

Social determinants and collaborative health care: Improved outcomes, reduced costs

Implications and opportunities
for health plans and states



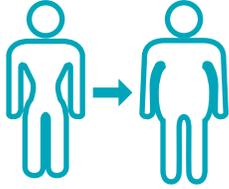
Overview

Three factors can dramatically influence a person's health status and associated health care costs: physical health, behavioral health, and social determinants. Research has shown that collaborative care models which address behavioral and physical health or programs which address social determinants have independently generated improved patient outcomes. However, these three factors are inextricably linked; combining social determinants with collaborative care models may further improve individual and overall outcomes, and provide the cost savings that health plans and states are looking for. This paper reviews some of the individual and collective impacts that physical health, behavioral health, and social determinants have on individuals and the US health system; examines how collaborative care models can help to improve outcomes and lower costs; discusses challenges to implementing integrated care; and suggests implications and opportunities for health plans and states.

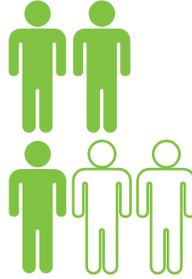
Introduction

Traditionally, physical health has been the primary clinical and financial focus of US health care stakeholders: providers, payers, life sciences companies, employers, people receiving services, and US federal and state governments. Yet, even though the US spends the most on health care across all countries – 16.9 percent of GDP in 2012, the highest share among Organization for Economic Cooperation and Development (OECD) countries and far above the OECD average of 9.3 percent¹— and leads the world in medical research and medical care,² the US health care system is fragmented, complex, costly, and the country lags other high-income nations in life expectancy and many other health outcome measures.³

Recent statistics illustrate that the US population's physical health is, frankly, unhealthy:



Obesity rates among US adults have increased greatly, from 30.9 percent in 2000 to reach 35.3 percent in 2012. This is the highest rate among OECD countries.⁴

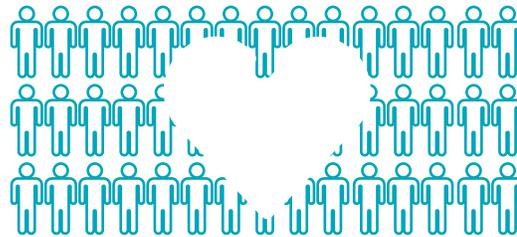


Complex patients with two or more chronic illnesses are primary drivers of health care costs. According to estimates, the top five percent of patients in complexity account for over 50 percent of costs.⁵

\$245 billion



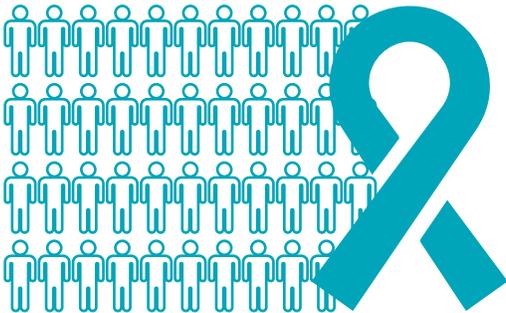
29.1 million US residents have diabetes and comprise \$245 billion in direct and indirect costs.⁶



About

610,000

Americans die from heart disease every year. It is the leading cause of death for most racial/ethnic groups in the United States.⁷



About

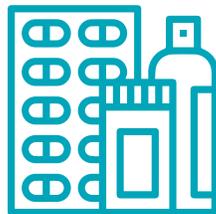
595,690

Americans are expected to die of cancer in 2016.⁸

Still, achieving and maintaining good health depends, in part, on people making conscious decisions to engage in positive behaviors – eating healthy foods and exercising are obvious choices – and to avoid risky behaviors such as smoking and heavy drinking. Some less recognized and/or acknowledged behavioral health risks – among them mental health conditions, substance abuse, and stress management – can have a disproportionately detrimental impact on physical health and health care costs, especially when they are not properly treated. Consider:

18% 

About 42.5 million American adults (18 percent of the total US adult population) suffer from some mental illness.⁹



Individuals with mental health and substance abuse disorders are often underdiagnosed and undertreated in primary care settings.¹² Depression and anxiety, in particular, are common in primary care settings but are often underidentified and undertreated.¹³



Health care costs associated with untreated mental disorders are estimated at \$70 billion annually.¹⁰

Depression alone will be one of the three leading causes of disability in the developed world by 2030.¹⁴



67%

Sixty-seven percent of individuals with a behavioral health disorder do not get behavioral health treatment.¹¹



Approximately eight million deaths each year are attributable to mental illness.¹⁵



Medicaid is the single largest payer in the United States for behavioral health services. In 2011, the one-in-five beneficiaries with a behavioral health diagnosis accounted for almost half of Medicaid expenditures.¹⁶

Physical, behavioral health linked

Despite US health care’s history of treating physical health conditions independently from behavioral health, the two are inseparably linked.¹⁷ Up to 70 percent of physician office visits are for issues with a behavioral health component.¹⁸ A similar percentage of adults with behavioral health conditions also have one or more physical health issues.¹⁹ Having a chronic condition puts people at risk for a behavioral health condition and vice versa.²⁰

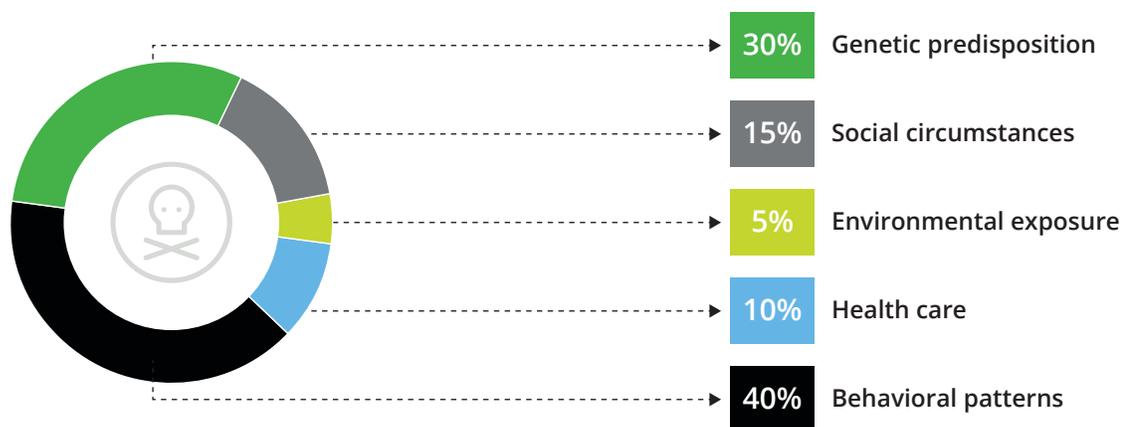
People with combined chronic medical and behavioral health conditions cost the health care system significantly more than those with only a chronic medical condition.²¹ For example, annual health care costs are much greater for adults who have diabetes or heart disease and depression.²² Unfortunately, the current fragmented state of mental health, substance use, and medical services results in inadequate care for those with mental illness.²³ People with mental disorders are frequently seen in primary care but are often underdiagnosed and undertreated.²⁴ Similarly, individuals with serious mental illness and substance use disorders seen in mental health settings lack adequate general medical care.²⁵

Social determinants directly, indirectly shape health

Scientists have found that the conditions in which we live and work have an enormous impact on our health.²⁶ Social determinants, some of which individuals can do little or nothing to control, can directly and indirectly shape physical and behavioral health.²⁷ Among these influencers are income, education, living and working conditions, transportation availability, and environmental factors (e.g., lead paint, polluted air and water, dangerous neighborhoods, and the lack of outlets for physical activity). Case in point: While research suggests that chronic stress can have direct physiological effects on health, it also may affect health-related behaviors. For example, children who experience stressful circumstances, especially on a daily basis, are more likely later in life to adopt—and less likely to discontinue—risky health behaviors like smoking and drug or alcohol abuse²⁸ that may function as coping mechanisms.²⁹

Studies show that social factors and behavioral patterns outside the control of the health care system account for more of a patient’s health care outcome – including premature death – than do clinical services (Figure 1).

Figure 1: Factors contributing to premature death³⁰



Adapted from McGinnis et al.

“The environments in which people live, work and play support healthier choices. Efforts focused solely on informing or encouraging individuals to modify behaviors, without taking into account their physical and social environments, often fail to reduce health inequalities.”



Paula Braveman and Susan Egerter, *Overcoming Obstacles to Health: Report from the Robert Wood Johnson Foundation to the Commission to Build a Healthier America, Washington (DC): RWJF Commission to Build a Healthier America, February 2008*

“For decades, policymakers and providers have seen worse health outcomes for people with behavioral health disorders compared to those without them. Some of the reasons for this include the lack of understanding of the relationship between mental and physical disorders and siloed behavioral and physical health care systems.”³¹



Martha Gerrity, MD, MPH, PhD, Milbank Memorial Fund

“Health starts where we live, learn, work and play.”³²



Robert Wood Johnson Foundation

In general, people with lower socioeconomic status have greater exposure to health-compromising conditions.³³ Both Medicaid and some commercially insured patients (e.g., people buying coverage on health insurance exchanges (HIX) who are below the median income but don't qualify for Medicaid) report problems with social determinant issues. Addressing these challenges within the health care system usually consists of linking patients with social and educational services to meet their needs (e.g., housing via Social Services or support from community-based services and groups that patients could attend or participate in online, such as Alcoholics Anonymous, Alzheimer's Support Group, and Weight Watchers³⁴). However, communication and collaboration among service agencies, primary care and behavioral health care providers is often limited, disjointed, or non-existent; situations that can impede care quality and drive up costs.

Lexicon: Behavioral health and primary care integration³⁵

Behavioral health care: Umbrella term for care that addresses behavioral problems bearing on health, including patient activation and health behaviors, mental health conditions, substance use, and other health behaviors, including smoking, poor diet and a sedentary lifestyle.

Collaborative care: Linking patients with primary care and behavioral health providers in a joint management effort, often coordinated by a care or case manager.

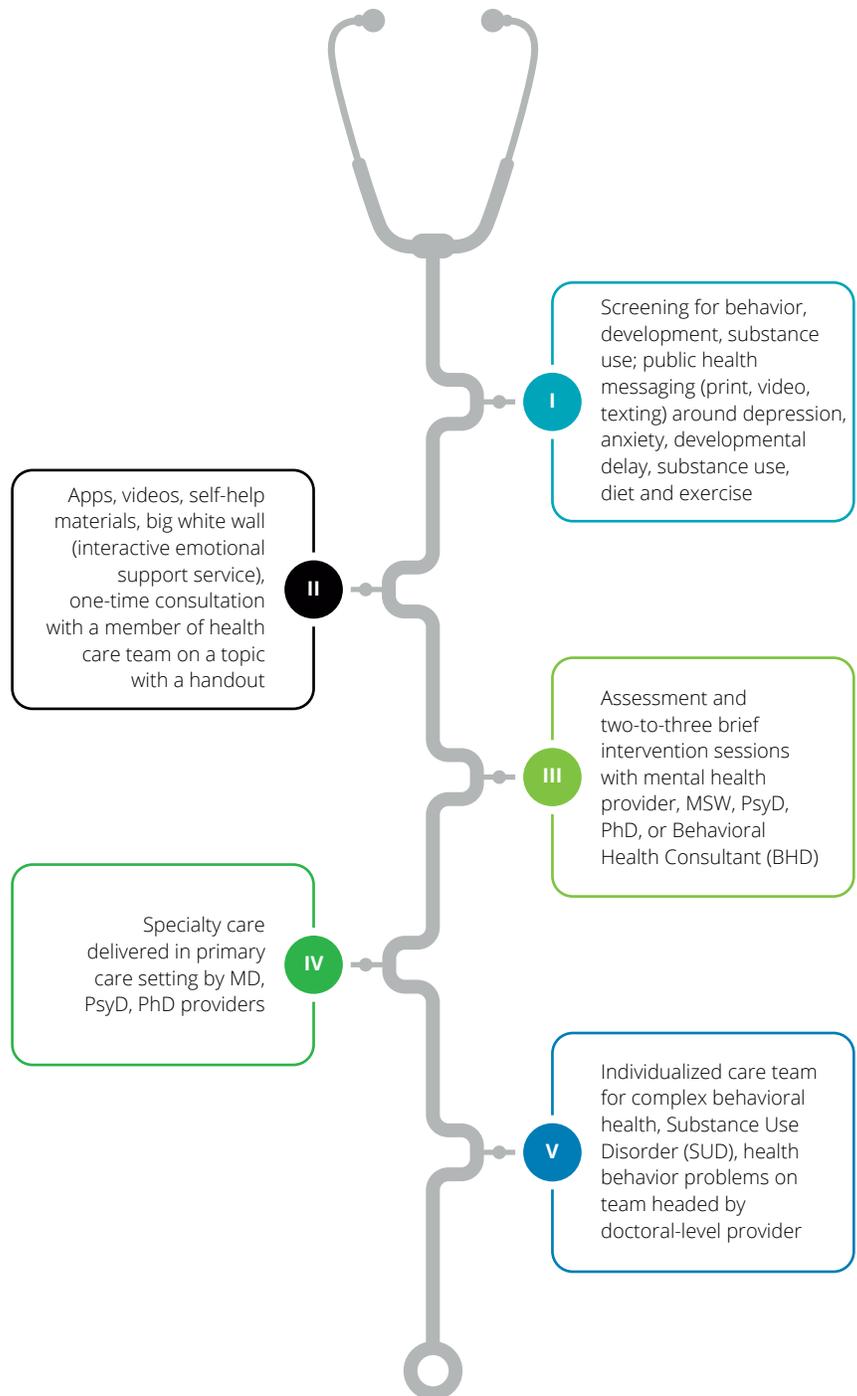
Coordinated care: Providers work within their own systems of care and the main contact among providers is through a referral, often with formal structured communication via treatment plans or discharge plans.

Care management: More robust integration of services. Providers may be co-located, usually target specific diseases or problem areas. Care managers provide assessment, intervention, care facilitation, and follow-up services.

Integrated care: Tightly integrated, collaborative teamwork with a unified care plan as a standard approach to care for designated populations. Also connotes organizational integration, often involving social and other community services.

Integrated behavioral health and primary care: The care that results from a practice team of primary care and behavioral health clinicians, working together with patients and families, using a systematic and cost-effective approach to provide patient-centered care for a defined population. This care combines medical and behavioral health services, and may address mental health and substance abuse conditions, health behaviors (including their contribution to chronic medical illnesses), life stressors and crises, stress-related physical symptoms, and ineffective patterns of health care utilization.

Primary care behavioral health levels



Integration improves outcomes

The Institute for Clinical and Economic Review (ICER) recently identified 36 models of integrated care that showed significant improvements in one or more outcomes areas.³⁶ In addition:

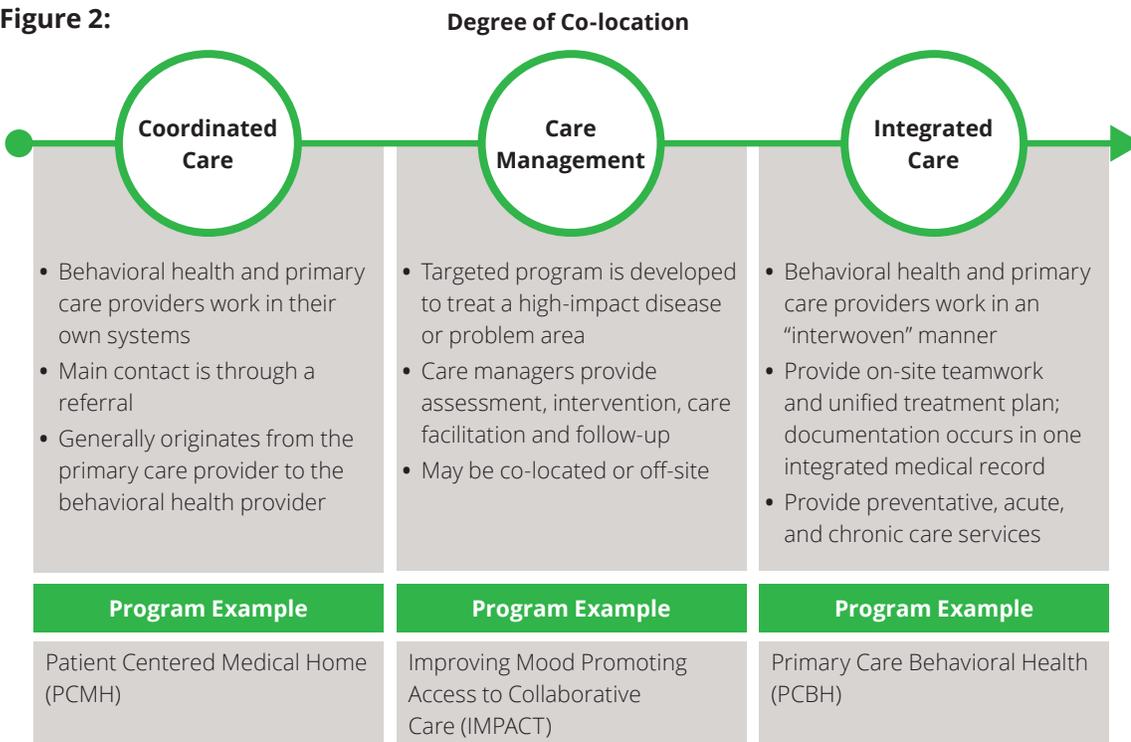
- High-quality evidence from more than 90 studies involving over 25,000 individuals corroborates that the Collaborative Care Model (CCM) improves symptoms specifically from mood disorders and mental health-related quality of life.³⁷
- The Behavioral Health Consultant model addresses not only mood disorders but the full range of behavioral concerns. The model has been implemented effectively in large health care systems including Cherokee, Intermountain, and the US Department of Veterans Affairs (VA).³⁸
- Components in both models that appear to be most strongly associated with improved outcomes are well-defined care plans, education, well-supervised care managers who provide systematic monitoring and follow-up, use of standard screening tools, communication with primary care providers (PCP), and psychological interventions.³⁹

Many policymakers, program administrators, clinicians, and advocates have suggested that coupling behavioral and physical health services through collaborative care models would not only improve health outcomes for Medicaid beneficiaries, it would also help to reduce costs.⁴⁰

Models of collaborative care

Collaborative care has been defined as linking people with primary care and behavioral health providers in a joint management effort. Often, this joint effort is coordinated by a care or case manager.⁴¹ The core features of collaborative care are: 1) communication between primary care and behavioral health care providers; and 2) an ongoing relationship among providers over time. Collaborative care falls across a spectrum defined by the degree of provider co-location and services integration. It leverages the benefits of multiple disciplines working together to address the challenges faced by people needing both medical and behavioral health care. Figure 2 illustrates three models of collaborative care.

Figure 2:



Source: Deloitte Consulting LLP, 2015 Webinar on Integrated Health Care Physical and Behavioral Care Delivery Models

Coordinated Care is the least-integrated of the three models. Providers work within their own systems of care and the primary contact among providers is through a referral, often with formal structured communication via treatment plans or discharge plans. An example of Coordinated Care is a Patient Centered Medical Home (PCMH). The concept of the medical home has been around since the 1970s, when pediatrics began considering a central source for children’s medical records—the medical home of the record. Additionally, during this time, psychologists would partner with physicians as a primary referral source. This relationship offered ease of access for the patient as well as improved communication among providers. The providers were rarely co-located and continued to practice in a largely independent system of care. A study of multi-condition PCMH coordinated care for depression and diabetes reported significant improvement in patients’ diabetes, blood pressure, and cholesterol; improved patient satisfaction after 12 months of care;⁴³ and savings of \$594 per person over 24 months.⁴⁴

The second form of collaborative care is **Care Management**, which features more robust integration of services. Providers may be co-located but they are not always. Like a medical home, programs are developed which usually target specific diseases such as diabetes, cardiac disease, and depression, or problem areas such as compliance to a treatment regimen or preventative practices. Care managers provide assessment, intervention, care facilitation, and follow-up services. Communication among primary care providers and care managers may fall along a spectrum from structured referral and discharge plans to integrated record sharing and treatment teams. Improving Mood—Promoting Access to Collaborative Treatment, or IMPACT, is an example of the Care Management model. This program from the AIMS Center (Advancing Integrated Mental Health Solutions)⁴⁵ provides an intervention for adults with a diagnosis of major depression or dysthymia, often with a co-morbidity such as diabetes. The IMPACT model includes a stepped-care approach in which a trained depression care manager (DCM)—usually a nurse, social worker, or psychologist—works with the patient, their primary care provider, and a psychiatrist to develop and administer a course of treatment. Follow-up is provided by the depression care manager after the treatment has been successfully implemented.

“The health care system must acknowledge and systematically address those realities of patients’ lives that directly impact health outcomes and costs. Specifically, the goals of value-based care—improving quality while reducing costs—cannot be achieved without meeting patients’ social needs.”⁴⁶



**Commission to Build a Healthier America,
Robert Wood Johnson Foundation**

“Access to a usual provider is associated with increased receipt of needed mental health services. Patients who have access to usual providers with PCMH qualities are more likely to receive mental health counseling.”



Audrey L. Jones, Ph.D.1, Susan D. Cochran, Ph.D., M.S., Arleen Leibowitz, Ph.D., Kenneth B. Wells, M.D., M.P.H., Gerald Kominski, Ph.D., and Vickie M. Mays, Ph.D., M.S.P.H. (May, 2015) Usual Primary Care Provider Characteristics of a Patient-Centered Medical Home and Mental Health Services Use. UCLA

Integrated Care is the most interwoven of the three collaborative care models. Behavioral health and primary care providers are co-located and share infrastructure including records and staff. Integrated care offers a full spectrum of services (preventative, acute and chronic care), features on-site teamwork and unified treatment planning and documentation. Integrated care has been shown to improve satisfaction and chronic physical health⁴⁷ and to reduce treatment costs. For example:

- The Department of Veterans Affairs (VA) augmented its existing infrastructure to implement a national strategy for behavioral health integration that focuses exclusively on serious mental illness (SMI) and depression. The program involves several individual projects that are coordinated but are individualized to each site's unique needs. Under this system, PCPs provide universal screening of depression and post-traumatic stress disorder (PTSD). Patients with positive screens are assessed for behavioral health needs using structured protocols performed by care managers. Depression care managers are included on the primary care team and make recommendations to the PCP about treatment, provide proactive patient follow-up, and communicate with consultant psychiatric specialists when problems arise. EHRs are used to facilitate provider communication, report data, and provide point-of-care decision support.⁴⁸
- The VA's Patient Care Aligned Teams (PACT) are comprised of PCMH services designed to provide comprehensive primary care. Behavioral health services are deemed essential and all PACT programs have on-site behavioral health consultants who provide screening, consultation, and brief therapy services. A recent review of the PACT program showed an 8.6 percent reduction in hospitalizations, 7.5 percent reduction in specialty care referrals, and in veterans over 65, an 18.4 percent reduction in urgent care visits.⁴⁸
- Cherokee Health Systems in Tennessee takes a population-based approach to integrated care management in which every patient is screened for behavioral health conditions and triaged to the appropriate level of support. Generalist Behavioral Health Consultants (BHCs) are fully embedded on the care team and work collaboratively with PCPs to develop treatment plans and co-manage patient care. BHCs are available to provide rapid access to behavioral services – often during the same patient visit. Psychiatric consults are available to provide guidance and support for more complex cases. Team members are connected through a system of EHRs and use standard measures to track patient outcomes.⁴⁹ This hybrid model of behavioral health psychologists working closely with psychiatrists resulted in an overall reduction of 22 percent in costs compared to other clinicians in Cherokee's region over a three-year period (2009-2012).⁵⁰

- Intermountain Healthcare's Mental Health Integration Program uses its existing institutional structures for coordinated care to integrate primary care and behavioral health services. Features of this model are being applied to health systems nationally. At Intermountain, all patients receive a comprehensive mental health assessment and are screened for depression, anxiety, and other behavioral health concerns using validated screening tools. PCPs and other behavioral health team members collaborate to develop shared treatment plans and provide for seamless patient transition across providers. A secure, central health information exchange is available to all team members to track and upload patient data, using a standard set of measure.⁵¹ Intermountain showed an average decreased cost of \$115 per member per year.⁵²
- The Agency for Healthcare Research and Quality (AHRQ) provides an interactive map with an overview of behavioral health and physical health integration efforts that are occurring at the clinical level across the country.⁵³

While there is no "one-size-fits-all" approach to collaborative care, most models are complementary – utilizing one or more could help clinicians address many population health needs. The most common program component across successful models in ICER's review was inclusion of a standardized care coordination plan that involved regular patient-physician interaction (86 percent), followed by formal education (69 percent).⁵⁴

Combining social determinants with collaborative health care models may further improve individual and overall outcomes, and lower costs. For example, social conditions affect people's choices, so improving them should create more opportunities for people to choose healthy behaviors.⁵⁵

Integrated care implementation challenges

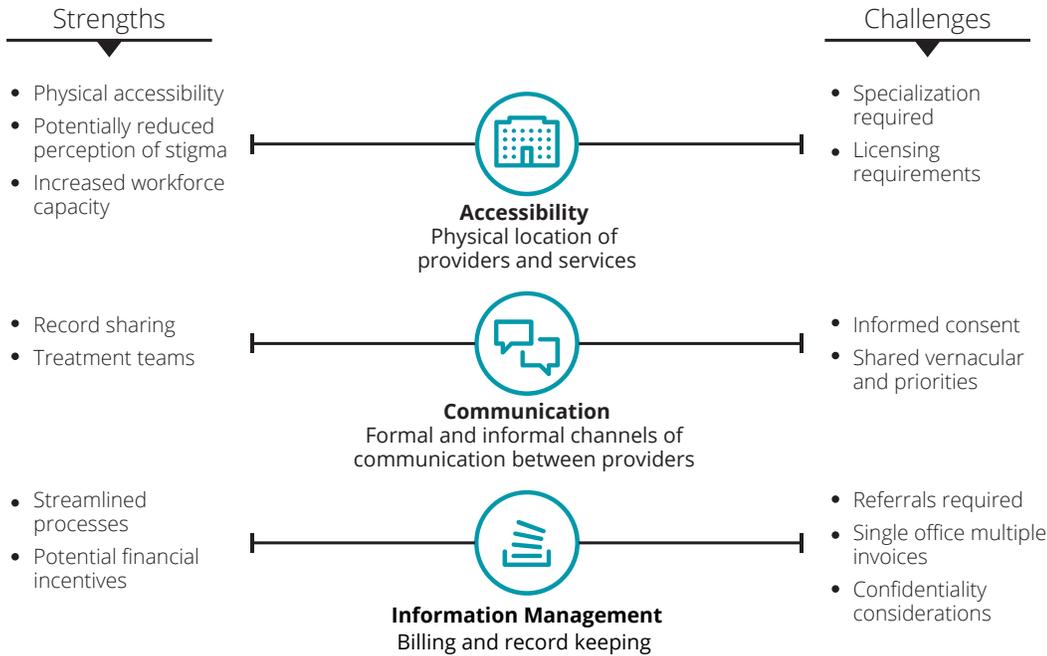
Payers and providers looking to implement sustainable integrated care programs face both financial and organizational barriers.⁵⁶ In addition to a lack of financial incentives for addressing social determinants, certain activities associated with integrated care, such as consultations between providers, and visits conducted outside of a physician's office (including online and phone consultations), may not be reimbursed under traditional fee-for-service (FFS) payment models. Sometimes there are pre-approval requirements or other restrictions that make it difficult for behavioral health care providers to work side by side with primary care clinicians.⁵⁷ Certain state Medicaid plans link physical and behavioral health components, but silo social determinants. Plus, there are ownership issues that may impact reimbursement – some state-level behavioral care programs are reimbursed through non-Medicaid programs. Finally, reduced funding negatively impacts all Medicaid programs, including integrated care.

Government and private payers are undertaking a number of strategies to overcome these and other financial impediments, such as moving from FFS to value-based-care (VBC) payment models, having health plans credential providers, and instituting creative employment and contract structures for care managers.⁵⁸ Still, financial disconnects remain, and are often exacerbated by the structure of contemporary primary care, wherein physician practices typically deal with numerous insurance plans. Inconsistent payment policies across the plans may make providers reluctant to invest in the clinical, technology, and process changes needed to implement integrated care.⁵⁹

Organizational challenges around implementing a collaborative care model are likely to be both cultural and structural. For both providers and payers, it can be difficult to overcome employees' resistance to new roles and procedures without strong leaders who are committed to integrated care and champion the program.⁶⁰ In addition, state health agencies may show resistance to a single care model, especially for behavioral health.

Structural, communication, and information management issues also may impact the effectiveness of an integrated care model (Figure 4). For example, two-thirds of primary care physicians report not being able to access outpatient behavioral health for their patients⁶¹ due to shortages of mental health care, health plan barriers, and inadequate or lack of coverage. Some states require a separate office structure and billing process for behavioral health clinicians co-located with primary care physicians. Finally, the complexity of care collaboration may be magnified by the number and different types of community organizations that health systems typically partner with; these could include local health departments, substance abuse and mental health organizations, and faith-based organizations.⁷¹

Figure 4: Integrated care model strengths & challenges



Source: Deloitte Consulting LLP, 2015 Webinar on Integrated Health Care Physical and Behavioral Care Delivery Models

“Payment is the heart of the problem.”⁶²

Roger Kathol, M.D., president, Cartesian Solutions Inc.



“We must break down silos that separate improving health from the work of education, business, transportation, community development, and other historically 'non-health' sectors that form an integral piece of the health puzzle.”⁶⁴



“The delayed returns from investments in social services and population health—years for early childhood interventions—require a longer time frame than many revenue-strapped governments believe they can afford.”⁶³

**Christopher F. Koller
President, Milbank Memorial Fund**



**From Vision to Action: Measures to Mobilize a Culture of Health
Robert Wood Johnson Foundation, 2015**

Improved health information technology (HIT) can foster care integration⁶⁵ but getting providers on board can be problematic – currently, less than 40 percent of physicians link electronic health information with other providers with the goal of encouraging integration, collaboration, and communication (Figure 5).⁶⁶ Improved education and reimbursement incentives may improve adoption rates and usage. Public policies also can play a key role in encouraging and maintaining collaboration across sectors, as well as creating incentives for different sectors to contribute what they can to the cause of improving the nation's health.⁶⁷

The reimbursement conundrum

Certain health care models – coordinated care, care management, and integrated care – do a better job of addressing the interplay of social determinants, physical health, and behavioral health, but the current FFS provider payment mechanisms that incentivize volume over quality are not properly aligned to reimburse these models of care.⁶⁸

The US health care system is moving away from payment models based on volume and services delivered to those based on value and outcomes. VBC is a concept that has existed for years, but has not been widely implemented to date. However, key legislation at the federal level is driving change. The US Department of Health and Human Services (HHS) has set a goal of tying 30 percent of FFS Medicare payments to quality or value through alternative payment models, such as Accountable Care Organizations (ACOs) or bundled payment arrangements, by the end of 2016, and tying 50 percent of payments to these models by the end of 2018.⁶⁹ The Health Care Transformation Task Force, consisting of providers, health plans, and employers, has committed to shift 75 percent of its members' business into contracts with incentives for health outcomes, quality, and cost management by January 2020.⁷⁰

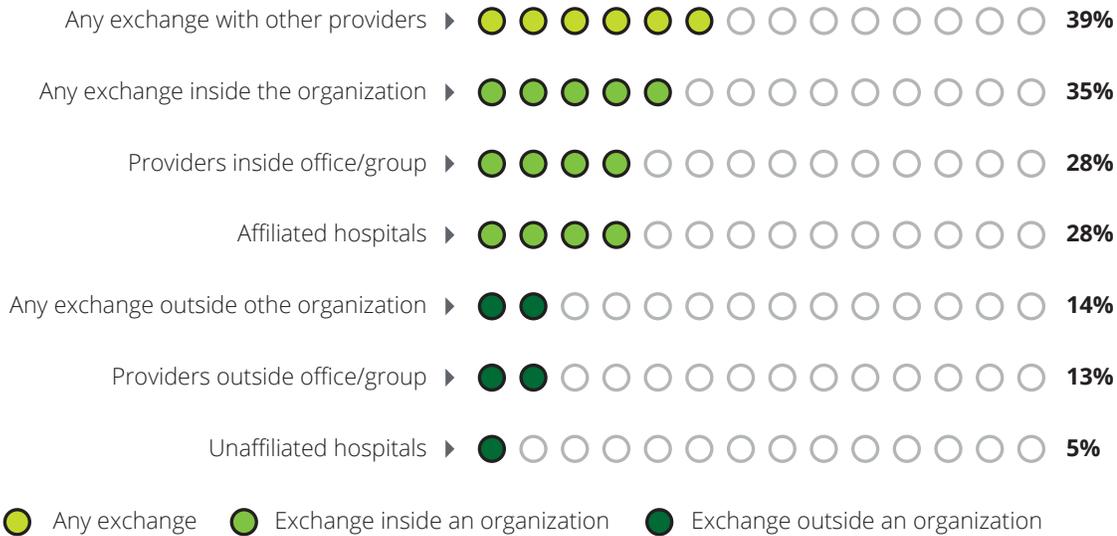
The Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) is poised to drive payment and delivery system reform for clinicians, health systems, Medicare, and other government and commercial payers. MACRA overhauls Medicare's payments to clinicians by creating strong incentives for them to participate in alternative payment models that require financial risk-sharing for a broad set of health services. Over time, resource use performance – measuring the costs associated with clinicians' practice and referral patterns – will grow to 30 percent of the performance formula. Together, these policies will encourage much stronger focus on quality and total cost of care.⁷¹ MACRA's financial incentives for clinicians to enter risk-bearing, coordinated care models could create opportunities for health systems and health plans to enter into new arrangements with clinicians under Medicare; this may set the stage for similar initiatives in other government programs, as well as with employers and commercial health plans.⁷²

Most VBC models emphasize outcomes related to medical care/physical health, even though that accounts for only about 10 percent of the variance in outcomes and is eclipsed by social determinants at 40 percent and behavioral health at 30 percent.⁷³ For example, MACRA does not address the importance of social determinants, although it reflects the impact a large payer can have on the marketplace. So where do programs to address social determinants fit into new, value-based reimbursement models? Many are taking place at the state level; among them are Accountable Communities for Health (ACH), a strategy to transform and align health care delivery with community-based social services in an effort to promote state health. ACHs bring together various stakeholders with a target of addressing multiple contributors to poor health.⁷⁴ The Center for Medicare & Medicaid Innovation (CMMI) administers the ACH initiatives and is working with four states (CA, MN, VT, and WA) to develop and implement statewide models. While the models vary in their approach to care, certain elements such as governance, reimbursement, geography and targeted populations span these initiatives.

The long-term goal of implementing social determinants programs and generating an ROI to attain financial stability will involve addressing the key equations of where savings accrue and how they become dedicated to the community.

Figure 5: Provider electronic health information exchange

Office-based physicians' electronic health information exchange with other providers, by organizational affiliation



Data source: National Electronic Health Records Survey, 2013

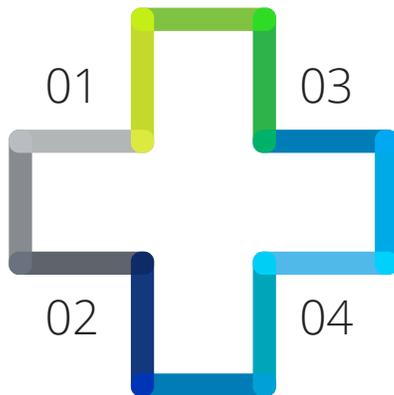
Implications and potential opportunities for health plans

Educate the entire organization (clinical, operational, and administrative) on the challenges, requirements, and benefits of integrating social determinants with physical and behavioral health care.

From a financial perspective, confirm the costs of serving different member populations and quantify how different integrated care models can generate a positive impact on the bottom line.

From a clinical perspective, validate how integrated care improves members' lives. For example, health plans could start by identifying a subset of people (usually chronically ill patients) who have high behavioral health needs, provide appropriate support services, and track clinical progress and costs.

As the largest payer of mental health services in the United States, state Medicaid agencies are key players, often influencing how mental health care is delivered. Policymakers and health care planners can benefit from information that helps them understand and implement effective interventions.⁷⁵



Many questions, no easy answers

Studies have verified the efficacy and value of integrated care. Unfortunately, there are many, many questions and no easy answers.

- How can health plans work with providers and policymakers to expand Americans' views about what it means to be healthy to include not just where health ends but also where it starts?⁷⁷
- What role can health plans play to foster policies, partnerships, and investments that support cross-sector collaboration to improve physical and behavioral health?
- How do we better align reimbursement and care models to encourage provider and payer adoption of integrated care? Should the industry consider an integrated eligibility approach, in which participants receive insurance coverage assistance and service integration as part of their care coordination?
- How can stakeholders strengthen integration of social and health services across patient populations?
- What technology tools are needed to support organizational process changes?
- Is CMS willing to modify reimbursement policy to include non-medical services that are proven to be cost-effective and improve care?
- Will states be able to align and integrate siloed agencies that need to work together in a collaborative model?
- Can financing and financial incentives be developed to enable implementation of leading practice models?

“To achieve lasting change, our nation cannot continue doing more of the same. We must embrace a more integrated, comprehensive approach to health—one that places well-being at the center of every aspect of American life. This approach must focus largely on what happens outside the health and health care systems, recognizing the key influences of factors found in communities, business and corporate practices, schools, and the many other spheres of everyday life.”



From Vision to Action: Measures to Mobilize a Culture of Health⁷⁶
Robert Wood Johnson Foundation, 2015

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Endnotes

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