



TRANSFORMING COLORADO'S BEHAVIORAL HEALTH SYSTEM

*A Model for the Delivery and Financing
of Mental Health and Substance Use Care*

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C O N T E N T S

<i>Acknowledgements</i>	ii
<i>Executive Summary</i>	1
<i>Introduction</i>	4
<i>A Model System for Behavioral Healthcare in Colorado</i>	7
<i>Who Is Included</i>	7
<i>The Role of State Government</i>	10
<i>The Role of the Managed Care Program</i>	12
<i>Cost Analysis</i>	19
<i>Next Steps to Consider</i>	22
<i>Conclusion</i>	23
<i>References</i>	25
<i>Appendix</i>	27



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Executive Summary

Colorado is pursuing reforms that will provide accessible and cost-effective health care to its residents. To assist with these objectives, the Colorado Behavioral Healthcare Council (CBHC) and the Colorado Association of Alcohol and Drug Services Providers (CAADSP) is proposing a behavioral health (BH) model to help guide further discussion with the Colorado Legislature, Governor, health policy makers, providers, and other stakeholders. Additionally, this proposal recommends several actions to expand upon the recommendations made in the Colorado Blue Ribbon Commission for Health Care Reform's Final Report.

The proposed model demonstrates how comprehensive coverage for mental health and substance use can help Colorado:

- ✓ Improve access to appropriate care
- ✓ Improve the quality of services and related outcomes for thousands of Coloradans
- ✓ Maximize effective use of scarce resources across multiple systems

Numerous interpretations of the term "behavioral health" exist. For the purposes of this paper, it is considered as an integrated approach to mental health and substance use care.

THE PROBLEM

Nationally, mental illnesses and substance use conditions are more disabling than any other illness. Alcohol and drug use cause the fourth largest proportion of disability for all ages.¹ However, the nation's health care system detects and treats less than half of those individuals suffering with these illnesses, even for very serious mental illnesses and addictions.²

The national problems exist in Colorado as well and the fragmentation of the BH system is considered to be a major contributor. In Colorado, individuals who receive services do so through a disjointed array of agencies and providers including the following:

- Government-funded mental health (MH) and substance use (SU) providers, who generally require a diagnosis and provide mostly treatment with very little prevention services.



- Private mental health and substance use providers which are largely funded by private insurance with limited behavioral health benefits and people who pay out of their own resources.
- Other systems of care that are not designated behavioral health providers. These include the physical health care system and other human service systems, such as child welfare, schools, and corrections. These systems provide more behavioral health services than all the designated BH providers combined.³

KEY RECOMMENDATIONS

An effective behavioral health system is one of the critical keys to a healthier Colorado. To maximize its impact, the BH system requires:

1. Policy-level consolidation through departmental, funding and data integration.
2. Public and private sector financing.
3. A carved-out managed care model to administer benefits (i.e., the BH benefit is managed separately from the physical benefits).
4. Offering the same benefits regardless of payer.
5. Focusing on prevention and early intervention services to avoid escalation of problems.
6. Increasing the use of proven or promising practices.
7. Coordination and integration of mental health, substance use, and physical health services.
8. All necessary services to be available based on a client's level of need.

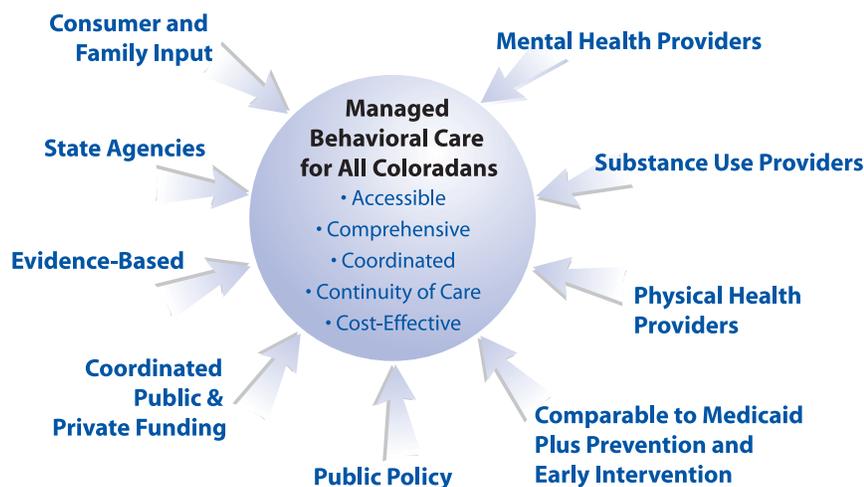
COVERED BENEFITS

The benefit structure in this model provides a common set of mental health and substance use services for the entire population of the State. The benefit structure would be equivalent to the current Medicaid mental health program, plus enhancements in the areas of *prevention and early intervention*.



DIAGRAM 1:

Vital Elements Of An Affordable & Effective BH Model



EXAMPLE OF COST SAVINGS BY PROVIDING APPROPRIATE SERVICES

About 40 percent of the entire inmate population has some type of mental health disorder. Treating these individuals in the community costs about \$6,000 - \$8,000 per year, while incarcerating them costs up to \$60,000 per year and offers minimal, if any, remedial benefit.⁴

COST ANALYSIS

An independent study and actuarial analysis of the proposed model was conducted by Milliman, Inc. They estimate that the net cost of providing comprehensive behavioral health care benefits to the entire projected Colorado population of 4.8 million people, would be an additional \$26.4 million, or \$0.46 more per member per month. The cost is based on full participation of commercial and public sector plans.

The new costs cover additional:

- Individuals (today's uninsured population);
- Benefits which are equivalent to the current Medicaid mental health program;
- Screening, assessment and educational programs;
- Provider encounters (screening and educational programs will identify clients earlier in their illness progression).

Milliman, Inc. included the following cost offsets:

- Utilization management savings;
- Administrative cost savings from coordinating several different administrative agencies and programs that run independently today;
- Medical cost and employer savings based on more effective identification and treatment of behavioral illnesses;
- Psychotropic drug utilization management; and
- Decreased use of tertiary providers, such as residential treatment centers, emergency rooms, hospitals, and correctional facilities for adults and youth.



Introduction



The Colorado General Assembly created the Blue Ribbon Commission for Health Care Reform in 2006, charging it with identifying strategies to expand health care coverage and reduce health care costs for Coloradans. Legislators took this action because Colorado, like most other states, faces urgent and interconnected problems regarding health care. Pursuant to its charge in Senate Bill 06-208, the Blue Ribbon Commission for Health Care Reform submitted its report to the Colorado General Assembly on January 31, 2008.

As directed by the statute, the report included unbiased economic analysis, feasibility and technical assessment of five proposals for comprehensive health reform, and specific recommendations for action.⁵ However, to be constructive, all deliberation must also include the comprehensive behavioral health (BH) needs of all Coloradans. To that end, the Colorado Behavioral Healthcare Council commissioned a study and actuarial analysis for implementing a model BH system in Colorado. The Colorado Association of Alcohol and Drug Service Providers were invited to join in this effort to lend their expertise and support.

The model proposed in this document would build upon the recommendations of the Blue Ribbon Commission and would help stakeholders develop a cost-effective and comprehensive health care system. It demonstrates that comprehensive coverage for mental health and substance use can help Colorado:

- ✓ Improve access to appropriate care;
- ✓ Improve the quality of services and related outcomes for thousands of Coloradans;
- ✓ Maximize effective use of scarce resources across multiple systems.

THE PROBLEM

In Colorado, the people who need, provide, and pay for behavioral health services, view the system as confusing, redundant, fragmented, and often unavailable. The current system in Colorado includes:

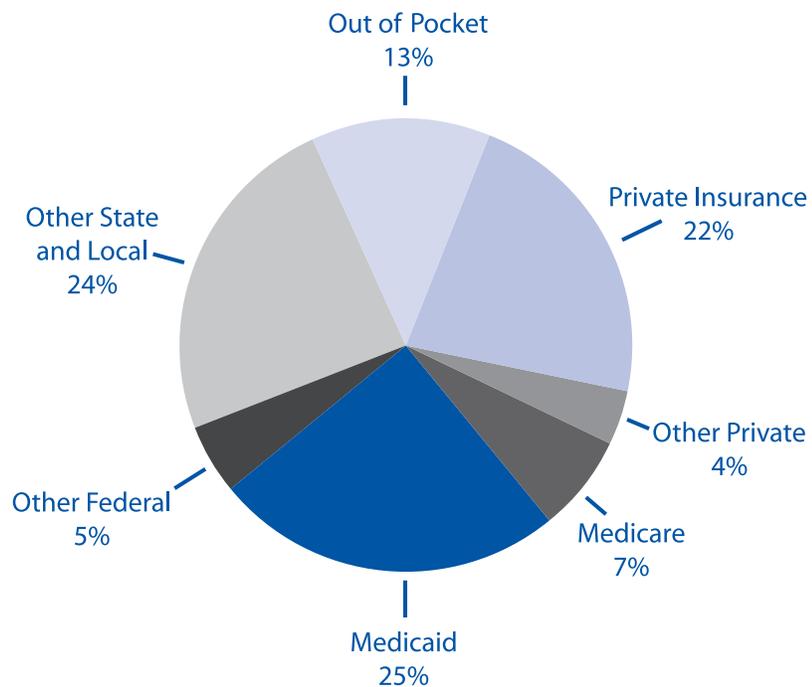
- Government-funded mental health (MH) and substance use (SU) providers, who generally require a diagnosis and provide mostly treatment with very little prevention services.



- Private mental health and substance use providers which are largely funded by private insurance with limited behavioral health benefits and people who pay out of their own resources.
- Other systems of care that are not designated behavioral health providers. These include the physical health care system and other human service systems, such as child welfare, schools, and corrections. These systems provide more behavioral health services than all the designated BH providers combined.⁶

DIAGRAM 2:

Distribution Of MH/SU Expenditures In The U.S. by Payer



Source: National Expenditures for Mental Health Services and Substance Abuse Treatment, 1993–2003, U.S. Department of Health and Human Services Substance Abuse and Mental Health Services Administration

On a national level, mental illnesses and substance use conditions are more disabling than any other illness. Alcohol and drug use cause the fourth largest proportion of disability for all ages.⁷ However, the nation's health care system detects and treats less than half those individuals suffering with these illnesses, even for very serious mental illnesses and addictions.⁸



Research has established the correlation of behavioral health illness with other factors, which lead to the increased morbidity and mortality among this population. For example:

- Persons with serious mental illnesses die an average of 25 years earlier than the general population.⁹ The 25-year disparity is due to two factors: chronic physical illnesses such as obesity, high blood pressure, diabetes, stroke, chronic heart disease, and heart attack; and mental illness-related causes such as suicide.¹⁰
- Persons with schizophrenia have a 20% reduction in life expectancy due to increased vulnerability to diabetes, coronary heart disease, hypertension and emphysema.¹¹
- Alcohol use is associated with 85,000 unnecessary deaths in the US annually. Approximately 17,500 unnecessary deaths in the U.S. are from alcohol-related vehicle crashes, and 67,500 from illnesses such as cirrhosis, pancreatitis, mouth, throat and stomach cancers, cardiovascular disorders, diabetes, and breast cancer.¹²
- Illicit drug use and misuse of prescription drugs adds another 21,000 unnecessary deaths annually, and contributes to an enormous burden of disease associated with HIV/AIDS and hepatitis.¹³

The cost to society will continue to mount if substantial health care reform does not occur. The percentage of the general population that is uninsured and underinsured will continue to rise, along with health care costs. In addition to the \$1.25 billion that is spent directly on Colorado's uninsured population,¹⁴ poor mental health and substance use coverage impacts the criminal justice systems, child welfare, education, primary health care, and employers.



A Model System for Behavioral Health Care in Colorado



In order to address the behavioral health care problems experienced nationally and in Colorado, and in order to build an effective BH system, the key principles listed below need to be put in place. These principles are based on national and Colorado-specific research and are detailed throughout the document.

- Behavioral health coverage for all Coloradans;
- Coordination and integration of policy and practice;
- A managed system to administer care;
- Full parity for behavioral health services;
- Availability of appropriate benefits according to a person's level of need;
- A focus on programs and practices that have demonstrated efficacy.

Epidemiologic surveys indicate that about 28 percent of the U.S. adult population have either a mental or addictive disorder⁶ and approximately 68% of individuals in Colorado, who have a diagnosable mental health disorder, including those with a severe disorder, do not receive services for their condition.¹⁷ Diagnostic failure and failures to treat can be lethal, as behavioral health illnesses are leading risk factors for suicide.¹⁸

The discussion that follows of a model system for BH care in Colorado describes *who is included* in the plan and focuses on *the role of state government* and *the role of the managed care program* in developing and operating an effective BH system. The state government would ensure that all programming, whether it is within the scope of the managed care plan or outside of it would be conducted with the greatest efficacy. The managed care component would be responsible for the specific plan benefits to clients.

Who Is Included?

All Coloradans will be impacted by the plan, as it includes the full intervention spectrum from prevention, to treatment of BH issues. Currently, behavioral health services are provided according to a person's:

1. Behavioral health condition
2. Benefit status

1. Behavioral Health Condition

In the model plan all Coloradans will have prevention services available. This includes routine screening and educational programs, as well as necessary assessments. The prevention services will help identify individuals with less severe behavioral health

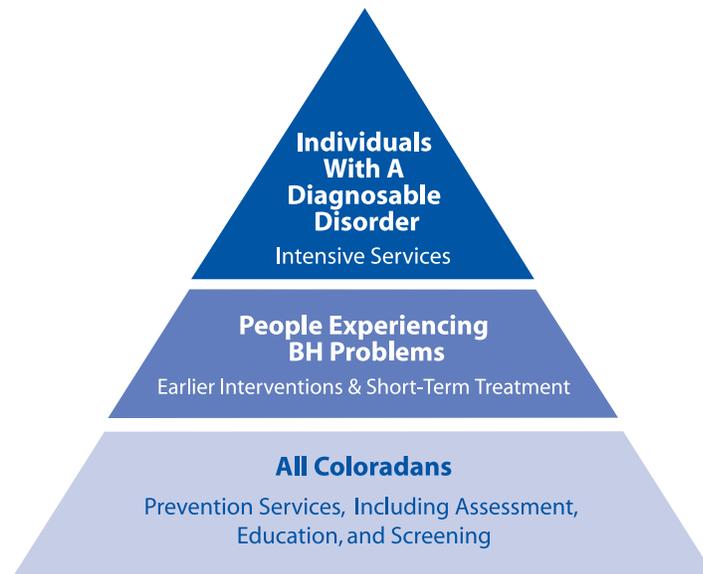


problems. Early interventions and short term therapies can be used with this group to prevent the condition from worsening¹⁵ and escalating to a disorder.

All behavioral health illnesses can not be prevented and disorders such as bipolar disorder, schizophrenia, severe anxiety, depression, or a physiologic dependence on alcohol or other drugs require treatments of longer duration. Individuals with BH disorders include children and adults experiencing a diagnosable mental, behavioral, emotional, or substance use disorder of sufficient duration to meet diagnostic criteria specified within DSM- IV. This category also includes individuals who have co-occurring MH and SU disorders. The proposed model will address these conditions by providing more extensive treatment approaches that have shown to have positive outcomes, and are based on individualized need. Hospitalization, residential treatment, and medications will be available according to need.

DIAGRAM 3:

Services For Coloradans By BH Status



2. Benefit status

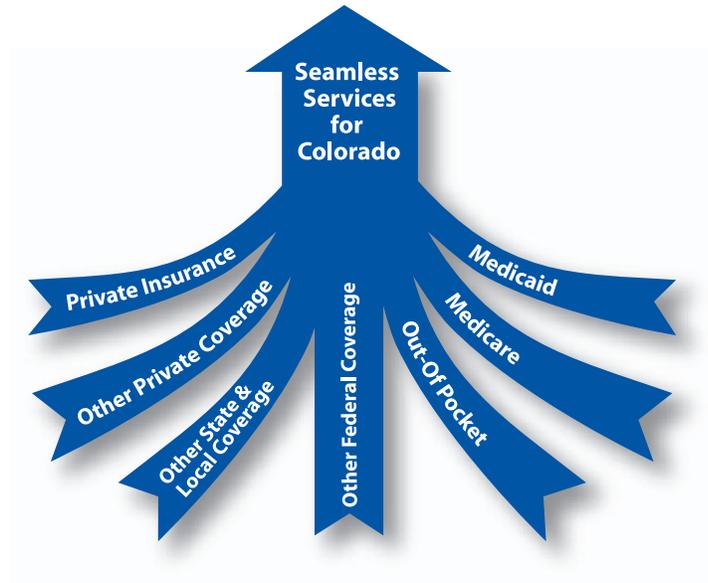
Benefit status will no longer be an issue under the proposed system. Meanwhile, under the current system, individuals receive disproportionate levels of service, based on what benefits their provider covers. This is a key component in the fragmentation of service delivery. Today, individuals who receive Medicaid are eligible for more comprehensive benefits than any other group. Those who are uninsured have the most limited services available to them.



In the proposed model people who currently receive public benefits, are under-insured or uninsured, will all have the same BH benefits available to them regardless of insurance carrier. This aids in the creation of a seamless service delivery system.

DIAGRAM 4:

— **Coordinated Funding Will Create A Seamless Delivery System** —





The Role of State Government

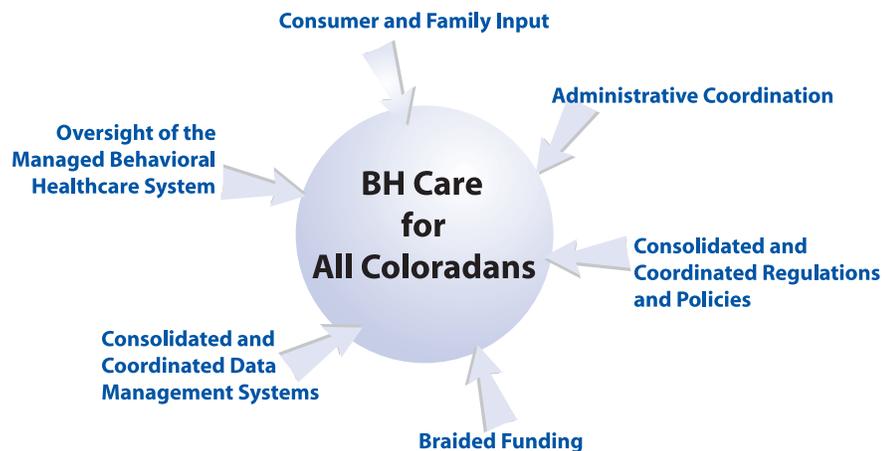


The creation of a model behavioral health system that meets the needs of its entire population requires leadership and cooperation at the highest levels of State government. It also relies on the commitment and coordination of all BH-related government systems. The State government must create:

1. Administrative and fiscal coordination
2. Coordination of various State-administered BH initiatives
3. Oversight of the managed behavioral health care program

DIAGRAM 5:

Greater State-Level Coordination



1. Administrative and Fiscal Coordination

Colorado's BH system is fragmented. For example, The Colorado Department of Human Services (DHS) and the Colorado Department of Health Care Policy and Financing (HCPF) have explicit responsibility for the publicly financed MH/SU population. However, even within each agency numerous areas oversee mental health and substance use programming, administration and funding. Meanwhile, other state agencies have responsibility for behavioral health services for their program recipients, including the Colorado Departments of Education, Corrections, Human Services and Public Health and Environment.

Parallel systems of care have formed and current services are not always coordinated. Individuals who receive services from multiple agencies are subject to duplicative,



and sometimes contradictory, care. In addition, the array of the services needed by an individual may not be covered by the different agencies.

A growing body of evidence suggests that a coordinated system is cost-effective and produces improved clinical outcomes.¹⁹ To accomplish administrative coordination and reduce fragmentation, policy makers should adopt the following strategies:

- Braided funding to eliminate duplicative services, promote interagency collaboration, and improve service coordination;²⁰
- Formalize collaboration between all relevant state agencies providing mental health, substance use and physical health services;
- Consolidate the development of regulations and policies; and
- Consolidate the development of information systems, data collection, and outcome evaluations.

2. Coordination of State-Administered BH Programs

Numerous BH initiatives are administered by various Colorado agencies. Such programs target specific populations and are currently outside the scope of any health care package (such as Medicaid or the Children's Health Insurance Program); they would remain under agency oversight. Some of these programs are similar with possible duplication. Some have a strong research base to justify their implementation, while others do not. There are also various funding sources for these programs, including local, state, federal and private, which complicates communication, coordination, and integration.

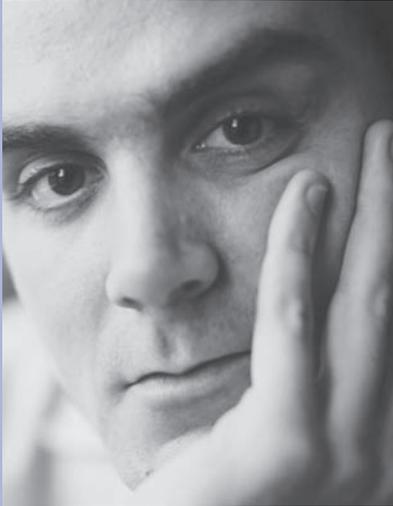
An examination of all BH related initiatives under state administration needs to be undertaken to assess which programs can be integrated, improved, or possibly eliminated. As the assessment is conducted, emphasis should be placed on programs that focus on *integration, evidence-based practices, and prevention and early intervention*. The State should consider moving all BH initiatives under single administrative oversight to ensure coordination and to minimize administrative and program duplication.

3. Managed Care Program Oversight

The proposed model advocates for the management of the BH benefits package. The managed care program will need state-level oversight to ensure proper service delivery and accountability. For example, HCPF is currently responsible for the oversight of the Behavioral Health Organization (BHO) Medicaid contracts. A similar relationship could be developed between the coordinated future BH state policy-making body and the BH managed care entities.



The Role of the Managed Care Program

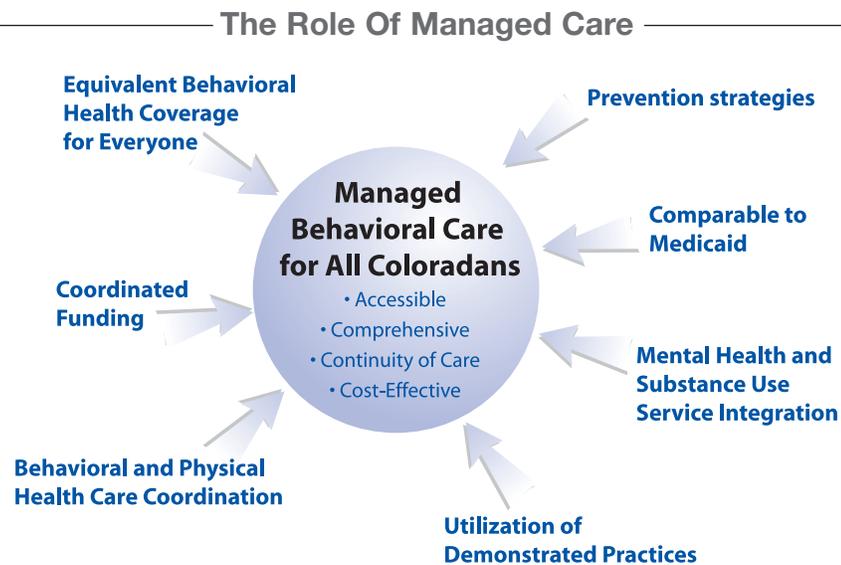


This model is based on a managed care system where one or more behavioral health managed care organizations would be created to oversee both financial resources and service delivery. Tight managed care controls will ensure that all necessary services are available, connected with other providers, accessible, clinically appropriate, and that unnecessary duplication is eliminated.

The managed care program would have the following core responsibilities:

1. Mental health and substance use service integration;
2. Behavioral and physical health care coordination;
3. Equivalent behavioral health coverage for everyone;
4. Comprehensive prevention strategies; and
5. Utilization of demonstrated practices.

DIAGRAM 6:



1. Mental Health and Substance Use Service Integration

Co-occurring substance use disorders occur in about 50 percent of individuals with serious mental illness and are associated with a variety of negative outcomes, including higher rates of relapse, violence, hospitalization, homelessness, and incarceration.²¹ Combining mental health and substance use treatment for people with co-occurring disorders leads to more positive outcomes. However, despite the frequent co-occurrence



of mental health and substance use problems, separate providers typically treat each condition independently.²²

Integrated Dual Disorders Treatment (IDDT) is an example of effective integrated behavioral health treatment where the same clinicians, or teams of clinicians provide mental health and alcohol/drug abuse treatment in one setting to individuals with co-occurring disorders.²⁵

In order for MH and SU service integration efforts to be successful, the managed care program should ensure the following:

- BH program policies and procedures should explicitly acknowledge co-occurrence and define requirements for addressing the needs of this population;
- Within the BH treatment context, both co-occurring problems/disorders should be considered primary conditions;
- A “no wrong door” approach. The integrated BH system of care should be accessible from multiple points of entry, as many people with single and co-occurring problems/disorders lack the capacity to navigate complicated service systems;²³
- Combined program design and certification;
- Inter-program collaboration and consultation;
- Integrated treatment plans and services;
- Prevention strategies to be coordinated for SU and MH;
- BH providers are cross-trained and have combined licensure, but individual specialties and expertise is preserved and not diluted;²⁴
- Common MH and SU screening tools for physical healthcare providers; and
- Competency of all providers to screen for mental health, substance use and co-occurring problems/disorders.

An example of a proven integrated model is the Screening, Brief Intervention and Referral to Treatment (SBIRT) program. SBIRT provides comprehensive, early intervention and treatment services for persons with substance use problems and disorders in primary care centers, hospital emergency rooms, trauma centers, and other community settings.³⁸

2. Behavioral and Physical Health Care Coordination

Providers of general medical care need to be included in the creation of this model since *up to 90 percent* of BH care occurs in physical care settings.²⁶ Coordination of behavioral and physical health care is essential to any health care reform initiative. The failure to do so negatively impacts the entire health care system.

For example, depression and anxiety disorders are strongly associated with somatic symptoms, such as headache, fatigue, dizziness, and pain, which are the leading causes of outpatient medical visits. Similarly, substance use problems and illnesses contribute to the misdiagnosis, difficult management, and poor outcomes associated with many of the most pervasive medical illnesses in this country, such as chronic pain, sleep disorders, breast cancer, hypertension, diabetes, pneumonia, and asthma. A substantial portion of individuals with chronic physical illnesses also have a co-morbid behavioral health problem or illness.²⁷



The BH managed care organization(s) would maximize provider communication and coordination through:

- Routine evidence-based screening with adults and children for mental health and substance use problems/disorders during physical exams, entry into a hospital and other instances when the general medical sector is primarily responsible for care;
- A medical home where either the primary care or behavioral health care provider is responsible for care coordination;
- Incentives for behavioral and physical health care providers to coordinate care;
- Sharing of pertinent clinical information between providers to enhance coordination and reduce duplication of services;
- Elimination of barriers which impede the sharing of necessary information; and
- Accountability mechanisms which ensure coordination and appropriate care.

3. Equivalent BH Benefit Package for Everyone

The concept of equivalent coverage for behavioral healthcare usually refers to a benefit package on par with physical health and is commonly referred to as “parity.” For the purposes of this model, parity is defined as a common set of mental health and substance use services for the entire Colorado population with benefits equivalent to the current Medicaid mental health program, plus enhancements in the areas of prevention and early intervention.

National studies show that implementing traditional parity has resulted in negligible cost increases where the care has been managed.²⁸ In the case of the Federal Employees Health Benefits Program, less than a one percent cost increase was attributable to the implementation of mental health and substance use care parity.²⁹

The proposed model goes beyond traditional parity to provide a significantly broader array of services to the entire Colorado population. However, the fiscal impact of adding the broad array of behavioral health services, is minimal – an estimated 2.7 percent increase³⁰ – compared to the benefits generated. This approach to parity will meet the needs of the entire population, whereas traditional parity concepts can result in fewer services than needed if there is a limited physical health benefit.

The Medicaid mental health program is used as a basis for this model because it has the comprehensive coverage necessary to serve people with lower behavioral health needs to adults with serious mental illness and children with serious emotional disturbance.

For the purposes of this model, parity is defined as a common set of mental health and substance use services for the entire Colorado population with benefits equivalent to the current Medicaid mental health program, plus enhancements in the areas of prevention and early intervention.



Conversely, half of Coloradans with insurance who were seen in private practice for mental health treatment were viewed by their provider as having inadequate insurance.³¹ Many non-Medicaid patients do not receive the services they need because these services are outside the scope of their benefits. As a result, many people who require services do not receive them because they are worried about costs.³²

The following benefits will be realized by creating an equitable coverage BH plan:

- ✓ An increase in the number of people who receive necessary treatment
- ✓ Reduction in the length of (more expensive) hospital stays because more people will have access to outpatient treatment³³
- ✓ Portability of benefits, as the same benefits will be available to everyone in the state

This proposed model ensures that everyone has the same sufficient level of coverage regardless of how that coverage is subsidized. If someone moves between plans they will maintain the same benefits.

4. Employing Prevention Strategies

In children, preventive interventions are effective in reducing the impact of risk factors for mental disorders and improving social and emotional development.³⁴ For consumers of all ages, early detection, assessment, and links with treatment and supports will help prevent behavioral health problems from escalating.³⁵ Early detection of mental and substance disorders will result in substantially shorter and less disabling courses of impairment.³⁶

The managed BH program will be responsible for the implementation of prevention services. The prevention benefit package would be comprised of:

- Comprehensive BH **educational programs**;
- **Screening** through utilization of proven tools, which would be routinely administered in low-stigma settings (such as primary health care facilities and schools), and in settings in which a high level of risk exists for mental health and substance abuse problems (such as criminal justice, juvenile justice, and child welfare systems);³⁷
- Proven **assessment** tools which would be administered if the initial screening determined a need for greater testing. The assessment would help guide decisions regarding further intervention.



5. Utilization of Demonstrated Practices

This model has, as its foundation for service delivery, the utilization of evidence based practices (EBPs) by providers. These are defined as the integration of the best-researched evidence and clinical expertise.³⁹ This behavioral health care model emphasizes EBPs to ensure that interventions appropriately meet a patient's needs, enhance positive outcomes, and conserve resources when possible. Ineffective care wastes resources and can lead to health complications.

Greater efficacy can be realized by the BH system by providing proven services that are known to prevent disease and encourage recovery, than by providing unproven interventions with unknown success rates. Therefore, as suggested by the President's New Freedom Commission, the managed care program should create reimbursement policies that reward EBPs,⁴⁰ allowing them to become standard practice.

Promising but less thoroughly researched and documented practices may also be utilized, but with caution. They also must include an evaluation component to ensure that the services provided are appropriate and cost-effective.

In a landmark study, people with alcohol dependence were found to receive care consistent with scientific best practices only about 10.5 percent of the time.⁴¹ This model will reverse that finding.

EXAMPLES OF EVIDENCE-BASED AND PROMISING PRACTICES

TABLE 1 – EVIDENCE-BASED PRACTICES

Specific medications for specific conditions
Cognitive and interpersonal therapies for depression
Treatment foster care
Motivational interviewing
Multi-systemic therapy
Assertive community treatment
Collaborative treatment in primary care ⁴²
Individualized drug counseling
Relapse prevention for problem drinking and cocaine addiction ⁴³
Promising Practices
Trauma-specific interventions
Wraparound services ⁴⁴



Why Carved-Out Managed Care?

National and Colorado-Specific Experience with Managed Behavioral Health Services:

Behavioral health benefits are increasingly provided through managed care organizations.⁴⁵ These organizations are often called Managed Behavioral Health Organizations, or MBHO's. National evidence credits MBHOs with:

- Keeping down costs to save money for employers, state agencies and other purchasers;⁴⁶
- Promoting community-based care (particularly where risk is shared between the managed care entity and the provider), as opposed to institutionalization and hospitalization;
- Increasing benefits; and
- Facilitating quality improvement.⁴⁷

Colorado implemented its carved-out Medicaid Mental Health Capitation and Managed Care Program statewide in 1998. According to the 2006 Report of the Colorado State Auditor, the overall effects of the system have been positive. In fact, individuals on Medicaid are more than twice as likely to receive care as others.⁴⁸

In 1997, Colorado's Alcohol and Drug Abuse Division (ADAD) employed principles of managed care to create a system of sub-state Managed Services Organizations (MSOs). There are now four MSOs that work with ADAD to administer and manage public substance use treatment funds in seven sub-state regions. ADAD monitors its Federal Block Grant contracts with these MSOs, which are responsible for providing a wide range of services to patients in Colorado's 64 counties.

The Evidence in Support of a Separately Managed Behavioral Health Program:

Behavioral health plans that are administratively and financially separate from the health insurance plans for general health care are informally called "carve-outs." Evidence suggests that carve-outs achieve significant cost savings as compared to fee-for-services or carve-in HMO plans.⁴⁹

In addition to the cost savings, carved-out systems provide the following benefits:

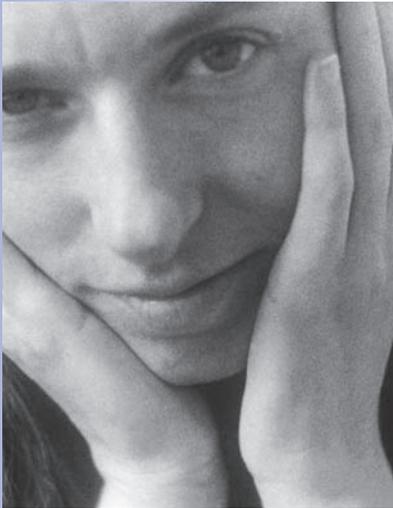
- Nurture a recognition and support for specialized knowledge of BH problems and illnesses and treatment expertise;⁵⁰



- Cover a broader array of services, including a shift to outpatient care with more home and community-based services;
- Allow greater flexibility in service delivery;⁵¹
- Improve access to care;
- Increase accountability of expenditures;
- Improve processes and outcomes of care;
- Increase patient satisfaction;
- Decrease wait times for accessing care;
- Improve implementation of utilization management controls such as prior authorization and the use of prescription formularies; and
- Benefit children and their families, especially in coordinating physical and mental health services with social service delivery needs such as child welfare and education.⁵²



Cost Analysis



An independent study and actuarial analysis of the proposed model was conducted by Milliman, Inc. The analysis is intended to be a high level estimate of the financial impact of CBHC's proposal. Milliman's findings are summarized below. Please see the Appendix for the complete Milliman analysis.

For their analysis, Milliman separated the Colorado population into seven different sub-populations:

- Commercially-insured groups
- Medicare beneficiaries
- Medicaid beneficiaries
- SCHIP population
- Corrections population
- Uninsured population
- Other Government/All Other

The table below provides a cost comparison by sub-population of the status-quo (pre-parity), with the implementation of our proposed program (as defined earlier in the paper, we refer to parity as a common set of mental health and substance use services for the entire Colorado population with benefits equivalent to the current Medicaid mental health program, plus enhancements in the areas of prevention and early intervention).

TABLE 2 – ESTIMATED ANNUAL BEHAVIORAL HEALTHCARE COSTS BY SUB-POPULATION			
COLORADO SUB-POPULATION	PRE - PARITY	POST - PARITY	INCREASE
Commercial	\$ 302,570,000	\$ 174,090,000	\$ (128,480,000)
Medicare	\$ 103,430,000	\$ 95,430,000	\$ (8,000,000)
Medicaid	\$ 431,230,000	\$ 407,240,000	\$ (23,990,000)
SCHIP	\$ 7,030,000	\$ 7,150,000	\$ 120,000
Corrections	\$ 31,070,000	\$ 25,690,000	\$ (5,380,000)
Uninsured	\$ 101,140,000	\$ 296,400,000	\$ 195,260,000
Other Government/All Other	\$ 12,500,000	\$ 9,360,000	\$(3,140,000)
Total Colorado	\$ 988,980,000	\$ 1,015,370,000	\$ 26,390,000



Milliman also estimated costs by BH service categories. The table below presents the cost estimates by service category and presents savings, (i.e., offsets) that would be realized with the correct implementation of the model. The table demonstrates that significant service increases are possible under the proposed model with only modest cost increases overall, due to the offsets.

TABLE 3 – ESTIMATED ANNUAL BEHAVIORAL HEALTHCARE COSTS BY SERVICE CATEGORY			
SERVICE CATEGORY	PRE - PARITY	POST - PARITY	INCREASE
Inpatient Hospital	\$ 84,010,000	\$ 94,580,000	\$ 10,570,000
Residential Treatment	\$ 20,300,000	\$ 30,330,000	\$ 10,030,000
Hospital Alternative Services	\$ 7,500,000	\$ 11,310,000	\$ 3,810,000
Emergency Services	\$ 7,690,000	\$ 9,740,000	\$ 2,050,000
Outpatient Professional	\$ 225,130,000	\$ 316,470,000	\$ 91,340,000
Case Management	\$ 56,980,000	\$ 143,210,000	\$ 86,230,000
Vocational	\$ 2,380,000	\$ 7,610,000	\$ 5,230,000
Educational/Screening	\$ 6,730,000	\$ 115,690,000	\$ 108,960,000
Respite Care	\$ 170,000	\$ 530,000	\$ 360,000
Other B3 Services	\$ 4,860,000	\$ 16,420,000	\$ 11,560,000
Psychotropic Drugs	\$ 522,110,000	\$ 807,340,000	\$ 285,230,000
Administrative Expenses	\$ 51,130,000	\$ 73,430,000	\$ 22,300,000
Total Costs without Offsets	\$ 988,980,000	\$ 1,626,660,000	\$ 637,680,000
Utilization Management Savings	\$ -	\$ (170,080,000)	\$ (170,080,000)
Administrative Cost Savings	\$ -	\$ (5,480,000)	\$ (5,480,000)
Employer Cost Savings	\$ -	\$ (148,810,000)	\$ (148,810,000)
Medical Cost Savings	\$ -	\$ (286,910,000)	\$ (286,910,000)
Total Costs	\$ 988,980,000	\$ 1,015,370,000	\$ 26,390,000

The calculations in the tables above show a net additional program cost of \$26.4 million. This estimate is for the entire population of the State of Colorado and is based on full participation by commercial and public sector plans.

The net cost represents a 2.7 percent cost increase over current expenditures and amounts to a per member per month increase of \$0.46 across the projected Colorado population of 4.8 million. If the Commercial population is excluded entirely from participation and only the public sector participates in the program, the estimated net cost is \$154.9 million above the current expenditures, or \$6.72 per member per month.



The new costs cover additional:

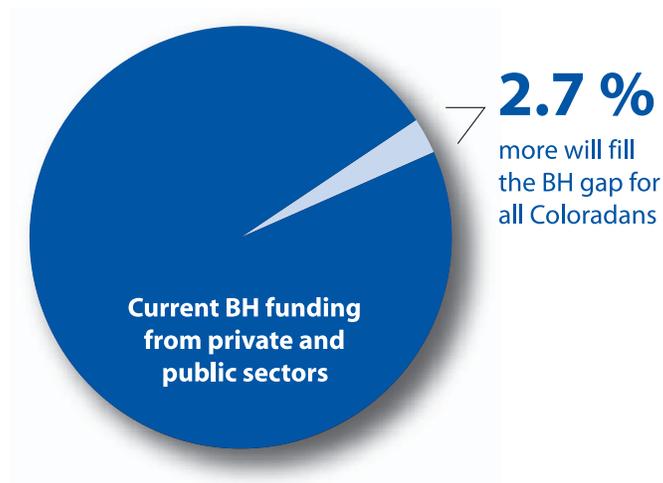
- Individuals (today's uninsured population);
- Benefits which are equivalent to the current Medicaid mental health program;
- Screening, assessment and education programs; and
- Provider encounters (screening and educational programs will identify clients earlier in their illness progression).

The cost-offsets include:

- Utilization management savings;
- Administrative cost savings from coordinating several different administrative agencies and programs that run independently today;
- Medical cost and employer savings based on more effective identification and treatment of behavioral illnesses;
- Psychotropic drug utilization management; and
- Decreased use of tertiary providers, such as residential treatment centers, emergency rooms, hospitals, and correctional facilities for adults and youth.

DIAGRAM 7:

The Cost Of Doing It Right

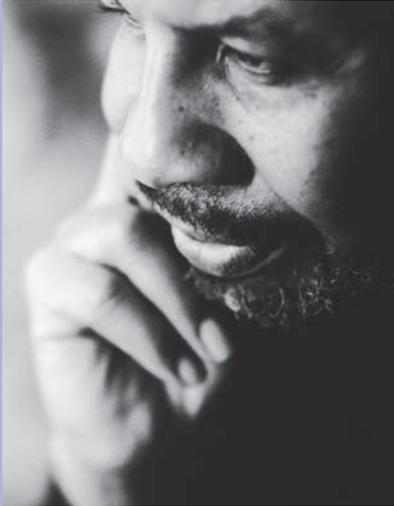


It will cost an additional 46 cents per person per month to fill the BH gap in Colorado.

The actuarial analysis does not consider *state-administered programs*. These will not be part of the managed care plan and are expected to generate additional savings if administered as described in the Role of State Government section above.



Next Steps to Consider



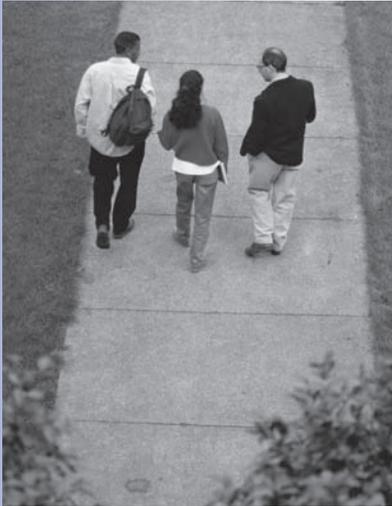
This paper presents the main components for building a comprehensive behavioral health care foundation. The government, private citizens and employers are currently impacted negatively because Colorado does not have all the necessary elements in place.

As policy-makers deliberate specific implementation guidelines, the following additional factors need consideration:

- Strategies for engaging private sector participation in the financing of the managed care system.
- If behavioral health reform needs to be implemented in phases, identify which populations and age groups should be prioritized for coverage.
- Which state agency-administered behavioral health initiatives would be included in the system.
- The role of the safety-net in a comprehensive behavioral health system.
- Ensuring that a wide range of qualified providers are included in the managed care network.
- Coordinating and providing services to people who are dually diagnosed with a mental health or substance use disorder and another illness.
- Strategies to further the work started by the HJR 1050 Behavioral Health Task Force, and the Governor's Behavioral Health Coordinating Council.
- Policy-level decisions, including:
 - Who will oversee the system,
 - The extent of interdepartmental collaboration,
 - Coordination of state and federal laws and regulations, and
 - Sharing of resources between State agencies.
- The effectiveness and relevance of current managed care models including Behavioral Health Organizations for Medicaid mental health, Managed Services Organizations for substance use, and "carved-in" plans for mental health services under the Children's Basic Health Plan.
- Risk-sharing requirements between providers and the managed care entities.
- Actuarial analysis to inform implementation.
- Long-term evaluation of the proposed components to ensure efficacy.
- A broad range of involvement in the planning and implementation including legislators, the executive branch of government, state agencies, consumers, advocates, families, providers, and health care plans.



Conclusion



An effective behavioral health system is essential for consumers and makes sound financial sense for employers and policy makers. It is one of the critical keys to a healthier Colorado.

The following recommendations summarize the main components needed for an effective BH system.

1. Policy-level consolidation through departmental, funding and data integration.
2. Public and private sector financing.
3. A carved-out managed care model to administer benefits (i.e., the BH benefit is managed separately from the physical benefits).
4. Offering the same benefits regardless of payer.
5. Focusing on prevention and early intervention services to avoid escalation of problems.
6. Increasing the use of proven or promising practices.
7. Coordination and integration of mental health, substance use, and physical health services.
8. All necessary services to be available based on a client's level of need.

Colorado's challenges in developing a comprehensive behavioral health benefit package mirror the problems that exist in most other states. This proposed model identifies an opportunity to not only provide a basic framework for a successful behavioral health system in Colorado, but to also serve as a national model. It demonstrates that for pennies per person per month, this state can add a behavioral health benefit that fills the gaps across Colorado and it explains how filling these important gaps will reap cost-effective dividends for all stakeholders.

The cost of dealing with mental health and substance use issues is unavoidable. The important decision is how and where Coloradans pay for them. By investing in appropriate preventive measures, early interventions and community-based treatment services, the state and its taxpayers avoid greater costs incurred through:

- Reliance on correctional facilities;
- Increased hospital and physical care costs⁵³; and
- Lost job productivity.



Colorado is in a unique position to capitalize on the growing momentum at the state and national level for comprehensive health care reform. The Colorado Behavioral Healthcare Council and the Colorado Association of Alcohol and Drug Service Providers look forward to continuing to work with policy makers and stakeholders to improve upon the current behavioral health care system and create a model that will serve as a shining example of how integrated services can be offered statewide.



References

- ¹ WHO, 2002, Global Burden of Disease.
- ² Kessler, R.C. (2004). "The epidemiology of dual diagnosis." *Biol Psychiatry*, 56: 730-737.
- ³ TriWest Group. (2003). The Status of Mental Health Care in Colorado. Mental Health Funders Collaborative: Denver, CO.
- ⁴ Denver Metro Area Counties: Transforming Services for Persons with Mental Illness in Contact with the Criminal Justice System, Policy Research Associates, February 2008.
- ⁵ Blue Ribbon Commission for Health Care Reform, *Final Report to the Colorado General Assembly*, January 31, 2008.
- ⁶ TriWest Group, op. cit.
- ⁷ WHO, op. cit.
- ⁸ Kessler, op. cit.
- ⁹ Colton, C.W., Manderscheid, R.W. "Congruencies in increased mortality rates, years of potential life lost, and causes of death among public mental health clients in eight states." *Prev Chronic Dis*. 2006;3:11-14.
- ¹⁰ Ibid.
- ¹¹ Newman, S.C., Bland, R.C. "Mortality in a cohort of patients with schizophrenia: A record linkage study". *Can J Psychiatry* 1991; 36: 239-245.
- ¹² Mokdad, A et al. "Actual cause of death in the United States", *JAMA* 2004;291:1238-1245.
- ¹³ ONDCP, (2004) *National Drug Control Plan*, Table 26, Washington, DC: ONDCP.
- ¹⁴ Blue Ribbon Commission for Health Care Reform, *Final Report to the Colorado General Assembly*, January 31, 2008.
- ¹⁵ Institute of Medicine of the National Academies, Committee on Crossing the Quality Chasm: Adaptation to Mental Health and Addictive Disorders, Board on Health Care Services. *Improving the Quality of Health Care for Mental and Substance-Use Conditions: Quality Chasm Series*. Washington, D.C. The National Academies Press, 2006.
- ¹⁶ U.S. Department of Health and Human Services. *Mental Health: A Report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health, 1999.
- ¹⁷ TriWest Group, op. cit.
- ¹⁸ Institute of Medicine, op. cit.
- ¹⁹ Bazelon Center for Mental Health Law, *Integration of Primary Care and Behavioral Health: Report on a Roundtable Discussion of Strategies for Private Health Insurance*.
- ²⁰ Mauery, D.R. et al. (2006). *Managed mental health care: Findings from the literature, 1990-2005* (DHHS Pub. No. SMA-06-4178). Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.
- ²¹ U.S. Department of Health and Human Services. *Co-Occurring Disorders: Integrated Dual Disorders Treatment Implementation Resource Kit DRAFT VERSION*. U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, 2003.
[accessed online: November 17, 2007]
http://download.ncadi.samhsa.gov/ken/pdf/toolkits/cooccurring/IDDTFidelityScaleAJ1_04.pdf
- ²² Institute of Medicine, op. cit.
- ²³ Center for Substance Abuse Treatment. *Overarching Principles To Address the Needs of Persons With Co-Occurring Disorders*. COCE Overview Paper No. 3. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2005.
- ²⁴ Center for Substance Abuse Treatment. *Systems Integration*. COCE Overview Paper 7. DHHS Publication No. (SMA) 07-4295. Rockville, MD: Substance Abuse and Mental Health Services Administration, and Center for Mental Health Services, 2007.



References (cont.)

- ²⁵ TriWest, op. cit.
- ²⁶ Narrow, W.E. et al. "Revised prevalence estimates of mental disorders in the United States: using a clinical significance criterion to reconcile 2 surveys' estimates." *Arch Gen Psychiatry*. Feb 2002;59(2):115-123.
- ²⁷ Institute of Medicine, op. cit.
- ²⁸ U.S. Department of Health and Human Services. *Mental Health: A Report of the Surgeon General*, op. cit.
- ²⁹ Bachman, R.E., Healthcare Visions, Inc. Letter to American Psychological Association Practice Organization, July 18, 2005.
- ³⁰ Milliman, Inc. analysis
- ³¹ TriWest, op. cit.
- ³² U.S. Department of Health and Human Services. *Mental Health: A Report of the Surgeon General*, op. cit.
- ³³ Gillo, K., Goplerud, E., and Williams, L. (September 2003) *Policy Brief 1*, The George Washington University Medical Center.
- ³⁴ U.S. Department of Health and Human Services. *Mental Health: A Report of the Surgeon General*, op. cit.
- ³⁵ President's New Freedom Commission on Mental Health. *Achieving the promise: Transforming mental health care in America*. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2003.
- ³⁶ Ibid
- ³⁷ Ibid
- ³⁸ SAMHSA, Center for Substance Abuse Treatment. <http://sbirt.samhsa.gov/index.htm>, accessed on February 1, 2008.
- ³⁹ TriWest, op. cit.
- ⁴⁰ President's, op. cit.
- ⁴¹ Institute of Medicine, op. cit.
- ⁴² President's, op. cit.
- ⁴³ National Institute on Drug Abuse, National Institutes of Health. *Principles of Drug Addiction Treatment: A Research-Based Guide*, October 1999.
- ⁴⁴ President's, op. cit.
- ⁴⁵ Institute of Medicine, op. cit.
- ⁴⁶ SAMHSA, op. cit.
- ⁴⁷ Institute of Medicine, op. cit.
- ⁴⁸ TriWest, op. cit.
- ⁴⁹ Mauery, op. cit.
- ⁵⁰ Institute of Medicine, op. cit.
- ⁵¹ Pires, S. A., Stroul, B. A., Armstrong, M. I., (2000). *Health care reform tracking project: Tracking state health care reforms as they affect children and adolescents with behavioral health disorders and their families—1999 Impact Analysis*. Tampa, FL: Research and Training Center for Children's Mental Health, Department of Child and Family Studies, Division of State and Local Support, Louis de la Parte Florida Mental Health Institute, University of South Florida.
- ⁵² Mauery, op.cit.
- ⁵³ Colorado Mental Health and Substance Abuse Summit, *Impact of State Budget Cuts on Mental Health & Substance Abuse Care in Colorado*, 2003.



Appendix



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March 27, 2008

Mr. George DelGrosso
Executive Director
Colorado Behavioral Healthcare Council
1410 Grant Street, Suite A-301
Denver, CO 80203

Re: Actuarial Analysis

Dear George:

Attached is our independent study and actuarial analysis of the financial impact of the Council's recommended behavioral health insurance parity benefits. This analysis is intended to contribute to the decision-making process of the Colorado Blue Ribbon Commission for Healthcare Reform.

Because the economy and the healthcare system are dynamic, there is an intrinsic uncertainty in projecting healthcare costs, especially under healthcare reform, and that uncertainty applies to our work. The estimates presented here are based on a number of assumptions as described in our report. Other researchers who use other assumptions and methods may present different estimates, and the actual costs may depend in part on factors we have not considered.

This report is not intended to support or detract from any particular legislation. It is intended for the exclusive use of the parties who commissioned the study and not intended to benefit any third party. This report should not be distributed without the permission of Milliman, and any distribution should be of the report in its entirety. This report reflects the authors' analysis and should not be interpreted as representing Milliman's endorsement.

Please let us know if you have any additional questions regarding our analysis. Thank you for the opportunity to complete this study. We have enjoyed working with you and the Council on this study.

Best regards,

Stephen P. Melek, FSA, MAAA
Consulting Actuary

This work product was prepared solely to provide assistance to the Colorado Behavioral Healthcare Council. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends a third party recipient be aided by its own actuary or other qualified professional when reviewing the Milliman work product.

Appendix A

Financial Cost of Recommended Behavioral Healthcare Benefit Design

Milliman, Inc. was commissioned by the Colorado Behavioral Healthcare Council to perform an independent study and actuarial analysis of the impact of the Council's recommended behavioral health insurance parity benefits on behalf of several interested parties. This analysis is intended to contribute to the decision-making process of the Colorado Blue Ribbon Commission for Healthcare Reform.

Our Approach

Our analysis is intended to be a high level estimate of the financial impact of providing the Council's comprehensive behavioral healthcare benefits to the entire population of the State of Colorado. We used a macro pricing approach in this analysis. We separated the Colorado population into seven different sub-populations as follows:

- Commercially-insured groups
- Medicare beneficiaries
- Medicaid beneficiaries
- SCHIP population
- Corrections population
- Uninsured population
- Other Government/All Other

We developed estimates of current behavioral healthcare costs on a per member per month basis for each sub-population for the following behavioral healthcare service categories:

- Inpatient hospital
- Residential treatment facilities
- Hospital alternative services
- Emergency services
- Outpatient professional
- Case management
- Vocational services
- Prevention (screening, assessment, and education)
- Respite care
- Other 1915(b)(3) waiver services (cost-effective alternative services to those contractually required covered services in the actuarially sound capitation rates)
- Psychotropic drugs

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Cost Estimates

Our cost estimates for current behavioral healthcare services provided in Colorado are intended to represent the total annual amount of spending by health insurers and various other agencies in Colorado, and exclude out-of-pocket costs for consumers. Our results are summarized in Table 1 below.

Table 1 – Estimated Annual Behavioral Healthcare Costs by Sub-population			
Colorado sub-population	Pre - Parity	Post - Parity	Increase
Commercial	\$ 302,570,000	\$ 174,090,000	\$(128,480,000)
Medicare	\$ 103,430,000	\$ 95,430,000	\$ (8,000,000)
Medicaid	\$ 431,230,000	\$ 407,240,000	\$ (23,990,000)
SCHIP	\$ 7,030,000	\$ 7,150,000	\$ 120,000
Corrections	\$ 31,070,000	\$ 25,690,000	\$ (5,380,000)
Uninsured	\$ 101,140,000	\$ 296,400,000	\$ 195,260,000
Other Government/All Other	\$ 12,500,000	\$ 9,360,000	\$ (3,140,000)
Total Colorado	\$ 988,980,000	\$ 1,015,370,000	\$ 26,390,000

We estimate the net cost of the Council’s proposed comprehensive behavioral healthcare benefits to be \$26.4 million (a 2.7% cost increase), or \$0.46 per member per month across the 4.8 million covered lives we project in Colorado. If the Commercial population is excluded, the estimated net cost is \$154.9 million, or \$6.72 per member per month.

We also divided our cost estimates by service category. Table 2 presents our cost estimates by service category and demonstrates various cost offsets that are included in our estimates.

Table 2 – Estimated Annual Behavioral Healthcare Costs by Service Category			
Service Category	Pre - Parity	Post - Parity	Increase
Inpatient Hospital	\$ 84,010,000	\$ 94,580,000	\$ 10,570,000
Residential Treatment	\$ 20,300,000	\$ 30,330,000	\$ 10,030,000
Hospital Alternative Services	\$ 7,500,000	\$ 11,310,000	\$ 3,810,000
Emergency Services	\$ 7,690,000	\$ 9,740,000	\$ 2,050,000
Outpatient Professional	\$225,130,000	\$ 316,470,000	\$ 91,340,000
Case Management	\$ 56,980,000	\$ 143,210,000	\$ 86,230,000
Vocational	\$ 2,380,000	\$ 7,610,000	\$ 5,230,000
Educational/Screening	\$ 6,730,000	\$ 115,690,000	\$ 108,960,000
Respite Care	\$ 170,000	\$ 530,000	\$ 360,000
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Administrative Expenses	\$ 51,130,000	\$ 73,430,000	\$ 22,300,000
Total Costs without Offsets	\$988,980,000	\$ 1,626,660,000	\$ 637,680,000
Utilization Management Savings	\$ -	\$ (170,080,000)	\$(170,080,000)
Administrative Cost Savings	\$ -	\$ (5,480,000)	\$ (5,480,000)
Employer Cost Savings	\$ -	\$ (148,810,000)	\$(148,810,000)
Medical Cost Savings	\$ -	\$ (286,910,000)	\$(286,910,000)
Total Costs	\$988,980,000	\$ 1,015,370,000	\$ 26,390,000

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Sources for Cost Estimates

We developed our cost estimates for the Commercial and Medicare populations using *Milliman's 2007 Health Cost Guidelines™* (HCGs)¹. The HCGs are Milliman's proprietary actuarial tool that enables the user to develop components of per capita medical claim costs taking into account benefit design, demographics, location, provider reimbursement arrangements, degree of managed care delivery, and other factors. In most instances, these cost assumptions are based on our evaluation of several data sources, and are not specifically attributable to a single data source. The HCGs are used by scores of client insurance companies and health plans for premium rate setting, evaluating health insurance products, and for financial management. We also applied trend assumptions to get costs to current levels.

We developed our cost estimates for the Medicaid population from Colorado Health Care Policy and Financing (HCPF) data for the Medicaid mental health managed care program² and other cost information provided by the Council^{3,4,5}, including increases for FY09 funding levels from the Joint Budget Committee. We developed our cost estimates for the SCHIP population from data on other state CHIP program behavioral healthcare costs, and from information provided by the Council. For the Prison population cost estimates, we balanced our total program costs to cost information provided by the Council⁶, and allocated some of the costs based on relationships by service category found in the Medicaid population.

We had limited cost data for both the Uninsured and Other Government/All Other populations, so we assumed that these costs could be modeled using relationships to populations where we had more credible data sources. We assumed that the Uninsured population costs could be reasonably represented as 67% Commercial and 33% Medicaid cost levels. We assumed that the Other Government/All Other population costs, which include the TRICARE population, could be reasonably represented at 90% Commercial and 10% Medicaid cost levels.

¹ The Milliman, Inc. *Health Cost Guidelines™* provide a flexible but consistent basis for the determination of claim costs and premium rates for a wide variety of health benefit plans. The *Guidelines* are developed as a result of Milliman's continuing research on health care costs. First developed in 1954, the *Guidelines* have been updated and expanded annually. These *Guidelines* are continually monitored; Milliman consultants and many insurers use the Guidelines for a variety of actuarial and financial management purposes.

² HCPF Community MH FY '08 Appropriations and FY '09 Budget Request – 11/8/07

³ Prevention, Treatment and Detox Spending Authority Summary, SFY 2007-08

⁴ FY 2007-08 and FY 2006-07 late SUPPLEMENTALS: DEPARTMENT OF HUMAN SERVICES, Office of Operations, Division of Child Welfare, Division of Child Care, Services for People with Disabilities, and Executive Director's Office (selected Special Purpose line items), Amanda Bickel, 1/23/08

⁵ Recap of DHS Sources of Financing

⁶ Senate Bill 07-239 (Long Bill)

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Key Assumptions

We made several assumptions in the development of our cost estimates. These are described below.

- Population membership was estimated based on various U.S. census data, Colorado Corrections data, and other published data
- Utilization of services was estimated to increase as a result of removing any existing limits on benefit use in insured populations, and from reductions in insured member copayments and other out-of-pocket costs
- Treatment rates and associated behavioral healthcare costs were estimated to increase for all populations as a result of the new screening, prevention and educational benefits
- Current administrative costs were assumed to be commensurate with levels, relative to healthcare costs, that we have observed in managed care plans
- Utilization management savings were assumed to result from incorporating medical necessity criteria on benefits and populations that are currently not being managed, and we relied on the Milliman *Cost Guidelines*TM and *Care Guidelines*[®] for these assumptions
- Administrative cost savings were assumed to result from coordinating several different administrative agencies
- Medical cost offset savings were modeled based on results of our previous research where more effective identification and treatment of behavioral illnesses resulted in savings for those with co-morbid chronic medical conditions
- Other employer cost savings were estimated (sick days, disability costs and increased productivity) based on more effective identification and treatment of behavioral illnesses among employees

Rationale for Savings

Little or no utilization management occurs on psychotropic drug benefits in Colorado today. Documented psychotropic drug management programs in other states have demonstrated savings from various quality improvement initiatives that target things like therapeutic duplication, lack of generic use, sub-optimal dosing, poly-pharmacy, inappropriate use, contraindicated use, treatment non-adherence and inappropriate switching. We assumed that a comparable initiative in Colorado could reduce psychotropic drug costs by about 20%. Additionally, the behavioral healthcare services delivered to the prison and uninsured populations are currently unmanaged. We assumed that incorporating utilization management and medical necessity criteria comparable to what is used for the managed Medicaid program could reduce behavioral healthcare costs for the prison and uninsured populations by about 20%.

Administrative cost savings are likely to be achieved with the coordination of several Colorado programs that run independently today. We assumed savings of 25% of total administrative costs for these programs would occur for all covered populations except for the Commercial and Medicare populations.

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Medical cost offset savings are assumed for each population group. Our savings are based on models Milliman has developed which analyze the excess healthcare costs that are incurred for insureds that have various chronic medical conditions (asthma, diabetes, hypertension, and seven other conditions) and co-morbid psychological disorders such as depression or anxiety. These excess costs arise because patients with co-morbid medical and psychological disorders have more difficulty with diet, exercise, sticking to their treatment regimens, and other self-care challenges. These contribute to exacerbated chronic medical conditions. Our medical savings assumption is that 10% of this excess healthcare cost could be saved through an integrated medical-behavioral healthcare model, which utilizes collaborative care management from both medical and behavioral healthcare providers. This amounts to approximately \$5.00 per member per month for all populations except the SCHIP population which is about \$1.00 per child per month.

Employees with psychological illnesses such as depression or anxiety have higher sick day costs, disability costs and reduced productivity. Various studies have proven these increased levels of employer-based costs (Druss et. al., Kessler et. al., Stewart, et. al., Goetzel et. al.). Similar to the medical cost savings assumption, we have assumed that 10% of these excess employer costs could be saved through effective delivery of the expanded behavioral healthcare benefits to the employed populations in our study. This amounts to about \$3.50 per employed member per month.

Limitations

Our analysis relied partly on actuarial data reflecting the experience of individuals covered through commercially available insured benefit plans. To represent current coverage, we selected “typical” benefit levels. We utilized a distribution of covered members by type of benefit plan for the Commercial and Medicare populations. Estimates for certain other populations covered, including the prison and uninsured populations, were developed partially by estimating the relationship of those population costs to the Commercial and Medicaid populations where data were more readily available.

Because the economy and the healthcare system are dynamic, there is an intrinsic uncertainty in projecting healthcare costs, especially under healthcare reform, and that uncertainty applies to our work. The estimates presented here are based on a number of assumptions as described above. Other researchers who use other assumptions and methods may present different estimates, and the actual costs may depend in part on factors we have not considered.

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About Milliman

Milliman has been serving business, financial, government, and healthcare organizations with expertise in managing and analyzing financial and other risk for over 60 years. Milliman employs more than 900 qualified consultants and actuaries. The Milliman *Health Cost Guidelines*[™] are developed as a result of Milliman's continuing research on healthcare costs. First developed in 1954, the *Health Cost Guidelines*[™] have been updated and expanded annually since that time. The Milliman *Care Guidelines*[®] are the leading evidence-based clinical guidelines used by managed care organizations. The company is owned only by its principals, not by an insurer, outsourcing company, bank or accounting firm. Milliman does not sell insurance or benefits programs or broker deals. The firm has helped thousands of managed care organizations, insurance companies, payers, and healthcare providers measure their financial status, appraise business opportunities, develop new products, and determine premium rates.

