

# The Impact of Mental Health on Health Status and its Relationship to Primary Care

## Overview

### For the Health District of Northern Larimer County Board of Directors

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## Mental Disorders: The Challenge

### Mental Illness: Real and Prevalent

*Mental disorders* are health conditions involving alterations in thinking, mood or behavior that cause people to feel distressed or that impairs their functioning (DHHS 1999, p. x). *Mental illnesses* refer collectively to all diagnosable mental disorders. Some mental disorders are associated with more severe functional impairments—these are termed serious mental illnesses (SMIs) in adults or serious emotional disturbances (SEDs) in children and adolescents. These more disabling illnesses include such disorders as schizophrenia, schizoaffective disorder, bipolar disorder, major depressive disorder, obsessive-compulsive disorder, panic and other severe anxiety disorders, autism and pervasive developmental disorders, attention deficit/hyperactivity disorder, borderline personality disorder, and other severe and persistent mental illnesses that affect the brain. Mental disorders are real health conditions that have an immense impact on individuals, families and the community. Why should we pay attention to mental health services? Aren't there more pervasive problems like cancer or AIDS that need more attention? The fact is, the prevalence of mental disorders is strikingly high and the impact of mental illness on overall health and productivity is often under-recognized. Prospective epidemiological studies have shown that the overall occurrence of diagnosable mental disorders in the general U.S. population is 21% on an annual basis (DHHS 1999, p. 47). About 15% of those with a mental disorder also have a co-occurring substance use disorder and half of people who experience a substance use disorder also suffer from at least one mental disorder (DHHS 1999, p. 102). Mental disorders fall along a continuum of severity. The most serious and disabling conditions affect 2.6 - 5.4% of adults and 5 - 9% of children ages five to seventeen (DHHS 1999, p. 46).

The Health District's Community Health Survey findings are consistent with other epidemiological studies showing that the prevalence and burden of mental illness in the community is substantial (see insert).

#### Prevalence of Mental Disorders in the Health District

A trend towards increasing prevalence of mental disorders was noted in the 2001 Health District Community Health Survey (PHSD and Burdine 2002): 20.4% of respondents reported that they were currently suffering from "depression, anxiety, or other mental problems" in 2001, up from 17.6% in 1998. The average adult reported having 4.7 days in the past month when "mental health was not good". This number was 33% higher among low-income and 77% higher for those in poverty than among those above low-income. The self-reported prevalence of mental health problems from the Health District survey was nearly identical to diagnosable mental disorder prevalence estimates from national epidemiological studies (20.4% vs. 21%). Applying

this estimate to our population, about 32,800 persons suffer from mental disorders in any given year in the Health District, most of whom do not receive care.

Severe disabling forms of mental illness are also common. “The Colorado Population in Need Study” (McGee, Holzer, Pandiani, and Banks 2003) was commissioned by the Colorado state legislature to measure need and unmet need for mental health services in the lower income population (300% federal poverty level and below). They studied only those with the most severe functional impairments—serious mental illness (SMI) and serious emotional disturbance (SED). The survey estimated that 3.8% or almost 10,000 people in Larimer County needed public mental health care for SMI or SED in 2001. In 2001-2, Larimer Center treated 3,479 individuals or about one-third this number. In Colorado, 46% of these severely affected individuals received care in mental health sector, 15% in primary care or other settings. The remaining 39% received no care. Not receiving mental health services was more likely among children (44%) and older adults (53%) (McGee and others 2003).

### **Highly Disabling, Large Disease Burden**

Depression alone is estimated to be the leading cause of disability in the Health District, costing the community over 1200 years of disability-adjusted life annually. Suicide, a consequence of depression, is one of the leading preventable causes of death in the Health District. Mental illness is equivalent to heart disease and cancer in terms of its impact on disability (Murray and Lopez 1996). Taken together, mental disorders account for over one-third of the lost productivity and millions of dollars in any given year in the Health District. Mental disorders frequently co-occur with other mental and somatic disorders, adding to the disability, morbidity and mortality.

#### **Burden of Mental Disorders in the Health District**

A total of 13,779 deaths—all deaths in Larimer County from 1990 through 2000—were included in an analysis of disease burden in the Health District. Ischemic heart disease (“heart attacks”) caused the greatest number of deaths each year, followed by cerebrovascular disease (“strokes”), COPD (emphysema and chronic bronchitis), lung cancer and dementia. These are also the top five causes of death in the state and nation.

Years of Life Lost accounts for *premature* death. Ranking causes of death by Years of Life Lost yields a much different order than crude mortality. Ischemic heart disease is still at the top, but traffic accidents and suicides—injuries that take the lives of relatively young people—rise up to second and third. Dementia, a mental disorder that generally occurs late in life drops to seventeenth.

When *disability* is taken into account, there is a dramatic shift in ranking of disease burden. Depression is the number one cause of disease burden in the Health District (1223 years lost). Heart disease drops to second (1063 years) and alcohol dependence rises to third (875 years). Psychiatric illnesses appear six times among the top 20 conditions ranked by disability-adjusted life years. Adding the burden of all mental illnesses and substance use disorders together, they account for *one-third* (4309 years out of 12,337 years) of all disease burden in our community in any year. Adding suicide to mental illness burden raises the proportion to 38%. Depression and other mood disorders have increased in every generation since 1910 in all industrialized countries (Murray and Lopez 1996). The Global Burden of Disease study estimated that depression was the number two cause of disease burden in the western world in the 1990s, but would rise to the leading cause of burden by 2030.

Ranking the burden of diseases and injuries can assist decision makers in allocating resources for treatment and rehabilitation. The emergence of mental illnesses, alcoholism and dementia in the top six is particularly important, considering the ongoing debate over re-distribution of resources between mental health and traditional health care services.

For patients with other chronic diseases, mental disorders are even more common. Research has shown that when these mental disorders are not recognized and treated, it contributes to high utilization of medical care and poorer health outcomes (Selden 1997). Half of high utilizers of medical care in a 1990 study were found to be psychologically distressed (Katon, VonKroff, et al 1990). Patients with depression who are receiving services in primary care use three to four times as many services for somatic complaints as controls (Katon and Schulberg 1992). Advocates have pointed out that diagnosing these conditions presents an opportunity to both improve health status and reduce costs.

### **Mental Illness is Treatable**

Mental disorders are imminently treatable. “An array of safe and potent medications and psychosocial interventions, typically used in combination, allow us to effectively treat most mental disorders” (DHHS 1999). Between 70 and 90 percent of individuals suffering from a mental illness have significant reduction of symptoms and improved quality of life with a combination of pharmacological and psychosocial treatments<sup>1</sup> and supports (National Association of Mental Illnesses 2003). In adults,

- Anxiety disorders and mood disorders, the first and second most common mental disorders in adults, can be treated with a host of effective medications and psychosocial treatments—either form of treatment is effective in 50-70% of patients in outpatient settings (Depression Guideline Panel 1993). About 30-50% of those who don’t respond to a first medication will respond to another (DHHS 1999, p.264). About 60-80% of older adults respond to a combination of medical and psychosocial treatment though there is often a delay in onset of recovery (DHHS 1999, p.354).
- Education of primary care providers regarding early diagnosis and treatment of mood disorders produced a significant reduction in suicide and suicide attempts in Sweden (Rihmer, Rutz, and Pihlgren 1995)
- Lithium (a mood stabilizer drug) is successful in treating acute mania in about half of patients and prevents recurrent episodes of mania in 40-60% of those with Bipolar disorder I (DHHS 1999, p268). Lithium has also been shown to prevent suicide, a tragically common outcome of bipolar disease.
- Conventional antipsychotic medications are highly effective (70% response) in treating acute symptoms of psychosis and in long-term maintenance and relapse prevention in schizophrenia. Treatment resistant patients respond 30-50% of the time to the newer “atypical” antipsychotics which also have fewer side effects. Early treatment with antipsychotic medications has been found to lead to better long-term outcomes—one-half to two thirds of people with schizophrenia significantly improve or recover. Psychosocial treatments, assertive community treatment and intensive case management, when used along with antipsychotics, substantially improve outcomes (DHHS 1999, p.287)

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<sup>1</sup> Pharmacological treatment involves the use of medications. Psychosocial treatment includes psychotherapy, a learning process accomplished largely by verbal communication between a patient/family and a mental health professional, and treatments focused on the social environment.

- Evidence-based outpatient psychotherapy modalities are effective in treating a wide variety of disorders including panic and other anxiety disorders, depression, somatization disorders, substance use and dependence, eating disorders, marital discord and sexual dysfunction (DHHS 1999).

There are significant gaps in knowledge of the efficacy and effectiveness of treatment in children and adolescents. Research on both psychosocial and pharmacological therapies for children with mental disorders has lagged behind use, however the evidence base has steadily improved over the past decade (Glier and Cuellar 2003). The evidence base is now well-established for the most prevalent disorders. It is known that:

- Psychostimulants are highly effective for 75% to 90% of children with ADHD. Those who don't respond often improve with alternative medications or psychosocial interventions.
- The class of anti-depressants called selective serotonin reuptake inhibitors (SSRIs) have been shown to be safe and effective in treating depression and obsessive-compulsive disorder in children and adolescents. Psychosocial interventions for depression show promise (DHHS 1999, p.157)
- Psychosocial interventions are well established in the treatments of disruptive disorders, enuresis (bed-wetting), and phobias.

### **Many people with mental disorders do not receive mental health care**

Despite the array of effective known treatments, surveys have consistently found that over 50% of persons with mental disorders do not receive treatment, and may needlessly suffer distress, disability, lost productivity, homelessness, over-use of other health care services and in some cases death (Regier, Narrow, et al,1993). Even those with the most disabling types of mental illnesses may experience delays in diagnosis and treatment. For instance, nearly 40% of people with bipolar disorder have not received treatment 1 year into their illness (Regier and others 1993).

Not all people that fulfill clinical criteria for a mental disorder perceive a need for help. Many people who have been identified in surveys as having a mental disorder do not define themselves that way, and if they do they may not want formal treatment (Mechanic 2003) Others prefer to handle the distress themselves, a preference that might be influenced by shame, fear of stigma or ignorance. Overall, only one-third of persons with diagnosable mental disorders perceive themselves as needing mental health treatment (APA Clinical Highlights Program 2001).

## **The Role of Primary Care in Identifying and Treating Mental Disorders**

### **First Contact**

Primary care has a key role to play in mental health care. Only half of persons with mental disorders *ever* seek care. Of those that do, 50% receive their care in the primary care setting (Regier and others 1993). In primary care, the prevalence of mental disorders is higher than in the general population: One-quarter of patients seen in the primary care setting have a diagnosable mental disorder (Olfson, Fireman, et al, 1997) and as many as

59 to 70% of patient visits are for medical complaints that stem from psychological factors. Populations in poverty have even higher rates of mental illness. A survey conducted at a private primary care clinic for low-income uninsured people in Grand Junction, Colorado found that the percentage of patients with at least one psychiatric diagnosis was almost double that in a general population of primary care patients—51% vs. 28%) (Mauksch, Tucker, et al, 2001). Addressing high rates of mental illness is one of the major challenges in caring for the uninsured poor in primary care (Cameron and Mauksch 2002).

A recent study by the American Board of Family practice found that evaluation and treatment of mood disorders was the number one reason for a primary care provider visit (29%), followed by hypertension (12%) (Blount 2003). Depression occurs in an estimated 6-10% of patients presenting to the primary care provider (PCP) in a year; major depression occurs in 5-9% of presenting patients (Katon and Schulberg 1992). Most depressed patients who receive mental health care receive it from their primary care physicians (Coyne, Fechner-Bates, and Schwenk 1994; Regier and others 1993; Rost, Zhang, et al, 1998). Research has indicated that the bulk of mental health problems in the community are dealt with by PCPs without referral to mental health specialists.

### **Treatment of Mental Illness is Increasing in Primary Care Settings**

The expanded evidence base and selection of drugs with fewer side effects and greater efficacy have led to substantial increases in the number of people receiving mental health diagnoses and treatment in the primary care setting in the past decade. The diagnosis and treatment of depression in adults and ADHD in children have increased in particular. This has been encouraged by efforts to increase the role of PCPs in mental health care. It has also been fueled by the introduction of newer medications that are safer and easier to dose, and by direct marketing to PCPs and to the public by the pharmaceutical industry (Olfson, Marcus, et al, 2002).

#### **Increased Treatment Frequency**

More than four times as many visits to PCPs involved a psychiatric diagnosis in 1999 compared to 1985 (Pincus, Tanielian, et al, 1998; Zito, Safer, et al, 2002). These increases were both for adults and children. From 1985 to 2000, there was a three fold increase in the percentage of children' physician visits including a mental health diagnosis (Glieb and Cuellar 2003). The proportion of children who received treatment for mental disorders from 1987 to 1998 increased from 5% to 7.7%. Much of the increase in both adults and children can be attributed to more frequent diagnosis and treatment of mental illness during primary care visits (Glieb and Cuellar 2003).

### **A Quality Gap in Mental Health Services in Primary Care**

However, several studies have shown that PCPs often misdiagnose mental health problems, missing illnesses in some and over-diagnosing in others (Horwitz, Leaf, et al, 1992). It is estimated that about 50% of patients with mental disorders go undiagnosed in the primary care setting (Higgins 1994). It is important to note here that just because a person has a disorder does not mean that treatment is necessary. Many disorders are mild in severity, non-disabling, self-limited and do not require treatment. However, under-recognition of more serious conditions may lead to unnecessary diagnostic procedures in

response to patient's vague complaints, increased utilization of services, persistent symptoms and loss of daily functioning and poorer long-term outcomes. For some conditions, over-diagnosis may be a problem in primary care (DHHS 1999, p. 149). Over-diagnosis may lead to unnecessary care and adverse effects.

#### **Screening for Mental Disorders in Primary Care**

The 2001 Health District CHS included a section regarding whether or not a respondents health care provider had talked to them about various health issues. When asked if their physician had talked to them about their "mental or emotional health" in the past 2 years, 29% of those who had seen their regular provider said "yes". Regarding their "alcohol consumption", 24% reported their providers had talked to them. More respondents recalled their providers talking to them about nutrition, weight, smoking and exercise than either mental health or substance abuse. From two focus groups of primary care physicians conducted by CMHSA staff in 2002 we heard that limited time was the biggest barrier to routinely screening for mental illness in their patient population. In the words of one, asking about mental health symptoms was "opening up a can of worms".

Barriers to recognition of mental disorders include the fact that they often exist in a complex medical and psychosocial context (DHHS 1999, p.348). Symptoms of mental illness are frequently masked in a myriad of somatic complaints, and patients may be in denial or resistant to the diagnosis because of the stigma. PCPs have reported reluctance to stigmatize patients, uncertainties about diagnostic criteria or treatments, concern about medication safety or effectiveness and lack of access to specialty care (DHHS 1999, p.349). PCPs also face an often-overwhelming challenge to meet an expanding array of patient needs and expectations in a shrinking visit time. Visits last an average of 13 to 16 minutes and patients have an average of 6 problems to address (Williams, Rost, et al, 1999). In addition to these challenges the PCP has to work under strict reimbursement constraints and limited availability of consultation.

Even when correctly recognized, primary care providers vary in their capacity to effectively treat mental illness (DHHS 2000). Several studies have found that less than half of patients diagnosed with depression in primary care were treated with appropriate doses and duration of medication according to widely recognized practice guidelines (DHHS 1999, p.269; Kessler, Berglund, 2003). About 40% of those who receive medications from their PCP stop taking them before the 4-6 weeks have elapsed that it takes for benefits to begin to appear, and fewer still take them for the recommended 6 months (Meredith, Wells, Kaplan, and Mazel 1996). In surveys about half of PCPs express a preference to provide counseling as a component of treatment for depression (DHHS 1999, p. 269). However, few have formal training in psychotherapy or the time (DHHS 1999, p.269). The average visit to a general practitioner including prescription of a psychotropic was 23 minutes long—50% longer than the average visit without a mental health problem.

Barriers to diagnosis and treatment of mental disorders in older adults appear to be particularly common. Due both to preferences and Medicare policies that encourage treatment by the PCP, older adults are particularly likely to get their mental health care from their PCP. Older adults offer a unique set of needs and barriers to appropriate diagnosis and treatment. PCPs are often poorly equipped to recognize the unique signs

and symptoms of mental illness in seniors—especially depression and dementia. One study of depressed patients in primary care found that over half (55%) received no treatment, and another third received inadequate treatment. Only 11% received adequate anti-depressant treatment (Katon and Schulberg 1992). Several studies have documented that 70% of older adults who committed suicide had seen their PCP within the prior month, a statistic that may in part reflect the diagnostic challenges faced by PCPs in their older patients (Cooper-Patrick, Crum, and Ford 1994).

#### **Primary Care Physicians Identify Challenges and Needs**

From two focus groups of primary care physicians conducted by CMHSA Partnership staff in 2002 we learned that toughest issue for the PCP is teasing out the disorder in the 10-15 minutes they have with a patient. PCPs generally said they could use more help in managing some of their patients with mental illness, but said they had problems accessing appropriate psychiatric consultation and referral services, particularly for low-income uninsured clients and for those on Medicare and Medicaid. They expressed a preference for consultants with whom they had trusted working relationships and who has seen the patient. Their ideal consultation service would be on-site allowing informal face to face interactions that build trust.

### **Access Barriers to The Mental Health System**

Primary care settings are less stigmatizing to many patients with mental disorders. They are also more accessible and less expensive (lower out-of pocket costs) for many patients. Whether patients seek out MH providers themselves or are referred into the MH care system by their health care provider, they face additional access barriers. Key barriers in the mental health system are 1) provider capacity and 2) financing issues.

#### **Limited Provider Capacity**

Across the nation certain mental health services are in short supply. They include wraparound services for children with serious emotional problems, combined services for people with mental illness and substance use disorders and disease management programs in primary care settings (DHHS 1999, p. 455). The supply of mental health professionals is also inadequate in many areas, particularly psychiatrists serving children and adolescents with severe disorders and geriatric populations.

#### **Shortage of Psychiatrists and Other Mental Health Care Providers**

The local Community Mental Health and Substance Abuse Partnership used key informant interviews, focus groups and resource mapping approaches in 2002 to identify gaps in services in our community. Locally, key informants have noted shortages in psychiatrists serving children and adolescents with severe disorders, psychiatrists providing inpatient care, and services for low-income people without insurance. Shortages of psychiatric capacity in these areas are common across the state.

People with Medicaid and low-income people who are uninsured have the least access to psychiatrists. In May 2003, The Health District conducted a comprehensive survey of mental health providers and found there were 1.1 psychiatrist FTEs accepting Medicaid or providing services on a sliding fee scale. The potential low-income client base in the Health District consists of 34,575 individuals who are at or below 200% of FPL, a ratio of 31,432 people to one psychiatrist (PHSD, 2003). The federal government considers a community to be underserved if the ratio of population to provider ratio is greater than 20,000 to one.

## Cost and Coverage Barriers

Paying for mental health care is also a barrier. In the 2001 Health District Community Health Survey, 14% of respondents indicated that they had put off needed mental health care because of cost. Unfortunately, the very people with a need for mental health care—the people with serious mental illness—are more likely to be uninsured or have restrictive mental health coverage (Manderscheid and Henderson 2001). In the Health District, a striking 28% of uninsured adults indicated they had delayed seeking needed mental health care, compared to 12% of respondents with health insurance. Similar responses were found when respondents were asked if they were unable to fill a prescription because of cost (PHSD and Burdine 2002).

### **Trends in Funding for Mental Health Care Worsening**

With accelerating health care inflation, matters are only getting worse. In Colorado over the past decade, mental health benefits through private insurance have dropped progressively as employers have tried to rein in costs by increasing co-pays and reducing benefits. The National Association of Psychiatric Health Systems (NAPHS) commissioned a study to analyze trends in the proportion of employer health care dollars spent on behavioral health care between 1988 and 1998 (Hays Group 1999). The total value of employer provided health care benefits decreased by 14.2 percent attributed to increased managed care. The value of general health care benefits decreased by 11.5 percent while the value of behavioral health care benefits decreased by 54.7 percent. As a proportion of the total value, behavioral health care decreased from 6.1 percent in 1988 to 3.2 percent in 1998.

The federal mental health parity law passed in 1996 prohibited plans from placing more restrictive annual and/or lifetime limits on mental health benefits than on medical/surgical benefits, but allowed increases in co-payments and deductibles as well as restrictions in number of visits or days. The federal law is limited to large employers with existing mental health care coverage. The Colorado mental health parity law provides for parity in treatment of the six major “biologically based mental illnesses”—schizophrenia, schizoaffective disorder, bipolar and major depressive disorders, obsessive-compulsive disorder and panic disorder—but only to plans subject to state regulations. Their impact on access to mental health care services is a subject of current research. To date it appears mental health coverage is still not offered at a level equivalent to coverage for other medical conditions (Barry, Gabel, et al, 2003).

Most low-income patients with severe mental illnesses receive their treatment through public agencies. In Colorado, public mental health services are largely funded through the state general fund and Medicaid. Public mental health care spending has lost ground in recent years in absolute terms as well as relative to need.

Not surprisingly, there is a positive association between health insurance coverage and more appropriate care for mental illness (Institute of Medicine 2002, p. 68). Uninsured adults with severe mental illness are far less likely to receive appropriate care than are those with coverage and may experience delays in receiving services until they gain public insurance (Institute of Medicine 2002, p. 70).

However, having health insurance does not guarantee mental health care access. Health insurance plans and programs historically have excluded services related to treatment of mental illness or strictly limited coverage of mental health services and administered mental health benefits separately from other sources of medical care. The mental health coverage benefit often has higher co-pays and limits on outpatient visits and inpatient

hospital days for patients and utilization review requirements and low reimbursements for providers. These service restrictions can interfere with needed care (Peele, Lave, and Kelleher 2002). The restrictions in prescription drug benefits, particularly for older adults with Medicare, also reduces access to mental health care. On the other hand, insurance coverage for mental health care for children has increased over the last decade nationally due to increases in CHP and Medicaid enrollment and out-of-pocket expenses for mental health care for children have decreased (Glied and Cuellar 2003).

### **Dissatisfaction with Fragmented Care:**

It is clear from the discussion above that a system in which PCPs accurately diagnosed and referred all patients with mental illness according to DSM IV<sup>2</sup> to mental health workers (MHWs) would not solve the problem. First of all, not all patients with diagnosable mental disorders require treatment. Others can be adequately treated by their PCP (Friedli, King, Lloyd, and Horder 1997). Third, there is not sufficient capacity in the specialty mental health system to care for these patients. But there is an additional issue that has not been addressed: For many patient problems, diagnosis and treatment does not break down into neat either-or delivery structures, and the result is dissatisfaction for all stakeholders. Separation of mental and somatic<sup>3</sup> health care does not fit with patient needs or with professional objectives (Patterson, Peek, et al, 2002, p.5).

Fragmentation can be difficult for PCPs, MHWs and patients alike. PCPs wanting to treat “the whole patient” are frustrated because knowledge about the patient is fragmented between several offices and several charts. Contacting other providers for needed information often results in "phone tag". Mental health therapists may not talk to PCPs because of confidentiality issues. Making referrals is difficult: Many patients’ problems don't fit into neat mental or physical health domains. It is often difficult for PCPs to engage patients about behavioral health issues related to physical problems or for psychosomatic symptoms that patients view as medical. Exploring emotional factors contributing to back pain or headache in a 10-15 minute visit is very difficult. Psychological distress frequently accompanies a patient and their family’s adjustment to a chronic illness. Patients with these problems often return to the PCP when the medical specialists have nothing left to offer.

Mental health workers may not know how to deal with patients’ physical complaints. It is not uncommon for physical disease to manifest as anxiety, depression, psychosis or other seemingly emotional symptoms. Mental health workers have limited training and experience in identifying these conditions. Patients often also experience dissatisfaction with this separation of care, both when they perceive connections between physical and emotional health and are receiving care only from one domain, or they are being seen in both domains and feel like they are being bounced around or having to tell the same story over and over again.

Fragmented care also leads to increased utilization of outpatient visits, unnecessary hospital and referral costs, which are a concern to payors. For employers, the fragmented

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<sup>2</sup> The standard manual used for diagnosis of mental disorders in the U.S.

<sup>3</sup> “Physical” as opposed to “mental”.

system makes it difficult to deal with substance use disorders or mental health problems when they employees will not see a MHW or to address productivity problems due to marital and family distress when these problems are not covered by benefits (Patterson and others 2002)

## **Considering the Integration of Mental Health Care and Primary Care**

### **A Logical Development**

There are many factors already noted that make integration of mental health care into primary health care a logical development (Blount 2003):

- A substantial proportion of people with psychiatric symptoms present in primary care. Reasons include easier access and less perceived stigmatization. Patients may have an established relationship of trust with the PCP. They may perceive their symptoms as physical.
- The underlying causes of many of the common somatic complaints that patients bring to their primary care physicians are psychosocial.
- Many chronic diseases can be prevented or treated in part by engaging patients in behavioral change.
- Chronic medical conditions and mental illness or substance use disorders often co-exist in the same patient.
- Many people receive their mental health care exclusively from their PCP.
- People served by public mental health services often need better access to primary care.

The core attributes of family practice—continuity, family and community (social environment), first contact<sup>4</sup>, and comprehensiveness—make family practitioners uniquely suited to link the mind and the body. The family doctor is often the portal of entry to the health care system for a person with a symptom of mental illness-offering a major opportunity for early intervention. Most people see a regular doctor at least once annually and family members also get their care from the family doctor. By establishing contacts with family, family practitioners and pediatricians are poised to tap this resource of support. Family involvement in care has been shown to be key in successfully treating children, the elderly, and those with more severe mental illness.

#### **Trust for PCP**

In the last Health District CHS, 88% of adults reported visiting their regular PCP within the past year. On average, people saw their regular health care provider 2.8 times annually. Persons with worse mental health function scores reported seeing their regular health care provider 3.4 times.

When asked to rate how much they trust their primary care provider on a scale of 1-10 (where 1 equals “not at all” and 10 equals “completely), respondents gave a mean trust rating of 8.3 to their regular provider. Less than 8% of District respondents gave a trust rating of 5 or less. Overall, 76% of respondents in the District have a high level of trust (rating of 8-10) in their primary care provider.

<sup>4</sup> first point of entry into the health care system

Primary care in its ideal rendering also offers the advantage of coordination and continuity of care for both mental and somatic disorders. Primary care is often less expensive than specialty care and can be more cost-effective, particularly for less severe mental disorders. Primary care is where most consumers prefer to receive mental health services (Annexure J., Katon, and Miranda 1997).

### **The Conceptual Framework of Integrated Care Systems**

Integrated MH-PC models have been designed to more fully address the spectrum of problems that patients bring to primary medical care. There are different degrees of collaboration that can occur between mental health care and primary care providers. There are

- services that are coordinated, though delivered in different sites,
- services that are co-located<sup>5</sup>,
- services that are fully integrated. Integrated services have medical and mental health services within one treatment plan for individuals or patient groups.

These categories are not mutually exclusive. Programs also differ in whether or not they are targeted at a specific patient population or condition and what treatment modalities are offered by what types of mental health service providers. Given the frequency of depression as a presenting problem in primary care, many programs have focused on treatment of this illness. Integrated programs can include mental health care workers who offer consultation regarding individual patients to primary care physicians and staff, deliver education activities, participate in combined sessions with PCPs or participate in coordinated treatment planning and case conferences.

The table “Primary Care/Behavioral Healthcare Collaboration” in the appendix summarizes a five level continuum of integration. Most private primary care practitioners and mental health care providers are integrated at level 1 or 2—systems of care are separate with limited communication and little sharing of responsibility. However there are some examples of highly integrated care systems in primary care settings in Colorado. Owing to the availability of mental health care expansion grants for federally qualified health centers, community health centers have widely embraced integrated models—Salud in Fort Lupton, Sunrise in Greeley, People’s Clinic in Boulder and several of the Denver Health CHCs have integrated MH care. Many of these programs have been funded by foundations, allowing them to circumvent the managed behavioral health care carve-out. The Marillac Clinic in Grand Junction and Kaiser Permanente are private providers that have integrated MHWs into primary care settings. “Local Models of Collaboration and/or Integrated Systems” in the appendix to this report describes some local or regional examples of more highly integrated programs.

Mental health care expertise is most effective when positioned in a primary care system in two ways. One is the integration of the MHW into the medical team—to help patients

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<sup>5</sup> located at the same site

with psychosocial factors related to their overall health and for physicians who need help in managing their patients' psychosocial problems. In this role the MHW is a supportive member of a team. The second is the specialty referral service. Both types of expertise are important and an integrated model may co-locate both, but the expanded generalist role of the integrated MHW is the key component (Patterson and others 2002).

### **What is Known About the Effectiveness of this Model?**

Recent studies have called into question the hope that creating systems of care for serious disorders simply through interagency coordination would reduce this fragmentation and improve outcomes (Bickman, Noser, and Summerfelt 1999). In fact such "coordination" may even lead to "diffusion of responsibility" and poorer outcomes (Glisson and Hemmelgarn 1998). However, true integration of mental health care into primary care is a well established approach that appears to improve outcomes.

Consolidating the research on integrated primary care is difficult because of the heterogeneity of programs, impacts measured, types of therapy offered, populations included and conditions targeted. The results are mixed but promising. The purported outcomes of integrated primary care were summarized in a recent literature analysis by Alexander Blount, a psychologist, researcher and advocate of integrated primary care (Blount 2003)<sup>6</sup>:

- improved access to mental health care,
- increased patient satisfaction with medical services,
- improved PCP satisfaction,
- improved patient compliance with treatment regimens,
- improved clinical outcomes for patients, and
- increased efficiency (improved cost-effectiveness) or actual cost-savings

Blount collected studies from five previous reviews and categorized them into groups based on level of integration, whether or not a certain population was targeted, whether or not care was specified and whether they were small or large scale programs. The resulting matrix of findings (Blount, 2003, Table 1) suggests that integrated MH/PC yields positive outcomes (including clinical outcomes, patient and physician satisfaction, improved access and cost-effectiveness) when care is highly integrated on-site and care is standardized<sup>7</sup> for a target patient population. For example, one randomized study compared usual care in family practice with a collaborative model using a psychiatrist. The researchers found that 74% of patients with major depression cared for in the collaborative clinic saw significant improvement vs. 42% in the control group (Katon, Von korff, and Lin 1995). Positive results are less consistent and mostly limited to clinical outcomes when providers are co-located, care is standardized but collaboration is less integrated. With co-location alone, only patient and physician satisfaction appears to improve.

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<sup>6</sup> This was not a systematic review and therefore could be subject to selection or interpretation bias.

<sup>7</sup> Based on mutually agreed upon practice guidelines.

An important secondary objective of co-locating MHWs with PCPs is that the addition of on-site MHWs may lead to changes in professional roles, the alteration of established clinical routines and improvements in clinical practice of PCPs. The mechanisms of change may range from specific knowledge and skill sharing to raising the awareness of mental health in primary care. A Cochrane systematic review was conducted in 1999 to address the issue of whether co-location changes the clinical behavior of primary care providers (Bower and Sibbald 2003) The review examined studies with control groups in which MHWs provided either “*replacement care*” where PCPs were encouraged to refer patients to the MHW, or *collaborative care plus support* to PCPs in managing patients mental health problems. Effects could either be direct—meaning impacting the diagnosis, treatment or referral of clients shared with the MHW-and/or indirect—impacting the overall delivery of care to patients in the practice. Among the 38 eligible studies, there was some evidence that:

- the replacement model achieved significant short-term reductions in PCP psychotropic prescribing and mental health referral to external providers but no enduring changes in behavior.
- the collaboration model improved PCP prescribing behavior when used as part of multifaceted interventions, but the effects were limited to the patient under the direct care of the MHW.

Some of the consultation-liaison studies reported significant improvement in patient clinical outcomes if they included significant direct contact between the patient and the MHW. The reviewers pointed out that important contextual factors were not examined that might make a big difference. For instance, changes in PCP behavior might be more likely if the MHW was a psychiatrist working in the “medical model” rather than a psychologist or social worker.

The current evidence seems to suggest that an integrated model with a high degree of collaboration can cost-effectively improve satisfaction and clinical outcomes. More research is needed to determine whether or not these effects are mediated, at least in part, through changes in primary care physician behavior.

### **Barriers, Obstacles and Challenges**

A symposium on integration of MH care and primary care assembled by the U.S. Surgeon General in 2000 hailed the opportunities of this model, but also identified the challenges (DHHS 2000). The participants noted that PCPs and MH professionals practice in different cultures and systems of care, including different visit times, communication styles, supervision structures, information sharing protocols, patient information systems and management information systems (DHHS 2000). Establishing partnerships is stymied by these differences. A challenge is the delegation of roles and responsibilities. Another is integrating client record systems, scheduling and billing.

There are no economic incentives for mental health and primary care providers to collaborate. Funding for mental health services is generally separate and more restrictive

than general medical services, often being “carved-out” by health plans into entirely separate systems of financing, delivering and managing specialty care.

Physician training programs and practice guidelines do not emphasize integration of MH care and PC. PCPs training in diagnosis and treatment of mental illness is limited. Training programs have few incentives to embrace integrated approaches. Except for a single disorder-depression-guidelines about when to treat in the primary care setting and when to refer are lacking. (DHHS 2000). Quality improvement programs have been developed for depression but not other disorders.

Research on cost-effectiveness is very limited. Payers see sparse evidence of lower health care costs, disability costs or improved worker productivity. Without evidence of strong consumer demand or cost-offsets, payers have no motivation to finance integrated systems of care.

Research is sparse-regarding integrated systems of care for those with severe mental illnesses. Translating what evidence exists into the community programs is difficult owing to the diversity of patient conditions (DHHS 1999).

### **How Might We Implement It On a Local Scale?**

In order to successfully target the population for whom these services are most needed (under- and uninsured populations with limited incomes), it might be possible to partner with the primary care clinics in the “safety net” system in the Health District—Plan de Salud Fort Collins and the Family Medicine Center. Currently both of these clinic systems have psychologists and/or social workers on staff and both indicate a strong need and desire to improve responsiveness to patient with mental health needs. Based on the needs assessment and resource mapping project conducted by the CMHSA Partnership, it appears that the services most needed in our own community for this population are a) psychiatric consultation, b) medication management and c) care coordination. If our community could blend those services into the integrated mental health/primary care model, it is likely that we could create significantly improved outcomes and efficiencies. The additional skill sets that would be required to complete a MH-PC team that could fill both the integrated generalist and specialty services roles might include a psychiatrist, a psychiatric nurse practitioner and a case coordinator.

This model would combine direct service delivery with indirect service delivery through enhanced training and support of PCPs and residents. The amount of mental health care that could be leveraged from such a system would depend on the nature of the patient population that is being served. These clinics are currently serving a substantial number of patients with serious mental illnesses (SMIs) and emotional disturbances (SEDs). Assuming one full-time psychiatrist spending one-third her time in specialty services and two-thirds in consultation, education and integrated care delivery services, supported by a case coordinator and a psychiatric nurse practitioner with prescriptive authority, the team would be able to care for as many as 500 SMI/SED patients as a specialty service, and support the residents’ and physicians’ care of hundreds more in their primary care practices.

In order to develop a model that would potentially have the greatest impact on the community, the Health District would need to work closely with the Larimer Center for Mental Health, Plan de Salud and the Family Medicine Center, perhaps working together first in a “learning community” mode before a specific model is finalized. It is possible that such a unique community effort might draw the interest of funding sources<sup>8</sup> who would partner in the development and/or evaluation of the concept. One of the funding options that could provide ongoing funding are HRSA CHC expansion grants. Since the window of opportunity for those may be limited and the deadline is rapidly approaching, if we intend to pursue this concept, sooner is better than later.

## Conclusion

Mental illness is a major burden on health in the Health District and a major challenge to the health care system, particularly primary care settings where the majority of patients present for care and receive treatment. Primary care physicians are asking for help. Our community is also underserved in terms of the availability of psychiatrists and other mental health care services. The board has committed the health district to working to improve access to primary care and access to mental health care. A way that the Health District can impact both primary care and mental health needs in our community would be to engage in a partnership to design and implement an integrated care system for under-served populations using our unique community situation and resources and the best practices from models that have worked in other communities.

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<sup>8</sup> The federal Health Services Resource Administration (HRSA), the Substance Abuse and Mental Health Services Administration (SAMHSA) and several national and state foundations have initiatives in this area.

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