

Mind and Body Reunited: Improving Care at the Behavioral and Primary Healthcare Interface

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Executive Summary

Nearly every major policy statement on mental health in the last decade, ranging from the Surgeon General's Report to the President's New Freedom Commission on Mental Health, has begun with the tenet that mental health is central to overall health and more recent reports have added a corollary—physical health is central to mental health.

Improving the treatment of mental and substance use disorders in primary care settings and improving the medical care of people with serious mental health (MH) and substance use (SU) disorders served in behavioral health (BH) settings has been a growing area of focus over the last decade. The goal of achieving quality of services and outcomes on both sides of the primary care/behavioral health interface is gaining long overdue attention and emphasis. This paper seeks to review the history, structure, and current developments of care at the primary care/behavioral health interface. It focuses on care in the public sector, where high rates of comorbidity, regulatory burdens, and lack of resources create particular challenges in providing care at that interface.

There are two sides to the primary care/behavioral health interface—the first is the presence of people in primary care that need MH/SU services. By 2003, 54% of people with mental health issues were served in the general medical only sector rather than within or in combination with the specialty mental health sector. Mood disorders are the seventh most costly health conditions in the United States, but rank second in the most disabling health conditions, reflecting both a high burden and potential under-funding of those conditions in the United States.¹ Many initiatives have focused on treating depression because of the broad scope of the problem (more than 19 million Americans each year), the degree to which it has been under-recognized and under-treated in primary care settings, and the growing understanding of the impact of depression on other chronic health conditions.

The other side of the interface is the issue of primary healthcare for people served in specialty mental health settings. Recent reports demonstrate that people with serious mental illness die, on average, 25 years earlier than their age cohorts in the general population. This is a serious public health problem for the people served by public mental health systems. 60% of premature deaths in persons with schizophrenia are due to medical conditions such as cardiovascular, pulmonary and infectious diseases.² Many of the risk factors for these “natural causes” of chronic disease/death, such as smoking, obesity, and inadequate medical care, are modifiable

We know the successful models of care for addressing MH/SU issues in primary care and have promising models for addressing the healthcare needs of people with serious mental illness. We know that providing stepped care according to specific program models will result in improved outcomes for those served. We know that both public and private policy and financing mechanisms function as barriers to implementing what is known clinically.

Improving care at the primary care/behavioral health interface will require that the MH/SU and medical systems of care begin to more fully embody the tenets noted above and create a health system that is person-centered. Moving from today's fragmented, disease-focused system to this sort of person-centered system will require work by multiple stakeholders in these systems and, as with any collaborative endeavor, some degree of sacrifice and loss of control. However, moving towards a more collaborative system of care will ultimately yield gains to consumers, communities, and society that far outweigh these sacrifices.

General Introduction

Improving the treatment of mental and substance use disorders in primary care settings and improving the medical care of people with serious mental health (MH) and substance use (SU) disorders served in behavioral health (BH) settings has been a growing area of focus over the last decade. The goal of achieving quality of services and outcomes on both sides of the primary care/behavioral health interface is gaining long overdue attention and emphasis.

As articulated recently by the Institute of Medicine (IOM) report, *Improving the Quality of Healthcare for Mental and Substance-Use Conditions*, “Healthcare 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.” In the field, the terms integrated care and collaborative care are often used interchangeably, sometimes with differing meanings. The IOM report provides some definitions which guide this overview of **collaborative care**:

- **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.³

Primary care refers to certain types of practitioners (typically general internists, family practitioners, and nurse practitioners, often referred to as Primary Care Practitioners or PCPs), or to the sites or clinics where care is provided. In 1996, the IOM defined primary care as “the provision of integrated accessible health care services by clinicians who are accountable for addressing a large majority of personal health needs, developing a sustained partnership with patients, and practicing in the context of family and community.”⁴ Primary care can also refer to a series of desirable characteristics of that care—care that is first contact (access to care), coordinated (organized across providers and sites), continuous (principal source of care over time), and comprehensive (addressing large majority of personal health needs).^{5,6,7} All of these definitions are relevant to considering care at the primary care/behavioral health interface. Most medical and mental healthcare in the United States is provided in primary care settings, making these critical sites for public health interventions. Much of that care fails to meet the standards of access, coordination, continuity, and comprehensiveness that are the goals of primary care.

Improving coordination, communication, continuity and comprehensiveness at the primary care/behavioral health interface is necessary, but not sufficient for improving the quality of care received by persons with MH/SU disorders. Attention is also needed to improve the delivery of care and provider training within each of these sectors. In the words of a recent editorial in *Health Affairs* “fragmentation is the problem in mental health, but integration is not necessarily the [only] solution.”⁸

This paper seeks to review the history, structure, and current developments of care at the primary care/behavioral health interface. It focuses on care in the public sector, where high rates of comorbidity, regulatory burdens, and lack of resources create particular challenges in providing care at that interface.

The Growth and Evolution of the Primary Healthcare and Behavioral Healthcare Safety Net

A sense of history is needed for a full understanding of the current interface between the general healthcare sector and the behavioral healthcare specialty sector providing MH/SU services, particularly in regard to the populations that receive their care from safety-net systems.

The interface between mental and medical health services up until 1970 paralleled the evolution of the broader US healthcare system. As medical care during the first part of the century shifted from the community to the hospital, the care of people with serious mental illness moved from families and almshouses to state-run institutions. The community mental health movement that emerged during the 1950s and 1960s sought to shift the focus of mental health treatment in the US from inpatient to outpatient settings and from custodial care to a more active treatment model.⁹ A central goal of the 1963 Community Mental Health Center Act was, in the words of President Kennedy, to “return mental health care to the mainstream of American medicine.” As envisioned in that Act, Community Mental Health Centers (CMHCs) would be organized around general medical hospitals, providing close collaboration between medical and community-based mental healthcare.¹⁰ This Act did provide an impetus for general medical hospitals to care for people with acute mental illnesses on psychiatric units located within these general hospitals. However, the promise of greater integration between medicine and mental health was never fulfilled, due to a combination of limited financial resources, weak organizational ties to general hospitals, and a philosophy that emphasized social rather than medical models of mental illness.¹¹

Under the Act, CMHCs were funded with declining multiyear grants, with the expectation of developing local funding. The federal mental health program was devolved to the states in the 1980s via the block grant program and, over time, mental funding sources, levels, methods and expectations have varied widely among the states. Many states have increasingly focused their public mental health systems on the population with Serious Mental Illness (SMI), supported increasingly by Medicaid, with minimal levels of support for non-SMI or uninsured populations.¹²

Parallel to the development of Community Mental Health Centers, Community Health Centers (a commonly used term that includes Federally Qualified Health Centers) were established in the 1960s as a part of the War on Poverty. Their mission is to provide community-based primary care to those with little or no ability to pay for medical care. There is a nationwide network of safety-net providers, supported by federal grants under the US Public Health Service, referred to as 330-funded grantees. Specifically, they include: Community Health Centers (CHCs); Migrant Health Centers; Healthcare for the Homeless Programs; Public Housing Primary Care Programs; and School Based Health Centers. Unlike Community Mental Health Centers, CHCs have retained their status as a direct federal program, with a combination of the 330 grant funds and special financial relationships with Medicaid and Medicare to help support their mission. CHCs are required to provide care for all individuals in their geographic catchment areas, regardless of one’s ability to pay.

The development of managed care in general healthcare and behavioral health, in both the private and public sectors during the 1980s and 1990s, substantially affected the operating environment of all providers. Two broad trends related to managed care have had a particular impact on the primary care/behavioral health interface—the increasing centrality of primary care providers in providing mental health services, and the more widespread use of mental health carve-outs (approximately 164 million Americans, or 2/3 of those with health insurance, are enrolled in managed behavioral health programs that are financially and organizationally carved out from medical care¹³, resulting in “silos” for access, service planning and payment.) These trends have been operating in opposite directions, the former pushing the medical and mental health disciplines closer together, the other pulling them further apart.¹⁴

Where Do Persons Receive Care at the Primary Care/Behavioral Health Interface?

The Epidemiologic Catchment Area (ECA) Study in the 1980s and journal articles based on this survey data, reported that about 50% of care for common mental disorders was delivered in general medical settings.¹⁵ Data from the National Comorbidity Survey (NCS) in 1990-92 and the NCS Replication in 2001-2003 show that, in the decade between these two studies, the proportion of individuals in the United States using mental health services rose from 12% to 20%.^{16,17} By 2003, most mental health services were provided in the general medical only sector, followed by psychiatry, other mental health specialty only, human services only, general medical with other mental health specialty and complementary/alternative medicine sectors. The proportion of individuals receiving care in the general medical only sector experienced the largest proportional increase (153%) over the decade, resulting in 54% of people with mental health issues being served in primary care. This expansion in the general medical only sector has occurred equally for people with severe as well as less severe disorders.¹⁸

The increase of mental health services in general medical settings has been even greater in the public sector as compared to the private sector. In 2000, the federal Health Resources and Services Administration (HRSA) Primary Care Integration Initiative began, targeted to CHCs. New 330-funded primary care delivery sites are now required to provide MH/SU services as well as primary care. Additionally, HRSA has supported the expansion of MH/SU services in existing CHC sites. For example, in FY 2005, HRSA awarded about 50 new MH/SU access grants and 60 expanded MH/SU access grants worth more than \$16 million.

Between 1998 and 2003, the number of persons receiving MH/SU care in CHCs increased from 210,000 to 800,000 persons, fueled by the HRSA initiative, the rise in the number of CHCs and the number of persons treated at each CHC.¹⁹ Although persons with serious mental illness commonly receive mental health care at CMHCs, declines in state funding to CMHCs have led to challenges in CMHCs providing care for uninsured patients. In some communities, CHCs now manage the bulk of care for uninsured persons with serious mental illness.²⁰ Even in communities in which CMHCs have the capacity to care for uninsured patients, CHCs are often managing most of the medical needs of persons with serious mental illness.

Improving Outcomes at the Primary Care/Behavioral Health Interface

Efforts to Improve Treatment for Substance Use in Primary Care

The Center for Substance Abuse Treatment has sponsored Screening and Brief Intervention (SBI) programs in 17 states. These programs have provided screening and brief interventions

for more than 424,000 people across inpatient, emergency department, primary and specialty care settings, including CHCs. Of the total population screened over a two year period, 14.8% were positive based on the screening questionnaires and received a protocol-driven brief intervention. This initiative has been based on more than 30 controlled clinical trials that demonstrated the clinical efficacy and effectiveness of SBI. For example, a trial in patients admitted to a large urban trauma center found a 47% reduction in re-injuries requiring an emergency department visit and a 48% reduction in injuries requiring another admission to a hospital, with three years follow up.²¹

Efforts to Improve Treatment for Depression in Primary Care

There is a robust body of research regarding the incidence of depression in people who access primary care settings. Mood disorders are the seventh most costly health conditions in the United States, but rank second in the most disabling health conditions, reflecting both a high burden and potential under-funding of those conditions in the United States.²²

Many initiatives have focused on treating depression because of the broad scope of the problem (more than 19 million Americans each year), the degree to which it has been under-recognized and under-treated in primary care settings (30-40% not identified and about 10% only on benzodiazepines²³), and the growing understanding of the impact of depression on other chronic health conditions. For example, there is an increased risk of mortality in patients post myocardial infarction with co-morbid depression.²⁴ Identification and treatment of depression is considered best practice in treating cardiovascular conditions and diabetes.

There is also “evidence that many, if not most, people coming into primary care are being treated for psychosocial problems, not organically based medical disease”²⁵ and the potential that if adequate detection of early stage psychiatric illness took place in primary care, there would be some prevention of individuals going on to more severe episodes of major psychiatric illnesses.

Addressing Morbidity and Mortality in People with Serious Mental Illness

Recent reports demonstrate that people with serious mental illness die, on average, 25 years earlier than their age cohorts in the general population. This is a serious public health problem for the people served by public mental health systems.

A Brief History of Research on Improving Care for Depression in Primary Care

1970s-1980s: Screening for depression: *screening may be necessary but is not sufficient*

1990s: Improved referral to mental healthcare: *only 50 % follow-up on referrals and few receive a full course of treatment*

1993: Agency for Healthcare Research and Quality practice guidelines and provider training based on guidelines: *guidelines and provider education may be necessary but are not sufficient*

Since 1990: *over 30 studies in the US and abroad document that systematic collaborative care is more effective than usual primary care for depression. Recent research also supports cost-effectiveness of this approach.*

Unutzer J.

Cardiovascular Disease (CVD) Risk Factors

Modifiable Risk Factors	Estimated Prevalence and Relative Risk (RR)	
	Schizophrenia	Bipolar Disorder
Obesity	45-55%, 1.5-2X RR ¹	26% ⁵
Smoking	50-80%, 2-3X RR ²	55% ⁶
Diabetes	10-14%, 2X RR ³	10% ⁷
Hypertension	≥18% ⁴	15% ⁵
Dyslipidemia	Up to 5X RR ⁸	

1. Davidson S, et al. *Aust N Z J Psychiatry*. 2001;35:196-202. 2. Allison DB, et al. *J Clin Psychiatry*. 1999; 60:215-220. 3. Dixon L, et al. *J Nerv Ment Dis*. 1999;187:496-502. 4. Herran A, et al. *Schizophr Res*. 2000;41:373-381. 5. McElroy SL, et al. *J Clin Psychiatry*. 2002;63:207-213. 6. Uzcok A, et al. *Psychiatry Clin Neurosci*. 2004;58:434-437. 7. Cassidy F, et al. *Am J Psychiatry*. 1999;156:1417-1420. 8. Allebeck. *Schizophr Bull*. 1999;15(1):81-89.

While suicide and injury account for about 30-40% of excess mortality, 60% of premature deaths in persons with schizophrenia are due to medical conditions such as cardiovascular, pulmonary and infectious diseases.²⁶ Cardiovascular mortality in persons with schizophrenia increased from 1976 to 1995, with the greatest increase in men from 1991 to 1995. In addition to increased odds of having diabetes, persons with schizophrenia have increased odds of complications of diabetes compared to controls.²⁷ The table above summarizes the risk factors for cardiovascular disease and reflects the increased relative risks for people with schizophrenia or bipolar disorder. Many of the risk factors for these “natural causes” of chronic disease/death, such as smoking, obesity, and inadequate medical care, are modifiable.²⁸

Persons with serious psychiatric illnesses also may be at risk for poor quality of care because of a host of patient, provider, and system-level factors.²⁹ Recent results from the Clinical Antipsychotic Trials of Intervention Effectiveness (CATIE) study found that among persons with schizophrenia, appropriate medical treatment was not received by 30.2% of persons with diabetes, 62.4% with hypertension, and 88.0% with dyslipidemia.³⁰

The CATIE study also provides information on the percentage of individuals meeting the criteria for key risk factors, as shown in the table at right. In all instances but one (glucose criterion for males), both males and females with serious mental illness met each criterion in percentages greater than the general population.

Comparison of Metabolic Syndrome and Individual Criterion Prevalence in Fasting SMI Subjects and Matched General Population Subjects

	Males		Females	
	SMI N=509	Gen.Pop. N=509	SMI N=180	Gen.Pop. N=180
Metabolic Syndrome Prevalence	36.0%	19.7%	51.6%	25.1%
Waist Circumference Criterion	35.5%	24.8%	76.3%	57.0%
Triglyceride Criterion	50.7%	32.1%	42.3%	19.6%
HDL Criterion	48.9%	31.9%	63.3%	36.3%
BP Criterion	47.2%	31.1%	46.9%	26.8%
Glucose Criterion	14.1%	14.2%	21.7%	11.2%

CATIE source for SMI data
NHANESIII source for general population data
Meyer et al., Presented at APA annual meeting, May 21-26, 2005.
McEvoy JP et al. *Schizophr Res.* 2005;(August 29).

In addition to the risk factors identified above, there is the impact of psychotropic medications. “Beginning with the introduction of clozapine in 1991, and the subsequent introduction of five newer generation antipsychotics over the next decade or so, antipsychotic prescribing in the US has moved to the use of these second generation antipsychotics. This has occurred despite their significantly greater cost, largely due to a decrease in neurologic side effects and the perception that people using them may experience better outcomes, especially improvement in negative symptoms. However, with time and experience the second generation antipsychotic medications have become more highly associated with weight gain, diabetes, dyslipidemia, insulin resistance and the metabolic syndrome and the superiority of clinical response (except for clozapine) has been questioned. Other psychotropic medications that are associated with weight gain may also be of concern.”³¹

Frameworks for Discussion: Models and Their Application

The Continuum of Collaboration, Coordination, and Integration

Doherty, McDaniel, and Baird noted in 1996 that the extent of collaboration in any given health/MH/SU situation is a function of the nature of the situation itself, the skills of the providers, and the capacity of the healthcare team and setting. Focusing on the system and organizational issues that facilitate or impede collaboration, they described the levels of collaboration achievable in different kinds of settings:

- Minimal collaboration,
- Basic collaboration at distance,
- Basic on-site collaboration,
- Partly integrated, and
- Fully integrated.³²

The continuum, which is analogous to one described by d'Aunno for substance use coordination,³³ assumes that the greater the level of systemic collaboration, the more adequate the management of very demanding health/MH/SU situations is likely to be, but the authors do not prescribe an optimal model for all healthcare settings.

Integration that is financial (benefit packages, carve-ins, shared risk pools or other incentives) or structural (services delivered under the umbrella of the same organization, mental health specialty services co-located with primary care services) does not necessarily assure clinical integration. However, clinical integration is very difficult to achieve without financing mechanisms and structures or infrastructure that support the collaborative effort.³⁴

Cultures of Primary Care and Mental Health Services

The differences between primary care and mental health languages and cultures have been identified as barriers to successful collaboration (and also identified as barriers to integrating MH and SU services). These language and culture differences are clinical, structural and financial. All three aspects need to be considered in developing models and in local services planning and implementation.

Cherokee Health Systems is a public sector example of attending to all three aspects of integration. Operating in Tennessee, which has carved-out Medicaid mental health services, Cherokee has a financing arrangement that is the only one of its kind within the state. The organization has been able to overcome the barriers that MH/SU and primary care providers

An Overview of Some Cultural Differences in Safety Net Organizations	
CHC	CMHC
National System	State Defined
Safety Net Provider	Medicaid Provider (in states that have no/minimal MH funding for indigents)
Need-Based Services	Eligibility-Based Services
Population-Focused	Case-Focused
Prevention Oriented	Rehabilitation Oriented
Lifespan Care	Episodic Care
Gatekeeper	Specialty Service
Open Access	Restricted Access
Flexible Scheduling	Rigid Scheduling
Treatment Team	Solo Provider
Symptom Focus	Personality Focus
Generalist	Specialist
Governed by Users	Governed by Community Leaders
	<i>Freeman, Cherokee Health Systems</i>

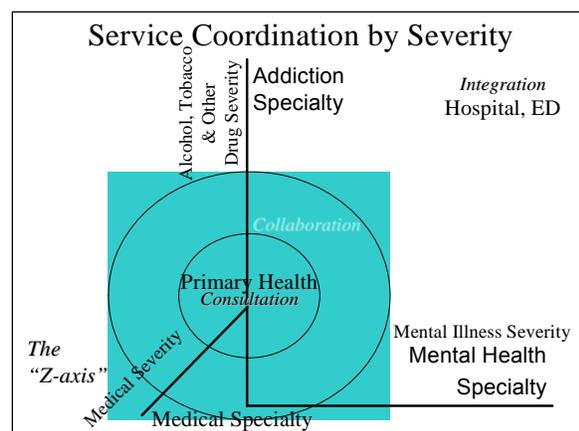
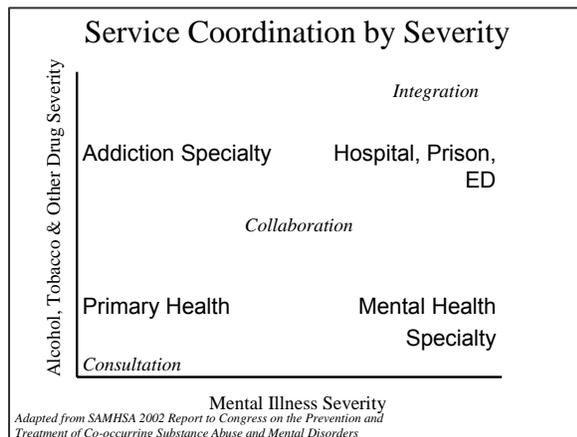
frequently experience in putting together a business model for collaboration.³⁵ The Cherokee model was featured as one of several examples in a report issued by the Bazelon Center— *Get It Together: How to Integrate Physical and Mental Healthcare for People with Serious Mental Disorders*. Cherokee is both a CHC and a CMHC provider, intersecting with both types of practice and bureaucratic cultures, so has had the opportunity to observe and manage the cultural differences.

Integration of MH/SU Services

The 1998 consensus document for MH and SU service integration, as initially conceived by state mental health and substance abuse directors (National Association of State Mental Health Program Directors [NASHMHPD] and National Association of State Alcohol/Drug Abuse Directors [NASADAD]), and further articulated by Ken Minkoff and his colleagues, describes differing levels of MH and SU integration and clinician competencies based on a MH/SU Four-Quadrant Model, divided into severity for each disorder.³⁶

- Quadrant I: Low MH-low SU, served in primary care
- Quadrant II: High SU-low MH, served in the SU system by staff who have MH competency
- Quadrant III: Low SU-high MH, served in the MH system by staff who have SU competency
- Quadrant IV: High MH-high SU, served by a fully integrated MH/SU program

Elaborating on the MH/SU Four-Quadrant Model, Saitz added a Z (Medical) axis and the constructs of Consultation, Collaboration and Integration.³⁷

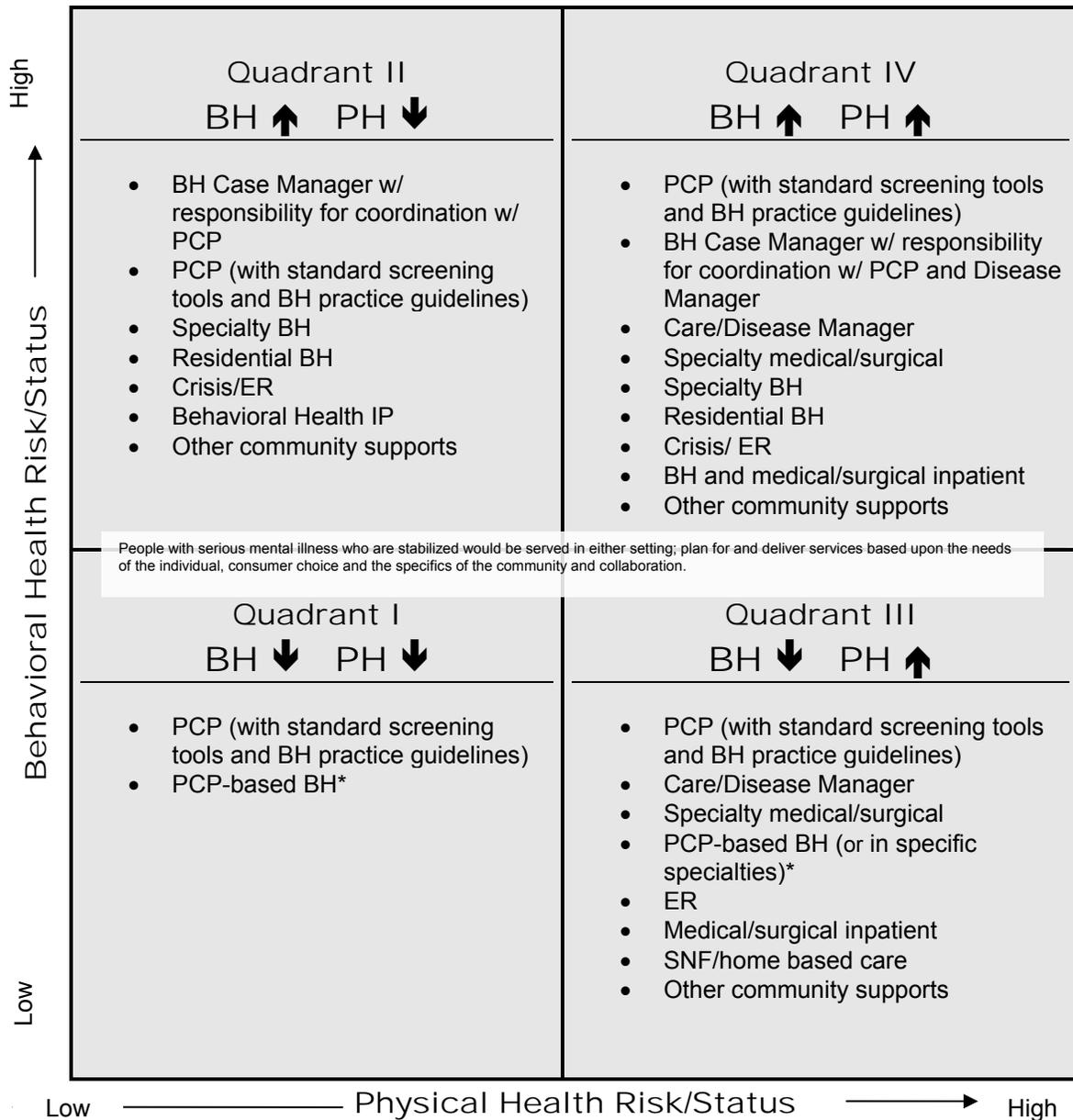


National Council for Community Behavioral Healthcare Four Quadrant Model

The National Council model for general healthcare and MH/SU collaboration builds on the MH/SU Four-Quadrant Model and incorporates the competency-based MH/SU integration concept on the X axis, with health on the Y axis, to describe the subsets of the population that Behavioral Health/ Primary Care (BH/PC) collaborations address.³⁸

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 Clinical Integration Model



*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 SU assessment and treatment. Conversely, a PCP might work for the specialty BH setting or for another organization but on-site in BH.

The use of the BH/PC 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 low to moderate BH risk.

- Quadrant II: High BH-low physical health complexity/risk, served in a specialty BH system that coordinates with the PCP and assures access to healthcare.
- 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.
- 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.

Stepped Care

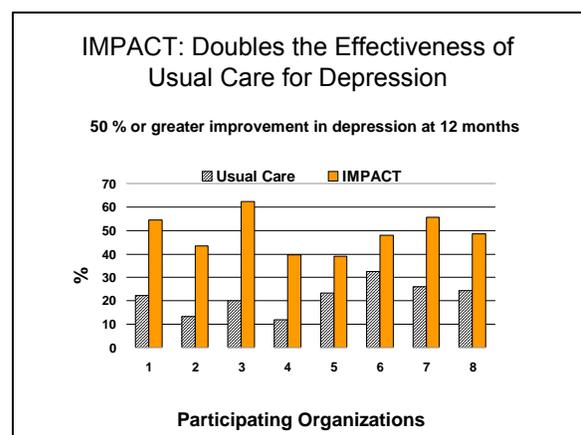
Regardless of the Quadrant in which a person's mental health, substance use and physical healthcare needs falls, there will always be a boundary between primary care and specialty MH/SU that must be addressed. Useful here is the concept of stepped care, in which services are provided and outcomes tracked and then services adjusted—lack of improvement or worsening status suggests that additional or different approaches are needed in the care plan. Care is not static, but responsive to individual needs. By applying this concept to the BH/PC Four Quadrant Model, we can think of a person who might be initially identified in Primary Care (Q I), but subsequently requires the intensity of specialty mental health services (Q II) or specialty medical services (Q III) and would be transitioned to the appropriate level of care, while assuring there is ongoing collaboration with the PCP.

In the largest treatment trial for late-life depression to date (*IMPACT*, a stepped care model) researchers followed 1,801 older adults with depression from 18 diverse primary care clinics across the United States for two years. The 18 participating clinics were associated with eight healthcare organizations in Washington, California, Texas, Indiana, and North Carolina. The clinics included several Health Maintenance Organizations (HMOs), traditional fee-for-service clinics, an Independent Provider Association (IPA), an inner-city public health clinic and a Veteran's Administration clinic. The *IMPACT* research sites represented a variety of insurance coverage and payment environments, ranging from integrated systems such as Kaiser or the Veteran's Administration to safety net clinics.

The *IMPACT* intervention resulted in a 50% or greater improvement in depression at 12 months, compared to usual care. The key components of the *IMPACT* intervention included:

Depression care manager

- May be a nurse, social worker or psychologist and can be supported by a medical assistant.
- Educates the patient about depression.
- Supports antidepressant therapy prescribed by the patient's primary care provider.
- Coaches patients in behavioral activation and pleasant events scheduling.
- Offers a brief (6-8 sessions) course of counseling, such as Problem-Solving Treatment in Primary Care.
- Monitors depression symptoms for treatment response.
- Completes a relapse prevention plan with patients.



Designated psychiatrist

- Consults on the care of patients who do not respond to treatments as expected.

Collaborative care

- Patient, care manager and primary care provider work together to develop a treatment plan (medications and/or brief, evidence-based psychotherapy).
- Care manager and primary care provider consult with psychiatrist to change treatment plan if patient does not improve.

Stepped care

- Measurement of depressive symptoms at the start of treatment and regularly thereafter. The PHQ-9 is recommended; however there are other effective measurement tools.
- Adjustment of treatment according to an evidence-based algorithm. Aim for a 50% reduction in symptoms within 10-12 weeks. If patient is not significantly improved at 10-12 weeks after the start of a treatment plan, the plan should be changed. The change can be an increase in medication dosage, change to a different medication, addition of psychotherapy or a combination of medication and psychotherapy.³⁹

Communities and Populations Are Unique

Models such as the BH/PC Four Quadrant Model are not intended to be prescriptive, but to serve as a conceptual framework for collaborative planning within a local service system. Each community will need to develop arrangements depending on the unique factors in the environment, including:

- Array of and capacity of services in the community—what services are available and is there access to sufficient amounts of the services that are needed?
- Trained workforce—do current MH/SU and primary care staff have the right skills to deliver planned services onsite?
- Organizational support in providing services—do managers provide encouragement and support for collaborative activities and what is the impact on operations, documentation, billing and risk management?
- Reimbursement factors—do payors support collaborative care and make it easy or difficult for the MH/SU and primary care sectors to work together?
- The population that is targeted for services—is the focus on older adults, adults, children, ethnic populations, privately insured, publicly insured, uninsured?
- Consumer preferences—are people more likely to accept care in primary care or specialty settings?

For example, if the community is in a state that will reimburse CHCs via Medicaid for providing care management as a component of depression care, then it is more feasible to develop a stepped care model. Sufficient availability of psychiatry in the community is a frequently mentioned concern—it is difficult to treat uncomplicated conditions in primary care if there are not specialists in the community available for consultation to primary care and treating more complex cases.

The examples used in the BH/PC Four Quadrant 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 MH/SU populations—research suggests they are willing to

receive MH/SU services in a primary care setting and that targeted interventions can make a difference in depression symptoms.^{40, 41}

Ethnic, language and racial groups have experienced barriers to accessing and receiving language and culturally appropriate MH/SU services. Primary care based MH/SU services can improve access for these populations and lead to appropriate engagement with MH/SU specialty services as needed because they are able to employ both staff and methods that are culturally appropriate and acceptable. For example, the Bridge Program in metropolitan New York has been successful in reaching the Asian-American community through primary care settings.⁴² The *IMPACT* project was successful in engaging and treating older African American men that were highly unlikely to seek or use specialty mental health services.

There are other population factors that affect delivery system planning. For example, much of the initial research on integrated approaches was conducted with middle-class, privately insured populations. Less is known about strategies for collaborative care in safety-net populations. There is data regarding differences in prevalence that must be taken into account in planning for collaborative care.

Medicaid Mental Health managed care penetration targets (the percentage of the target population to be served, which was subsequently embedded in financing assumptions) were set at 10% in the early 90s, based on a 7% rate in the privately insured population. The NCS Replication in 2001-2003 showed that the proportion of the US population using mental health services rose to 20%. However, as reflected in the table at right, newly available

	Washington State	Washington State	Colorado Access	Colorado Marrilac Clinic
Population	Medicaid (Aged Blind, and Disabled)	General Assistance Unemployable	Medicaid (All aid codes)	Uninsured
Number	100,171	22,917	6,500	500
Any MH/SU Diagnosis	47% (claims)	52% [MH=36%, SU=32%] (claims)	40% (claims)	51% (PHQ 9)
Percent of Those w/ Dx Seen by MH/SU System	52%	MH=22% SU=13.7%	33%	N/A

data suggests a much higher prevalence of mental health and substance use disorders in the Medicaid, General Assistance and uninsured populations than in the general population.⁴³ With this in mind, the relative size of populations within each of the BH/PC Four Quadrants would vary, depending on the target population that is the focus of the community planning effort.

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.⁴⁴ Application of models must consider the resources locally available and develop alternative methods of coordination (for example, using telemedicine in rural areas) that may be required when specialty care (either physical or MH/SU) is delivered in another community.

Quality Improvement Activities

Research Efforts and National Initiatives Across Systems

Improving the Treatment of Substance Use in Primary Care

As described earlier, the federal government has sponsored the spread of screening and brief intervention for substance use in healthcare settings. The essential components of SBI include:

- Detailed history of alcohol and/or drug use,
- Formal questionnaire-driven assessment of alcohol and/or drug use utilizing validated instruments,
- Brief intervention, provider-assisted commitment to behavioral change, and
- Arrangement for appropriate follow-up services if indicated.⁴⁵

The Accreditation Council for Continuing Medical Education chose SBI as their 2007 demonstration program and will assist all specialty medical societies to implement SBI continuing medical education programs during the coming year. The Centers for Disease Control, Substance Abuse and Mental Health Services Administration (SAMHSA), National Highway Traffic Safety Administration and National Institute of Alcohol Abuse and Alcoholism have collaborated and funded publication of SBI guidelines for use in all American College of Surgeons accredited Level I Trauma Centers in the US. A collaborative effort, assisted by Eric Goplerud at George Washington University, recently resulted in the submission of a Coding Change Request Form to establish a series of Current Procedural Terminology (CPT) SBI codes which, once established and adopted by payors, will become a vehicle for billing SBI services.

Improving the Treatment of Depression in Primary Care

The *MacArthur Initiative on Depression and Primary Care*, initiated in 1995, was charged with making a difference nationally in the primary care management of depression. Toward this end, the Initiative launched a variety of projects to better understand current primary care management approaches and to develop strategies to enhance that management. The MacArthur Three Component Model demonstrated the relationship between the PCP, the care manager and the specialty mental health provider and how care monitoring becomes an essential element for reviewing and revising care to achieve remission (stepped care).⁴⁶

Randomized controlled trials of stepped care models have demonstrated efficacy on measures of access, engagement and outcomes. The *IMPACT* program, described above, has been funded by the Hartford Foundation to provide materials, training, consultation and other assistance to adapt and implement the model nationally.

In the federally funded *PRISMe* study of integrated versus referral models, which focused on older adults, even with “the best referral process imaginable”, only 49% of the patients referred actually became engaged in specialty mental health services, compared to 71% in the integrated model. Findings from the integrated model included:

- Greater engagement in MH/SU services,
- Greater engagement for more severe symptoms and worse functioning,
- High engagement among suicidal elderly, and
- Engagement demonstrated across different clinics and ethnicities.

Although the *PRISMe* primary care-based MH/SU providers didn’t have treatment algorithms, they achieved outcomes close to those achieved by specialty MH/SU providers.⁴⁷

Depression in Primary Care: Linking Clinical and System Strategies has been a five-year, Robert Wood Johnson Foundation (RWJF) funded, national program with the goal of increasing the use of effective models for treating depression in primary care settings. Now in its final year, the program was developed to address three issues:

- Depression as a serious and prevalent chronic disease that should be conceptualized in a way that is parallel to other chronic conditions (e.g., asthma, diabetes, etc.);

- Longitudinal chronic illness care approaches to depression treatment are effective, but not currently implemented by health systems and practitioners; and
- Putting these approaches into place requires a combination of clinical and economic systems strategies at multiple levels, engaging patients/consumers, providers, practices, plans, and purchasers.

The program charged the eight demonstration sites (four Medicaid, four private) with addressing financial and structural issues as well as implementing clinical models.

In 2005, Aetna announced a new program, *Aetna Depression Management*, the first national health plan initiative to integrate medical and behavioral healthcare at the primary care physician office and provide incentives for screening and assessment as patients first enter the healthcare system. Aetna Depression Management is a pilot program in Pennsylvania, New Jersey, Maryland, Virginia, the District of Columbia, Oklahoma and Texas. The program:

- Provides a turnkey depression treatment program for PCPs based on the Three Component Model program. The model uses an empirically validated, standardized depression screening tool and outcome measurement tools. The three components include:
 - A prepared practice working with
 - A care manager and
 - A behavioral health specialist.

The care manager helps guide and facilitate a patient's adherence to the prescribed treatment.

- Gives primary care access to a network of psychiatrists who are on call throughout the day to answer questions about treatment that may be needed outside the PCP office. In addition, Aetna case managers track and follow up with patients.
- Redesigns Aetna's mental health benefit policy to reimburse PCPs for screening and assessing patients for depression.
- Includes a Web-based Continuing Medical Education program for PCPs and brings training and heightened sensitivity and educational materials to the doctors who first see patients.
- Provides training for office staff of participating PCPs who also work and interact with the patients.
- Distributes member-targeted communications materials for use by the PCPs.⁴⁸

The *Health Disparities Collaboratives* are part of a multi-year national initiative to implement models of patient care and change management in order to transform the CHC system of care for underserved populations. The Institute for Healthcare Improvement (IHI), with support from the federal Bureau of Primary Health Care (BPHC), has provided leadership for the collaboratives and produced training manuals to help CHCs improve care for their patients with chronic illness. CHC grantees with new BH programs have been expected to participate in the Depression Collaborative and implement the key concepts in the Depression Manual. These key change concepts are based on Wagner's Care Model, which outlines a team infrastructure for managing chronic health conditions, rather than requiring that the primary care practitioner perform all the tasks.⁴⁹ An evaluation of the Depression Collaborative by RAND suggested that participating sites were successful in incorporating and, to a lesser degree, sustaining these changes over time.⁵⁰ These findings suggest that it is possible to implement depression quality improvement even in poor, underserved, and fragmented systems of care.

The National Council for Community Behavioral Healthcare has recently initiated a four site improvement collaborative. Each site is a partnership between a CHC and a CMHC. The quality improvement focus of the project is on the patient population identified in primary care as depressed (via the PHQ-9) and the creation of standardized screening and referral protocols for

those with substance use, suicide, and bipolar issues. Persons subsequently referred to specialty mental health care will be followed for the healthcare impact of atypical antipsychotics via ongoing collaborative care protocols with primary care. The National Council is also conducting a survey of its entire membership base; the survey gathers information on the extent to which MH/SU providers are currently involved in monitoring and managing the health status of the population they serve as well as coordinating with primary care clinics to identify and address MH/SU issues in the primary care population.

Improving Healthcare for Persons with MH/SU Disorders

To date, only a handful of effectiveness trials have assessed strategies to improve medical care in patients with MH/SU disorders. However, the results from these trials are quite promising, demonstrating that a range of strategies appear to be effective in improving linkage with, and quality of, medical care, and improving self-reported health outcomes in groups with higher levels of baseline medical comorbidity.

Models for improving medical care in persons with mental illnesses are analogous to those used to classify models for the management of mental disorders in primary care⁵¹, and can be organized along a continuum from less to more involvement on the part of primary healthcare providers.⁵²

At one end of the continuum, training programs may provide psychiatrists^{53,54} with additional medical training, or patients with expertise in self-management⁵⁵ and/or therapeutic lifestyle change strategies.^{56,57} Studies⁵⁸ in this area have demonstrated considerable potential to reduce lifestyle risk factors such as poor diet, smoking, and obesity in persons with serious mental illness.

Strategies to Improve Medical Care in Persons with Serious Mental Disorders: A Continuum of Involvement of Medical Providers		
Strategy	Involvement of Medical Providers	Requirements
Training for Patients or Staff	Low	Time; training; motivated trainees
Onsite Medical Consultation	Intermediate	Sufficient flow of patients to support medical consultant
Collaborative Care	Intermediate	Regular contact between medical and mental health/addiction staff
Facilitated Referral to Primary Care	High	Adequate community medical resources Mechanism for linkage between the systems

Druss B.

In medical consultation models, a part-time or full-time medical consultant comes on-site in the specialty mental health setting to provide for the medical needs for patients. This approach has been tested in several inpatient studies^{59,60} where it has been shown to improve the quality of medical care. Collaborative care models in which care is delivered by multidisciplinary teams made up of both internists and mental health or substance use specialists^{61,62,63,64} are analogous to evidence-based approaches to treating depression in primary care.⁶⁵ Finally, under facilitated referral models, a mental health facility can hire a care manager to provide linkage and coordinate follow-through with medical care in a community medical setting.⁶⁶ These models are among the simplest programs to implement in free-standing mental health settings such as CMHCs, although they depend on the availability of a high quality community medical provider and effective linkages between the MH/SU and primary care provider organizations.

A large NIMH-funded trial of a facilitated referral model using nurse care managers to improve quality of primary care is currently underway in an Atlanta CMHC. This randomized, controlled trial is located in an inner-city community mental health center in Atlanta, Georgia. Subjects assigned to medical case management are provided a manualized, stepped-care intervention that includes patient education and activation, communication and advocacy with medical providers and help in overcoming system-level barriers to primary care. The study is testing the impact of the intervention on quality of primary care, health outcomes, and costs.

As another example, a Massachusetts behavioral healthcare network that is part of a community-based healthcare delivery system initiated a performance improvement project focused on adults with serious mental illness. They chose to embed a nurse practitioner within the mental health setting, creating one-stop shopping in a familiar environment. Patients were randomly assigned to experimental and control groups. The experimental group received routine primary healthcare from the nurse practitioner. Those in the control group received treatment as usual with regard to their primary care. One goal was to reduce ER visits; ER visits were actually 42% lower in the experimental group compared with the control group. The most dramatic differences were found in the healthcare screens for hypertension and diabetes. For both indicators, the experimental group experienced a 44% rate of access compared with 0% in the control group.⁶⁷

State/Local Initiatives

There are a wide range of activities that organizations define as integrated or collaborative care. In a new study sponsored by RWJF, thirteen different programs were interviewed by telephone. In finding that integration approaches vary, the report observes that “each initiative was designed around the particular set of local or statewide problems to be solved. None of the initiatives set out to “do integration” in a cookie cutter way.” Commonalities included: existence of conceptual framework; use of communication tools and case management; screening; clinical approach; start up funding; work on sustainability; and data collection and evaluation.⁶⁸ A number of the programs described throughout this paper and summarized in the table on page 17 were reviewed in the newly released RWJF study.

In 2006 The Hogg Foundation for Mental Health made grants to five Texas primary care and pediatric clinics to promote effective identification and treatment of mental health problems in primary care settings. With the funding the organizations will adopt the collaborative care model, an integrated healthcare approach in which primary care and mental health providers partner to manage treatment in the primary care or pediatric setting and address any implementation barriers they encounter. The model integrates a mental healthcare manager and a consulting psychiatrist into the primary care or pediatric setting to educate patients about their problems and monitor their response to treatment.⁶⁹

In Colorado, eight grantmaking foundations joined together as the Mental Health Funders Collaborative in 2003 to commission an extensive assessment and analysis of the public and private mental health systems in their state. The study found alarming trends within the complex, fragmented array of mental health systems and providers, including the fact that one of five Coloradans need mental health services each year and less than one-third of these people receive care.⁷⁰ Among the many recommendations was one to implement primary care initiatives for all ages, particularly older adults. A subsequent 2005 grant making process awarded six grants to counties, each focused on system change. Some sites are implementing integration models as a part of this initiative. For example, Colorado West, a CMHC, has located

bilingual mental health service capacity in a nonprofit community clinic; one of the services is a drop in group medical appointment with a psychosocial component.

A few Medicaid pilots have recently been initiated, some using the BH/PC Four Quadrant Model as the basis for their planning. The North Carolina and Massachusetts initiatives are the first state-led collaboration projects to require paired (e.g., MH/SU and Primary Care) safety-net organizations to partner in local planning and service improvement.

The Washtenaw Community Health Organization (WCHO) in Michigan is a collaboration between the University of Michigan, the county mental health agency, and local private health clinics. Mental health clinicians are placed in primary care settings to address the mental health needs of primary care patients. The services provided to people with serious mental illness include nurse practitioners from the School of Nursing who operate side by side with psychiatrists and social workers at two mental health clinics. Consumers with urgent health needs and those without primary care providers can receive healthcare services at the time of their mental health appointment. Additionally, researchers from the University of Michigan and the WCHO have designed a health risk appraisal instrument that assists mental health staff in identifying specific health risk behaviors and potential health conditions. This electronic tool flags the data and notifies the person completing the form of needed health follow-up based on the answers in the tool.⁷¹

The following table summarizes characteristics of some of the sites funded by RWJF, states and other entities as of July 2006. A recap of the efforts of various sites would not be complete without acknowledging the commitment of safety-net providers around the country that continue to patch together funding because they believe in the efficacy of the collaborative approach—for example, in Washington State there is CMHC/CHC partnership where the mental health clinicians placed by the CMHC in the CHC sites are financed by an annual golf tournament—hardly a sustainable model.⁷²

Characteristics of A Sample of Efforts Addressing the Primary Care/Behavioral Health Interface⁷³				
Site	Clinical Model	Business Model	Target Population	Financing Strategy
Colorado Access (RWJF Medicaid Site)	Care managers with psychiatric back up, based at health plan, telephonic and in-person services	Health plan employs the care managers and psychiatrist.	High cost and risk enrollees with co-morbidities, identified through claims data	Health plan pays, recovers costs from reductions in inpatient, ER utilization, and overall PMPM.
Oregon (RWJF Medicaid Site)	MH staff onsite in CHCs, employed by CHCs. Second model was CMHC staff on site in CHCs.	MH staff employed and become part of CHC cost structure, services billed to Medicaid health plan CMHC staff placed on site in CHCs, services billed to Specialty MH Medicaid carve out.	Depressed patients in primary care Depressed patients in primary care	Build the cost into the CHC Medicaid prospective payment. Specialty MH system rules and processes created barriers.
North Carolina (Buncombe County Site)	MH staff onsite in public health safety net primary care clinic.	MH staff employed by clinic, partnership with regional MH authority supports referrals for specialty	Depression, anxiety, ADHD identified in primary care	State pilot testing payment for psychiatric consultation and care management,

Characteristics of A Sample of Efforts Addressing the Primary Care/Behavioral Health Interface ⁷³				
Site	Clinical Model	Business Model	Target Population	Financing Strategy
		MH services. To date, has relied on multiple grants, billings, recently released cost savings results to seek additional support.		possible future Medicaid codes.
Massachusetts (Holyoke Site)	Depression care manager on site in CHC, PHQ-9 screening, psychiatric consultation to PCPs.	CMHC and CHC partnership, referrals to specialty MH, psychiatric consults, use of Community Support case managers.	Depression	Some Medicaid plans will pay for care management, some plans will pay for case managers, no funding for psychiatric consults. State pilot seeks to identify and address barriers.
Aetna	Screening in primary care practices. Care managers, access to psychiatric back up provided by health plan.	Primary care practices screen with existing staff, care managers and psychiatric consults provided by health plan.	Depression	Commercial insurance will pay PCPs for depression screening and assessment, and provide care management and psychiatric consultation.
Tennessee (Cherokee Health)	Behavioral consultant embedded in primary care teams. Psychiatric consults available from within the agency.	A single organization that is both a CMHC and CHC (not all primary care sites are CHCs, however).	All diagnoses	Fully integrated financially through global budgets for MH and primary care as well as billing all other payors.
Michigan (Washtenaw County)	CMHC staff placed on site in primary care clinics, psychiatric consultation.	CMHC with University-based and private primary care clinics.	All diagnoses, focus on individuals with SMI covered by the Medicaid MH waiver as well as indigent patients covered by local funds	Fully integrated Medicaid capitation for both MH and primary care, in partnership with University of Michigan.

Key Challenges and Opportunities for Stakeholders

A 2002 scan of stakeholder experts conducted for SAMHSA reported mixed findings regarding integration of Mental Health and Primary Care for treatment of depression, including: confusion about the concept of integration; lack of clarity about its benefits; lack of information about implementation and outcomes; financial and non-financial barriers; lack of information about impact on consumers; and lack of common understanding of key concepts, including cost offsets and parity.⁷⁴

These stakeholder survey findings were daunting, because they identified the complexity of our nation's healthcare purchasing and delivery system as the source of both the barriers and the solutions to integration. Or, as noted by Mike Quirk and his colleagues at Group Health, "Simply because integration is a good and fundamentally strong idea does not mean that somehow, on

its own merit, it would be able to compete with the habit-based nature of 'regular care'...To achieve real and substantial change, you need corporate sponsorship, local impassioned leadership, a plan that is accepted by all the relevant players, a system of scheduling progress markers and accountability for achieving them.”⁷⁵

Policy and Regulation

Federal and state categorical funding for specific target populations make it difficult to adequately support MH/SU services in primary care as well as medical services within specialty mental health settings. A related issue is the state level regulatory and paperwork requirements that accompany most MH/SU program efforts. Primary care based services require brief assessment, intervention and documentation. MH/SU providers wanting to work with CHC partners are disadvantaged if they must complete lengthy assessments and paperwork in order to access MH/SU funding for persons seen in a primary care setting. Even when they plan to use other funding sources, MH/SU agency licensing may be tied to regulations requiring these more intensive assessment and documentation processes. Some CMHCs have been concerned that public MH providers are being marginalized, as current federal and state policies make it almost impossible to be responsive to the needs of CHCs and communities. This marginalization of CMHCs is seen as potentially leading to insufficient funding and support to carry out their services to priority target populations.

The documentation methods to be used in collaborative care will vary depending on the business model that is adopted for placing a MH/SU clinician in the primary care setting. If the clinician is an employee of the primary care clinic, the documentation becomes a part of the medical chart (in most instances in a separate segment of the chart so the notes can be quickly located as well as be protected from inadvertent release). If the clinician is the employee of a MH/SU provider organization, providing services through a contractual agreement, Dyer recommends consideration of a “staff rental” model, in which the clinician works under the direction of the PCP and documents the visit in the medical chart. In this model, billing is done using medical rather than MH/SU codes, by the clinic rather than the MH/SU clinician. In another model, billing is done by the MH/SU provider organization using MH/SU codes, so documentation is within the MH/SU system. The decision about business model and staff “ownership” should be made after considering all possible revenue streams, both medical and MH/SU, in order to determine the most stable and advantageous revenue mix.⁷⁶ (Analogous approaches can be taken for organizing the provision of primary care within specialty mental health settings. However, there is considerably less experience in addressing the challenges of billing for primary care services delivered in a specialty mental health setting. Initial reports from CMHCs indicate that they have encountered barriers in Medicaid reimbursement for these services.)

Whether the documentation becomes part of the medical chart or the MH/SU provider organization chart, there is consistent agreement regarding brief, immediate documentation of MH/SU services delivered in a primary care setting. This will require MH/SU providers, who often have extensive documentation requirements, to develop alternate methods of documentation for primary care based services. These clinicians will not be able to function responsively within the primary care culture if they are expected to carry over the bureaucratic requirements of most public sector MH/SU systems.

Financing

It is not surprising that large scale primary care/behavioral health integration models developed first within private sector integrated healthcare systems such as Kaiser, HealthPartners and Group Health, where the financing stream was integrated (although internal negotiations were still required to identify the resource base for collaborative care) and the benefits of population health could be realized. For the rest of the healthcare delivery system, minimal progress has been made on resolving issues of financing.

In 2006 the RWJF *Depression in Primary Care* project published a series of papers in a special issue of *Administration and Policy in Mental Health and Mental Health Services Research*, some of which speak directly to the financial and policy barriers in the system.

“The clinical interventions that have been so successful in controlled research environments have proved difficult to sustain in the rough and tumble of daily practice. Existing financial and organizational arrangements are thought to impede incorporation of evidence-based depression care into routine practice. Common problems include the inability of PCPs to bill for depression treatment (in the context of behavioral healthcare carve-out programs) and the absence of payment mechanisms for key elements of the collaborative care model such as care management and psychiatric consultation services. Also, since appropriate care of people with depression typically involves more time than the average case, PCPs reimbursed on a capitated basis or rewarded for the number of patients seen may opt to refer patients to specialty care that could be treated successfully in primary care. Fragmentation in financing and delivery of care due to managed behavioral health carve-out contracts, multiple health plan contracts, and separate prescription drug budgets contribute to and reinforce tendencies to avoid attending to cases of depression using evidence-based practice.

[While the] demonstration programs pursued similar clinical innovations consistent with the collaborative care model, they adopted strikingly different approaches to altering the economic and organizational environment surrounding the primary care treatment of depression. Variation in the economic and organizational strategies across sites reflects both contextual differences in local delivery systems, as well as distinct judgments about which organizations should take responsibility for spearheading and financing quality improvement. Developing an economic and organizational strategy also proved to be significantly more difficult to conceptualize and implement compared with changes in clinical practice.”⁷⁷

There are many complexities associated with financial and structural barriers. For example, there has been considerable discussion about whether MH/SU should be carved-in or carved-out when states or other purchasers make purchasing decisions. Some carve-out models have been customized to support clinical integration efforts, while some carve-in models have had the effect of reducing overall levels of MH/SU spending and services, especially for the population with serious mental illness.⁷⁸

A major barrier in safety-net systems is whether the consumer has insurance coverage (e.g., Medicare, Medicaid or private) or is indigent and/or uninsured. Unlike CHCs, CMHCs have no national requirement to serve the uninsured population, lacking the equivalent of the 330 funding received by CHCs and the special reimbursement relationship with Medicaid. A mandate to serve the uninsured and financing to support it has been a matter of state mental

health policy, with a great deal of variation among the states.⁷⁹ For example, Tennessee recently released a report addressing the mental health needs of the over 520,000 individuals that are uninsured; among other options, the report suggests screening in primary care settings and the provision of integrated healthcare.⁸⁰ Despite receiving federal funds for the uninsured, CHCs commonly lose money on these individuals, needing to recoup those losses with treatment for Medicaid revenues and generation of local grants. Thus providing services to the uninsured represents a major financing challenge across the public safety-net.

Medicare both leads the way and presents some of the structural barriers that the parity movement has tried to address. Medicare led the way in adopting CPT codes (the 96150 series) to support collaborative care; intermediaries around the country are paying on these codes. Some intermediaries are also using these codes in their commercial plans, so there has been a small initial success in obtaining payment for services that are focused on behavioral health issues provided under a medical, not psychiatric, diagnosis. For Medicare covered individuals seen principally for mental health diagnoses in primary care (e.g., major depression), the most significant barrier is the differential co-pay requirement for a mental health visit (50%) as contrasted with a primary care visit (20%).⁸¹

For safety-net providers, the most complex situation vis-à-vis collaborative care is that of the Medicaid system. CMHCs and CHCs in each state must engage in a conversation with the State Medicaid Agency and the State Mental Health Authority to develop policy direction that addresses the need for greater access to MH/SU services for the Medicaid population, without disadvantaging the population that is now served by the public mental health system.⁸²

In October 2003, HRSA issued Program Information Notice (PIN) 2004-05 regarding Medicaid Reimbursement for Behavioral Health Services, which states that Medicaid agencies “are required to reimburse FQHCs and RHCs for behavioral health services...whether or not those services are included in the State Medicaid plan” and clarifies that, “in order for FQHCs and RHCs to be reimbursed..., FQHC/RHC providers must be practicing within the scope of their practice under the state law.” What might PIN 2004-05 mean for the Medicaid population? Medicaid beneficiaries may or may not be able to easily gain access to public mental health services, depending on definitions of target populations and medical necessity, which vary from state to state. In states with public mental health systems that focus on populations with serious mental illness (the populations in Q II and Q IV), PIN 2004-05 creates an opportunity for other Medicaid populations (the populations in Q I and Q III) to obtain MH/SU services through a CHC, consistent with the HRSA initiative focused on reducing health disparities and creating behavioral health capacity in CHCs. This helps assure that safety net populations are served.⁸³

What does this mean in terms of financing and the MH/SU services now provided to Q II and Q IV populations? The answer will vary from state to state because of the differing Medicaid models among the states. For states that are paying fee-for-service (FFS) for outpatient Medicaid mental health services, this will generate new billings and costs for the Medicaid system, but should not affect CMHCs and their target populations in Q II and Q IV. However, for FFS states that require public mental health providers to make the local match (from state and/or locally designated funds) to the FFS federal share, this will require problem solving:

- Will the state pay CHCs the full FFS at the matched rate, using other state funds to match?
- Will state and/or local funds now used for CMHC match be reallocated to cover billings generated by CHCs?
- What will happen to current CMHC service levels/consumers if this occurs?⁸⁴

For states that have managed care for Medicaid mental health benefits, there are a different set of questions:

- Will CHCs be added to the networks of providers?
- Where there are regional sub-capitation arrangements, how would the relationship with CHCs be structured?
- If the CHCs are brought in under the auspices of the managed care system, will they have to play by the same medical necessity/target population/documentation rules as the CMHCs, defeating the purpose of serving a broader Medicaid population in a primary care setting?
- Or will the CHC Medicaid prospective payment cover these services outside of the managed care system and rules? (And if so, will the federal Balanced Budget Act actuarial requirements allow these costs?)
- Would this affect the payments to the managed care system and Quadrant II and IV target populations? ⁸⁵

Other questions regarding financing in both the public and private sector include:

- Is BH consultation in a PC setting a medical or BH service? (Proponents of embedded BH consultants in PC settings believe this should be defined as a medical service, and until there is a change in Medicare policy regarding differential co-pays, it would be advantageous to consider this a medical service.)
- Is medical consultation in a MH setting a medical or MH service?
- Why is there a prohibition on same day services from a PCP and a MH provider? (Some health plans/state Medicaid programs will not process a claim for MH service provided on the same day as primary care service within the same provider organization. There is a misconception that this is a federal CMS requirement.)
- How will issues of MH/SU program licensure, documentation and data submission, clinician licensure, credentialing, and supervision for MH/SU services provided in primary care settings be resolved?
- Which entity (Health Plan or BH Plan) bears financial responsibility when BH is carved out? (Analysis of data on Medicaid enrollees in Washington and Colorado suggests a hypothesis that requires further research. It may be that funding for BH services to the Q I and Q III populations is not in the base/capitation of any entity. Mental health services have often not been delivered to the Medicaid Q I and Q III populations. Yet, based on the data regarding prevalence of MH/SU diagnoses in the Medicaid population as well as the impact of providing MH/SU services on Medicaid healthcare costs, medical cost offsets may be found in the Medicaid population, which would warrant the investment in expanded MH/SU service capacity.) ⁸⁶

Performance Measurement

Performance measurement must be a part of collaborative care programs as they are designed and implemented. The *Center for Quality Assessment & Improvement in Mental Health* has presented three sets of quality measures for use, each including structure, process, and outcome measures (See Attachment). These are examples of the sorts of measures that may eventually be used to provide incentives to improve care on the primary care/behavioral health interface.

- Quality measures for patients with co-occurring medical and psychiatric conditions treated in primary care settings.

- Quality measures for patients with co-occurring medical and psychiatric conditions treated in the mental health specialty setting.
- Quality measures for patients with co-occurring substance use and psychiatric conditions treated in the mental health specialty setting.⁸⁷

Workforce

A major federal and state system issue is workforce development, including: training and competencies for: primary care physicians in provision of care for common MH/SU disorders; MH/SU clinicians in screening and treatment of common medical conditions, and; each type of provider in developing skills for working as consultants in the other setting.

In addition to the familiar difficulties in recruiting due to location or non-competitive salary and benefit plans, leaders of successful programs report that it is difficult to find clinical staff with the skills and knowledge to be effective bridgers between the two systems; they also report that there are few candidates among their employees for whom additional training would result in effective performance. There is a clear need to develop training programs designed to grow the required skills. Agencies such as Cherokee Health Systems have created their own training programs to meet their staffing needs.

Unpublished findings from recent research suggest that simply locating a MH/SU clinician in primary care may not produce outcomes any better than usual care. This is consistent with experiences reported by CHCs in which they have hired clinicians from other MH/SU settings who then replicated their past practices in a primary care setting—resulting in mini-private practices in which individuals were seen for longer sessions and longer courses of care than is recommended in the researched models, sometimes making the MH/SU clinician unavailable to the PCPs for new referrals. Even in settings in which the PCPs may be satisfied with access to their site-based MH/SU clinician, we cannot assume that outcomes for the persons served compare with those in structured and measured models.

This speaks to the need for training in clinical models, as well as consistent measurement, to assure that new MH/SU investment in primary care settings results in the outcomes that research tells us are possible. For example, the University of Massachusetts Medical School has recently initiated a Certificate Program in Primary Care Behavioral Health, targeted to licensed mental health professionals. The 56 hours of didactic and experiential training is

Competencies of MH/SU Providers in Primary Care Settings

Can be any licensed practitioner--training, orientation and skills are the key:

- Finely honed clinical assessment skills (MH/SU)
- Cognitive behavioral intervention skills
- Group and educational intervention skills
- Consultation skills
- Communication skills
- Psychopharmacology and Behavioral Medicine knowledge base
- Flexible, independent and action/urgency orientation
- Solution rather than process orientation
- Prevention orientation
- Team and collaboration orientation
- Clinical protocols and pathways orientation
- Focus on impacting functioning, not personality
- Experience with the SMI population and how the public MH system works
- Understanding of the impact of stigma
- Strong organizational and computer competency
- Bilingual and culturally competency in serving the major population groups seen in the primary care clinic

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focused on training individuals to function successfully as behavioral health providers in primary care.

Information Technology

In discussing the use of information technology in the context of the primary care/behavioral health interface, the key issue to be managed is the balance between privacy and the need for shared communication. There are several principles related to assuring accessibility of information wherever a person presents for care, including:

- Empower consumers—seek their consent to share information, acknowledging that some will decline, but most will want care coordinated.
- Comply with federal and state regulations.
- Maximize the intent of HIPAA regarding information sharing for the purposes of coordinating care.

The Washtenaw Community Health Organization has addressed these challenges through a data warehouse that provides real time access to recent (within the last 24 hours) medical, MH/SU, hospital and emergency room information. This is not a shared health record but a shared set of data elements (e.g., lab results, pharmacy, visits) that enable users from participating systems with appropriate security clearances to access the data, which is used for individual care coordination as well as aggregate analysis of service patterns.

In the future, Electronic Health Records (EHRs) and Personal Health Records (PHRs) will provide a data set that can be mined for aggregate data. We must assure that EHR and PHR templates include the data elements needed to manage and coordinate general healthcare and MH/SU care. These systems need careful design to ensure that critical health status and service information for the purposes of service patterns and performance measurement can be extracted. In addition, Regional Health Information Organizations (RHIOs) are now being formed to develop electronic networks containing data elements essential to care coordination and accessible by diverse participating healthcare organizations in a defined geographic region. The IOM report outlines the actions needed to ensure that the developing National Health Information Infrastructure (NHII) serves consumers of healthcare for MH/SU conditions as well as it does those with general healthcare needs and notes that MH/SU information technology systems lag behind those of general healthcare, as does MH/SU coding of services provided.⁸⁸

Consumer Role

There are multiple aspects to Recovery, as described in the SAMHSA *Consensus Statement on Recovery*.⁸⁹

- Self-Direction
- Individualized and Person-Centered
- Empowerment
- Holistic
- Non-Linear
- Strengths-Based
- Peer Support
- Respect
- Responsibility, and
- Hope.

Of these, the Holistic principle particularly speaks to the issues under consideration in this paper. The holistic nature of Recovery includes “body...and healthcare treatment and services.” The essential role of Recovery principles in good healthcare is clear from the IOM definition of Patient-centered—“providing care that is respectful of and responsive to individual patient preferences, needs and values and ensuring that patient values guide all clinical decisions.” This idea is one that can encompass the collaborative services offered, whether focused on depression in primary care or on the health status of persons with serious mental illness.

Consumers should become aware of the issues outlined here and participate in their state and community policy discussions regarding collaborative care. For many consumer advocates, this means stepping outside of an assumption that mental health care is only delivered in the mental health system (if that has been their experience) and becoming aware of the numbers of individuals in primary care settings that need and are unable to receive MH/SU services because they do not meet the medical necessity criteria or target population definitions of the specialty mental health system. It means supporting alternative methods of primary care sited MH/SU service that are proven effective, not as a substitute for specialty MH/SU care, but as an appropriate response to another population of individuals. It also means supporting mechanisms for sharing pertinent information among medical/MH/SU practitioners that are all caring for the same person.

There is a substantial future role for Certified Peer Specialists in health and wellness promotion, especially in the specialty MH/SU sector. Peer-led disease self-management interventions have been demonstrated to be feasible, effective, scalable, and to lead to sustainable improvements in health and health behaviors in populations with a range of chronic medical conditions. The Chronic Disease Self-Management Program (CDSMP) was developed by Kate Lorig and colleagues based on the following notions:

- People with chronic illnesses share many common needs and challenges in managing their conditions;
- Both because of these common features of these conditions and because of the high rates of comorbidity across conditions, it is important to have a single program that can address multiple chronic conditions; and
- Lay people with chronic conditions, with appropriate training, can teach the CDSMP as effectively, if not more effectively, than health professionals.^{90, 91}

CDSMP programs are led by two peer educators with chronic conditions. A series of six group lectures addresses a set of self-management tasks that have been found to be common across chronic conditions; these include becoming a better self-manager, increasing healthy behaviors, and effective use of the health system.⁹²

Future Needs/Areas of Focus

Research

Given the enormous rate of activity on the primary care/behavioral health interface, it is critical that services research be informed by, and help inform, these evolving models. Researchers must be willing to move from the more traditional “top down” models of intervention design to partnerships with administrators and community leaders to develop and evaluate these evolving models. In order to ensure timeliness and relevance, these evaluations will need to use innovative approaches beyond those used in traditional randomized trials, and include careful cost analyses to understand if and how these models can be sustained in real world settings.

They could apply and report on proposed performance measures and add to the knowledge base regarding fidelity indicators.

Federal funding agencies need to collaborate given that the work lies on the interface between services research, evaluation and practice, and between medical and MH/SU services. Because NIH is the main funder of research in general, it is particularly important that it make a commitment to developing sustainable models of care at the primary care/behavioral health interface .

The recent NIMH report, *The Road Ahead: Research Partnerships to Transform Services*, highlights the importance of these partnerships. However, given the relatively slow process for NIH funding, as well as the flat line NIH budget, it is also critical that other funding sources continue and expand work in this area. It is troubling that several major foundations, including the Robert Wood Johnson Foundation and MacArthur Foundation that have supported major initiatives on the primary care/behavioral health interface, have recently shifted their priorities away from this work.

Policy and Financing

There needs to be a much better understanding of how to obtain reimbursement on the primary care/behavioral health interface in the public sector. Confusion about billing practices has been a major impediment in implementing and sustaining evidence-based models of care for common mental disorders in primary care and for common medical conditions in specialty mental health settings. As a part of the Federal Action Agenda, emanating from the President's New Freedom Commission on Mental Health's Final Report, the Department of Health and Human Services sponsored a project in 2006 to conduct a series of key informant interviews and convene an expert panel to address the issue of reimbursement for mental health services provided in primary care. The final report contains recommendations regarding reimbursement policy clarification, government and stakeholder collaboration, education and technical assistance, and provision of additional services.⁹³

This work needs to happen simultaneously and at multiple levels. At a federal level, there needs to be support for billing key service components such as screening, care management, and psychiatric consultation under Medicare and clarification for the states regarding what they may do under Medicaid. At a state level, it is critical to better understand how to implement existing Medicaid billing codes (and how to incorporate new ones) and to identify the key individuals at CMS, Medicaid Authorities, legislatures, and Mental Health Authorities who need to be involved in the process. It is also critical to address the issue of the uninsured, who are often the single most challenging population to care for in both medical and MH/SU settings. At a local level, it is important for local administrators and communities to begin to build bridges between MH/SU and medical safety-net providers to ensure a seamless continuum of care.

Ongoing Quality Improvement

For improving MH/SU services in primary care, it is critical that local sites develop models that are consistent with the research literature as well as compatible with their local workforce, financing environment, and community resources. Certain models, such as placing a MH/SU clinician in primary care, may not be enough to assure improved outcomes unless they are coupled with measurement, care management, stepped care and other organizational structures to ensure appropriate follow-up with care.

The NASMHPD report on morbidity and mortality calls for numerous policy recommendations for reducing morbidity and mortality of persons with serious mental illness. These include treating persons with serious mental illness as a health disparities population in federal/state initiatives, adopting the US Public Health Service guidelines for prevention and intervention in regard to modifiable risk factors—assuring at least the same standard of care as that available to the general population—and building linkages between mental health and medical providers in the community.⁹⁴

Conclusion

There has been considerable progress made in the last few years in clarifying some of the areas of confusion regarding the importance of and barriers to integrating primary care/behavioral health that were identified in the 2002 SAMHSA scan of stakeholders. We now know that people with serious mental illness need much greater access to healthcare screening, management, and education. We know the successful models of care for addressing MH and SU issues in primary care and have promising models for addressing the healthcare needs of people with serious mental illness. We know that providing stepped care according to specific program models will result in improved outcomes for those served. We know that both public and private policy and financing mechanisms function as barriers to implementing what is known clinically. More “barrier busting” has been done in regard to the substance use intervention (SBI), through Trauma Center accreditation, CME requirements, and the recent CPT coding request, than has been accomplished in the mental health sector.

Nearly every major policy statement on mental health in the last decade, ranging from the Surgeon General’s Report to the President’s New Freedom Commission on Mental Health, has begun with the tenet that mental health is central to overall health and NASMHPD’s report also reminds us of the corollary—physical health is central to mental health.

Improving care at the primary care/behavioral health interface will require that the MH/SU and medical systems of care begin to more fully embody these tenets and create a health system that is person-centered. Moving from today’s fragmented, disease-focused system to this sort of person-centered system will require work by multiple stakeholders in these systems and, as with any collaborative endeavor, some degree of sacrifice and loss of control. However, moving towards a more collaborative system of care will ultimately yield gains to consumers, communities, and society that far outweigh these sacrifices.

Attachment

TABLE 1. Quality Measures for Patients with Co-Occurring Medical & Psychiatric Conditions Treated in Primary Care Settings

STRUCTURE	PROCESS	OUTCOME
<p>Clinicians</p> <ul style="list-style-type: none"> • <u>competencies</u>: % of PCPs (or staff) demonstrating competencies in recognition and treatment of mental disorders / SUD • <u>specialist availability</u>: MHS (adult & child psychiatrists, therapists) availability per # beneficiaries in health plan <p>Services</p> <ul style="list-style-type: none"> • Level of care availability for SUD treatment <ul style="list-style-type: none"> ○ # beds available per # beneficiaries: detoxification, inpatient rehabilitation, clinically managed residential ○ # programs per # beneficiaries: partial hospital, intensive outpatient, outpatient • Evidence-based treatment models for depression in PC <ul style="list-style-type: none"> ○ <u>registry</u>: % of PC practices using depression registry ○ <u>measurement</u>: % of PC practices using structured severity assessment for depression ○ <u>care mgmt</u>: % of PC practices providing care mgmt for depression ○ <u>self-management</u>: % of PC practices providing self-management education/tools ○ <u>training—meds</u>: % PCP's who complete depression medication management training ○ <u>training—CBT</u>: % of eligible clinicians receiving training on CBT based techniques • Buprenorphine treatment for opioid addiction in PC <ul style="list-style-type: none"> ○ <u>training</u>: # PCP's who have received training in buprenorphine treatment per capita or per # beneficiaries in health plan ○ <u>registry</u>: % of PCP's who prescribe buprenorphine that utilize a registry to track patients treated with buprenorphine <p>Clinical Information Systems</p> <ul style="list-style-type: none"> • % of PC practices which provide PCPs with immediate access to MHS / SUD records • % of MHS/SU specialists in plan who have immediate access to PC records • % of practices with procedures guiding consent to access MHS / SUD records <p>Financing</p> <ul style="list-style-type: none"> • <u>Care mgmt. reimbursement</u>: % of beneficiaries in plan whose 	<p>Detection</p> <ul style="list-style-type: none"> • % of PC patients screened annually for depression • % of PC patients with high risk conditions (p-MI, p-CVA, CHF, DM) screened annually for depression • % of PC patients screened for substance use disorder <p>Assessment</p> <ul style="list-style-type: none"> • % of PC patient dx'd with mental disorder with qualifying DSM sx documented on assessment • % of PC patient dx'd with MDD with presence or absence documented on assessment: psychosis; suicidality; h/o mania; substance use • % PC pts w/ MDD meeting severity/complexity criteria for MHS referred for/receive MHS care <p>Access to specialty care</p> <ul style="list-style-type: none"> • % of patients referred to MH/SU specialty care who attend initial visit • Average time to initial visit after referral to MH/SU specialty care • % of patients with SUD who are referred to the appropriate (ASAM) level of care <p>Treatment fidelity to evidence based treatment models</p> <ul style="list-style-type: none"> • Evidence-based treatment of depression in PC <ul style="list-style-type: none"> ○ % of PC patients with depression w/ # acute-phase contacts with care manager ○ % of PC patients with depression w/ structured severity assessment <ul style="list-style-type: none"> ○ on initial evaluation; ~ 4-6 weeks; ~ 12 weeks; ~ 6 months ○ % of PC patients with depression w/o response at ~6 weeks w/ change in treatment • Brief intervention for SUD in PC <p>Coordination between PCP and MHS Following Referral</p> <ul style="list-style-type: none"> • patient report of coordination <ul style="list-style-type: none"> ○ "my clinicians kept each other informed about my treatment and progress" ○ "my clinicians worked well together to coordinate my care for depression" ○ "I knew which clinician to turn to when I had a problem related to depression" • % of referrals resulting in appropriate MHS/SU feedback to PCP w/in # days 	<p>Symptom change</p> <ul style="list-style-type: none"> • mean sx change (e.g., PHQ-9) at 12-weeks, 6-months • % patients meeting remission criteria at 12-weeks, 6 months <p>Functional change</p> <p>Behavioral change</p> <ul style="list-style-type: none"> • abstinence • reduced SU • change in ASI score

STRUCTURE	PROCESS	OUTCOME
<p>PC is eligible for reimbursement for care management for depression</p> <ul style="list-style-type: none"> • <u>PCP reimbursement</u>: % of beneficiaries in plan whose PC is eligible for reimbursement for visit with primary diagnosis of mental disorder or SUD 	<p>Safety</p> <ul style="list-style-type: none"> • Avoidance of prescribing drugs of abuse for patients with SUD <ul style="list-style-type: none"> ○ % of patients with h/o alcohol abuse or dependence prescribed benzodiazepines ○ % of patients with h/o opiate abuse or dependence prescribed opiates 	

Key: PC= primary care; MH=mental health, MHSC=MH specialty care; SUD=substance use disorder, pt=patient, IP=IP, OP=outpatient, dx=diagnosis, tx=treatment
 © Center for Quality Assessment & Improvement in Mental Health, 2006. Hermann RC, Fullerton C, Dausey DJ, Kilbourne AM. Measuring Quality of Care for Co-Occurring Conditions. RWJF Depression in Primary Care Program. February, 2006. www.cqaimh.org/research.html

TABLE 2. Quality Measures for Patients with Co-Occurring Medical & Psychiatric Conditions Treated in the Mental Health Specialty Settings

STRUCTURE	PROCESS	OUTCOME
<p>Clinician Characteristics</p> <ul style="list-style-type: none"> • % of prescribing MH practitioners with competence in detecting and monitoring diseases with high prevalence in the SMI (CV conditions, smoking, obesity, pulmonary disease, thyroid disease and infectious disease) • % of MH practitioners trained to detect diseases with high prevalence in the SMI • # of PCP physicians available for pts with severe mental illness • nurse and physician assistant to MD staff ratio <p>Clinical Information Systems</p> <ul style="list-style-type: none"> • % of pts for whom medical records and laboratory data are available • % of charts with permission to communicate with PCP is obtained • % of practices w/ disorder specific registries <p>Service Linkages</p> <ul style="list-style-type: none"> • Modified Continuity of Care Index: a ratio assessing the degree to which general medical IP and OP services are provided at the same VA facility: $\{1 - [\#facilities/(\#visits+0.01)]/[1 - (1/(\#visits+0.01))]\}$ <p>Financing</p> <ul style="list-style-type: none"> • % of MH practitioners are reimbursed for monitoring medical conditions • % of plans or organizations that provide financial incentives for quality improvement and monitoring 	<p>Detection</p> <ul style="list-style-type: none"> • % pts with annual fasting glucose • % pts with fasting lipid profile and glucose 12 wks after initiating atypical antipsychotics • % of pts with fasting lipid profile every 5 years • % pts screened for HIV/hepatitis who engage in high risk behaviors • % pts screened with TSH, B12, FA, RPR, Calcium <p>Assessment</p> <ul style="list-style-type: none"> • % pts with complete medical history, smoking history, family medical history, risk factors for CV, TB, and ID transmission, and ROS in chart • % pts with height, weight, blood pressure, pulse, waist circum. recorded every 6 mos in chart • % of pts with all current meds (including non-psychiatric) listed in chart • Access: % of pts with significant medical/lab findings referred to medical care • Availability: % of pts who are referred to primary care who attend initial visit • Time: Average length of time to initial visit • % of pts who saw a primary care physician within 12 months of their last MH visit <p>Treatment:</p> <p><u>Preventive medicine and maintenance</u></p> <ul style="list-style-type: none"> • % of eligible women who had a pap test in a two year period • % of pts on psychotropic medications for 6 months who receive appropriate monitoring every 6 mos.* • VPA with levels, LFT's, CBC q6months • TCA and EKG prior to initiation • Lithium with BUN/creat + TSH • % of pts asked and advised about level of physical activity • % of pts between 50-80 who had appropriate screening for colorectal cancer. <p><u>CV disease and risk factors</u></p> <ul style="list-style-type: none"> • % of pts with dx of hypertension whose BP < 140/90 • % of eligible pts placed on beta blocker therapy post AMI • % of eligible pts who received beta blocker tx 6 mo post AMI • % of pts post MI or with CAD who have LDL-C <130 or <100 • % of pts who smoke who received advice to quit smoking, who were recommended smoking cessation medications, or who discussed smoking cessation strategies • % of pt who smoke who were prescribed smoking cessation medications <p><u>Diabetes:</u> % of pts with DM type 1 or 2 with the following</p> <ul style="list-style-type: none"> • HbA1c testing; HbA1c poorly controlled (>9); Eye exam performed; LDL-C screening performed; LDL-C <130 mg/dL; LDL-C <100 mg/dL; Kidney disease monitored <p><u>Pulmonary</u></p> <ul style="list-style-type: none"> • % of pts with asthma who were appropriately prescribed medication • % of pts with new dx or newly active COPD who received appropriate spirometry testing • % of pts given influenza and pneumococcal vaccines <p>Coordination</p> <ul style="list-style-type: none"> • Pt report: Perception of coordination 	<p>Behavior change</p> <ul style="list-style-type: none"> • % of pts who are abstinent from smoking for 6 months • % of pts with > 1 point improvement in BMI over year • % of pts involved in increased level of physical activity <p>Medical outcomes</p> <ul style="list-style-type: none"> • Mortality Rate • LDL-C <130 mg/dL • LDL-C <100 mg/dL • Eye exam performed <p>Quality of life</p> <ul style="list-style-type: none"> • change in health status over defined interval (e.g., SF-12, etc.) <p>Patient Satisfaction</p> <ul style="list-style-type: none"> • % of pts with SMI who are satisfied with their physical healthcare

STRUCTURE	PROCESS	OUTCOME
	<ul style="list-style-type: none"> ○ “my clinicians kept each other informed about my tx and progress” ○ “my psychiatrist knows my medical conditions” ● Need for standards: Communication of physical health care ● % of MH practitioners who communicate with PCP every 6 months, during IP MH hospitalization ● % of MH practitioners who receive communication from PCP within 2 weeks after specific referral regarding detection of medical disease ● % of MH visits that review non-psychotropic medications and adherence ● % of IP medical hospital stays with discharge summaries sent to the pt’s primary MH specialist 	

Key: PC= primary care; MH=mental health, MHSC=MH specialty care; SUD=substance use disorder, pt=patient, IP=IP, OP=outpatient, dx=diagnosis, tx=treatment
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TABLE 3. Quality Measures for Patients with Co-Occurring Substance Use & Psychiatric Conditions Treated in the Mental Health Specialty Settings

STRUCTURE	PROCESS	OUTCOME
<p>Clinician Characteristics</p> <ul style="list-style-type: none"> • % of MH providers that are trained to treat SA disorders and have a certificate, license or some other documentation to prove training. • Evidence of documented formal referral policies for SUD in MHSC settings. <p>Clinical Information Systems</p> <ul style="list-style-type: none"> • % of MH providers who reported being able to access any patient tx information, laboratory information, or medical records from a SUD specialty settings <p>Service Linkages</p> <ul style="list-style-type: none"> • % of programs that have: Integrated services (MH and SA services in the same treatment program) <ul style="list-style-type: none"> ○ Co-location (MH and SA services in the same location) ○ Formal relationships (referral agreements or contractual relationships among providers) ○ Informal or ad hoc (absence of formal relationships) <p>Financing</p> <ul style="list-style-type: none"> • % of MH providers 	<p>Detection</p> <ul style="list-style-type: none"> • % of pts screened for SA upon IP or residential admission in a MHSC setting. • % of pts in MHSC with a newly identified SA disorder over a period of 12 months (after a 6 month washout period). <p>Assessment</p> <ul style="list-style-type: none"> • % of pts with a SUD with qualifying DSM documentation on assessment at a MHSC setting. • % of pts who are admitted to a MHSC IP or residential facility whose medical record includes an assessment of both their MH and SUD history • % of pts admitted to a hospital for a mental disorder who are also assessed for a SA disorder upon admission • % of pts who receive a psychiatric evaluation that includes a drug and alcohol use assessment • % of surveyed behavioral health plan members with a MH diagnosis who report being asked about alcohol or drug use by a plan clinician in the prior year • % of pts discharged from a hospital with a MH disorder as their primary diagnosis whose IP admission or discharge assessment note includes an assessment of SA or dependence <p>Treatment</p> <ul style="list-style-type: none"> • Average fidelity score across participating programs: <ul style="list-style-type: none"> ○ New Hampshire/Dartmouth Integrated Dual Disorder Treatment (IDDT) model ○ 26 Item fidelity scale ○ Each item represents an org. or tx component of model ○ Scores from individual programs can be compared to the mean score or a recognized benchmark • % of pts discharged from IP or residential care with COD who had at least one MH and one SUD clinic visit within 6 months of discharge • % of pts identified with both a SUD and MH condition who report receiving 3 or more minutes of counseling from their physician about both disorders <p>Coordination</p> <ul style="list-style-type: none"> • % of dually diagnosed pts receiving case management who report that their MH manager assisted them in obtaining SUD tx • % of dually diagnosed pts who are participating in a case management program and have a documented plan of care to address both conditions • % of dually diagnosed pts who report that their case manager or managed behavioral healthcare organization assisted them in obtaining all necessary MH and SUD services • % of dually diagnosed pts in a MHSC IP setting whose medical record documents contact between the pts MH and SUD providers • % of dually diagnosed pts admitted for a SUD that had an OP mental health visit 30 	<p>Behavior change</p> <ul style="list-style-type: none"> • % of pts with any SUD dx discharged from a IP or residential MHSC setting who report abstinence from drugs and/or alcohol over 6 months. <p>Medical outcomes</p> <ul style="list-style-type: none"> • % of dually diagnosed pts with a reduction in psychiatric symptoms 6 mos. • % of dually diagnosed pts in MHSC settings with a significant reduction in ASI alcohol or drug scores 6 months after index tx episode. <p>Function Improvement</p> <ul style="list-style-type: none"> • % of pts with any SA diagnosis treated in a MH specialty setting that are employed. • % change in absentee rates of employees with both MH and SUD conditions treated in a MHSC setting 6 months after index tx episode. <p>Quality of life</p> <ul style="list-style-type: none"> • % of pts receiving both MH and SA specialty services who report a high quality of life. <p>Patient Satisfaction</p> <ul style="list-style-type: none"> • % of pts receiving both MH and SUD specialty services who report a high satisfaction with their care.

STRUCTURE	PROCESS	OUTCOME
<p>reporting the inability to bill for SA services provided to pts</p> <ul style="list-style-type: none"> • % of MH providers that report coding SA services as MH services in order to be reimbursed. 	<p>days prior to admission</p>	

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