

Summary Report: 90-Day R&D Project

Integrating Behavioral Health and Primary Care

September–November 2013

IHI's 90-day projects represent our process for research and development. The method, which includes periods of scanning, testing, and synthesis (in the form of the 90-day report), was designed to provide a reliable and efficient way to research innovative ideas, assess their potential for advancing quality improvement, and bring them to action. IHI has created a small team with dedicated resources to support this process, and the team begins at least five new projects every 90 days. Projects are selected by IHI's senior leaders, based on IHI's strategic plan and customer needs and suggestions. Learn more about [IHI's 90-Day R&D Process](#) on our website.

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I. IHI Research and Development Team

Mara Laderman and Kedar Mate

II. Intent and Aim

This 90-day R&D project report will examine the basic principles underlying existing, exemplary integration models and integrated organizations, identify the core components required for success, and assess how (or if) they are operationalized by each of the different models. The aim is to understand the core principles underlying successful integration of behavioral health services into primary care.

III. Background

Comorbid medical and behavioral health issues are a significant burden, driving poor outcomes and high costs. Kathol found that 30 percent of diabetics, 38 percent of patients with chronic lung disease, and 40 percent of patients with heart failure had a co-occurring behavioral condition. These comorbidities increased the annual cost of caring for these patients considerably — by 124 percent, 186 percent, and 76 percent respectively.¹ We have seen similar data in the literature and in unpublished accounts from payers, showing increased costs of caring for patients with similar co-morbidities who have behavioral health issues ranging from 150 to 300 percent.²

Organizations are increasingly realizing that achieving the Triple Aim for populations in a geographic area without an integrated behavioral health strategy is virtually impossible. Organizations looking to reduce their costs will find that behavioral health issues are frequently comorbid with other chronic conditions among their high-cost (and high-risk/high-need) patients.

IV. Benefits of Integration

The benefits of integration are well documented. In short, integration is associated with better physical and behavioral health outcomes, reduced costs,³ and better patient experience of care. There is a strong association between having a chronic illness and comorbid major depression and increased health care utilization; increased functional disability; and work absence (lost productivity), compared to having a chronic illness without comorbid depression.⁴ Several studies have examined the effects of treating comorbid chronic illness and depression. Patients were better able to manage their diabetes when their comorbid depression was treated, showing increased exercise, lower depression severity, and improvements in overall functioning.⁵ Depressed and diabetic individuals who usually have high costs had lower total health care costs over two years (compared to usual care) when their depression was treated in addition to their diabetes.⁶

A large study examining the effect of the IMPACT⁷ program for patients with comorbid diabetes and depression found that patients in the intervention group experienced 115 more depression-free days over 24 months when compared to patients in the usual care group. While total outpatient costs were \$25 higher, the analysis also showed a net benefit of \$1,129.⁸ A different study of IMPACT found lower mean total health care costs for patients in the intervention group compared to those receiving usual care (\$29,422 and \$32,785, respectively) over four years.⁹

Intermountain Healthcare in Utah has a program that integrates behavioral health professionals in the primary care setting while also folding in community resources, care management, and patient/family engagement. In the first 12 months after the initial diagnosis of depression, patients enrolled in the program were 54 percent less likely to have an ER visit, and cost the health plan \$667 less than patients in

the control group; and one-half of the enrollees were in remission as measured by their PHQ-9 (depression screening tool) scores.¹⁰

Group Health Cooperative of Puget Sound's Pathways model of coordinating care for patients with diabetes and comorbid major depression reduced five-year mean total medical costs by approximately \$3,900 compared to usual primary care.¹¹ In our interviews, a conversation with Dr. Parinda Khatri from the well-known Cherokee Health System in Tennessee was illustrative. She noted that a single visit to a behavioral health consultant reduced the utilization of primary care medical visits by 27 percent for the next two years.

While many organizations have been aware of this, the clinical, operational, and financial challenges of addressing treatment gaps in behavioral health care and integrating behavioral health care into primary care have prevented many from addressing it. Fortunately for integration advocates, those incentives are rapidly changing. As organizations form accountable care organizations (ACOs), take capitated funds, and look at building a practice environment that is desirable to consumers, one-stop shopping for physical and behavioral health may attract patients. Medicaid expansion means an influx of millions of newly insured patients with a disproportionate burden of comorbid physical and behavioral health conditions. Managing the two separately with limited behavioral health professionals is not a viable strategy for state officials and institutions, given the well-documented shortage of both primary care and behavioral health providers and concomitant influx of newly insured patients seeking care.^{12,13}

Given this, organizations are increasingly seeing the need to integrate behavioral health¹⁴ into primary care and to address the low quality of behavioral health care that is provided to many patients. At this point, this realization and new focus on behavioral health integration is not confined to early adopters or innovators; professional associations and more mainstream organizations and publications have drawn attention to the need for behavioral health integration.

V. Integration Levels

There are several possible levels of integration; the desired level of integration will depend on the organization's patient population, characteristics, and goals they wish to achieve through integration. The Collaborative Family Health Care Association (CHFA) describes five different levels of integration, from minimal collaboration to a fully integrated system.¹⁵

The SAMHSA-HRSA Center for Integrated Health Solutions lays out six levels of collaboration or integration, divided into three categories: Coordinated, Co-Located, and Integrated.¹⁶ These categories, which are quite similar to the CFHA's levels, start with minimal collaboration and build to full collaboration in a transformed or merged integrated practice. It is important to note that organizations do not need to move through each level to achieve their goal and that the most integrated level may not be appropriate or feasible for all organizations.

Finally, the Four Quadrant Clinical Integration Model helps organizations decide the right type of setting (primary care or specialty mental health) for patients with different physical and behavioral health and risk and complexity.¹⁷

VI. AHRQ Lexicon for Integration

Another approach is to use the AHRQ Lexicon for Integration,¹⁸ which asks organizations to consider the extent to which key elements of integration are present or absent and to help identify the appropriate integration approach. For example, organizations can ask themselves, what is the likelihood that our

primary care providers will identify behavioral health comorbidities? In a co-located model, some behavioral health comorbidities may be identified; in a fully integrated system, all comorbidities should be identified.¹⁹

VII. Integration Models and Core Components

Numerous existing integration models have been implemented in a variety of settings, including integrated delivery systems, large multi-group practices, ACOs, the safety net setting (Federally Qualified Health Centers partnering with Community Mental Health Centers), by employers in employee clinics, and at the state level. For the purposes of this 90-day R&D project, we surveyed the following models:

- Intermountain Healthcare’s mental health integration model
- IMPACT program (University of Washington AIMS Center)
- TEAMcare
- Behavioral health consultant model: Cherokee Health Systems, St. Charles Health System, and Southcentral Foundation
- Colorado’s Advancing Care Together
- California’s Integrated Behavioral Health Project
- US Department of Veterans Affairs mental health integration model

After reviewing the literature and conducting expert interviews, we were struck by the remarkable similarities in the models. A majority of models follow the basic principles of the MacColl Institute’s Chronic Care Model, applying concepts of collaborative care for chronic disease specifically to behavioral health issues in the primary care setting. We compiled these principles from expert interviews, several papers, and models,^{20,21,22,23,24} and arrived at the following principles:

1. Self-care support
 - Patient and family education about illness and treatments
 - Self-monitoring, self-management, and adherence support
 - Motivational therapies and skill-building
2. Care management and care team responsible for care
 - Use of non-physician staff in care team — primary care physician (PCP), care manager (nurse), consulting behavioral health provider (psychiatrist, psychologist, social worker or other masters-level clinician)
 - PCP works with care manager and consulting behavioral health provider to develop and implement a treatment plan; changes made if no improvement (see stepped care)
3. “Treatment to target”
 - Systematic tracking of disease severity; adjustments to treatment made as needed

4. Stepped care

- Providers should offer care that causes minimal disruption to the person's life; is the least extensive, intensive, and expensive care needed to yield positive outcomes; and is the least expensive in terms of staff training to provide effective care
- Intensity of care is stepped up if the patient's functioning does not improve during the usual course of care and is customized according to the patient's response
- Three levels (third level is highly trained behavioral health providers); if no improvement, then referred to specialty mental health care

5. Systematic caseload review, consultation, and referral

6. Patient tracking and registry functions for outcomes measurement

- Use of a registry to track clinical outcomes and key process steps
- Regular measurement of outcomes
- Facilitates shared management across care team members
- Referral tracking

7. Adoption of evidence-based interventions/guidelines

8. Engagement of social service agencies (e.g., housing, employment, justice)

VIII. Interviews and Themes

Interviews conducted with:

- Gary Belkin, NYC Health and Hospitals Corporation / NYU
- Benjamin Miller, University of Colorado Denver
- Mary Rainwater, Integration Consultant formerly with Integrated Behavioral Health Project (CA)
- Laurie Alexander, Integration Consultant formerly with AIMS Center, University of Washington
- Alexander Blount, UMass Medical Center, Center for Integrated Care
- Parinda Khatri, Cherokee Health Systems
- Jurgen Unützer, IMPACT / AIMS Center, University of Washington
- Brenda Reiss-Brennan, Intermountain Healthcare
- Robin Henderson, St. Charles Health System
- Russell Phillips, Harvard Medical School Center for Primary Care
- Jen White, Big White Wall

- Ileana Welte, Big White Wall
- Brady Cole, US Department of Veterans Affairs

The interviews focused on several key themes:

1. The need for assistance as the Affordable Care Act (ACA) takes hold and organizations and states go through different types of payment reform.
2. The barriers to financing integration and the need for alternative payment models, and business plans for organizations in states without these incentives that keep getting pushed aside as there aren't good answers yet. There are different financial plans based on the type of payer mix (see barriers section below for more details).
3. The components of collaborative care are consistent across many different integration models (see principles above). Organizations need a menu of options from which to choose what works for them.
4. Organizations need help operationalizing the core components of integration into clinical workflows. While many experts we spoke with have the content expertise, they find that in the thousands of practices they've interacted with, in the first year after training and beginning implementation: 10 percent make incredible progress on their own; 10 percent don't do anything with the knowledge; and 80 percent try to make changes, but need help from seasoned change management, improvement-focused experts and organizations. There is the need to strike a balance between prescriptive instructions and giving organizations the choice and flexibility to adapt to their organization.
5. Workforce development issues — having the right staff at all levels
6. Existing models with good results have not spread as much as one might expect based on the evidence base. Reasons for this may include a lack of a business case for many types of organizations and those in states without incentives; initial investment barriers that will need to be overcome; staff resistance to usual work; reimbursement issues; cultural differences between behavioral health and primary care; lack of integration with the community and focus on disease rather than whole-person health; or adaptations to the intervention have limited the ability to assess effectiveness of model in different settings.

IX. Barrier Analysis

There are a number of barriers to integration, falling into three domains: clinical, operational, and financial. The financial barriers are the most difficult to overcome, but also are arguably the most integral to success, as integration will not be sustainable if there is no way to pay for the services.²⁵ Organizations operating in a fee-for-service (FFS) environment will have a very difficult time being reimbursed for the provision of integrated services. The main strategies that organizations in these environments use to recover costs of integration include figuring out how to maximize billings to cover as much of the integrated care as possible and negotiating case rates with payers. Even with these strategies, our expert respondents noted that full cost recovery is very difficult in pure FFS environments, and often organizations are left making an investment in order to achieve Triple Aim outcomes.

Another strategy is to slowly change the payer mix and include some forms of global or capitated payment, such as forming an ACO or a patient-centered medical home (PCMH). In these situations, cost recovery and even margin production is possible as the integrated services are paid for and utilization of services (such as emergency department visits) decreases. While integration in these models can lead to cost savings, one problem is that the savings often accrue to different parts of the health care system (payers or hospitals) than where the expenditure is needed (primary care). See Appendix B for descriptions of how three integrated organizations and states made the business case for integration.

Additionally, the initial investments needed to begin integrating services can be substantial barriers to getting started. The up-front costs of redesigning the care team, hiring and retraining staff, and addressing other key clinical and operational elements can be significant and are not generally reimbursable through payers. This means that the organizational leadership must be committed to practice transformation to provide integrated care, even if it means operating at a loss until the integrated clinic is fully operational.

Clinical and operational barriers include how to operationalize the core components of integration into clinical workflows. Communication is a key issue — separate records, suppressed behavioral health notes, and legal issues in sharing protected health information must be dealt with. Additionally, issues of staff engagement, divided leadership, and merging two distinctly different cultures (behavioral health and primary care) can all impede success. Other operational issues include obtaining the necessary supplies and materials, and modifying the electronic health record to accommodate behavioral health input.

Based on this barrier analysis, we propose the solutions described in Table 1 when working with organizations to implement integrated behavioral health care.

Table 1. Barriers and Proposed Solutions for Implementing Integrated Behavioral Health Care

| Barrier | Proposed Solution |
|---|---|
| FFS environment | Develop creative workarounds as necessary — FFS systems will have a very difficult time being reimbursed for integration. Consider forming ACOs, integrated delivery systems, and PCMHs. |
| Separate funding streams and non-aligned incentives | Identify federal- and state-level incentives (e.g., ACA provisions, Medicaid waivers). Form “regional alliances” with like-minded organizations to increase bargaining power with payers to negotiate global payments and better rates for provision of integrated care. |
| Savings accrue to system, not organization that made initial investment | Create systems that understand where savings occur and “share the savings” throughout the system, if possible. |
| Communication between providers | Modify the electronic health record to accommodate behavioral health input. The US Department of Veterans Affairs has an integrated medical record that could serve as a model for others. |
| Cultural clashes between behavioral health and primary care providers | Provide trainings for both types of staff to reinforce the benefits of integration for patient care. Let staff members who want to leave go elsewhere, and hire staff who are more open to operating in a new, integrated environment. Accept that high turnover will be an issue. |
| Divided leadership and low staff engagement | Leadership need to present a shared vision of integrated care to staff. Redesign work so that integrated care is not added to usual work. |

X. Proposed Approach for Implementing Integrated Care

The primary aim of behavioral and physical health integration is to generate better patient-reported outcomes for those suffering from comorbid behavioral and physical ailments. Too often in our research, we found that the aim was integration itself, rather than a patient-focused or patient-reported outcome measure. Indeed, AHRQ's recent framework on measuring behavioral health integration focuses heavily on structure and process measures depending on how "integrated" the practice environments are, with limited measures of patient-reported outcomes of importance.²⁶

Our first design principle is to design better care for patients living with multiple physical and behavioral comorbidities. This may or may not lead to starting with integration at the clinic visit as a specific part of the production system design; rather, organizations may implement components of service delivery integration that are applicable to their patient population and relevant and tailored to their organization's characteristics.

The three steps described below form the outline of how an organization might approach implementing integrated care.

Step One: Assess Readiness for Integration²⁷

Part One: Understand Your Patients' Needs

Organizations will want to assess the health (medical and behavioral) and social needs of their patient population. There are several ways to do this:

- Implement screening of all patients with a tool such as the PHQ-9
- Analyze data from electronic health records for percentage of patients with current behavioral health diagnosis
- Identify types of diagnoses (depression/anxiety vs. more severe behavioral illness)
- Interview providers

Part Two: Understand Your Clinic's Capabilities

The type of organization — single-person provider, multispecialty large group practice, PCMH, ACO — will affect the collaborative care components organizations select. For example, a single-person provider likely would select to expand their own capacity to screen and treat behavioral health conditions rather than hire additional care team members. Conversely, an ACO will want to examine its existing primary care and behavioral health staff, support staff (medical assistants, care managers, nurses), and infrastructure such as data collection and analysis capability; information sharing technology; and supplies and materials.

Part Three: Understand Your Policy and Financial Environment

With the Affordable Care Act and the growth of population health objectives and the Triple Aim, there have been a number of important changes to the financial environment that may incent or disincent integration. For example, Massachusetts' recent Mass Health Primary Care Payment Reform Initiative (PCPRI)²⁸ legislation supported a potential financial top-up for behavioral health integration to primary care. In the weeks that followed the announcement of this program, Sandy Blount from UMass Medical

Center reported receiving many calls from large primary care practices for training and skills development. As the legislation met implementation resistance, those calls and interests diminished.

To assess state readiness for integration, we examined state health policies towards behavioral health and identified states that are more “favorable” financially for integration (see Appendix A more details of the analysis). The states with favorable environments based on this analysis are Arizona, Arkansas, California, Colorado, Illinois, Kentucky, Maryland, Michigan, Nevada, New Jersey, New Mexico, Ohio, Oregon, and Vermont.

Step Two: Select Collaborative Care Components

Organizations select components from the collaborative care principles that fit with their patient needs and organizational characteristics. There are so many strong models that IHI does not advocate for one particular model over another. Rather, organizations should implement the principles that are consistent across models and learn from these successful models to inform implementation efforts.

Step Three: Operationalize Components into Clinical Workflows

Organizations apply continuous quality improvement methods to operationalize the core components, testing out small changes (for example, using the Model for Improvement and Plan-Do-Study-Act cycles) on the road to full implementation.

XI. Next Steps and Open Questions for Potential Future Study

Integration is now the standard of care, and while multiple systems are implementing integration with varying degrees of efficiency and progress, we can foresee a time in the not-too-distant future in which “non-integrated” primary care practices will be rare or even extinct. So where is the frontier now? Where are innovators in the field focused at this point in time?

IHI believes there are currently four areas of primary innovation: 1) integrating behavioral health into high-risk specialty clinics; 2) scaling integration to communities, regions, and states; 3) understanding the costs of integration and what financial models and alternative payment models will support integration; and 4) moving beyond the office visit as the only point of intervention for patients with comorbid behavioral health and physical health issues.

Integrating Behavioral Health into High-Risk Specialty Clinics

The first is deployment of integration into high-risk specialty clinics which often serve as the “health homes” for patients living with chronic pain, spinal injuries, sleep disorders, malignancy, heart failure, and other conditions. In such settings, while the principles of integration are not dissimilar to those employed in primary care, care can be more episodic which can challenge consistent behavioral health service delivery.

Scaling Integration to Communities, Regions, and States

The second area is focused on scaling where design principles of integration are now affecting not just single practices or multiple practices in a region, but entire communities, regions, and even states. Solving structural challenges of measurement, interoperability of records, and behavioral health resource availability at this order of scale will be areas in which innovation is needed. Current state-level work in Colorado and Washington State is tackling this at great scale.

Understanding the Costs of Integration and Financial and Payment Models

Third, we believe that much work will be needed to understand how much integration costs and what financial models and alternative payment methods will allow integration efforts to thrive.

Moving Beyond Office Visits to Design More Comprehensive Care for People with Behavioral Health Needs

Fourth, while the majority of integration work has focused on the clinic microsystem environment, we are concerned that this may overemphasize the clinic environment itself and not the functions of the primary care practice, which include an emphasis on providing continuous supportive care beyond the clinic encounter, navigating community support systems, and engaging family and relationship support systems.

More comprehensive primary care systems are designed to support patients in the many thousands of hours patients spend outside of the clinic visit living with behavioral illness and comorbid medical disease. Much thinking is being done right now about the so-called “5,000+ waking hours”²⁹ that patients live with their chronic conditions outside of their clinic visits and face-to-face time with medical providers. Our strong belief is that this is the frontier in behavioral health integration in primary care, where wise leaders will focus their attention to maximize health gains and reduce costs even more efficiently.

To guide innovation in this area, we might turn to some of the work that is beginning on chronic disease care outside of the clinic visit.^{30,31} This thinking led us to a conceptual model that identified three key components: 1) frequency of the points of interaction, 2) where the service is provided, and 3) who it is provided by. We identify five layers of potential service using these three dimensions (see Table 2); all are needed for a complete care system for patients living with behavioral and physical chronic conditions.

Table 2. Layers of Service in Full-Spectrum Integrated Care

| Layer of Service | Frequency of Interaction | Where Service Is Provided | Who Provides Service | |
|-------------------------------------|---|---|--|---|
| 1 – Acute Care | Continuous (during hospitalization) | Hospital | Physician | Cost  |
| 2 – Clinic Care | Quarterly | Clinic | Primary care physician; behavioral health provider; could include group visits | |
| 3 – Community Care | Weekly; more than once a week initially | Home, workplace, community organization | Community health workers; mobile clinics; could include group visits | |
| 4 – Family Engagement in Care | Daily | Home | Family members | |
| 5 – Self-Care | Daily | Home | Patients | |
| Policy and Financial Considerations | | | | |

The first layer of service, Acute Care, applies to patients during a hospitalization. Many patients who are admitted to the hospital are not evaluated for behavioral health issues, as their medical needs supersede other issues. However, the need for intervention remains. There are also opportunities for behavioral

health interventions to affect both behavioral and physical health outcomes; for example, St. Charles Health System implemented an intervention in which a behavioral health consultant routinely rounds in the NICU to work with parents of premature infants to teach what to expect, how to stimulate neurodevelopment, and how to care for their children. The intervention reduced NICU utilization (earlier discharge), with better outcomes and retention in postnatal care.

The second layer of service, Clinic Care, is the focus of most integration models. Group visits have been employed for substance abuse disorders and more recently for chronic conditions.³² Integrators here might purposely build groups of, for example, individuals with depression and diabetes who meet together to discuss coping and living strategies.

The third layer of service is Community Care. The Community Health Worker (CHW) Visit applies an intervention that has long been used in resource-poor environments for supervision of therapy for tuberculosis and HIV. These visits are being applied by novel programs like PACT and Commonwealth Care Alliance in Boston to target high-risk, high-cost patients to help with their management. Behavioral health issues are often the hardest to solve in these programs, but CHWs with training in behavioral health could assist with comorbid disease.

The fourth layer of service is Family Engagement in Care, which has been used for some time to help with the management of infectious diseases and chronic conditions. Training family members to also help with the management of co-morbid behavioral illness would provide a near continuous asset to the integration process.

The fifth layer of service is Self-Care, with the patient at the center of their own care. New technologies to track movement (pedometers), sleep (sensors), mood (SMS technology), weight (scales), and blood pressure (BP cuffs) in the home and wirelessly transmit data from these devices to providers are allowing patients to see their own data and manage their conditions themselves. These solutions may not be for everyone, but they can often passively collect substantial amounts of data and help patients and providers better characterize contexts that affect both their physical and behavioral ailments.

Policy and financial considerations underlie each layer of full-spectrum integration; innovations in payment mechanisms to fund different components such as community health workers will be needed for these services to spread more widely. We have not encountered, to date, anyone in the field who is looking at this full spectrum of “complete care integration” for behavioral health and primary care. During this R&D project, we discovered a technology-enabled platform in the UK called the “Big White Wall”³³ (which entails an anonymous behavioral health consult virtually, shared information on a message board, a “guided group,” connection to local care providers, etc.) that leverages technology to provide a number of these services. Some of our key informants are considering the “Big White Wall” as an add-on service to their existing efforts in integration.

Other related areas in need of further study include the following:

- Development of useful, core quality measures for integration since the existing CMS measures are not particularly useful for many, and a majority of measures relate to the process of integration rather than to patient outcomes. These measures can also be tied to population health measures and the Triple Aim measurement framework.
- Knowledge sharing across states that have been implementing integration
- Integrating primary care into behavioral health settings for patients with more severe behavioral illness

- Of note, many of our informants felt that the frontier for integration would be in integration of behavioral health into specialty areas that have a high burden of behavioral health patients (e.g., spine clinic, pain clinic, headache clinic, sleep disorders clinic, etc.)
- Building quality improvement capability for mental health providers
- The need for alternative payment models

XII. Conclusions and Recommendations

While integrated clinics are not yet the standard of care, we can foresee a time when non-integrated clinics are rare. While many organizations are still in the very early stages of implementation, there are four primary areas for innovation: 1) integrating behavioral health into high-risk specialty clinics; 2) scaling integration to communities, regions, and states; 3) understanding the costs of integration and what financial models and alternative payment models will support integration; and 4) moving beyond the office visit as the only point of intervention for patients with comorbid behavioral health and physical health issues.

XIII. Appendices

Appendix A: State Financial Favorability for Integration

Appendix B: Brief Business Case “Case Studies”

Appendix A: State Financial Favorability for Integration

There is significant variability between states in the financial environment for integration. Some of these differences are due to different Medicaid waivers to manage and coordinate care for different populations; whether the state received a Medicaid 2703 Health Home waiver to coordinate care for a chronically ill population;³⁴ whether the state has outpatient behavioral health carved out of Medicaid managed care;³⁵ the number of ACOs in the state;³⁶ whether the state plans to expand Medicaid³⁷ and expected growth in the Medicaid population³⁸ (which is disproportionately affected by behavioral health issues); and the presence of prominent integrated systems/organizations within the state. For this analysis we estimate that approximately 15 percent of patients have behavioral-health-related claims based on the fact that the National Institute of Mental Health (NIMH) estimates that 26.2 percent of individuals in the US have a mental illness (and even more in the Medicaid population) and that so many individuals with behavioral health issues are under- or un-treated.³⁹ We also looked at whether the state has any efforts underway to support global payments and/or shared savings arrangements.⁴⁰

Given this information, we identified states in which the policy environment is right for integration: Arizona, Arkansas, California, Colorado, Illinois, Kentucky, Maryland, Michigan, Nevada, New Jersey, New Mexico, Ohio, Oregon, and Vermont. Please note that this analysis was completed to begin to understand which states may have a favorable financial environment for integration and is not comprehensive.

| State | Expanding Medicaid? | Est. # of Patients Added to Medicaid in 2014 | Est. # of Patients with Behavioral Health Issues Added to Medicaid | Managed Medicaid Behavioral Health Carve Out (as of 2010)? | 2703 Health Home Waiver? | Est. # of ACOs | Push for Global Payments/ Shared Savings? |
|---------------|---------------------|--|--|--|--------------------------|----------------|--|
| Alabama | No | | | No | Yes | 1 | |
| Alaska | No | | | No | | 2-3 | |
| Arizona | Yes | 350,000 | 52,500 | Yes | Planning grant | 4-6 | |
| Arkansas | Yes | 233,000 | 34,950 | No | Planning grant | 1 | Yes — Health Care Payment Improvement Initiative |
| California | Yes | 1.86M | 279,000 | Yes | Planning grant | 20+ | |
| Colorado | Yes | 225,000 | 33,750 | Yes | | 2-3 | |
| Connecticut | Yes | 150,000 | 22,500 | Yes | | 2-3 | |
| Delaware | Yes | 16,000 | 2,400 | yes | | 2-3 | |
| Florida | No | | | yes | | 20+ | |
| Georgia | No | | | no | | 4-6 | |
| Hawaii | Yes | 62,000 | 9,300 | yes | | 4-6 | |
| Idaho | No | | | No | Planning grant | 0 | |
| Illinois | Yes | 573,000 | 85,950 | Yes | | 4-6 | |
| Indiana | No | | | No | | 2-3 | |
| Iowa | Yes | 72,000 | 10,800 | No | Yes | 4-6 | |
| Kansas | No | | | No | | 1 | |
| Kentucky | Yes | 268,000 | 40,200 | yes | | 4-6 | |
| Louisiana | No | | | No | | 2-3 | |
| Maine | No | | | No | Yes | 2-3 | |
| Maryland | Yes | 146,000 | 21,900 | Yes | | 2-3 | Yes — Global Payment Payer System |
| Massachusetts | Yes | 16,000 | 2,400 | No | | 10-19 | Yes — Primary Care Payment Reform and Alternative Quality Contract with Blue Cross Blue Shield |
| Michigan | Yes | 345,000 | 51,750 | No | | 10-19 | |
| Minnesota | Yes | 35,000 | 5,250 | No | | 4-6 | |
| Mississippi | No | | | yes | Planning grant | 1 | |
| Missouri | No | | | Yes | Yes | 2-3 | |
| Montana | No | | | No | | 2-3 | |
| Nebraska | No | | | Yes | | 2-3 | |
| Nevada | Yes | 137,000 | 20,550 | No | Planning grant | 4-6 | |

| State | Expanding Medicaid? | Est. # of Patients Added to Medicaid in 2014 | Est. # of Patients with Behavioral Health Issues Added to Medicaid | Managed Medicaid Behavioral Health Carve Out (as of 2010)? | 2703 Health Home Waiver? | Est. # of ACOs | Push for Global Payments/ Shared Savings? |
|----------------|---------------------|--|--|--|--------------------------|----------------|---|
| New Hampshire | No | | | No | | 4-6 | |
| New Jersey | Yes | 291,000 | 43,650 | Yes | Planning grant | 7-10 | |
| New Mexico | Yes | 208,000 | 32,200 | No | Planning grant | 4-6 | |
| New York | Yes | 320,000 | 48,000 | Yes | Yes | 20+ | |
| North Carolina | No | | | No | Yes | 7-10 | |
| North Dakota | Yes | 32,000 | 4,800 | No | | 1 | |
| Ohio | Yes | 684,000 | 102,600 | yes | | 7-10 | |
| Oklahoma | No | | | No | | 2-3 | |
| Oregon | Yes | 400,000 | 60,000 | No | yes | 4-6 | Yes — Coordinated Care Organizations |
| Pennsylvania | No | | | Yes | | 7-10 | |
| Rhode Island | Yes | 40,000 | 6,000 | No | Yes | 0 | |
| South Carolina | No | | | Yes | | 2-3 | |
| South Dakota | No | | | No | | 0 | |
| Tennessee | No | | | No | | 4-6 | |
| Texas | No | | | No | | 10-19 | |
| Utah | No | | | Yes | | 1 | |
| Vermont | Yes | 3,000 | 450 | No | | 1 | Yes — Multi-payer Shared Savings |
| Virginia | No | | | Yes | | 2-3 | |
| Washington | Yes | 137,000 | 20,500 | No | Yes | 7-10 | |
| West Virginia | Yes | 116,000 | 17,400 | Yes | Planning grant | 0 | |
| Wisconsin | No | | | No | Planning grant | 7-10 | |
| Wyoming | No | | | No | | 4-6 | |
| Washington, DC | Yes | 26,000 | 3,900 | No | | 0 | |

Appendix B: Brief Business Case “Case Studies”

Cherokee Health System

Cherokee Health System provides integrated primary care and behavioral health in Eastern Tennessee. It began as a community mental health center. They partnered with a local Federally Qualified Health Center (FQHC) to begin providing integrated primary care and behavioral health services. Their model is based on the Chronic Care Model, but they have a behaviorist intervene at the primary care visit.

The dominant payers in their area were not open to negotiating a global payment for integrated care. To increase their bargaining power, Cherokee formed regional alliances with other, similar organizations to entice the payers to come to the negotiating table as they were now working with an increased number of organizations and providers. They felt this “expansion binge” was necessary to get payers to listen to them and that their size has been important to negotiating with payers. This strategy worked and Cherokee was able to negotiate global payment (capitation, per-patient per-month rates, and some case rates) for the provision of integrated primary care and behavioral health services which has sustained them thus far. Other states such as Vermont and Colorado have also created bargaining power through developing regional alliances.

There are several other financial keys to Cherokee’s success:

- Value-based contracting: Clinicians have the flexibility to engage in whatever they need to do to meet the patient’s needs.
- The behaviorists are licensed clinicians, who are able to bill for their services using mental health and other relevant codes. Because they are a community mental health center as well as an FQHC, they can negotiate different rates than individuals in an independent private practice. Part of this is because they see many uninsured patients, so there will be some cost balancing and shifting.
- They have deliberately stayed away from grants as the funding is not sustainable.
- They’ve been very careful about tracking clinical outcomes and utilization so they can show, especially to managed care organizations and Medicaid, that their patients have significantly less emergency department (ED) visits and costs, inpatient and specialty costs, than any other Medicaid provider in the state. They have this data from a major payer. They are able to show that they can help bend the cost curve for the flexibility to implement their model.
- Efficiency: They have a high volume of patients, prize access to care, and work hard. The behaviorists see 12 to 15 patients a day, which is high for a mental health practice.
- They operated at a loss initially because of the initial investment needed in equipment, training for staff, and developing a referral network.

Intermountain Healthcare

Intermountain Healthcare is an integrated delivery system in Salt Lake City, Utah. They began to implement their mental health integration (MHI) program in primary care clinics throughout their system and have almost fully scaled it up to all clinics. Intermountain was able to overlay their MHI design onto existing “tracks” for clinical integration of other chronic care illnesses (such as diabetes and asthma). They also had a care manager and a psychologist there for a few hours a week, but these staff members were not integrated — the MHI program combined the infrastructure and care process.

Intermountain made the business case by showing that the components of their MHI program produced positive system-level outcomes — reduced costs, increased efficiency, patient satisfaction, physician satisfaction, and functional improvements in the population of patients served. They used ambulatory sensitive measures to show that people in the MHI program were using the ED less frequently and that primary care managed this population much better in a lower cost setting. They also used the PCMH requirements to expand care management and give more financial incentives to physicians to manage chronic diseases.

Given these successes, MHI became a central piece of Intermountain’s business model as the delivery mechanism to achieve the Triple Aim. For organizations seeking to implement Intermountain’s model, they provide tailored consultation to help make the business case work in that specific payment environment; they have helped organizations in both integrated and fee-for-service systems.

Colorado

Colorado is implementing a program called Advancing Care Together, which aims to implement and test its Statewide Health Innovations Fostering Transformation (SHIFT) program to integrate primary care and behavioral health — the goal is for 80 percent of Coloradans to have access to integrated behavioral health care by 2019.⁴¹ Colorado is coordinating with stakeholder groups, academic institutions, and health organizations and systems to support the formation of integrated primary care practices within Colorado’s existing Medicaid Accountable Care Collaboratives, using “incentives and forms of payment tied to provider’s level of readiness for risk acceptance and the level of behavioral and clinical care integration achieved.”⁴² Colorado’s effort is an immense undertaking and among the only current statewide efforts underway to test how changes in financial incentives affect the implementation of integrated behavioral health care at such a large scale.

XIV. References

- ¹ Kathol R. Cartesian Solutions, Inc.™ July 2013 analysis based on consolidated health plan claims data.
- ² Unpublished data from Blue Cross Blue Shield of Massachusetts.
- ³ Blount A, Schoenbaum M, Kathol R, et al. The economics of behavioral health services in medical settings: A summary of the evidence. *Professional Psychology: Research and Practice*. 2007;38(3):290-297.
- ⁴ Egede LE, Ellis C. Diabetes and depression: Global perspectives. *Diabetes Research and Clinical Practice*. 2010;87:302-312.
- ⁵ Williams JW, Katon W, Lin EH, et al. The effectiveness of depression care management on diabetes-related outcomes in older patients. *Annals of Internal Medicine*. 2004;140:1015-1024.
- ⁶ Katon W, Unützer J, Fan MY, et al. Cost-effectiveness and net benefit of enhanced treatment of depression for older adults with diabetes and depression. *Diabetes Care*. 2006;29(2):265-270.
- ⁷ IMPACT program. Available at: <http://impact-uw.org/>
- ⁸ Katon W, Unützer J, Fan MY, et al. Cost-effectiveness and net benefit of enhanced treatment of depression for older adults with diabetes and depression. *Diabetes Care*. 2006;29(2):265-270.
- ⁹ Unützer J, Katon WJ, Fan MY, et al. Long-term cost effects of collaborative care for late-life depression. *Am J Manag Care*. 2008;14:95-100.
- ¹⁰ Reiss-Brennan B, Briot PC, Savitz LA, Cannon W, Staheli R. Cost and quality impact of Intermountain's mental health integration program. *J Healthc Manag*. 2010; 55(2):97-113.
- ¹¹ Katon W, Russo JE, Von Korff M, Lin EH, Ludman E, Ciechanowski PS. Long-term effects on medical costs of improving depression outcomes in patients with depression and diabetes. *Diabetes Care*. 2008;31(6):1155-1159.
- ¹² American Psychological Association. "A Critical Need for Mental (and Behavioral) Health Workforce Training." Available at: <http://www.apa.org/health-reform/pdf/mental-health-workforce.pdf>
- ¹³ Association of American Medical Colleges. "Physician Shortages to Worsen Without Increases in Residency Training." Available at: <https://www.aamc.org/download/286592/data/>
- ¹⁴ The terms "behavioral health" and "mental health" are often used interchangeably. Behavioral health generally refers to the treatment of mental disorders and substance abuse disorders, while mental health refers to only the treatment of mental health issues such as depression and anxiety.
- ¹⁵ Minnesota Association of Community Mental Health Programs. Levels of Systematic Collaboration/Integration. Available at: <http://www.macmhp.org/pdfs/levelsofsyst.pdf>
- ¹⁶ Heath B, Wise Romero P, and Reynolds K. *A Review and Proposed Standard Framework for Levels of Integrated Healthcare*. Washington, DC: SAMHSA-HRSA Center for Integrated Health Solutions; March 2013. Available at: http://www.integration.samhsa.gov/integrated-care-models/CIHS_Framework_Final_charts.pdf
- ¹⁷ *Behavioral Health/Primary Care Integration: The Four Quadrant Model and Evidence-Based Practices*. National Council for Community Behavioral Healthcare; Winter 2004. Available at: http://www.integration.samhsa.gov/clinical-practice/four_quadrant_model.pdf
- ¹⁸ Academy for Integrating Behavioral Health and Primary Care, Agency for Healthcare Research and Quality (AHRQ). Lexicon for Behavioral Health and Primary Care Integration. Available at: <http://integrationacademy.ahrq.gov/lexicon>

- ¹⁹ Miller BF, Mendenhall TJ, Malik AD. Integrated primary care: An inclusive three world view through process metrics and empiric discrimination. *Journal of Clinical Psychology in Mental Health Settings*. 2009;16:21-30.
- ²⁰ Patel V, Belkin GS, Chockalingam A, Cooper J, Saxena S, Unutzer J. Grand challenges: Integrating mental health services into priority health care platforms. *PLoS Medicine*. 2013;10(5):e1001448.
- ²¹ Collins C, Hewson DL, Munger R, Wade T. *Evolving Models of Behavioral Health Integration in Primary Care*. New York: Milbank Memorial Fund; 2010.
- ²² Katon WJ, Lin EH, Von Korff M, et al. Collaborative care for patients with depression and chronic illness. *New England Journal of Medicine*. 2010;363(27):2611-2620.
- ²³ Katon WJ, Lin EH, Von Korff M, et al. Integrating depression and chronic disease care among patients with diabetes and/or coronary heart disease: the design of the TEAMcare Study. *Contemporary Clinical Trials*. 2010;31:312-322.
- ²⁴ *The COMPASS Model for Improving the Care of Patients with Chronic Mental and Physical Diseases*. Bloomington, MN: Institute for Clinical Systems Integration; November 2012.
- ²⁵ Butler M, Kane RL, McAlpine D, Kathol RG, Fu SS, Hagedorn H, Wilt TJ. *Integration of Mental Health/Substance Abuse and Primary Care, No. 173*. (Prepared by the Minnesota Evidence-based Practice Center under Contract No. 290-02-0009.) AHRQ Publication No. 09- E003. Rockville, MD: Agency for Healthcare Research and Quality; October 2008.
- ²⁶ *Atlas of Integrated Behavioral Health Care Quality Measures*. Rockville, MD: Agency for Healthcare Research and Quality; June 2013. AHRQ Publication No. 13-IP002-EF. Available at: http://integrationacademy.ahrq.gov/sites/default/files/framework_and_measures.pdf
- ²⁷ There are some existing tools (and at least one in development) to assess organizational readiness for integration.
- ²⁸ Massachusetts Office of Health and Human Services. Primary Care Payment Reform Initiative. Available at: <http://www.mass.gov/eohhs/gov/newsroom/masshealth/providers/primary-care-payment-reform-initiative.html>
- ²⁹ Asch DA, Muller RW, Volpp KG. Automated hovering in health care — watching over the 5000 hours. *New England Journal of Medicine*. 2012;367:1-3.
- ³⁰ Logan AG, McIsaac WJ, Tisler A, et al. Mobile phone-based remote patient monitoring system for management of hypertension in diabetic patients. *American Journal of Hypertension*. 2007;20(9):942-948.
- ³¹ Koehler F, Winkler S, Schieber M, et al. Impact of remote telemedical management on mortality and hospitalizations in ambulatory patients with chronic heart failure. *Circulation*. 2011;123:1873-1880.
- ³² Jaber R, Braksmajer A, Trilling J. Group visits for chronic illness care: Models, benefits, and challenges. *Family Practice Management*. 2006;13(1):37-40.
- ³³ Big White Wall. Available at: <http://www.bigwhitewall.com>
- ³⁴ Townley C, Takach M. *Developing and Implementing the Section 2703 Health Home State Option: State Strategies to Address Key Issues*. Washington, DC: National Academy for State Health Policy; 2012. Available at: http://www.nashp.org/sites/default/files/health.home_state_option.strategies.section.2703.pdf
- ³⁵ Kaiser Family Foundation data; 2010.
- ³⁶ American Academy of Physical Medicine and Rehabilitation. Accountable Care Organizations Listed by State. Available at: <http://www.aapmr.org/practice/PracticeMgmt/ModelsOfCare/Pages/Accountable-Care-Organizations-Listed-by-State.aspx>

³⁷ *Where the States Stand on Medicaid Expansion*. The Advisory Board Company Daily Briefing; February 7, 2014. Available at: <http://www.advisory.com/Daily-Briefing/Resources/Primers/MedicaidMap>

³⁸ Holahan J, Buettgens M, Carroll C, Dorn S. Kaiser Commission on Medicaid and the Uninsured. *The Cost and Coverage Implications of the ACA Medicaid Expansion: National and State-by-State Analysis*. Washington, DC: Kaiser Family Foundation; November 2012. Available at: <http://kaiserfamilyfoundation.files.wordpress.com/2013/01/8384.pdf>

³⁹ National Institute of Mental Health. The Numbers Count: Mental Disorders in America. Available at: <http://www.nimh.nih.gov/health/publications/the-numbers-count-mental-disorders-in-america/index.shtml>

⁴⁰ National Academy for State Health Policy. Multi-Payer Resource Center: Payment. Available at: <http://nashp.org/multi-payer-resource-center/payment>

⁴¹ Colorado State Innovation Model (SIM). Available at: <http://coloradosim.org/>

⁴² Centers for Medicare & Medicaid Services. State Innovation Models Initiative: Model Pre-Testing Awards. Available at: <http://innovation.cms.gov/initiatives/State-Innovations-Model-Pre-Testing/>