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Bending the Medicaid healthcare cost curve through financially sustainable medical-behavioral integration



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TABLE OF CONTENTS

INTRODUCTION	2
THE OPPORTUNITIES AT HAND	3
THE LEXICON AND STRUCTURE OF INTEGRATED/COLLABORATIVE CARE	6
WHAT THE RESEARCH HAS SHOWN SO FAR	8
THE NEED FOR INTEGRATED CARE SUSTAINABILITY	10
INNOVATIVE PILOTS UNDER WAY	11
ACKNOWLEDGEMENT	13
QUALIFICATIONS	13
ENDNOTES	14

INTRODUCTION

When it comes to Medicaid costs, a single percentage point can have billion-dollar implications. Medicaid managed care premiums increased only 1.0% to 2.0% on average in recent years. This increase in premiums amounts to \$36.5-\$41.9 billion over 10 years in total, with the state governments funding \$13.0 to \$14.9 billion.¹ Reducing costs by even a tenth of a percent has significant implications for Medicaid, which is why increased behavioral health deserves consideration.

The focus on minimizing cost increases will only continue. State Medicaid programs are facing many financial challenges these days. The current economic challenges are resulting in reduced state revenues.² Healthcare reform is requiring Medicaid programs to cover millions of additional low-income Americans and to make significant improvements to its computer infrastructure. Budget cut discussions center around what can be cut and by how much. According to the National Alliance on Mental Illness (NAMI) report issued in November 2011 on state mental health cuts, between FY2009 and FY2012, state general funding for mental health services was cut by \$1.6 billion.³

Adding to this dynamic, the Supreme Court has recently ruled that states can choose whether or not to participate in the Medicaid expansion program called for by the Patient Protection and Affordable Care Act (PPACA) without being penalized for not participating. Even with the federal government subsidizing most of the expansion costs, state Medicaid programs will have to ultimately fund 10% of the expansion costs.

This paper will present a recommendation to provide more behavioral healthcare services to Medicaid beneficiaries, not less, through integrated medical-behavioral healthcare programs. It will also present some data to assess the value opportunity for doing this integration, discuss the language of integrated/ collaborative care, address the challenges in achieving financially sustainable integration models, and look at recent innovations and pilot programs that are focused on delivering better healthcare, attempting to achieve better clinical and financial outcomes, and providing input for the case that medical-behavioral integration innovations can work well.

As with any new approach to delivering healthcare, innovations can be met with hesitation and even scrutiny from payors, which is due to a lack of evidence that the changes will accomplish the desired goals. This paper seeks to provide state Medicaid agencies and Medicaid managed care programs with current information on integrated medical-behavioral programs to consider in making informed decisions as they struggle with providing healthcare benefits while the funds available to provide them are diminishing. State Medicaid programs, because of the large amount of spending devoted to beneficiaries with behavioral disorders, could experience savings by implementing the approaches outlined in this paper.

THE OPPORTUNITIES AT HAND

Medical and behavioral healthcare services have been largely financed, operationalized, and delivered in separate silos for the last few decades. This has been an effective solution in keeping behavioral healthcare service costs under control. Yet it has led to significant challenges for providers and consumers of both medical and behavioral healthcare services. Separate patient identifiers, payment pools and systems, networks, customer service providers, care management processes, data systems, and provider locations are a few of the challenges that have to be navigated.

Of patients with behavioral health disorders (defined herein to include mental health and substance abuse disorders), 90% are seen in the largest platform of healthcare delivery, primary care.⁴ A mere 10% of patients are seen exclusively in the behavioral healthcare specialty treatment sector.⁵ Two-thirds of patients with behavioral health disorders seen in the general medical sector receive no treatment for their behavioral health conditions.⁶ Effective treatment outcomes are elusive when treatment is provided. According to the National Comorbidity Survey Replication, only 12.7% of the patients receiving care in the general medical sector could be said to have received *minimally adequate treatment* while the same can be said of 48.3% of those treated in the specialty behavioral sector.⁷

Prescription drug costs for psychotropic drugs have risen substantially from just 7% of total mental health spending in 1986 to 23% in 2003, and are projected to reach 30% of all mental health spending by 2014.⁸ The number of Americans taking antidepressants doubled to 10.1% of the population in 2005 compared with 1996. The number seeing psychiatrists is still declining.⁹ There is a significant opportunity for getting integrated behavioral specialty care into general medical settings to improve treatment rates and effective outcomes. There is also a considerable need to get medical care into settings that specialize in treating behavioral disorders for those who receive a majority of their care in behavioral settings.

Medicaid membership has a much higher prevalence of mental health and substance abuse disorders than private commercial insurance populations.¹⁰ For example, recent data from the Medical Expenditure Panel Survey (MEPS) for non-institutionalized civilian persons with schizophrenia found that 87% were covered by Medicaid or Medicare and only 15% were covered by private health insurance at any time during the past year. Therefore, Medicaid programs are opportunistically positioned to reevaluate their approaches to delivering behavioral healthcare services. The Substance Abuse and Mental Health Services Administration (SAMHSA) spending estimates, which highlight the differences in behavioral spending as a percentage of total healthcare spending for 2014, are shown in the charts in Figure 1.¹¹

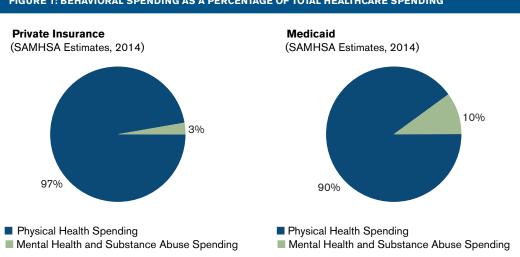


FIGURE 1: BEHAVIORAL SPENDING AS A PERCENTAGE OF TOTAL HEALTHCARE SPENDING

Bending the Medicaid healthcare cost curve through financially sustainable medical-behavioral integration Stephen P. Melek Figure 1 on page 3 indicate that Medicaid spending on behavioral healthcare as a percentage of total healthcare spending is more than three times that in the private insurance market. And this is just for spending that can be identified as being related to the delivery of behavioral healthcare services. What is not shown is the increased level of physical healthcare spending for individuals who have a behavioral condition and a comorbid chronic medical condition.

The best opportunity for behavioral health and primary care integration is the very high cost of patients that have comorbid behavioral health disorders and chronic medical conditions. The table in Figure 2 shows the differences in total healthcare costs per member per month (PMPM) for patients who have certain chronic medical conditions with and without treated comorbid depression. The values presented in the tables in Figures 2 and 3 are updated values from a 2008 Milliman research report, *Chronic Conditions and Comorbid Psychological Disorders*.

	NO TREATED DEPRESSION			WITH TREATED DEPRESSION			
CHRONIC OR SEVERE	MEDICAL E	BEHAVIORAL	TOTAL	MEDICAL E	BEHAVIORAL	. TOTAL	
MEDICAL CONDITION	РМРМ	РМРМ	PMPM	РМРМ	PMPM	РМРМ	
HYPERTENSION	\$631	\$9	\$639	\$1,036	\$96	\$1,132	
ARTHRITIS	610	13	623	1,136	125	1,262	
DIABETES	780	9	789	1,236	105	1,341	
ASTHMA	491	10	501	1,175	128	1,303	
HEART DISEASE	1,090	11	1,101	1,706	105	1,811	

FIGURE 2: TOTAL HEALTHCARE COSTS OF PATIENTS WITH CHRONIC MEDICAL CONDITIONS, WITH AND WITHOUT TREATED DEPRESSION

The exacerbated medical costs for patients with these chronic medical conditions and depression range from about 60% to 240%. While additional comorbidities are a key contributor to these cost differentials, the high relative costs do present an opportunity for integrated services to not only achieve improved clinical outcomes but also to reduce total healthcare costs.

Patients with comorbid substance use disorders and chronic medical conditions also have significantly higher total healthcare costs, as illustrated in the table in Figure 3.

	NO TREATED ALCOHOLISM			WITH TREATED ALCOHOLISM			
CHRONIC OR SEVERE	MEDICAL BEHAVIORAL		TOTAL	MEDICAL I	BEHAVIORA	TOTAL	
MEDICAL CONDITION	РМРМ	РМРМ	РМРМ	РМРМ	РМРМ	РМРМ	
HYPERTENSION	\$ 709	\$ 25	\$ 734	\$ 1,296	\$ 156	\$ 1,452	
ARTHRITIS	723	37	760	1,200	170	1,370	
DIABETES	871	28	900	1,690	168	1,858	
ASTHMA	599	28	627	1,178	165	1,343	
HEART DISEASE	1,217	30	1,247	2,114	138	2,253	

FIGURE 3: TOTAL HEALTHCARE COSTS OF PATIENTS WITH CHRONIC MEDICAL CONDITIONS, WITH AND WITHOUT TREATED ALCOHOLISM

The exacerbated medical costs for patients with these chronic medical conditions and alcoholism range from about 65% to 200%.

Integrated medical-behavioral healthcare programs target members with medical and behavioral comorbidities in an effort to improve patient physical and mental health through improved access to effective clinical care with the goal of improving patient self-care, clinical outcomes, and financial outcomes, thus bending the healthcare cost curve. Some of these elevated medical costs for patients with comorbid medical and behavioral disorders may be due to the severity of the medical disorders and may not be easily reduced, if at all, through integrated programs. Others will, hopefully, lend themselves to potential reductions through such programs.

THE LEXICON AND STRUCTURE OF INTEGRATED/ COLLABORATIVE CARE

The goal of integrated medical-behavioral healthcare (IMBH), also frequently referred to as collaborative care, is to develop a clinical practice team that is tailored to the needs of each patient and situation. It should create a patient-centered experience and a broad range of outcomes (clinical, functional, quality of life, and fiscal), patient-by-patient, that no one provider or patient is likely to achieve unassisted. This requires a suitable range of behavioral and primary care expertise and role functions available to draw from, so that the team can be defined at the level of each patient, and in general for targeted populations. Much of the following lexicon was developed by C.J. Peek, PhD, associate professor at the University of Minnesota, with contributions from members of the National Integration Academy Council (NIAC) in 2011.

The collaborative care model includes chronic illness care, care for common physical symptoms associated with stress without serious disease present, and mental health/substance abuse dimensions of the total care of patients and health behavior change. It employs clinicians with disciplines appropriate for those functions. Patients and families are considered to be part of the care team–*how are we going to get you healthier* being the treatment mantra. Specific team members and clear roles are identified and organized to help patients achieve functional and/or disease goals (and personal preferences), articulated in a shared treatment plan. These goals and needs may change according to the active problems and resources needed for those problems.

The integrated care model includes shared *workspace* for behavioral health and medical clinicians and staff. This can include co-location, which is the sharing of the same physical space, shared *process space*, which includes shared clinical workflows, protocols, and office procedures that enable and ensure collaboration (including a shared treatment plan for each patient), and a shared practice culture rather than separate and often conflicting behavioral health and medical practice cultures. This integration doesn't magically happen overnight; it requires formal or on-the-job training in preparation for the clinical roles and relationships of the collaborative care team, including culture- and team-building for both medical and behavioral clinicians.

With a panel of clinic patients in common, behavioral health and medical team members together take responsibility for the shared mission and accountability for total health outcomes. The collaborative team employs methods to identify those members of a population who need or may benefit from integrated medical-behavioral care and at what level of severity. The team engages patients and families in identifying their needs for care, the kinds of services or clinicians to provide it, and a specific group of healthcare professionals that will work together to deliver those services. The team cares for each patient using an explicit unified care plan that contains assessments and plans for biological/physical, psychological, cultural, and social aspects of each patient's care in an organized fashion. It is important to consider the systems in which the patient operates or has membership, including family, cultural groups, language, schools, vocation, and community. A shared electronic health record or registry is a key element of integrated care. Systematic follow-up and adjustment of treatment plans is made if patients do not improve as expected.

Integrated care must be supported by office practices, aligned leadership, and financial mechanisms. The clinical operational systems, office processes, and office management should consistently and reliably support communication, collaboration, tracking of an identified population, shared care plans, joint follow-up appointments, and other collaborative care functions. An alignment of purposes, incentives, leadership, and program supervision within the practice is a key to success. Financial models that support sustainable business models, which include consistent delivery of collaborative, coordinated behavioral, and medical services in a single setting or practice relationship, are essential for longer-term success. The collaborative initiative needs to include continuous quality improvement and measurement of effectiveness. This includes routinely using measured practice-based data to improve quality-to change what the practice is doing and quickly learn from experience, including clinical, operational, demographic, and financial/cost data. The practice should periodically examine and internally report provider- and program-level outcomes for care, patient experience, and affordability-the Institute for Healthcare Improvement (IHI) Triple Aim-and engage the practice in making design changes accordingly. Last, the practice should promote to the community, population, and individuals that it serves that behavioral health and primary care will be integrated so that multiple clinicians, staff, and their patients achieve patient-centered, effective care.

WHAT THE RESEARCH HAS SHOWN SO FAR

Several studies have been conducted to evaluate various medical-behavioral integration efforts. Most studies focused on clinical improvements, such as increases in depression-free days, and associated those improvements to the cost of the intervention per utilizer in order to measure cost effectiveness. Each study had a unique approach to integration with varying degrees of success (or failure). This section summarizes various studies that have been conducted and the outcomes of each program. These studies serve to provide some of the evidence that payors are looking for in order to make changes in the care delivery models employed. They can help guide program developers as to what types of programs may work better than others. As described later in this paper, there are also several other programs currently being monitored to increase the evidence that integrated medical-behavioral programs can be effective.

Missouri pioneered a program for Medicaid beneficiaries with severe mental illness (SMI) that is based in community mental health centers and provides care coordination and disease management to address the "whole person," including those with mental illness and chronic medical conditions. In the state's Chronic Care Improvement Program (CCIP), the aim is to enroll the sickest people. In an analysis of Medicaid costs for 6,757 SMI members, a total savings of \$8.3 million was achieved. Actual pharmacy costs decreased by \$9.2 million, or 23%, actual general hospital services decreased by \$1.6 million, or 7%, while primary care services increased by \$775,000, or 22%.¹²

Primary care clinics of Kaiser Sacramento integrated medical and substance abuse treatment. The patients selected for the integration program were a group of adults in an outpatient chemical dependency recovery program. The integrated care delivery resulted in reduced total medical PMPM costs of over 50% for patients with a substance-abuse-related medical condition. Integrated care patients also had decreases in hospitalization rates, inpatient days, and emergency room use.¹³

The Harris County Community Behavioral Health Program was established as an integrated behavioral care program for low-income uninsured residents in Houston. This program employed behavioral health staff in community health centers, allowing for on-site care. Some of the services included standard evaluation and treatment of scheduled patients, walk-in services for patients in crisis, and on-site consultations for primary care physicians to help them provide behavioral healthcare. Initial evaluation of the program, through questionnaires to both primary care physicians and behavioral health specialists, showed an increase in accessibility and improved quality of care. Patient satisfaction increased, and improvements in mental health of treated patients were measured with the Behavior and Symptom Identification Scale (BASIS-24), which is a comprehensive assessment of mental health functioning, measured by patient-reported symptoms. The annual total cost of these improvements was \$268 per patient.¹⁴ No savings were analyzed.

Washtenaw County Integrated Health Care Project is an example of a state university, Medicaid managed healthcare plan, and county partnership to provide integrated behavioral health and primary care to Medicaid patients by offering a single point of entry into the behavioral healthcare system.¹⁵ The project also offered individual case management services and coordinated mental health and medical care. The organizational partners shared key functional activities, such as planning, information systems, and coordinated clinical and administrative services. They also shared financial resources and risk, which necessitated the creation of a new legal entity—the Washtenaw Community Health Organization (WCHO). WCHO established a risk pool of \$2.6 million, which was intended to be funded by cost savings from integration. The project was able to realize cost savings and improved care for needy patients by reducing expensive but preventable services.¹⁶ It is unclear whether it met its \$2.6 million savings goal.

A collaborative care model was made available to veterans with bipolar disorder at 11 Department of Veterans Affairs (VA) hospitals. The model, generally used for other chronic diseases, included a *teambased intervention* with patient psycho-education to improve self-management skills, simplified clinical practice guidelines, and a nurse care coordinator to work with a supervising psychiatrist to improve continuity of care. This model was applied to bipolar disorder treatments and evaluated over a three-year period. The model produced a reduction of 6.2 weeks in affective episodes over three years, as well

as a reduction of 4.5 weeks in manic episodes. Manic and depressive symptoms remained the same, but improvement was seen in mental quality of life, treatment satisfaction, and social functioning (i.e., work, parental, extended-family roles). Most benefits were seen in years 2 and 3. Comparing three years of medical costs (including inpatient, outpatient, and psychiatric) for both the intervention and control groups resulted in the conclusion that the program was cost-neutral.¹⁷

Another collaborative care intervention for panic disorder patients, which included three primary care clinics near Seattle, Washington, integrated a psychiatrist into primary care. It was associated with significantly more anxiety-free days, but no reduction in total outpatient costs. On average, the incremental mental health costs of the intervention (cost of antidepressants and outpatient mental health visits) was \$205, while total outpatient costs were \$325 less for the group. However, once a margin for error was taken into account, these extra costs versus savings quickly balance each other out. The patients participating in the intervention had higher costs for both psychiatric medication and outpatient mental health costs; in turn, the control group experienced slightly higher non-mental health and total outpatient costs. This intervention included an initial psychiatric visit during which a prescription for a specific antidepressant was given. Patients were also mailed an educational videotape and pamphlet about panic disorder after their initial diagnoses. Follow-up psychiatric telephone calls and visits were offered. In addition, physicians participated in a one-hour training session on the recognition and treatment of panic disorder.¹⁸

A comparison between a collaborative care intervention program and consult-liaison care for depression in a VA primary care clinic showed that collaborative care resulted in 14.6 more depression-free days over a nine-month period, at a mean additional cost of \$237 for mental healthcare and \$519 for total outpatient costs over those same nine months. In order for the program to achieve cost effectiveness, each additional depression-free day must be valued at \$24 to cover depression treatment costs, or \$33 to cover total outpatient costs.¹⁹

A cost-effectiveness study performed by the nonprofit organization Partners in Care of two quality improvement interventions to treat depression (drug therapy and psychotherapy) showed that depression-free periods increased by 25 days (for drug therapy) and by 47 days (for psychotherapy) compared to usual care over a two-year period. The *usual care* clinics were provided with depression practice guidelines by mail, while the intervention sites provided training to local practice teams so that they could provide appropriate education, auditing, feedback, and supervision to their staffs in regard to handling patients with depression. Additionally, educational videotapes and pamphlets, patient tracking forms, and reminder cards were provided to the teams for distribution. Nurses in the psychotherapy interventions were also trained to support medication adherence through telephone calls or visits. Therapists in the therapy interventions were trained to provide individual and group cognitive behavioral therapy, which was available at the primary-care copayment rate. Employment periods increased by 17.9 days (drug therapy) and by 20.9 days (psychotherapy) over 24 months. Also, the average healthcare costs increased by \$419 (for drug therapy) and by \$485 (for psychotherapy).²⁰

Based on the research results described above, most studies generally found an improvement in mental health of patients in integrated programs (when compared to the status quo care delivery methods). However, only a few found their integration efforts to be cost effective. Cost effectiveness was primarily studied by comparing cost of behavioral integration efforts with cost reductions that were due to improved behavioral health of the patients. With the exception of a couple of studies, there was little research comparing overall healthcare expenditures when care is integrated versus *typical* non-integrated care.

As such, the evidence for medical cost offsets that can be achieved through effective management of behavioral conditions remains elusive and in need of additional study. It should be noted, however, that in the case when total healthcare costs were compared, up to a 50% decrease in healthcare costs was observed. Lastly, most study periods were only six to 12 months in duration. Longer-term results of integration have not been adequately researched, an important factor to consider given the chronic nature of certain medical conditions and behavioral disorders.

Bending the Medicaid healthcare cost curve through financially sustainable medical-behavioral integration Stephen P. Melek

THE NEED FOR INTEGRATED CARE SUSTAINABILITY

Integrated medical-behavioral healthcare (IMBH) will require changes to financial payment models. Some of the new collaborative care services that work well (and may be essential) in integrated programs are currently not funded by commercial, Medicare, or Medicaid payors. While innovators that receive grants from various sources to fund their integration activities (such as the Healthcare Innovation Challenge from the Center for Medicare and Medicaid Innovations) can fund their IMBH pilots and initiatives, a sustainable financial payment model without grant funds is really needed to ensure long-term financial sustainability of these programs. This likely would involve policy changes and provider payment reforms. Some of the current challenges to such IMBH sustainability include:

- Same-day billing restrictions
- Inability to bill for health and behavioral codes
- Inability to bill for screening codes
- Inability to bill Healthcare Common Procedure Coding System (HCPCS) codes correctly
 - Inability to establish cost effectiveness
 - Training issues/need for technical assistance
 - Government/regulatory concerns
 - Licensing issues
 - Scope of practice concerns
 - Sharing of data between providers

Changes to the current fee-for-service system that can contribute to financially sustainable IMBH systems of care may include:

- Enhanced primary care capitation payments to include care management services
- Collaborative care capitation payments to include medical and behavioral services delivered in primary care/integrated care settings
- Fee-for-service payments for telephonic psychiatric consults to primary care physicians
- · Fee-for-service payments for screening services for mental health and substance abuse disorders
- Fee-for-service payments of integrated care office visits including both medical and behavioral healthcare components
- Global payment fees for various combined facility and professional fees
- Fee-for service payments for new provider types and new service codes
- Pay-for-performance components that reward clinical improvement and withholds for inappropriate healthcare
- Risk-adjusted capitation payments
- Shared savings or shared risk approaches between payors and providers, reflecting medical cost
 offsets obtained through effective collaborative care

Regardless of the changes that are made to payment models and systems, there is a tremendous need to collect data and measure and analyze outcomes to identify what works in different IMBH program designs and what does not. Payment system changes should align incentives so that we achieve the IHI Triple Aim goals of (1) improving the experience of healthcare, (2) improving the health of populations, and (3) reducing per capita costs of healthcare.

INNOVATIVE PILOTS UNDER WAY

Integrated medical-behavioral pilots are under way in various parts of the United States. In Colorado specifically, through funds from the Colorado Health Foundation, the Advancing Care Together (ACT) program includes funding for 11 new collaborative care initiatives. They vary in their designs and areas of focus, and include the following:

- 1. The development of an integrated patient health profile, which will be used clinic-wide by all primary care and behavioral health staff involved in the provision of healthcare. The profile will serve as a guide for decisions regarding care coordination and healthcare interventions. This has historically been a community mental health center.
- 2. The development and implementation of a targeted and annual cognitive and psychological screening process in an integrated primary care setting, targeting seniors accessing services at a community health center. The screening results will be incorporated into the patient care plans.
- 3. The development of a population screening initiative for needs related to behavioral health, mental health, and substance abuse, connecting the patients needing services with their preferred modalities of treatment. The population includes all English- and Spanish-speaking patients aged 18 and over visiting the community health center for a primary care visit.
- 4. A pilot program to promote systems integration and an increase in access to integrated mental health, substance abuse, and primary care services-Healthcare Homes Without Walls. The target population is patients served by three community mental health centers who have a substance abuse diagnosis and lack a primary care provider.
- 5. A pilot program to better integrate behavioral medicine specialists in primary care medical practices for patients who are frequent visitors to the medical office, who have at least one chronic medical condition, and who have a suspected or known mental health condition.
- 6. A project to improve chronic patients' abilities to self-manage their diseases with healthy lifestyles through the identification of mental illness and the separation of patients into rapid intervention plus/ minus medication to help the intervention toward lifestyle changes. All adults with chronic medical conditions will be targeted at the family medicine practice.
- Automation of the depression Patient Health Questionnaire (PHQ-9), Substance/Alcohol Abuse, Generalized Anxiety Disorder seven-item scale (GAD7), and Social Isolation assessment tools and, through algorithms, more efficient directing of patient flow. The target population at this family medicine practice is 18- to 75-year-olds with chronic medical diseases such as diabetes and cardiovascular disease.
- 8. The expansion of patient-centered medical homes to include behavioral healthcare services through the increase and facilitation of physician and behavioral health clinician working relationships, and the identification of patients who would benefit from such integrated care. The target population includes the entire patient population of two primary care groups.
- 9. The development and implementation of a cost-efficient training model to decrease symptoms and increase functionality of obstetrics (OB) patients with a positive behavioral health screen or as identified as high-risk by the primary care physician. Full psychosocial screens will be administered to all OB patients.
- 10. The expansion of existing mental health/primary care integration at community health centers to include a substance abuse counselor, and the development and implementation of a hybrid tool of the Screening, Brief Intervention, Referral to Treatment (SBIRT), Alcohol, Smoking and Substance Involvement Screening Test (ASSIST), and PHQ-9 tools for screening for mental health and substance abuse problems.

Bending the Medicaid healthcare cost curve through financially sustainable medical-behavioral integration Stephen P. Melek

11. The incorporation of additional mental healthcare in a medical clinic through the addition of a behavioral health provider, including coaching for chronic disease patients, behavioral modification, and improved vetted screening scores. The focus is on acute interventions and solution-based dialogue with patients and providers on the healthcare team.

The design and execution of outcome evaluations that include the objectives of the IHI Triple Aim for each of these and other pilots and innovations are very important to prove which pilots and innovations are successful and which are not. The sustainability of the innovations is also very important. When grant funding ends, there must be a clear pathway to ongoing sustainability, either through cost offsets, payment reforms, policy changes, or other options.

The goal of these innovations and other similar efforts around the country is to prove that an integrated or collaborative care model is better than the current prevalent "usual care" model of providing physical and behavioral healthcare services without coordination among different providers. There is a huge opportunity given the high prevalence of comorbid chronic medical and behavioral conditions in the Medicaid population. State Medicaid programs that are successful with integrated care initiatives will likely change their healthcare trends and improve the health of their covered populations.

We estimate the increased annual healthcare costs for patients with chronic medical conditions and comorbid behavioral health disorders to range from \$50 million to \$150 million for every 100,000 covered Medicaid lives, based on prevalence models we developed from national healthcare claim data. Current estimates from the integrated program innovations for the targeted potential of reduced healthcare costs resulting from an effective integrated medical-behavioral program are 10% of this exacerbated cost level, on average, for these comorbid lives. These savings targets are based on the unpublished yet achieved savings rates of similar IMBH programs for commercial health insurers. With the current Medicaid-covered population close to 60 million lives,²¹ this translates to potential healthcare cost reductions of \$3 billion to \$9 billion annually across the United States. This is a significant opportunity for state Medicaid programs to bend their cost curves in a time of budget challenges and program expansion.

Medicaid members with comorbid chronic medical conditions and behavioral disorders may have higher medical costs that are due to the severity of their chronic medical conditions. It may not be possible to reduce healthcare costs for segments of this comorbid population. The hope is that there are other segments that would benefit from such integrated medical-behavioral healthcare, resulting in improved clinical outcomes and reduced healthcare costs. That is the goal of the innovations described above.

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QUALIFICATIONS

Guidelines issued by the American Academy of Actuaries require actuaries to include their professional qualifications in all actuarial communications. The author of this report, Stephen P. Melek, FSA, is a member of the American Academy of Actuaries, and meets the qualification standards for performing the analyses in this report.

Bending the Medicaid healthcare cost curve through financially sustainable medical-behavioral integration Stephen P. Melek

ENDNOTES

- ¹ Meerschaert, J. D., Doucet, M. (2012). PPACA Health Insurer Fee Estimated Impact on State Medicaid Programs and Medicaid Health Plans. Milliman Publications. Retrieved on February 14, 2012. From http://publications.milliman.com/publications/healthpublished/pdfs/ppaca-health-insurer-fee.pdf.
- ² McNichol, E., Oliff, P. O., & Johnson, N. (2012). States Continue to Feel Recession's Impact. Center on Budget and Policy Priorities. Retrieved June 18, 2012, from http://www.cbpp.org/cms/index.cfm?fa=view&id=711.
- ³ Honberg et al, (2011). State Mental Health Cuts: The Continuing Crisis. National Alliance on Mental Illness. Retrieved June 18, 2012, from http://www.nami.org/ContentManagement/ContentDisplay.cfm?ContentFileID=147763.
- ⁴ Kathol, R.G. et al. (2005). General medical and pharmacy claims expenditures in users of behavioral health services. *Journal of General Internal Medicine* 20(2), 160-167.
- ⁵ Kathol, ibid.
- ⁶ Kathol, ibid.
- ⁷ Wang, P.S., Lane, M., Olfson, M., Pincus, H.A., Wells, K.B. & Kessler, R.C. (2005). Twelve-month use of mental health services in the U.S.: Results form the National Co-morbidity Survey Replication. *Archives of General Psychiatry* 62(6): 629-640.
- ⁸ Kathol, R.G., Melek, S., Bair, B., & Sargent, S. (2008). Financing mental health and substance use disorder care within physical health: A look to the future. Psychiatric Clin N Am 31 11-25, p11-12.
- Szabo, L. (2009). Number of Americans taking antidepressants doubles. USA Today. Retrieved June 18, 2012, from http://www.usatoday.com/news/health/2009-08-03-antidepressants_N.htm.
- ¹⁰ Thomas, M.R., Waxmonsky, J.A., Gabow, P.A., McGinnis, G.F., Socherman, R., & Rost, K. (2005). Prevalence of psychiatric disorders and costs of care among adult enrollees in a Medicaid HMO. Psychiatric Services 56 (11).
- ¹¹ Levit, K.R., Kassed, C.A., Coffey, R.M., Mark, T.L., McKusick, D.R., King, E., Vandivort, R., Buck, J., Ryan, K., & Stranges, E. (2008). Projections of National Expenditures for Mental Health Services and Substance Abuse Treatment, 2004–2014. SAMHSA Publication No. SMA 08-4326. Rockville, MD: Substance Abuse and Mental Health Services Administration.
- ¹² Parks, J., MD (2012). National Council 42nd Annual Meeting, Mental Health Weekly, April 23, 2012, 2-3.
- ¹³ Parthasarathy, S., Mertens, J., Moore, C., & Weisner, C. (2003). Utilization and cost impact of integrating substance abuse treatment and primary care. *Med Care*, 41, 357-367.
- ¹⁴ Begley, C. E., Hickey, J. S., Ostermeyer, B., Teske, L. A., Vu, T., Wolf, J. et al. (2008). Integrating behavioral health and primary care: The Harris County Community Behavioral Health Program. *Psychiatr Serv*, 59, 356-358.
- ¹⁵ Grazier, K. L., Hegedus, A. M., Carli, T., Neal, D., & Reynolds, K. (2003). Integration of behavioral and physical health care for a Medicaid population through a public-public partnership. *Psychiatr Serv*, 54, 1508-1512.
- ¹⁶ Grazier et al., ibid.
- ¹⁷ Bauer, M. S., McBride, L., Williford, W. O., Glick, H., Kinosian, B., Altshuler, L. et al. (2006). Collaborative care for bipolar disorder: Part II. Impact on clinical outcome, function, and costs. *Psychiatr Serv*, 57, 937-945.
- ¹⁸ Katon, W. J., Roy-Byrne, P., Russo, J., & Cowley, D. (2002). Cost-effectiveness and cost offset of a collaborative care intervention for primary care patients with panic disorder. *Arch Gen Psychiatry*, 59, 1098-1104.
- ¹⁹ Liu, C. F., Hedrick, S. C., Chaney, E. F., Heagerty, P., Felker, B., Hasenberg, N. et al. (2003). Cost-effectiveness of collaborative care for depression in a primary care veteran population. *Psychiatr Serv*, 54, 698-704.
- ²⁰ Schoenbaum, M., Unutzer, J., Sherbourne, C., Duan, N., Rubenstein, L. V., Miranda, J. et al. (2001). Cost-effectiveness of practice-initiated quality improvement for depression: Results of a randomized controlled trial. *JAMA*, 286, 1325-1330.
- ²¹ Medicaid.gov. Medicaid & CHIP Program Eligibility Information. Retrieved June 18, 2012, from http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Eligibility/Eligibility.html.



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