behavioral healthcare system has historically been a specialty care system, and the work to be done by behavioral health clinicians in primary care is distinctly different from their work in the specialty system. The specialty medical and surgical healthcare system also is an arena where behavioral healthcare skills may be helpful as there is increasing research regarding depression and the need for behavioral healthcare as a care component for specific medical and post surgical interventions.

The cross-walk to Evidence-Based Practices (EBPs) is intended to demonstrate that the integration of behavioral healthcare and healthcare services is not a separate layer of activity, but rather an essential component of appropriate clinical service delivery that is based on assessment of behavioral health and physical health risk and complexity.

Policy Context: Institute of Medicine Report

The Institute of Medicine convened the Committee on Crossing the Quality Chasm: Adaptation to Mental Health and Addictive Disorders in 2004. The committee was charged with adapting the quality improvement framework contained in the predecessor Institute of Medicine report, Crossing the Quality Chasm—A New Health System for the 21st Century. The scope of adaptation is across mental and substance-use (M/SU) conditions, the public and private sectors, and the comprehensive range of issues identified and addressed in the Quality Chasm report.

The report of the Committee, Improving the Quality of Health Care for Mental and Substance-Use Conditions, was published in early 2006. There are two overarching recommendations:

- **Overarching Recommendation 1**: Health care for general, mental, and substance-use problems and illnesses must be delivered with an understanding of the inherent interactions between the mind/brain and the rest of the body.
- **Overarching Recommendation 2**: The aims, rules and strategies for redesign set forth in Crossing the Quality Chasm should be applied throughout mental/substance use health care on a day-to-day operational basis but tailored to reflect the characteristics that distinguish care for these problems and illnesses from general health care.

Within the report, Chapter 5: Coordinating Care for Better Mental, Substance-Use and General Health, provides definitions, summarizes the body of research and makes recommendations specific to the issues of integration of care. The definitions include:

- **Communication** exists when each clinician caring for the patient shares needed clinical information about the patient to other clinicians also treating the patient.
- **Collaboration** is multidimensional, requiring:
  - A shared understanding of goals and roles,
  - Effective communication, and
  - Shared decision making.
- **Care coordination** is the outcome of effective collaboration and corresponds to clinical integration.
- **Clinical integration** is the extent to which patient care services are coordinated across people, functions, activities, and sites over time so as to maximize the value of services delivered to patients.

The recommendations in Chapter 5 include:

- **Recommendation 5-1**: To make collaboration and coordination of patients’ M/SU health care services the norm, providers of the services should establish clinically effective linkages within their own organizations and between providers of mental health and substance use...
treatment. The necessary communications and interactions should take place with the patient’s knowledge and consent and be fostered by:

- Routine sharing of information on patient’s problems and pharmacologic and nonpharmacologic treatments among and between providers of M/SU treatment
- Valid, age-appropriate screening of patients for comorbid mental, substance-use and general medical problems in these clinical settings and reliable monitoring of their progress.

**Recommendation 5-2:** To facilitate the delivery of coordinated care by primary care, mental health, and substance-use treatment providers, government agencies, purchasers, health plans, and accreditation organizations should implement policies and incentives to continually increase collaboration among these providers to achieve evidence-based screening and care of their patients with general, mental, and/or substance-use health conditions. (Detailed specific measures follow, please see full report.)

**Recommendation 5-3:** To ensure the health of persons for whom they are responsible, M/SU providers should:

- Coordinate their services with those of other human-services and education agencies, such as schools, housing and vocational rehabilitation agencies and providers of services for older adults, and
- Establish referral arrangements for needed services.

Providers of services to high-risk populations—such as child welfare agencies, criminal and juvenile justice agencies, and long-term care facilities for older adults—should use valid, age-appropriate and culturally appropriate techniques to screen all entrants into their systems to detect M/SU problems and illnesses.

**Recommendation 5-4:** To provide leadership in coordination, DHHS should create a high-level continuing entity reporting directly to the secretary to improve collaboration and coordination across its mental, substance-use and general healthcare agencies…DHHS also should implement performance measures to monitor its progress toward achieving internal interagency collaboration and publicly report its performance on these measures annually. State governments should create analogous linkages across state agencies.

In the Foreword, it is noted that this report "represents the intersection of two key developments now taking place in health care. One is the increasing attention to improving the quality of health care in ways that take account of patients’ preferences and values along with scientific findings about effective care. The second important development comes from scientific research that enables us to better understand and treat mental and substance-use conditions.”

### The Four Quadrant Clinical Integration Model

The NCCBH proposed model for the clinical integration of health and behavioral health services starts with a description of the populations to be served. This Four Quadrant Model builds on the 1998 consensus document for mental health (MH) and substance abuse/addiction (SA) service integration, as initially conceived by state mental health and substance abuse directors (NASHMHPD/ NASADAD) and further articulated by Ken Minkoff and his colleagues. This model for a Comprehensive, Continuous, Integrated System of Care (CCISC) describes differing levels of MH and SA integration and clinician competencies based on the four-quadrant model, divided into severity for each disorder:

- **Quadrant I:** Low MH-low SA, served in primary care
- **Quadrant II:** High MH-low SA, served in the MH system by staff who have SA competency
- **Quadrant III:** Low MH-high SA, served in the SA system by staff who have MH competency
- **Quadrant IV:** High MH-high SA, served by a fully integrated MH/SA program
The Four Quadrant Clinical Integration Model

**Quadrant II**

- BH Case Manager w/ responsibility for coordination w/ PCP
- PCP (with standard screening tools and BH practice guidelines)
- Specialty BH
- Residential BH
- Crisis/ER
- Behavioral Health IP
- Other community supports

**Quadrant IV**

- PCP (with standard screening tools and BH practice guidelines)
- BH Case Manager w/ responsibility for coordination w/ PCP and Disease Manager
- Care/Disease Manager
- Specialty medical/surgical
- Specialty BH
- Residential BH
- Crisis/ER
- BH and medical/surgical IP
- Other community supports

**Quadrant I**

- PCP (with standard screening tools and BH practice guidelines)

**Quadrant III**

- PCP (with standard screening tools and BH practice guidelines)
- Care/Disease Manager
- Specialty medical/surgical
- PCP-based BH (or in specific specialties)*
- ER
- Medical/surgical IP
- SNF/home based care
- Other community supports

*PCP-based BH provider might work for the PCP organization, a specialty BH provider, or as an individual practitioner, is competent in both MH and SA assessment and treatment

The Behavioral Health / Primary Care integration model above assumes this competency-based MH/SA integration concept within the behavioral health (BH) services offered and builds on the MH/SA integration model to describe the subsets of the population that Behavioral Health/Primary Care integration must address.

Each quadrant considers the behavioral health and physical health risk and complexity of the population and suggests the major system elements that would be utilized to meet the needs of...
the individuals within that subset of the population. The Four Quadrant model is not intended to be prescriptive about what happens in each quadrant, but to serve as a conceptual framework for collaborative planning in each local system. Ideally it would be used as a part of collaborative planning for each new HRSA BH site, with the CHC and the local provider(s) of public BH services using the framework to decide who will do what and how coordination for each person served will be assured.

The use of the Four Quadrant Model to consider subsets of the population, the major system elements and clinical roles would result in the following broad approaches:

**QUADRANT I**

*Low BH-low physical health complexity/risk, served in primary care with BH staff on site; very low/low individuals served by the PCP, with the BH staff serving those with slightly elevated health or BH risk.*

The PCP provides primary care services and uses standard BH screening tools and practice guidelines to serve most individuals in the primary care practice. Use of standardized BH tools by the PCP and a tracking/registry system focuses referrals of a subset of the population to the BH clinician. The role of the primary care based BH clinician is to provide formal and informal consultation to the PCP as well as to provide BH triage and assessment, brief treatment services to the patient, referral to community and educational resources, and health risk education. BH clinical and support services may include individual or group services, use of cognitive behavioral therapy, psycho-education, brief SA intervention, and limited case management. The BH clinician must be competent in both MH and SA assessment and service planning. The PCP prescribes psychotropic medications using treatment algorithms and has access to psychiatric consultation regarding medication management.

The consumer of care, by seeking care in primary care, has selected a “clinical home”. Consistent with appropriate clinical practice, that should be honored. The primary care and specialty BH system should develop protocols, however, that spell out how acute behavioral health episodes or high-risk consumers will be handled. This will also lead to clarity regarding the “clinical home” of consumers with SPMI who are currently stable, which should be based upon consumer choice and the specifics of the community collaboration.

**QUADRANT II**

*High BH-low physical health complexity/risk, served in a specialty BH system that coordinates with the PCP.*

The PCP provides primary care services and collaborates with the specialty BH providers to assure coordinated care for individuals. Psychiatric consultation for the PCP may be an element in these complex BH situations, but it more likely that psychotropic medication management will be handled by the specialty BH system. The role of the specialty BH clinician is to provide BH assessment, arrange for or deliver specialty BH services, assure case management related to housing and other community supports, assure that the consumer has access to health care, and create a primary care communication approach (e.g., e-mail, v-mail, face to face) that assures coordinated service planning, especially in regard to medication management.

Specialty BH clinical and support services will vary based upon state and county level planning and financing; some localities may encompass the full range of services offered by specialty BH systems including:

**Specialty MH Services**

- 24/7 crisis telephone
- Mobile crisis team
- Urgent care walk in clinic

**Crisis Services**

- Crisis respite facilities
- Crisis residential facilities
- Crisis observation 23 hour beds
- Locked sub-acute residential
• Inpatient (voluntary and involuntary)
• Dual diagnosis inpatient
• Hospital discharge planning
• Partial hospitalization
• In-home stabilization
• Outreach to homeless shelters
• Outreach to jail/corrections
• Outreach to other special populations
• Individual/family treatment/counseling
• Group treatment/counseling
• Dual diagnosis treatment groups
• Multifamily groups
• Psychiatric evaluation/consultation
• Psychiatric prescribing/management
• Advice nurse (medication issues)
• Psychological testing
• Services for homebound frail or disabled
• Specialized services for older adults
• Brokerage case management
• 24/7 intensive home/community case management (ACT teams)
• School-based assessment and treatment
• Supported classroom
• Stabilization classroom
• Day treatment (adult, adolescent, child)
• Supported employment/supported education
• Transitional services for young adults
• Individual skill building/coaching
• Intensive peer support
• After school structured services

• Summer daily structure and support

**Specialty SA Services**
• Sobering sites
• Social detoxification/residential
• Outpatient medical detoxification
• Inpatient medical detoxification
• Pre-treatment groups
• Intensive outpatient treatment
• Outpatient treatment
• Day treatment
• Aftercare/12 step groups
• Narcotic replacement treatment

**Residential Services**
• Boarding homes
• Adult residential treatment
• Child/adolescent residential treatment
• Transitional housing
• Adult family homes
• Treatment foster care
• Low income housing (dedicated to BH consumers)

**Supports for SPMI / SED Populations**
• Representative payee/financial services
• Time limited transitional groups
• Parent support groups
• Youth support groups
• Dual diagnosis education/support groups
• Caregiver/family support groups
• Youth after school normalizing activities
• Youth tutors/mentors

The BH clinician must be competent in both MH and SA assessment and service planning. A specific standard of practice should be adopted that defines the methods and frequency of communication with PCPs. Note that this quadrant is where most public sector BH consumers currently can be found.

**QUADRANT III**

**Low BH-high physical health complexity/risk, served in the primary care/medical specialty system with BH staff on site in primary or medical specialty care, coordinating with all medical care providers including disease managers.**

The PCP provides primary care services, works with medical specialty providers and disease managers (e.g. diabetes, asthma) to manage the physical health issues of the individual and uses standard BH screening tools and practice guidelines to serve most individuals in the primary care practice. Use of standardized BH tools by the PCP and a tracking/registry system focuses referrals of a subset of the population to the BH clinician. The role of the primary care or medical specialty based BH clinician is to provide BH triage and assessment, consultation to the PCP or treatment services to the patient, referral to community and educational resources, and health risk education. BH clinical and support services may include individual or group services, use of cognitive behavioral therapy, psycho-education, brief SA intervention, and limited case management. The BH clinician must be competent in both MH and SA assessment and service
planning. The PCP prescribes psychotropic medications using treatment algorithms and has access to psychiatric consultation regarding medication management.

Depending on the setting, the BH clinician may also serve as a health educator regarding lifestyle and chronic health conditions found in the general public (diabetes, asthma) or conditions found in at-risk populations (Hepatitis C, HIV). These population-based services, as articulated by Bob Dyer, would include: patient education, activity planning; prompting; skill assessment; skill building; and, mutual support. In addition to these disease management services, the BH clinician might serve as a physician extender, supporting efficient use of physician time by problem solving with acute or chronic patients, as well as working with patients on medication compliance issues.

Specialty healthcare and disease management programs could also integrate depression screening into a wide array of self management and rehabilitation programs, building on current research findings regarding the frequency and impact of depression in cardiovascular or diabetes populations.

**QUADRANT IV**

High BH-high physical health complexity/risk, served in both the specialty BH and primary care/medical specialty systems; in addition to the BH case manager, there may be a disease manager, in which case the two managers work at a high level of coordination with one another and other members of the team.

The PCP works with medical specialty providers and disease managers (e.g. diabetes, asthma) to manage the physical health issues of the individual, while collaborating with the BH system in the planning and delivery of BH clinical and support services, which include those listed in Quadrant II. Psychiatric consultation is a key element in these most complex situations. The role of the specialty BH clinician is to provide BH assessment, arrange for or deliver specialty BH services, assure case management related to housing and other community supports, and collaborate at a high level with the healthcare system team. The BH clinician must be competent in both MH and SA assessment and service planning.

In some settings, BH services may be integrated with specialty provider teams (for example, Kaiser has BH clinicians in OB/GYN working with substance abusing pregnant women). With the extension of disease management programs into Medicaid health plans, there is the likelihood of coordinating with disease managers in addition to healthcare providers. The BH clinician and disease manager should assure they are not duplicating tasks, but working together to support the needs of the consumer. A specific standard of practice should be adopted that defines the methods and frequency of communication.

**APPLICATION OF THE FOUR QUADRANT MODEL TO VARIOUS POPULATIONS**

The examples used in the diagram of the Four Quadrant Integration model are for adult populations; the same template can be used to create models that are specific for children and adolescents, or older adults, reflecting the unique issues of serving those populations (for example, the role of schools and school based services in serving children). Older adults, particularly, have been shown to utilize primary care settings for psychosocial, non-organic somatic complaints and to be underrepresented in specialty BH populations—research suggests they are willing to receive BH services in a primary care setting and that targeted interventions can make a difference in depression symptoms.

Ethnic, language and racial groups also have unique issues in receiving language and culturally appropriate behavioral health services. Primary care based BH services can improve access for these populations and lead to appropriate engagement with BH specialty services as needed. For
example, the Bridge Program in metropolitan New York has been successful in reaching the Asian-American community via their primary care settings.\textsuperscript{41}

There are also differences between rural and urban environments and among regional markets in terms of the resources available and ease or difficulty of access to services\textsuperscript{vi} The Four Quadrant Integration model provides a template for considering the resources locally available and developing alternative methods of coordination (for example, telemedicine) that may be required when specialty care (either physical or behavioral health) is delivered in another community.

The Four Quadrant Clinical Integration model is not diagnosis specific; it looks at degree of clinical complexity and risk/level of functioning. Further, the evidence-base is at different levels of development in each of the Quadrants. The model is intended to provide a conceptual construct for how to integrate services. Diagnosis specific guidelines should be used to provide detailed guidance for the scope of the primary care provider, the primary care based BH provider, and the specialty BH provider.

The Four Quadrant Model and Evidence-Based Practices in Healthcare and Behavioral Health

EVIDENCE-BASED PRACTICES IN THE HEALTHCARE SYSTEM

In the healthcare system, there are numerous evidence-based practice guidelines that are diagnosis/condition specific. The National Guideline Clearinghouse\textsuperscript{™} (NGC\textsuperscript{™}) is a public resource for evidence-based clinical practice guidelines. NGC is sponsored by the Agency for Healthcare Research and Quality (AHRQ), U.S. Department of Health and Human Services, in partnership with the American Medical Association and the American Association of Health Plans. There are over 1000 disease/condition guidelines that can be accessed through their website (www.guideline.gov).

The Chronic Care Model (CCM) (http://www.improvingchroniccare.org/change/index.html) was developed by Ed Wagner and his colleagues under the Improving Chronic Illness Care Program (a Robert Wood Johnson [RWJ] funded project). The CCM is in use in a variety of healthcare settings, providing a structured approach for clinical improvement.

The CCM has been used to develop specific approaches for serving patients with diabetes, cardiovascular disease, asthma and depression in a project sponsored by the Bureau of Primary Health Care (BPHC) with the Institute for Healthcare Improvement (IHI), a not-for-profit organization driving the improvement of health by advancing the quality and value of health care. The Health Disparities Collaboratives (http://www.healthdisparities.net/) are a multi-year national initiative to implement models of patient care and change management in order to transform the system of care for underserved populations.

The organizing principles for each of Health Disparities Manuals follows the key elements of the CCM; many of the components apply to each disease entity (e.g., diabetes, asthma, depression), while specific tasks and tools are unique to the specific disease entity. The key change concepts found in the Depression Collaborative manual include:

Organization of Health Care/Leadership
- Make sure senior leaders and staff visibly support and promote the effort to improve chronic care
- Make improving chronic care a part of the organization’s vision, mission, goals, performance improvement, and business plan
- Make sure senior leaders actively support the improvement effort by removing barriers and providing necessary resources
• Assign day-to-day leadership for continued clinical improvement
• Integrate collaborative models into the quality improvement program

Decision Support
• Embed evidence-based guidelines in the care delivery system
• Establish linkages with key specialists to assure that primary care providers have access to expert support
• Provide skill oriented interactive training programs for all staff in support of chronic illness improvement
• Educate patients about guidelines

Delivery System Design
• Identify depressed patients during visits for other purposes
• Use the registry to proactively review care and plan visits
• Assign roles, duties and tasks for planned visits to a multidisciplinary care team. Use cross training to expand staff capability
• Use planned visits in individual and group settings
• Make designated staff responsible for follow-up by various methods, including outreach workers, telephone calls and home visits

Clinical Information System
• Establish a registry
• Develop processes for use of the registry, including designating personnel to enter data, assure data integrity, and maintain the registry
• Use the registry to generate reminders and care planning tools for individual patients
• Use the registry to provide feedback to care team and leaders

Self-Management
• Use depression self management tools that are based on evidence of effectiveness
• Set and document self management goals collaboratively with patients
• Train providers and other key staff on how to help patients with self management goals
• Follow up and monitor self management goals
• Use group visits to support self management

Community
• Establish linkages with organizations to develop support programs and policies
• Link to community resources for defrayed medication costs, education and materials
• Encourage participation in community education classes and support groups
• Raise community awareness through networking, outreach and education
• Provide a list of community resources to patients, families and staff

EVIDENCE-BASED PRACTICES IN THE BEHAVIORAL HEALTH SYSTEM

The Chronic Care Model (CCM) has also been adapted by The National Program Office for Depression in Primary Care (http://www.wpcc.pitt.edu/dppc/), a RWJ funded project, to develop a clinical framework for all partnering organizations to follow. Their Flexible Blueprint was developed after a review of published interventions used to treat depression, interviews with a variety of primary care physicians, mental health specialists and other experts in the field, and selected site visits to view elements of the Chronic Care Model in action.

The Substance Abuse and Mental Health Services Administration (SAMHSA) and RWJ are supporting the Implementing Evidence Based Practices Project. This project is focused on people who have severe mental illness; these people are most frequently served in the public mental health system (http://www.mentalhealthpractices.org/).
There are six areas that have been researched. Toolkits have been developed based on the multi-state demonstrations that have been underway. The six areas are described below, based on the website materials:

- **Illness Management and Recovery**: This is a program of weekly sessions where specially trained MH practitioners help people develop personal strategies for coping with mental illness and moving forward in their lives. The program emphasizes helping people set and pursue personal goals and become better able to realize their vision of recovery.

- **Medication Management Approaches In Psychiatry (Medmap)**: This focuses on using medication in a systematic and effective way, providing guidelines and steps for decision-making based on current evidence and outcomes, monitoring and recording information about medication results, and involving consumers in the decision-making process.

- **Assertive Community Treatment (ACT)**: This program is for people who experience the most severe symptoms of mental illness. The goal is to help people stay out of the hospital and develop skills for living in the community. Services are provided by a team of practitioners, are available whenever and wherever needed, 24-hours a day, and are provided for as long as they are wanted and needed.

- **Family Psychoeducation**: This involves a strong partnership between consumers, families and supporters, and practitioners. People work toward recovery by developing better skills for overcoming everyday problems and illness-related issues, developing social support, and improving communication with treatment providers.

- **Supported Employment**: This is a well-defined approach to helping people with mental illness find and keep competitive employment. These programs are for anyone who expresses the desire to work. The programs are staffed by employment specialists who work with the treatment team to integrate services. They help people look for jobs soon after entering the program, and provide support as long as consumers want the assistance.

- **Integrated Dual Disorders Treatment**: This treatment approach is for people who have mental illness and addiction disorders, offering mental health and substance abuse services together, in one setting, at the same time. A wide variety of services are offered in a stage-wise fashion because some services are important early in treatment, while others are important later on.

The EBPs described above are intended for use in the public mental health system, serving people with severe mental illness; they are not diagnosis specific. The American Association of Community Psychiatrists (http://www.wpic.pitt.edu/aacp/default.htm) has released guidelines, such as Guidelines for Recovery Oriented Services, that also address this target population rather than a diagnosis specific population.

The American Psychiatric Association has developed diagnosis specific practice guidelines (http://www.psych.org/) that are applicable in a wide variety of settings, as have other professional groups. The following list of behavioral healthcare guidelines and protocols is from the National Guideline Clearinghouse:

- Adjustment Disorders
- Anxiety Disorders
- Delirium, Dementia, Amnestic, Cognitive Disorders
- Dissociative Disorders
- Eating Disorders
- Factitious Disorders
- Impulse Control Disorders
• Mental Disorders Diagnosed in Childhood
• Mood Disorders
• Neurotic Disorders
• Personality Disorders
• Schizophrenia and Disorders with Psychotic Features
• Sexual and Gender Disorders
• Sleep Disorders
• Somatoform Disorders
• Substance-Related Disorders

**EVIDENCE-BASED PRACTICES FOR ALL POPULATIONS**

There are evidence-based practices in clinical preventive services that should be utilized with all populations, whether or not they are receiving services related to a particular diagnosis or condition. This is an area for improvement in services to persons with severe mental illness, who historically have had difficult accessing healthcare services for acute or chronic medical conditions, not to mention clinical screening and prevention services.

The U.S. Preventive Services Task Force (USPSTF) ([http://www.ahcpr.gov/clinic/uspsstfix.htm](http://www.ahcpr.gov/clinic/uspsstfix.htm)) was convened by the U.S. Public Health Service to rigorously evaluate clinical research in order to assess the merits of preventive measures, including screening tests, counseling, immunizations, and chemoprevention. The USPSTF consists of 15 experts from the specialties of family medicine, pediatrics, internal medicine, obstetrics and gynecology, geriatrics, preventive medicine, public health, behavioral medicine, and nursing. The recommended clinical prevention services are organized into the following clinical categories:

- Cancer
- Heart and Vascular Diseases
- Injury and Violence-Related Disorders
- Infectious Diseases
- Mental Disorders and Substance Abuse
- Metabolic, Nutritional, and Endocrine Disorders
- Musculoskeletal Disorders
- Obstetric Disorders
- Pediatric Disorders
- Vision and Hearing Disorders

The original Task Force's efforts culminated in the 1989 *Guide to Clinical Preventive Services*. A second edition of the *Guide* was published in 1996. In November 1998, the Agency for Healthcare Research and Quality (then the Agency for Health Care Policy and Research) convened the current USPSTF to update existing Task Force assessments and recommendations and to address new topics.

**CROSSWALKING EVIDENCE-BASED PRACTICE TO THE FOUR QUADRANT MODEL**

This second version (revised) of the Four Quadrant Model cross-walks the likely use of Evidence Based Practices to each of the Quadrants. It focuses on Evidence Based Practices (EBPs) currently under development by the Substance Abuse and Mental Health Services Administration (SAMHSA) and the Health Resources and Services Administration (HRSA), as well as referencing other work in public and private healthcare sectors. It demonstrates that some EBP components should be used with all populations (USPSTF), while others are quite specific to a level of risk and complexity (SAMHSA). The Chronic Care Model is useful in all quadrants, because the CCM integrates the concept of a registry and tracking of health status, with intervention geared to the appropriate level given the risk and complexity status of the individual.
Behavioral Health/Primary Care Integration
The NCCBH Four Quadrant Clinical Integration Model
And Evidence-Based Practices

All Populations: USPSTF Clinical Preventive Services

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Behavioral Health Risk/Status

- High

Physical Health Risk/Status

- Low

- High

National Council for Community Behavioral Healthcare
The Flexible Blueprint and the Depression Manual both address a significant finding: "Practices that have been demonstrated to be effective by clinical services research could improve the lives of many people if they were widely adopted in routine healthcare settings... However, studies of the impact of practice guidelines suggest that publication and distribution of guidelines is not enough to change the practice of clinicians." Torrey and his colleagues, in their review of the literature regarding efforts to change clinical practice, note that training and education alone is insufficient, sustained change requires a restructuring of the flow of daily work, and focused restructuring may not be sustained following a period of intervention unless there is continued feedback. They conclude that the supports required to establish and maintain a desired practice include: "clearly voiced administrative support for change before training; initial clinical training using didactic methods, observation of practice and written materials; ongoing weekly supervision by an expert, based on written principles and practices; follow-up visits by a program expert with feedback on implementation; and feedback on services and outcomes... To succeed, the system of care must have adequate resources and be reasonably organized, and the efforts of multiple stakeholders must be aligned to support the practices".

The Institute of Medicine’s Improving the Quality of Healthcare for Mental and Substance-Use Conditions states: "A large body of research and other published work on organizational change, for example, consistently calls attention to five predominantly human resource management practices (and one other organizational practice) that are key to successful change implementation (1) ongoing communication about the desired change with those who are to effect it; (2) training in the new practice; (3) worker involvement in designing the change process; (4) sustained attention to progress in making the change; (5) use of mechanisms for measurement, feedback, and redesign; and (6) functioning as a learning organization. All of these practices require the exercise of effective leadership."

\[\text{\textsuperscript{vi}}\] Institute of Medicine. Improving the quality of health care for mental and substance-use conditions. The National Academies Press, 2006. \texttt{www.nap.edu}


\[\text{\textsuperscript{xi}}\] Chung, H. Primary care and mental health "Bridge Program" \texttt{www.bphc.hrsa.dhhs.gov/mtw/mtw_chinatown.htm}.

\[\text{\textsuperscript{xii}}\] Lambert, D, Bird, DC, Hartley, D, Genova, N. Integrating primary care and mental health services: current practices in rural areas. National Rural Health Association. 1996.


\[\text{\textsuperscript{xiv}}\] Institute of Medicine. Improving the quality of health care for mental and substance-use conditions. The National Academies Press, 2006. \texttt{www.nap.edu}