Integrated Primary Care and Behavioral Health
A Case Study Report
This report was produced under the auspices of Altarum Institute’s Community Health Center Innovation Mission Project, a 2-year, $2.3 million internally funded initiative to strengthen the FQHC care delivery system and improve health for vulnerable populations. The project was designed as a working partnership between Altarum and FQHCs to test systems change methods, strengthen FQHC capacity, and ultimately enhance patient care. This project was one of three in Altarum Institute’s Mission Projects Initiative, which sought to solve pressing health care issues using systems methods at the institutional, organizational, and community levels in partnership with the public and private sector.

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Integrated Primary Care and Behavioral Health

A Case Study Report

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Executive Summary

Half of all American adults live with one or more diagnosable chronic health conditions, which are presently the leading cause of morbidity and mortality among adults nationwide. Mental disorders, one type of chronic health condition, affect more than a quarter (26.2%) of adults at any given time in the United States. Furthermore, adults with serious mental illness have been found to die an average of 25 years younger than the general U.S. population. Consequently, domestic health care systems have increasingly moved to integrate the historically separated primary care and behavioral health systems to better address health care needs, improve outcomes, and promote health equity among the many adults living with chronic health conditions. Although the evidence base regarding the integration of primary care and behavioral health has grown over the past decade, given the breadth of health care settings and the communities served, the adaptation and implementation of integrated health care delivery has been highly variable throughout the country.

As part of its Community Health Center Innovation Mission Project, Altarum Institute established a partnership with Cherry Street Health Services, a federally qualified health center based in Grand Rapids, Michigan. At the time this partnership was formed, the health center had arranged for the launch of an integrated primary care and behavioral health initiative in collaboration with two other community-based health organizations, Touchstone innovaré and Proaction Behavioral Health Alliance. These two organizations focus on the delivery of mental health and substance use services, and they are supported by the Kent County mental health authority, network180. Together, the three partner organizations planned to integrate primary care and behavioral health through the following chronological stages:

1. Integration development,
2. Piloting,
3. Sustainability, and
4. Replication.

During the first stage, Altarum Institute provided strategic planning support and technical assistance related to the initiative’s evaluation and conducted a qualitative case study. The integration development consisted primarily of planning the initiative, having a small team of eight health care professionals test an integrated care model with a convenience sample of 15 adult patients with chronic conditions, and securing resources to aid in the rollout of subsequent phases. As the initiative continues to progress, piloting the integration of primary and behavioral health care is expected to commence in October 2011. During the pilot stage, the three organizations will integrate primary care and behavioral health with an increased number of health care professionals and adult patients with chronic health conditions at the recently constructed Heart of the City Health Center in downtown Grand Rapids.
To inform the qualitative case study of how primary care and behavioral health was integrated during this initiative’s development phase, a comprehensive literature review of studies published on domestic primary care and behavioral health integration was first conducted by Altarum Institute staff members. In collaboration with leaders from the three partner organizations, Altarum Institute staff members then developed data collection methods to gather information from organizational staff members and patients. Once the study protocol was granted approval from the Michigan Department of Community Health, several Altarum Institute staff members subsequently conducted two site visits to Grand Rapids in September 2010 and March 2011. During the first site visit, key informant interviews were conducted with 17 organizational staff members who served as leaders or members in one or more of the initiative’s workgroups. Key informant interviews were conducted with eight health professionals who delivered care to patients as part of the integration development team, and one focus group with seven patients who had received integrated health services was also conducted during this visit. In March 2011, two focus groups, one with four patients who had started receiving services after the first site visit and another with the same seven patients who participated in the focus group conducted during the first site visit, were conducted as well as one focus group with seven health professionals who delivered care as part of the integration development team. All key informant interviews were audio recorded for subsequent transcription by an independent consultant. Data were managed and analyzed with QSR NVivo 8 software, and an inductive content analysis approach was used whereby common themes were identified from the data.

Staff members from across the three organizations were selected by executive leaders or volunteered to participate in one or more workgroups based on their interest in the initiative and their areas of expertise. Eleven workgroups were established to address the following aspects of the initiative: Culture Change, Curriculum, Client Selection, Information Technology, Evaluation, Finance, Leadership, Practice Management, Space, and Staff Selection. Each workgroup had one leader and two to four other members. The activities and deadlines, for which each workgroup was held responsible by executive leaders with support from the initiative’s manager, generally dictated the amount of time required of those organizational staff members involved and the frequency with which their groups met. Workgroup leaders began meeting with the three organizations’ executive leaders and manager of the initiative on a monthly basis for several months following the formation of the workgroups. Staff members who participated in the workgroups were not compensated or provided with release time for activities related to the initiative. Workgroup members did however meet and complete various tasks for the initiative during their regular working hours. Moreover, the three organizations were perceived by organizational staff members to have dedicated various resources, including building space, staff, and information technology, to the initiative’s development.

Those staff members who served as part of the integration development team were selected by the executive leaders at the three organizations and were provided with release time from their current positions beginning in February 2010. From February to May 2010, these staff members underwent a series of training modules designed to increase the team’s cohesion, their knowledge of highly prevalent chronic health conditions, and their skills related to the provision of various primary care and behavioral health treatment modalities. In June 2010, this interdisciplinary team of health professionals began delivering integrated health care to adult patients with co-occurring mental disorders, substance use conditions, or other chronic diseases, such as type 2 diabetes, hypertension, and asthma. Although primary care and behavioral health services were not delivered in the same building, the locations where primary care and behavioral health services were accessible were within one block of each other. To assure care coordination, this team convened brief meetings each morning that
they delivered care to patients and routinely e-mailed encounter notes to all team members. The chronic care model was used as the overarching conceptual framework guiding this initiative; however, the model through which integrated care was delivered to patients was commonly perceived among organizational staff members to be a coordinated, disease management hybrid. That is, the health professionals involved were not co-located during the time period, but they collectively delivered a variety of primary care and behavioral health services intended to enhance patients’ abilities to self-manage their chronic health conditions and become less burdened by the symptoms of their chronic health conditions. Most organizational staff members indicated that, as the initiative expanded to serve a larger number of patients in the new Heart of the City Health Center building, the model of care delivered would become increasingly integrated as reflected by increasingly integrated systems processes and highly individualized, preventive patient care.

During the development phase, organizational staff members, including workgroup members and those who delivered integrated care, perceived a range of factors that helped and hindered the initiative's progression. Major barriers perceived as impeding the initiative's progression included: lack of awareness and understanding of the initiative among organizational staff members; cultural differences between primary care and behavioral health organizations and staff members; limited leadership within workgroups and from the organizational executives; lack of resources, particularly funding; competing priorities primarily due to staff members’ routine job responsibilities, which limited time to work on initiative-related activities; and difficulties standardizing operational and clinical processes, notably those related to reimbursement and health information technology. Alternatively, the following factors were the most commonly perceived as facilitating the initiative’s progression: awareness and understanding of integrated care among organizational staff members; buy-in to the initiative and positive attitudes toward integrated care; support from organizational leaders, including the investment of resources and leadership; collaboration among organizational staff members to complete initiative activities; standardization of operational and clinical processes; and federal, state, and local governmental policies and programs supporting integrated care, such as the health home provision of the health reform legislation. According to the literature reviewed on integrated health care and other organizational redesign efforts, such factors are known to originate in and influence one or more levels of health care systems (Kaplan et al., 2010). Furthermore, the influence of such factors are typically impacted by those individuals or actors who are involved in planning and implementing major redesign initiatives, such as the integration of primary care and behavioral health (Kirchner et al., 2010).

Organizational staff members generally described positive experiences related to their involvement with the initiative during the development phase. Among both workgroup members and staff members who delivered integrated care to patients, their initial experiences with the initiative were the most commonly described in terms of the following:

- Gaining an improved understanding of integrated primary care and behavioral health through training and communication with executive leaders and senior management;
- Perceiving the benefits of integrated health care both for patients as well as the three partner organizations and wanting to be involved with the initiative to support its progression;
- Increasingly communicating and collaborating with staff members both within the given staff member’s organization and with staff members at the other two partner organizations; and
Perceiving increased standardization in operational and clinical processes related to the initiative, such as the development of a uniform health record as well as intake and referral processes.

Patients who received integrated health care during the initiative’s development phase similarly expressed positive experiences with regard to the care they received. Patients most commonly indicated that their awareness of their chronic health conditions and ways to self-manage these conditions had improved during their time receiving integrated health care. Patients also frequently expressed that their self-efficacy and activation related to the self-management of their conditions had increased, as had their adherence to medication regimens, healthy eating habits, and exercise. Some patients further attributed positive changes in their use of inpatient care and symptoms of their chronic conditions, such as blood pressure, panic attacks, and hemoglobin A1c levels, to the integrated care that they received. Similar short-term outcomes have been documented by others (Krause et al., 2006) along with longer-term outcomes reflective of improvements in patients’ actual health status as well as organizational effectiveness (Butler et al., 2008; Collins, Hewson, Munger, & Wade, 2010).

Though limited by the qualitative nature of the information gathered and the formative phase of the initiative to integrate primary care and behavioral health that was studied, this case study’s findings both substantiate what has been previously demonstrated in the literature on similar endeavors and suggest that the next larger-scale piloting phase of the initiative may be fruitful for both organizational staff members and patients. As illustrated by the amount of resources and the time invested to launch this initiative, the following phase will likely be subject to its own challenges. After all, the colloquialism “Change is hard,” rings true more often than not. Given this reality, it may be more appropriate to view efforts to integrate primary care and behavioral health in health care systems through a lens of iterative, continuous transformation rather than as a single-step initiative fundamentally changing all aspects of service delivery and management. Leaders with the former perspective may be better able to foster organizational cultures conducive to the sustainability of primary care and behavioral health integration insofar as the systems that these leaders operate within are able to continually adapt to the ever-changing environments surrounding them.
Background

Case study purpose
As one component of Altarum Institute’s Community Health Center Innovation Mission Project (CHCI-MP), Altarum partnered with Cherry Street Health Services, a federally qualified health center (FQHC), based in Grand Rapids, Michigan. This partnership lasted from July 2009 to March 2011. Over the course of this period, Altarum provided planning and evaluation support to Cherry Street Health Services and its integrated care partners Touchstone innovaré, a community-based behavioral health care provider in Grand Rapids, and Proaction Behavioral Health Alliance, a substance use treatment and behavioral health provider in Michigan.

Together, these three organizations launched an integrated primary care and behavioral health (PCBH) initiative for adults with co-occurring chronic health conditions, including serious mental illness (e.g., major depressive disorder, schizophrenia, bipolar disorder), substance use disorders, medical conditions (e.g., diabetes, hypertension, chronic obstructive pulmonary disease), and chronic disease risk factors (e.g., overweight and obesity). The impetus for this initiative was the recognition that many conditions diagnosed in primary care and behavioral health settings are chronic throughout the lifespan. Furthermore, chronic disease is the leading cause of morbidity and mortality among adults in the United States, with an estimated one in two American adults living with at least one chronic condition (Centers for Disease Control and Prevention, 2011). Recognizing the prevalence and burden of chronic health conditions among their patient populations, the three partner organizations have collectively adapted innovative models of care, including the chronic care model (see figure 1), to more holistically approach the delivery of health care and ultimately elicit improved outcomes for their communities and constituents. Unique from other sing-disease state applications of the chronic care model, this initiative provided concurrent treatment and management for all of patients’ health conditions.

Altarum followed the initiative’s path during its development phase, capturing the central lessons learned and experiences of planning stakeholders (i.e., workgroup members), staff.
members who delivered integrated health care (integration development team members), and those individuals who received integrated health services. This report was developed with the intent of sharing the case study findings with the CHCI-MP advisory council members and Altarum’s executive leaders. Since this initiative is one of many similar efforts presently underway to integrate historically fragmented health care delivery systems and promote community health throughout the United States, a structured literature review of empirical studies on integrated PCBH published in peer-reviewed journals was also completed. This review provided context for integrated PCBH initiatives occurring domestically and a basis of comparison for the studied integrated PCBH initiative in Grand Rapids.

In the following section, a synthesis of peer-reviewed literature on integrated PCBH efforts in the United States is presented. More specifically, the common imperatives, funders, target populations, models, challenges and facilitators, and critical outcomes related to domestic PCBH initiatives are summarized. An overview of the integrated PCBH initiative in Grand Rapids is subsequently provided. The case study approach is then described, including the primary research questions and methods used. Finally, key study findings and their implications as well as the limitations of this case study are discussed.

Overview of primary care and behavioral health integration in the United States

The rationale for integrated primary and behavioral health care

More than a quarter (26.2%) of adults in the United States are estimated to have a diagnosable mental disorder during any given year (National Institute of Mental Health [NIMH], 2008). For many of these individuals, the onset of mental disorders occurs in adolescence with symptoms recurring throughout the lifespan (NIMH, 2005). Moreover, strong correlations between chronic physical and behavioral health conditions exist, such that individuals with chronic physical health conditions often experience co-occurring mental health or substance use disorders (Kessler, Chiu, Demler, & Walters, 2005; Bernstein et al., 2005). If these individuals do not receive the requisite care to manage their chronic conditions, they are highly prone to adverse health outcomes (Colton & Manderscheid, 2006; Druss, Rohrbaugh, Levinson, & Rosenheck, 2001; Katon et al., 2001; Lang, 2003).

Given the complexities of the health care system, questions of how to improve the efficiency and effectiveness of health care delivery, especially for individuals with multifaceted health care needs, have been longstanding. The report, Improving the Quality of Health Care for Mental and Substance-Use Conditions: Quality Chasm Series, was issued by the Institute of Medicine (IOM) in 2006. This report reflects the inadequacies of domestic mental health and substance use care, and recommends mental health services be integrated into primary care settings (IOM, 2006). This recommendation has been echoed by many others from both the primary care and behavioral health fields (Funk & Ivbijaro, 2008; Gunn & Blount, 2009; Manderscheid, Masi, Rossignol, & Masi, 2007; Thielke, Vannoy, & Unützer, 2007).

Integrated PCBH programs were initially implemented by the Veterans Health Administration, FQHCs, and health maintenance organizations (HMO, Robinson & Strosahl, 2009). However, in recent years, efforts to integrate PCBH have increasingly become a priority across health care settings. The following set of assumptions underpins this movement:
Integrating primary care and behavioral health services increases access to behavioral health services (Aitken & Curtis, 2004; Collins et al., 2010; Grazier, Hagedus, Carli, Neal, & Reynolds, 2003; Westheimer, Steinley-Bumgarner, & Brownson, 2008);

Providing mental health and substance use services in primary care settings reduces the stigma of receiving such services (Collins et al., 2010; Gunn & Blount, 2009; Mims, 2006; Robinson & Strosahl, 2009);

The delivery of behavioral health care services in primary care settings is cost-effective (Collins, 2009; Collins et al., 2010; Grazier et al., 2003); and

Improved patient outcomes (e.g., patient satisfaction, patient self-management, chronic health condition symptoms) result from the delivery of integrated primary and behavioral health care (Collins, 2009; Collins et al., 2010; Grazier et al., 2003).

Integrated primary care and behavioral health funding streams

Although the aforementioned assumptions may serve as the basis for integrating PCBH, such programs only become viable with the availability of necessary funding. Integrated PCBH programs have relied upon a range of funding streams, generally contingent upon the type(s) of organization(s) delivering integrated health care and the model whereby integrated services are provided (Collins et al., 2010; Robinson & Strosahl, 2009; Stroul, 2007; Mauer, 2003). The following examples of how such programs have been financed and the implications of these financing approaches are drawn from published literature.

Northern California Kaiser-Permanente, an HMO, designed an integrated system by adding mental health clinicians to primary care teams (Dea, 2000; Butler et al., 2008; Mauer, 2010). The major goal of this initiative was to reduce current system inefficiencies and decrease future costs. To establish this new system, Kaiser-Permanente made a significant, upfront investment in its health care infrastructure across Northern California through the addition of behavioral health specialists as well as regional call centers and computerized clinical information systems. Kaiser-Permanente’s experience rolling out an integrated care system across Northern California suggests that this approach to health care may indeed lead to future cost savings. However, the start-up costs for this type of massive redesign may be prohibitive to other health care systems with more limited resources.

Beyond commercial payers, integrated PCBH programs also receive funding from a variety of sources including state and local governments, nonprofit foundations, and academic institutions (Collins, 2009; Grazier et al., 2003; Williams, Shore, & Meschan, 2006). In several instances, two or more funding sources have collaborated to develop, implement, and sustain integrated health care programs. For instance, the Washtenaw Community Integrated Health Care Project was created through a financial partnership between the Michigan Department of Community Health, the Washtenaw County Community Health Board, and the University of Michigan (Grazier et al., 2003). These organizations created a separate legal entity, the Washtenaw Community Health Organization, to control the project’s finances. With this encompassing governance structure, the three organizations were able to share financial risks and decisions related to resource allocation, which may have overburdened one organization alone.
Patient needs and integrated care models

Many integrated PCBH programs target specific groups of individuals at increased risk of mental disorders and other chronic health conditions, including those who are uninsured, low-income, homeless, veterans, immigrants, Medicaid recipients, or receive substance use treatment (Butler et al., 2008). Due to the spectrum of health needs among these populations, traditional primary care in and of itself may not provide the breadth of services necessary for individuals to maintain their health and well-being. Similarly, specialty behavioral health care settings may be unable to provide sufficient medical services for the physical health conditions of these populations. Therefore, to simultaneously address both the physical and behavioral health care needs of various populations, a number of integrated PCBH models have been developed and implemented throughout the United States.

The four-quadrant clinical integration framework (see table 1) was created to demonstrate the type of health care setting best suited to meet the needs of patients based on their level of risk for or the complexity of their physical or behavioral health conditions (Collins et al., 2010; Mauer, 2006). In a recent Milbank Memorial Fund report regarding models of behavioral health care integration in primary care, Collins et al. (2010) connected the four quadrants to the continuum of integrated care models, indicating that patients at higher risk of or with more complex health needs may be better served by more fully integrated models of care (see appendix A).

The continuum of integrated care models described by Collins et al. (2010) is commonly segmented into three broader model categories: (1) coordinated; (2) co-located; and (3) integrated. Model characteristics, including the level of communication and collaboration

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<tr>
<th>QUADRANT II</th>
<th>QUADRANT IV</th>
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<tr>
<td><strong>Behavioral Health Risk/Complexity</strong></td>
<td><strong>Behavioral Health Risk/Complexity</strong></td>
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<tr>
<td>Low (Patients with low behavioral health and low physical health needs)</td>
<td>High (Patients with high behavioral health and high physical health needs)</td>
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<tr>
<td>Served in primary care settings</td>
<td>Served in primary care and specialty mental health settings</td>
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<tr>
<td>(Example: Patients with moderate alcohol abuse and fibromyalgia)</td>
<td>(Example: Patients with schizophrenia and metabolic syndrome or hepatitis C)</td>
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<th>QUADRANT I</th>
<th>QUADRANT III</th>
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<td><strong>Behavioral Health Risk/Complexity</strong></td>
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<td>Served in primary care settings</td>
<td>Served in primary care settings</td>
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<tr>
<td>(Example: Patients with moderate alcohol abuse and fibromyalgia)</td>
<td>(Example: Patients with moderate depression and uncontrolled diabetes)</td>
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Table 1. Four quadrants of clinical integration based on patient needs (adopted from Collins et al., 2010; Mauer, 2006)
between staff members, staffing requirements, services provided, and screening and assessment tools utilized, may vary depending on the level of health system integration. Consequently, PCBH models may be further differentiated within the three broad model types. Central features of those models delineated by Collins et al. (2010) are described in table 2.

Table 2. Descriptions of integrated primary care and behavioral health models

<table>
<thead>
<tr>
<th>Coordinated</th>
<th>Improved collaboration between separate providers</th>
<th>Medically-provided behavioral health care</th>
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<td></td>
<td>Primary care and behavioral health providers engage in minimal collaboration, because they maintain separate facilities and processes, such as documentation and billing. Although communication between providers and patients may be sporadic, case managers serve as liaisons between patients and providers by coordinating care.</td>
<td>Primary care and behavioral health providers maintain separate facilities and processes; however, communication between providers regarding the care of shared patients may improve. One example of this would be when a primary care physician provides behavioral health services while using a psychiatrist or another behavioral health professional as a consultant.</td>
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<tr>
<th>Co-located</th>
<th>Co-location</th>
<th>Disease management (chronic care model)</th>
<th>Reverse co-location</th>
<th>Unified primary care and behavioral health</th>
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<td></td>
<td>Primary care and behavioral health systems remain separate, but providers share a facility. Communication is enhanced since the physical proximity of providers allows for regular in-person communication. Yet each provider remains in his or her own professional culture. For example, specialty mental health professionals may provide services at the same location as a primary care provider.</td>
<td>Providers share a facility and integrate some system processes, such as appointment scheduling and record keeping. The integration of these systems allows for increased collaboration and regular in-person communication. In many examples of the disease management model, traditional behavioral health interventions, such as self-management strategies and lifestyle modifications, are adapted for the primary care setting by care managers to optimize patient functioning and impact disease burden costs.</td>
<td>Providers share the same facility and several system processes, but in this instance, a primary care provider is stationed in a behavioral health facility to monitor the physical health of patients with serious mental illness. Health professionals recognize that they belong to a larger team and understand their roles working together to treat patients. Depending on the level of integration, challenges related to records, billing, consent and privacy, policy, and culture may remain, but collaboration and regular in-person communication may continue to increase.</td>
<td>Primary care and behavioral health providers are part of the same team, often as a part of a larger practice. Providers collaborate closely but often serve much broader populations rather than offering very specific services to the most at-risk populations.</td>
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<tr>
<th>Integrated</th>
<th>Primary care behavioral health</th>
<th>Collaborative system of care</th>
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<td></td>
<td>Primary care and behavioral health providers are part of the same team and the elements of the broader health care delivery system that they work within are seamlessly interconnected. Together, they share a facility and all system processes, including technology, records management, payers, and culture. In many instances, the primary care physician is the principle provider and the behavioral health clinician performs interventions upon referral.</td>
<td>Specialty mental health services are integrated with primary care by creating individualized plans for high-risk patients. Individualized plans require close collaboration between providers; however, system processes may remain partially or fully integrated.</td>
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</table>
The following vignettes drawn from the literature reviewed serve to illustrate how aspects of each of the three broader integrated care models have been implemented.

**Coordinated models**

In a health care system with a coordinated care model, primary care and behavioral health providers generally maintain separate facilities, systems, and cultures (Collins et al., 2010; Manderscheid et al., 2007; Oslin et al., 2006; Pell & Feller, 2005; Upshur, 2005; Van Voorhees et al., 2003; Williams et al. 2006; Yeung et al., 2004). Due to this arrangement, communication and collaboration may occur sporadically between providers and patients as well as among providers (Blount, 2003; Butler et al., 2008; Collins et al., 2010). With this type of model, primary care physicians (PCP) provide behavioral health services using a psychiatrist or another behavioral health professional as a consultant, and the PCP maintains periodic communication about the patient with the consultant (Pell & Feller, 2005). In order to improve collaboration between different types of health care providers, case managers may be assigned to patients in order to coordinate care between patients and various health professionals (Pell & Feller, 2005; Williams et al., 2006).

The behavioral health laboratory project at the Philadelphia Veterans Administration Medical Center is one example of a coordinated care model (Oslin et al., 2006). This project equipped primary care providers with a telephonic clinical assessment service. This service was staffed with care managers and health technicians who conducted behavioral health and substance use screening and follow-up treatment decision support. In this particular program, a care manager could be a registered nurse (RN), physician assistant, social worker, or psychologist at the bachelor’s or master’s degree level with at least 2 years of experience in a research or clinical setting (U.S. Department of Veterans Affairs, 2010). In contrast, no specific credentials were required for health technicians. Rather, they were selected on the basis of personal attributes, interpersonal skills, and substantive knowledge (U.S. Department of Veterans Affairs, 2010). This program used the nine-item Patient Health Questionnaire (PHQ-9) to assist PCPs in identifying symptoms of depression (see appendix C for a complete list of instruments used to screen for and monitor mental health and substance use conditions). This program provided PCPs with a low-cost method of diagnosing and treating patients with mental health and substance use conditions. Other programs have also found that telephonic services offering assessment and consultation can help reduce costs (Upshur, 2005; Weinreb, Nicholson, & Williams, 2007).

**Co-located models**

Farther down the continuum of integrated care are co-located models. These models have typically been found to exhibit increased communication and collaboration since primary care and behavioral health providers typically share one facility (Blue-Howells, McGuire, & Nakashima, 2008; Briggs, Racine, & Chinitz, 2007; Kanapaux, 2004; Manderschied et al., 2007; McGuire, Gelberg, Blue-Howells, & Rosenheck, 2009; Mims, 2006; Pell & Feller, 2005; Westheimer, Steinley-Bumgarner & Brownson, 2008; Williams et al., 2006; Yeung et al., 2004). Although the closer physical proximity brought about through co-located models allows for more frequent in-person communication and collaboration among different health care staff members, primary care and behavioral health providers, such as physicians and psychiatrists, tend to remain culturally separated. This cultural divide may manifest into challenges around the standardization of processes involving health records, scheduling, patient consent and privacy, billing, and organizational policies (Butler et al., 2008; Gunn & Blount 2009, Manderschied et al., 2007; Williams et al., 2006). In addition to the PCP, the types of staff members involved with co-located care models vary by health setting, yet often include psychologists, medical residents, licensed clinical social workers (LCSW), RNs, pharmacists,
doctoral students, family advocates and case managers, and psychiatrists (Blount, 2003; Butler et al., 2008; Collins et al., 2010). While mental health professionals may become part of the team or larger practice, more often a behavioral health provider is stationed at a primary care facility. Generally, this provider serves the broader population with brief clinical interventions, such as self-care management strategies and lifestyle modifications (Blount, 2003; Butler et al., 2008; Collins et al., 2010; Williams et al., 2006). Although the services provided through co-located care models vary between health settings, these services often include patient education, screening, referral, consultation, assessment, therapy, case management, outreach, crisis walk-ins, monitoring, follow-up, care coordination, and medication prescription (Blount, 2003; Butler et al., 2008; Collins, 2009; Collins et al., 2010).

A study by Williams et al. (2006) demonstrated the differences between three private primary care practices that adapted co-located care models. In one practice, an LCSW from a community mental health center was “out stationed” as the mental health provider in the primary care practice two days per week (p. 538). In this role, the LCSW provided mental health and substance use assessment, therapy, consultation, and case management services (e.g., making patient referrals to other community programs). Positive outcomes associated with this co-located arrangement included improved access to health services among patients and increased communication between this mental health provider and the medical staff. However, in this case, it was also difficult to efficiently process paperwork and obtain reimbursement for services rendered to new patients because billing for mental health services was entirely through the community mental health center’s Medicaid claims process.

In the second practice, a licensed psychological associate (LPA) was hired; however, the medical practice assumed all responsibility for the expenses and reimbursement of mental health services. The medical staff members were responsible for informal patient consultations, and if necessary, referred patients to the LPA, who offered behavioral health care services, such as testing, diagnostic interviews, and individual or family therapy. The addition of the LPA had several advantages, including increased access to mental health care among patients, perceived improvement in making diagnoses among providers, and increased revenue for the practice. An early disadvantage of hiring the LPA was a lack of clinical space and difficulties billing with mental health codes.

The third model described by Williams et al. (2006) was the creation of a separate corporation for a mental health practice, collaborating with and functioning at the same location as a pediatric practice. The mental health practice comprised two psychologists, an LCSW, and a psychological associate. The two practices were located in the same building joined by a hallway with nearby reception areas. Each practice maintained separate health records and billing for patients. The mental health providers were available 2 to 4 days per week and provided services including diagnostic interviews, psychological and psycho-educational testing, individual and family therapy, parenting, and school consultations. In this instance, co-location allowed for increased communication between the two practices, and interdisciplinary learning occurred between pediatric and mental health staff members on a variety of issues. In line with the former examples, providers in each practice also found it difficult to adjust to the distinct philosophies and approaches of the other practice.

The disease management or chronic care model, another type of co-located model, focuses on secondary and tertiary prevention among populations with chronic health conditions. Specifically, this model emphasizes the use of self-management and lifestyle modification strategies in primary care settings by care managers or care coordinators with individuals diagnosed or at high-risk of chronic diseases (Collins et al., 2010). Care managers are
commonly nurses or master’s-level social workers who use specialty behavioral health interventions in collaboration with other health professionals (Blue-Howells et al., 2008; Cournos & Goldfinger, 2006; Manderschied et al., 2007; Upshur, 2005).

At 83 primary care clinics in Minnesota, the Depression Improvement across Minnesota Offering New Direction (DIAMOnD) initiative focuses on coordinated treatment for depression in primary care clinics using a disease management model (Jaekels, 2009). In each clinic, all patients receiving primary care are screened for depressive symptoms with the PHQ-9 instrument at intake. Patients who are identified as having depressive symptoms are referred to a care manager by their PCPs and are subsequently monitored through a registry system. Care managers are available for consultation via telephone, e-mail, or in-person. Care managers are a critical point of contact for patients, because care managers are generally more accessible than physicians. A psychiatrist supports care managers by reviewing caseloads weekly and recommending treatment changes. Care managers then discuss these recommendations with physicians. This continuous feedback loop integrates behavioral health expertise in each clinic by increasing knowledge of depression and treatment of co-occurring conditions among health professionals.

Integrated models

Through integrated care models, all health care providers are part of the same team and share a facility with interconnected processes (Begley et al., 2008; Collins, 2009; Dea, 2000; Earnst, Miller, & Rollnick, 2007; Grazier et al., 2003). Although primary care and behavioral health professionals are part of the same team with this model, the PCP is often the principle provider, while the behavioral health provider delivers services upon referral. The integrated care model enables high-risk patients, such as those in quadrant IV of the four quadrant clinical integration framework adopted by Collins et al. (2010), to receive highly individualized care plans (Begley et al., 2008; Collins, 2009; Dea, 2000; Earnst et al., 2007; Grazier et al., 2003; Mims, 2006; Pell & Feller, 2005).

The Rhode Island Free Clinic currently implements a culturally sensitive integrated care model with volunteer medical and nursing students, physicians, and nurse practitioners in addition to psychiatrists, psychiatric nurses, and social work therapists from private practice or academic settings (Pell & Feller, 2005). This clinic was initially established to meet the needs of Spanish-speaking female immigrants with depression. The PHQ-9 instrument is administered by a nurse and interpreter during the intake process to determine the most appropriate treatment options (e.g., referral to an onsite social work therapist or psychiatrist, future referral to a behavioral health specialist) for the patients. Streamlined services with translators are available in a shared facility, which enables patients’ needs to be more effectively and efficiently addressed. The addition of this service has improved patient satisfaction, decreased costs, and ultimately enhanced the quality of care delivered.

Another example the integrated care model can be found at a community health center in Buncombe County, North Carolina, where three full-time master’s-level behavioral health therapists are co-located with 12 physicians (Mims, 2006). Together, these staff members serve 85% of the county’s low-income population. In order to provide seamless care, patients use the same waiting room regardless of whether they are seeing a physician or a behavioral health clinician. One behavioral health clinician is always on-call to immediately triage patients. Both types of providers use the same medical record, which enables behavioral health specialists to provide prompt feedback and evidence-based recommendations to physicians. The behavioral health clinicians are viewed as primary care providers rather than specialty mental health therapists.
Common barriers and supports related to the integration of primary care and behavioral health

The federal government supports integrated health care delivery by providing guidance to state and local agencies (Robinson & Strosahl, 2009) as well as opportunities to participate in demonstration projects including medical home initiatives and primary care co-location (Druss & Mauer, 2010). Nevertheless, challenges pertaining to the reimbursement and general financing of mental health services in primary care have been well-documented barriers to the integration of primary care and behavioral health at state and local levels (Bachman, Pincus, Houtsinger, Unützer, 2006; Blue-Howells et al., 2008; Briggs et al., 2007; Butler et al., 2008; Dea, 2000; Foy, Earls, & Horowitz, 2002; Glassgow, Bull, Piette, & Steiner 2004; Gunn & Blount, 2009; Hinton et al., 2007; Kanapaux, 2004; Kautz, Mauch, & Smith, 2008; Mims, 2006; Williams, Shore, & Foy, 2006). The following seven priority barriers related to the reimbursement of mental health services in primary care setting were identified in a Substance Abuse and Mental Health Administration report by Kautz et al.(2008, pp. 2–3):

- State Medicaid limitations on payments for same-day billing for a physical health and a mental health service or visit;
- Lack of reimbursement for collaborative care and case management related to mental health services;
- Absence of reimbursement for services provided by nonphysicians, alternative practitioners, and contract practitioners and providers;
- Medicaid disallowance of reimbursement when primary care practitioners submit bills listing only a mental health diagnosis and corresponding treatment;
- Level of reimbursement rates in rural and urban settings;
- Difficulties in getting reimbursement for mental health services in school-based health center settings; and
- Lack of reimbursement incentives for screening and providing preventive mental health services in primary care settings.

With the landmark passage of the Patient Protection and Affordable Care Act in March 2010, efforts to abate these reimbursement-related challenges and promote the integration of primary care and behavioral health, particularly among safety net providers serving populations at higher risk of chronic conditions, are currently underway (Druss & Mauer, 2010). Under the health care reform legislation, Medicaid enrollees with two or more chronic conditions and/or a serious mental illness may designate a provider as a health home (Druss & Mauer, 2010). Medicaid agencies have launched various patient centered medical home demonstration projects, some of which specifically target individuals with serious mental illnesses or substance use conditions, to assess the effects of new payment methods on quality of care and health care costs (Goroll, Berenson, Schoenbaum, & Gardner, 2007). Promising payment methods with respect to the integration of primary care and behavioral health include pay-for-performance (Butler, 2008) as well as hybrid methods that combine fee-for-service with monthly care management fees and provider bonuses (Druss & Mauer, 2010).

Beyond challenges financing integrated health care delivery, long-standing cultural differences between the disciplines of primary care and behavioral health in addition to the related fragmentation of primary care and behavioral health care delivery systems have hindered efforts to integrate health care (Blue-Howells et al., 2008; Collins et al., 2010; Gunn & Blount, 2009; Manderscheid et al., 2007; Upshur, 2005; Walker & Collins, 2009). These barriers may be imposed by the environments that primary care and behavioral health systems are...
embedded in, reinforced by the structure and organization of each individual system. That is, disparate operational and clinical processes may exist between primary care and behavioral health organizations despite attempts to integrate health care delivery. Moreover, as is the case with certain coordinated models of integrated care, primary care and behavioral health organizations may remain geographically separated. Rigid confidentiality laws that preclude information sharing regarding substance use and mental health between primary care and behavioral health organizations may additionally obstruct the integration of certain care delivery processes (Collins et al., 2010; Gunn & Blount, 2009). Such cultural and other large systemic differences may also manifest into challenges that primary care and behavioral health staff experience communicating, collaborating, and ultimately delivering integrated care to patients.

As accountable care organizations (i.e., collectives of hospitals, primary care providers, specialists, and other types of health care staffs responsible for the care of designated patient groups) begin to take root nationwide, those systemic and cultural differences between various health care systems, such as primary care and behavioral health organizations, may be reduced out of the sheer functional necessity to collectively serve patients and their multifaceted health care needs. Along these lines, the development and utilization of shared interorganizational processes, such as integrated health information technology, shared governance structures (e.g., interorganizational policies, boards, and leaders), and regionalized or centralized call centers, have been shown to support the integration of primary care and behavioral health (Dea, 2000; Foy et al., 2002; Manderscheid et al., 2007). The co-location of mental health professionals within primary care organizations has additionally been shown to increase the integration of behavioral health services with primary care (Briggs et al., 2007; Kanapaux, 2004). In many cases, organizational champions may spur the integration of health care by promoting related clinical and operational changes to organizational staff and fostering a transformative climate more conducive to organizational change (Manderscheid et al., 2007; Varkey & Antonio, 2010).

To integrate PCBH and overcome the aforementioned barriers, organizations and their staff often require upfront training and technical assistance to gain the requisite abilities to transform their combined systems of care (Blount & Miller, 2009; Butler et al., 2008; Druss & Mauer, 2010; Oakley, Moore, Burford, Fahrenwald, & Woodward, 2005; Runyan, Fonseca, Meyer, Oordt, & Talcott, 2003). In turn, staff members at various levels of the organization may better understand the benefit of integrated health care and become increasingly willing to change their day-to-day processes whereby the integration of primary care and behavioral health may also be facilitated (Manderscheid et al., 2007; Robinson & Strosahl, 2009; Walker & Collins, 2009; Williams, Shore, & Foy, 2006). Runyan et al. (2003) found that support for integrated health care endeavors among providers is especially critical to ensuring that necessary changes in clinical processes occur. Communication and collaboration may also be enhanced among primary care and behavioral health staff members as awareness, understanding, and support of integrated care grow (Gunn & Blount, 2009; Westheimer et al., 2008).

Lessons learned and outcomes achieved through integrated health care efforts

As models of integrated PCBH continue to evolve and be tested, the impact of these models on health care delivery outcomes, including access to care, quality of care, and health care costs, as well as outcomes related to health status and behaviors will become increasingly evident. However, given the wide spectrum of integrated health care models being implemented as well as the variation in the sociodemographic characteristics of patient populations exposed to these models and the structural and organizational features of the
health care systems delivering integrated care, the ability to compare the effectiveness of integrated health care delivery with respect to those outcomes achieved is currently limited. Nonetheless, both individual studies and systematic reviews conducted over the past decade have begun to assess the outcomes associated with integrated health care delivery in addition to the critical lessons learned that may inform future efforts to integrate primary and behavioral health care.

**Access to care**

Among others, Collins et al. (2010) assert that “when mental health is integrated into primary care, people can access mental health services closer to their homes, thus keeping families together and allowing them to maintain daily activities. Integration also facilitates community outreach and mental health promotion, as well as long-term monitoring and management of affected individuals” (p. 3). This rationale that integrated PCBH will increase access to care has been substantiated by findings from several studies of various integrated health care programs (McGuire et al., 2009; Oslin et al., 2006; Runyan et al., 2003; Williams, Shore, & Foy, 2006). Some studies have further suggested that increased access to care via integrated primary care and behavioral health systems may be in part related to the reduced stigma that patients experience as a result of having their mental health assessed in primary care settings and subsequently referred to behavioral health providers (Yeung et al., 2004) as well as having their mental health assessed and treated by mental health professionals in primary care settings (Gallo et al., 2004). Pell and Feller (2005) additionally demonstrated that a high proportion of patients who are referred for mental health services in primary care follow-up with mental health providers.

**Quality of care**

Once individuals have accessed integrated health care systems, the quality of care received as indicated by the coordination of services rendered, continuity of care, screening and health condition identification rates, and interactions between patients and health professionals (i.e., patient satisfaction) may then be improved (Blue-Howells et al., 2008; Butler et al., 2008; Gallo et al., 2004; Golinkoff, 2007; Oslin et al., 2006; Pell & Feller, 2005, Williams, Shore, & Foy, 2006). For example, in a study of a reverse co-location model that provided additional training to psychiatrists in mental health settings to monitor and treat common physical conditions, associated outcomes included increased organizational capacity and improved quality of care with respect to those services patients received from psychiatrists (Mauer & Druss, 2007). More concretely, increased organizational capacity as a result of primary care and behavioral health co-location may allow primary care providers additional time to focus on complex medical issues while mental health providers address patients’ behavioral health issues (Collins et al., 2010). Further, as Williams, Shore, and Foy (2006) suggest, integrated care may improve communication among primary care and behavioral health professionals thereby improving quality of care.

**Health care costs**

Blount et al. (2007) along with others (Collins et al., 2010; Pincus, Pechura, Keyser, Bachman, & Houtsinger, 2006) have established that the provision of behavioral health in primary care settings is cost-effective. Individual studies of integrated primary care and behavioral health systems have further demonstrated cost savings (Cournos & Goldfinger, 2006; Druss et al., 2001; Golinkoff, 2007; Manderscheid et al., 2007; Parhasarathy, Mertens, Moore, & Weisner, 2003). Although such savings have been specifically attributed to the reduced provision of duplicative services, decreased hospitalization rates, and increased clinical effectiveness in the assessment and treatment delivered through those interdisciplinary teams that are part of integrated care systems, it has been recognized that the specific model and strategies
whereby integrated care is delivered may influence whether or not cost savings occur (Butler et al., 2008; Blount et al., 2007).

**Health outcomes**

Given the chronic nature of many health conditions, including serious mental illnesses and substance use conditions, significant improvements in health status may take time and be preceded by changes in health behaviors to self-manage these conditions (e.g., treatment adherence, substance use, diet and exercise). For example, a study by Bernstein et al. (2005) found that patients who met with a mental health counselor during their routine medical visits and then received follow-up calls were motivated to reduce their illicit drug use. A study by Whitlock, Polen, Green, Orleans, and Klein (2004) additionally showed that the utilization of behavioral counseling interventions in primary care settings reduced risky and harmful alcohol use among primary care patients. Beyond decreased substance use, several studies have shown improvements in patients’ adherence to treatment regimens for mental disorders and physical health conditions through integrated health care programs (Bogner & de Vries, 2010; Knott et al., 2006) as well as improvements in physical functioning, perceptions of physical well-being and self efficacy, and diet and exercise habits (Krause et al., 2006).

A review of 33 integrated primary care and behavioral health randomized clinical control (RCT) trials and high quality quasi-experimental design studies conducted by Butler et al. (2008) for the Agency for Healthcare Research and Quality generally found positive outcomes related to symptom severity, treatment response, and remission compared to the standard of care. However, in comparing these outcomes between the different models of integrated care studied, the authors did not find that outcomes improved as the level of integration inherent in the models studied increased (i.e., either provider integration or integrated processes of care; Butler et al., 2008). The authors further caution that gender and comorbidities, such as increased pain and complications levels, may confound the relationships between the care received and related outcomes.
Summary of the Integrated Health Initiative in Grand Rapids, Michigan

Initiative origins

Located in western Michigan, Kent County is the fourth most populous region in the state with more than 605,213 residents (Population Division, U.S. Census Bureau, 2008). The population is predominantly White (81.2%) with a smaller proportion of Black/African-American (14.2%), Latino/Hispanic (4.2%), and Asian (2.4%) residents (U.S. Census Bureau, 2009). Grand Rapids, which is 150 miles west of Detroit, is the county seat with an estimated population of 201,835 (Kent County Administration, 2011). In recent years, Grand Rapids has experienced some of the fastest population growth in the state, increasing in the number of residents by 14.7% over a 10-year period according to the 2000 U.S. Census. This growth may be attributed in part to the relatively favorable economic climate with marked job increases in the health services industry (Kent County Administration, 2011).

Nevertheless, more than one in 10 individuals (13.1%) live below the federal poverty level in Kent County (U.S. Census Bureau, 2009), and approximately 15% of Kent County adults are uninsured (University of Wisconsin, 2011). Nationwide an estimated 5–7% of adults age 18 years and older have a serious mental illness (SMI) in any given year, which would have translated into more than 412,000 adult Michiganders in 2000 (Michigan Department of Community Health, 2010). In Kent County, adults with SMI primarily receive mental health services through a system of qualified health plans (network180, 2010). However, if an individual’s condition is found to be very complex or evident to the community, he or she may instead be referred to the public mental health authority, which provided more extensive behavioral health benefits (network180, 2010). A microcosm of the U.S., many adults with SMI in Kent County receive fragmented primary care and behavioral health services from a patchwork of health care providers.

Recognizing the shortcomings of their local health care delivery system and seeking solutions, a consortium of leaders from primary care, mental health, and substance use organizations based in Grand Rapids grew interested in the concept of integrated health care for
individuals with co-occurring chronic health conditions, including those typically labeled as physical or mental. Their high prioritization of finding a more effective health care delivery model to meet the needs of this population was further validated by a National Association of State Mental Health Program Directors report that demonstrated individuals with SMI die on average 25 years younger than the general population (Parks, Svendson, Singer, Foti, & Mauer, 2006). To accomplish their goal, the consortium’s leaders resolved to push for adoption of the Chronic Care Model (see figure 1). To pursue this shared vision, and to ultimately deliver care in a way that would enable patients to better manage their co-occurring chronic health conditions, Cherry Street Health Services, Touchstone innovarè, and Proaction Behavioral Health Alliance, with the local mental health authority network180, established a partnership and began developing an integrated primary care and behavioral health initiative.

**Initiative partners**

Since 2009, Cherry Street Health Services, Touchstone innovarè, and Proaction Behavioral Health Alliance have been committed to collaboratively integrating primary care and behavioral health. While not a formal member of the partnership, the Kent County mental health authority, network180, has also expressed interest in and provided support to these organizations in this endeavor. These organizations are all part of the local safety net, providing health services to the most vulnerable and diverse populations in Kent County, in many cases, regardless of an individual’s ability to pay. Yet, the history, culture, and types of services offered by each organization are unique. Consequently, brief descriptions of each organization are provided in the following subsections as a foundation for the subsequent case study findings.

**Cherry Street Health Services**

Cherry Street Health Services (CSHS) is an FQHC that was founded in 1988 (CSHS, 2011). CSHS operates at 12 centers and 68 schools in Kent and Montcalm counties. During 2010, 51,125 individuals, 53% of whom were covered by Medicaid, received care through CSHS. In 2009, CSHS documented over 166,000 patient encounters (G. Dziadosz, personal communication, April 29, 2011). CSHS provides health services to all individuals requiring primary care, regardless of their cultural or socioeconomic backgrounds. CSHS presently offers the following range of health services and programs:

- Medical care
- Dental program and services (adult and pediatric)
- Social work
- Eye exams and eyeglasses
- Maternal support services program

- Women, Infants, and Children (WIC) program
- 340B pharmacy program
- Asthma program
- National Health Service Corps
**Touchstone innovarè**

Touchstone innovarè (TI), which is supported by network180, was formed in 1998 through the merger of three similar organizations with roots dating to 1956. TI provides psychiatric, therapy, case management, and psychosocial rehabilitation services for individuals with SMI. Co-occurring substance use disorders are common in nearly half (40%) of the client population. Most clients have public insurance—85% of clients have Medicaid, and 45% of clients have Medicare. During 2010, approximately 2,900 individuals received mental health services from TI, and in 2009, 92,800 client encounters were documented (G. Dziadosz, personal communication, April 29, 2011).

**Proaction Behavioral Health Alliance**

Originally Project Rehab, Proaction Behavioral Health Alliance was established in 1968. The organization was created to provide residential and outpatient substance abuse treatment. Currently, Proaction provides residential treatment for federal and state correctional systems; outpatient counseling for mental health, substance use, and co-occurring disorders; medication assisted treatment (i.e., methadone, suboxone); and employee assistance programs (G. Dziadosz, personal communication, April 29, 2011). In 2010, Proaction documented approximately 176,000 outpatient encounters and 56,700 residential treatment days (i.e., the number of days is according to number of individuals who were in residential treatment; G. Dziadosz, personal communication, April 29, 2011).

**network180**

Since 1987, network180 has provided community-based mental health services in Kent County (network180, 2011). As the county’s mental health authority, network180 provides payment for services for mental health, substance use, and developmental disabilities to individuals enrolled in Medicaid. Although network180 directly provides emergency access center services, all other mental health services are contracted (network180, 2011). In 2010, network180 served 92,554 individuals (network180, 2010).

**Initiative theory of change**

As the three partner organizations collaboratively roll out the integration initiative, four shared elements have been identified as collectively moving the initiative forward. These include (1) the adaptation of the chronic care model, (2) an established network of partnerships, (3) the strategic investment of organizational resources, and (4) a commitment to meet the community’s chronic health care needs. Together, these characteristics have served as the foundation for the initiative’s four chronological stages, which include:

1. Integration development,
2. Piloting,
3. Sustainability, and
4. Replication.
During the CHCI-MP, Altarum was involved with and studied the first development phase of the integration initiative. This phase consisted primarily of planning the initiative, having a small team of health care professionals test an integrated care model with 15 patients diagnosed with chronic conditions, and securing resources to aid in the rollout of subsequent phases. As the initiative continues to progress, the larger scale pilot phase is expected to begin in the fall of 2011. In the pilot phase, the three organizations will integrate primary care and behavioral health with an increased number of health care professionals and adult patients with chronic health conditions at the recently constructed Heart of the City Health Center in downtown Grand Rapids. By continuously monitoring, evaluating, and transferring knowledge regarding the initiative to various stakeholders, the aim of the initiative is to establish and sustain a fully integrated health care system. In doing so, it is hoped that the initiative will positively impact the health status of vulnerable individuals and the community that surrounds them. Figure 2 visually depicts this change theory.
Case Study Approach

Research questions, study design, and time period

A single-case study design with three embedded units of analysis was used to address the following research questions (see table 3) related to the development phase of the integration initiative (Yin, 2009). This study commenced during the spring of 2010, when approval for the study was granted by the Michigan Department of Community Health Institutional Review Board. Prior to this, Altarum staff members collaborated with the members of the three partner organizations to plan the study and assess other planning related activities (e.g., integration development team training, workgroup collaboration and communication). The study concluded in the spring of 2011, toward the end of Altarum’s formal partnership with CSHS, and the CHCI-MP Joint Advisory Council and Participating Health Centers meeting in May 2011.

Table 3. Integration development research questions

<table>
<thead>
<tr>
<th>Question</th>
<th>Description</th>
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<tbody>
<tr>
<td>1.</td>
<td>What were the major planning activities undertaken by the three partner organizations to launch the integrated primary care and behavioral health initiative?</td>
</tr>
<tr>
<td>2.</td>
<td>What were the main resources invested by the three partner organizations during the integration development phase of the initiative?</td>
</tr>
<tr>
<td>3.</td>
<td>How was primary care and behavioral health integrated among the three partner organizations during the study period?</td>
</tr>
<tr>
<td>4.</td>
<td>What were the most commonly perceived barriers and facilitators, including macrosystem level and/or environmental factors (e.g., clinical, operational, financial factors), that influenced the rollout of this initiative during the study period?</td>
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<tr>
<td>5.</td>
<td>How, if at all, did communication and/or collaboration change among staff members who were directly involved with the integration development (i.e., workgroup and IDT members)?</td>
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<tr>
<td>6.</td>
<td>How, if at all, did buy-in to the integration initiative change among staff members during the study period?</td>
</tr>
<tr>
<td>7.</td>
<td>How, if at all, did understanding of integrated primary care and behavioral health change among staff members at the three partner organizations during the study period?</td>
</tr>
<tr>
<td>8.</td>
<td>How, if at all, did the standardization of clinical and/or operational processes change among the three partner organizations during the study period?</td>
</tr>
<tr>
<td>9.</td>
<td>How, if at all, did self-efficacy, patient activation, and/or self-perceived health status change among patients who received integrated care during the study period?</td>
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Embedded units of analysis

The data used to address the aforementioned research questions was gathered from three units embedded in the development phase of the integration initiative. These units included integration development workgroup members, IDT members, and patients who received integrated primary care and behavioral health during the study period. In the following subsections, brief descriptions of each embedded unit of analysis, in addition to how data were gathered and analyzed from these units are provided.

Workgroup members: Key characteristics and sample

A total of 11 workgroups were formed in September 2009, during the project’s kickoff meeting, to plan the integration initiative. These workgroups were made up of three to six individuals who were employed by one of the three partner organizations or network180. One workgroup leader per group and other workgroup members were collectively nominated by executive leaders and other staff members from the three partner organizations. Each workgroup was charged with addressing one area which was determined to be critical in launching the integration initiative. These areas included: CEO/workgroup leadership, culture change, curriculum development, client selection, evaluation, finance, information technology (IT), practice management, space, and staff selection. Some individuals were part of more than one workgroup. From a total of 26 individuals who were originally recorded as participating in the workgroups, a purposive sample of 17 workgroup leaders and members was used for data collection purposes. More specifically, this sample included five individuals employed by CSHS, four individuals employed by Proaction, seven individuals employed by TI, and one individual employed by network180.

Integration development team members: Key characteristics and sample

The integration development team (IDT), another data source for this study, was made up of eight health professionals recruited from the three partner organizations to initially provide integrated health care services to adults with co-occurring disorders. The IDT began receiving weekly training on how to deliver integrated primary care and behavioral health services in February 2010. These staff members began delivering integrated care to patients in May 2010. During the study period, data were collected from all IDT members. The IDT was made up of the following health professionals:

- One internal medicine physician
- One psychiatrist
- One registered nurse
- One medical assistant
- One pharmacist
- Three health coaches.

1 Altarum’s CHCI-MP evaluator served as the evaluation workgroup leader from October 2009 to December 2010.
2 This total number excludes the Altarum staff member who led the evaluation workgroup.
3 Health coaches are licensed social workers with Master of Social Work degrees.
Patients of the integration development team: Key characteristics and sample

Given the interest of the county mental health authority in addition to the ease by which services provided to patients enrolled in Medicaid could be billed, a small number of adults with chronic co-occurring disorders, including SMI, were invited to receive integrated health services from the IDT and participate in this formative study beginning in May 2010. These individuals had previously received behavioral health services from either Proaction or TI.

Over the course of the study period, a total of 15 patients were enrolled in this study. The range of chronic health conditions that these patients were diagnosed with was three to 15, with patients having an average of eight chronic health conditions at any given time during the study period. A summary of the most common chronic health conditions diagnosed among these patients is provided in table 4.

### Table 4. Summary of the most common chronic health conditions diagnosed among IDT patients

<table>
<thead>
<tr>
<th>Health condition</th>
<th>Number of patients with the condition</th>
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<tbody>
<tr>
<td>Hypertension</td>
<td>8</td>
</tr>
<tr>
<td>Schizoaffective disorder</td>
<td>8</td>
</tr>
<tr>
<td>Hyperlipidemia</td>
<td>6</td>
</tr>
<tr>
<td>Gastro esophageal reflux disease</td>
<td>6</td>
</tr>
<tr>
<td>Asthma</td>
<td>5</td>
</tr>
<tr>
<td>Chronic back pain</td>
<td>4</td>
</tr>
<tr>
<td>Bipolar 1</td>
<td>4</td>
</tr>
<tr>
<td>Insulin dependent diabetes mellitus</td>
<td>4</td>
</tr>
<tr>
<td>Type 2 diabetes</td>
<td>4</td>
</tr>
</tbody>
</table>

Data were collected from 11 (73%) of these 15 patients. These patients ranged in age from 28 years to 60 years, with a median age of 50 years. More than half (55%) of these patients self-identified as White/Caucasian, three (27%) self-identified as African-American/Black, one (9%) self-identified as Asian, and one (9%) self-identified as Dutch. In reporting the highest level of education earned, only one patient indicated having earned a bachelor’s degree, and the remainder of patients reported that they had some college education or vocational training (approximately 45%), had earned a high school diploma or General Equivalency Diploma (approximately 36%), or had some high school (approximately 9%).

### Data collection methods

#### Key informant interviews

Primary data were collected from the workgroup members through semistructured, in-depth interviews. In-person interviews were conducted by Altarum staff members with 14 workgroup members during a site visit to Grand Rapids in September 2010. Three workgroup members were unavailable for interviews during the site visit, so telephone interviews were conducted with these individuals either the week before or the week after the site visit. Informed consent was obtained from all individuals prior to their interviews (see appendix C). In-person interviews occurred at TI’s Sheldon Avenue location in downtown Grand Rapids. Refreshments were provided. Each interview lasted approximately 60 minutes and
was audio recorded for subsequent transcription by an independent consultant. A semi-structured guide, which was collaboratively developed by the Altarum project team, was used by each interviewer (see appendix D).

During the September 2010 site visit to Grand Rapids, semistructured interviews were additionally conducted with IDT members at TI’s Sheldon Avenue location with refreshments provided. In-person interviews were conducted with seven of the eight IDT members. A telephone interview was conducted following the site visit with the one IDT member who was unavailable for an in-person interview during the site visit. Prior to each interview, informed consent was obtained from each IDT member (see appendix E). Interviews with IDT members lasted approximately 60 minutes and were also audio-recorded for subsequent transcription by an independent consultant. The semi-structured interview guide used with IDT members was collaboratively developed by the Altarum project team (see appendix F).

Focus groups

During the September 2010 site visit, one focus group was conducted at TI’s Sheldon Avenue location with seven patients who had received health services from the IDT. A total of eight patients were invited to participate in this focus group. These patients received a flyer about the focus group from the project manager or their health coaches (see appendix G). Patients were offered a $50 gift card to Meijer, a local grocery and household goods store, as an incentive to participate in this group. A pizza dinner was also provided. Informed consent was obtained from all patients prior to the focus group (see appendix H). The focus group lasted approximately 60 minutes, and was co-facilitated by two Altarum staff members with a third Altarum staff member who took notes. The lead facilitator used a semistructured protocol, which was developed by the Altarum project team, to guide the focus group discussion (see appendix I). The focus group was audio recorded for subsequent transcription by an independent consultant. Focus group participants were asked to complete a brief demographic survey at the end of the group (see appendix J), were then each given a $50 gift card, and were asked to complete an incentive reimbursement form (see appendix K).

A second site visit to Grand Rapids occurred in March 2011. During this visit, one focus group was conducted with IDT members, and two focus groups were conducted with patients who had received health services from the IDT. The two focus groups were segmented by the date that patients began receiving IDT services, such that one group was conducted with patients who had started receiving IDT services before September 2010, and the second group was conducted with patients who began receiving IDT services between September 2010 and January 2011. Seven individuals participated in the IDT focus group, seven individuals participated in the focus group conducted with patients enrolled prior to September 2010, and four individuals participated in the focus group with patients enrolled from September 2010 to January 2011.

Similar methods were employed for these three focus groups. Flyers were used to recruit both IDT members and patients (see appendices L and M, respectively). Participant incentives were $20 Meijer gift cards for IDT members and $50 Meijer gift cards for IDT patients. A pizza dinner was provided for each patient focus group, and a pizza lunch was provided for the focus group with IDT members. Informed consent was obtained from both IDT members and patients prior to the focus group they participated in. Each group was co-facilitated by two Altarum staff members, who used an adapted version of the patient focus group protocol from the September 2010 site visit (see appendix N) and an IDT focus group protocol (see appendix O), both collaboratively developed by the Altarum project team. The three focus groups were audio recorded for subsequent transcription by an independent consul-
tant. Patients who had begun receiving services from the IDT between September 2010 and January 2011 were requested to complete the same brief demographic survey that patients who participated in the focus group during the September 2010 site visit had. All focus group participants were also requested to complete the incentive reimbursement form.

**Data management and analysis**

All transcripts from key informant interviews and focus groups were uploaded as Word documents into QSR NVivo 8 software. Unique databases were established for each data source (i.e., workgroup members, IDT members, and IDT patients). An inductive content analysis approach was used (i.e., linking text from the transcripts to codes or themes) by a team of three experienced qualitative researchers. This approach is commonly used to analyze qualitative data (Glaser & Strauss, 1967; Patton, 2002). The team used both the interview guides and transcripts to ground the development of broad themes or top-level codes for each database. The team then applied the top-level coding schemes, which were developed for each database, to the relevant transcripts. To ensure a high-level of coding consistency, team members met on a biweekly basis from November 2010 to April 2011 to develop sub-code schemes and resolve any confusion regarding how various text passages should be coded. In addition, each team member reviewed another team member’s coding to collectively resolve any inconsistencies in how text was linked to codes and modified the coding scheme if necessary. The team then mapped the subcodes or themes to the various research questions, and when applicable, collectively explored similarities and differences among the sources from which the relevant data were gathered. As such, case study findings are organized by the main research questions and described in terms of the most common themes that emerged from the relevant source(s). Discrepancies between different sources are also described.
Case Study Findings

Description of the integration development process

Integration development workgroup activities

At the beginning of the initiative, executive leaders contacted a variety of employees across the three organizations to request their involvement as part of several workgroups tasked with planning the integration initiative. Leaders recruited staff members in two different ways. Either the staff member notified the leaders that he or she was interested in becoming involved, or the staff member possessed specific abilities that the leaders sought out. The participation of these staff members in the workgroups was voluntary, and their roles and responsibilities related to the integration initiative were in addition to regular job responsibilities. Workgroup members did not receive compensation for their participation in the integration initiatives beyond their regular salaries. In order to coordinate and track the many pieces of the integration development, including tasks, timelines, and communication between workgroup members, the leaders selected one staff member to be the initiative’s manager.

The workgroups focused on 10 areas that the organizational leaders believed were crucial to the development of the integration initiative. Throughout the course of this phase, the responsibilities and time commitment of most workgroup members fluctuated. Tasks for some workgroups were frontloaded, such that once a certain goal was accomplished, the tasks for these groups diminished. For example, the curriculum development workgroup members spent more time at the initiative’s onset to develop and schedule the training modules compared to after the IDT training occurred. In contrast, other workgroups assumed more continuous roles and responsibilities. The finance workgroup, for instance, continuously worked to determine which codes IDT members could use to bill services and what the billing process would look like once the electronic health record (EHR) system became integrated across the three organizations. The space workgroup also worked continuously as the agencies were in the process of constructing the Heart of the City Health Center building in preparation for co-location. Regardless of their past and present roles and responsibilities related to the initiative, most workgroup members recognized that their involvement with the initiative would increase again during the piloting phase.
Investment of resources toward the integration development

Workgroup and IDT members acknowledged that the three organizations dedicated a number of resources to the integration development phase. These resources included dedicated staff time, building space, training, and IT software and assistance. Though these resources were not purely financial, they were perceived as potentially affecting the finances of the three partner organizations.

Those interviewed frequently cited the release time for IDT members to both train and deliver care to patients as a significant organizational resource invested in the initiative. Organizational leaders provided IDT members with 6 hours of release time per week. Workgroup members were not provided dedicated time for integration development activities. However, members did note that they shifted some of their primary job responsibilities in order to perform workgroup duties.

The workgroup and IDT members also commonly described building space as another organizational resource invested in the initiative. Building space was provided for workgroup meetings and IDT trainings. In addition, leaders reserved meeting space for the IDT’s weekly huddles and for health coaches to meet with the IDT patients.

Beyond dedicated staff time and building space, IDT members received training on a variety of primary care and behavioral health topics. Training occurred 1–2 days per week for 16 weeks, from February to May 2010. Each training module was 2–4 hours. IDT members received training on a wide range of chronic conditions, including diabetes, heart disease, asthma, mental disorders, and substance use conditions. IDT members were also trained in various treatment modalities, such as motivational interviewing, cognitive behavioral therapy, self-management tools, and dialectic behavioral therapy. One aspect of the training that IDT members noted to be particularly useful was discussion around medical versus behavioral health terminology. For example, the IDT members indicated that the meaning of certain acronyms, such as MI, could stand for myocardial infarction or motivational interviewing depending on the staff member’s clinical orientation.

Other inputs touched on by IDT and workgroup members were IT software and assistance. IT personnel were initially involved with the initiative by providing audio-visual support for integration-related presentations and trainings. The most significant monetary investment made during this phase was in EHR software that the IT staff members were programming across the three organizations when these interviews were conducted. The installation of an additional telephone line was another investment made to make the direct transfer of calls between locations more efficient.

PCBH integration model initially implemented

During the interviews with workgroup members, they were shown a visual aid (see table 2) and asked to identify which integrated primary care and behavioral health model most closely resembled the model implemented by the IDT. Many workgroup members experienced difficulty identifying one specific model that matched what they understood to be the model presently implemented by the IDT. Consequently, workgroup members selected models across the integration spectrum from coordinated care models, which mainly improved collaboration between separate providers, to the most integrated collaborative system of care model4. Most workgroup members interviewed qualified these responses

4 This is a highly integrated system of care whereby medical and behavioral health professionals collaborate closely with one another to create individualized treatment plans for high-risk patients

“The way I sometimes [describe integration initiative] is that if you ask somebody who came into care in our system some years later what they came in for, was it a physical problem or behavioral health problem, they will say, ‘I don’t know what you mean. What is behavioral? What is physical?’”

~ Workgroup member
by indicating that they primarily perceived the integration of primary care and behavioral health to have occurred for those patients receiving care from the IDT versus across the partner organizations more broadly. Moreover, many workgroup members elaborated that the model currently implemented was different from the model they believed the organizations were working to implement in the future. In making this distinction, workgroup members clarified that the model presently implemented by the IDT more closely resembled a coordinated model; whereas, in the future, the model implemented would become increasingly integrated.

Workgroup members perceived that for the present IDT patients, services were integrated with primary care and behavioral health providers working as part of the same treatment team. Workgroup members further explained that for the IDT, regular in-person communication and collaboration allowed for the creation of highly individualized treatment plans. However, workgroup members also noted that all IDT members were not yet co-located and system processes related to IT, billing, and culture, were not yet integrated across the organizations. Several workgroup respondents elaborated that the integration of these system processes would occur to a greater extent following co-location or an organizational merger. When asked to indicate the model that the three agencies were striving to implement in the future, most workgroup members agreed that the ideal integration model is the integrated collaborative system of care. Those CEO/leadership workgroup members interviewed further articulated that part of their vision for the integration initiative is to eliminate separate systems of “primary health care” and “behavioral health care,” establishing one fully integrated “health care” system for patients with chronic conditions.

IDT members provided more tangible examples of how care was delivered using an integrated model during the initiative’s development phase. Patients who received care through the IDT were not assigned a principle provider, and instead received collaborative team-based care. Depending on the state of each patient’s chronic conditions, the patient could visit the team’s various health professionals at different intervals, which could fluctuate with the intensity of his or her conditions. For instance, one month a patient could visit his or her health coach more frequently; whereas, the next month he or she might visit the internal medicine physician more often than the health coach. Care delivered through the IDT was described as highly individualized and holistic with the compartmentalization of symptoms eliminated. Examples of health services delivered by the IDT included medication consultation, motivational interviewing, case management, and health education regarding chronic conditions and condition self-management.

During their weekly huddles, IDT members reported that they discussed their patient panel to ensure that everyone on the team remained apprised of each patient’s status. IDT members also reported that they frequently used e-mail as a communication mode to discuss pressing patient issues between weekly huddles. Until the EHR is integrated across the three organizations, the IDT members indicated that they will continue to summarize patient visit notes after appointments and e-mail their notes to the team. IDT members commonly spoke of increased communication and collaboration amongst team members and even amongst staff members at the three partner organizations who were not directly involved in the integration, such as the dentist or diabetic educator. All IDT members indicated that they maintained their regular job responsibilities within one of the three organizations four days per week.

Patients who participated in the integration development had access to appointments with IDT members every Tuesday. Since the beginning of their involvement with the IDT, patients indicated that how they schedule appointments and when these appointments occur has remained the same. For those patients who need to visit multiple providers on the same day,
IDT members try to ensure patients’ appointments are consecutive in order to minimize wait times. IDT members schedule patients’ follow-up appointments at the end of their current visits in an attempt to reduce scheduling confusion on the patient’s end and to ensure continuity of care.

Patients noted that appointments, depending on which provider they are seeing and the nature of their treatment, may last from 30 to 60 minutes. When asked about the frequency of their visits, patients stated that they saw the physician and psychiatrist from every week to once every 3 months, depending on the severity of their conditions. On average, patients visited their health coaches every 2 weeks. When asked to describe the care they received from the IDT, patients explained that during each appointment with a health coach, they discuss their care plans and goals as well as health behaviors, such as diet and exercise. Several patients also indicated that they received educational pamphlets on various aspects of health, which are available in the health coach’s office. When necessary, patients reported also having met with the IDT’s RN to discuss their medication regimens.

Barriers and facilitators, including macrosystem and environmental factors, perceived in relationship to the integration initiative

Key barriers perceived as hindering the integration development

During the integration development, IDT and workgroup members commonly identified several contextual factors that hindered the initiative’s rollout. Barriers specifically cited among workgroup members included cultural differences between the fields of primary care and behavioral health, limited awareness among organizational staff members regarding the initiative, lack of leadership, challenges securing the resources necessary to standardize processes across the three organizations, and competing priorities. These barriers are described in terms of both the organizational or macrosystem and microsystem levels (i.e., those individual units of staff members involved in the integration development). Socioeconomic and political forces that influenced the initiative by way of the community, which the three partner organizations are embedded in, are also described.

At an organizational level, the cultural differences faced integrating health care delivery systems across the three organizations was a barrier frequently described by workgroup members. Some workgroup members noted that at the initiative’s onset, staff members at each partner organization may have had erroneous perceptions of the types of services provided and the populations served by the other partner organizations. Several workgroup members further indicated that the stigma surrounding serious mental illness and/or substance use may have exacerbated negative perceptions of TI and Proaction. In addition, many workgroup members recognized that each organization’s workplace culture was unique from the others as each organization was physically housed in a separate facility with different organizational processes, such as those related to billing. In addition, staff members within each organization were recognized as having unique clinical orientations and attitudes toward certain health care practices based on their education and training (e.g., medical staff members were accustomed to typically spending 10 to 15 minutes with patients; whereas, behavioral health staff members were used to spending 30 to 60 minutes with clients).

Competing priorities were also commonly identified among workgroup and IDT members as an organizational barrier that hindered the initiative’s progression. More concretely, workgroup and IDT members described a lack of time to focus on integration-related activities
given their routine job responsibilities. Workgroup members frequently described the lack of dedicated time for integration-related activities as well as a lack of coverage for their primary job responsibilities as posing the most significant barrier to their completion of integration tasks. IDT members expressed similar concerns regarding their abilities to effectively manage job responsibilities, particularly as the initiative expands during the pilot phase. Political and socioeconomic forces, including health care reform and the economic downturn, were additionally described as influencing other organizational initiatives and priorities, including the prospective merger of the three partner organizations into one more cohesive system of health care and the increasing demand within the community to deliver essential health services to the growing number of uninsured and economically disadvantaged individuals as part of the health care safety net.

Limited resources, within and across the partner organizations, was another organizational factor frequently perceived among IDT and workgroup members as impeding the initiative's progression. In specific, those interviewed expressed awareness that the three agencies did not have a surplus of funding to allocate to the staffing, health information technology, space, and training required to launch this initiative. Underlying this lack of resources, workgroup members expressed concerns about the financing of the integration initiative, especially in the future. That is, many members indicated that financing would become increasingly challenging as the initiative expands to serve individuals who are not enrolled in Medicaid or who require certain behavioral health services that have not been historically billable for medical conditions, such as those health education and case management services provided by health coaches. Here again, political and socioeconomic forces related to health care reform as well as the prevalence of low-income adults with chronic health conditions were identified as influencing the initiative's future financing mechanisms. Organizational leaders identified that future health care home demonstration projects may be one potential funding source, while recognizing the blended or braided funding streams attained through multiple sources may help to sustain the initiative for longer time frames.

Workgroup members commonly perceived that limited resources hindered the standardization of operational processes across the three organizations. Whereas, IDT members more commonly relayed that the lack of shared space to provide primary and behavioral health care or co-location more broadly was a barrier to clinically integrating health care insofar as it was still necessary for patients to visit different offices, albeit down the street from one another, for primary care versus behavioral health services. That is, medical care was still provided at a CSHS office; while, mental health services were provided at TI’s office. Furthermore, IDT members perceived a need for additional, ongoing training. For example, IDT members suggested that more training on engaging in sensitive discussions with patients regarding trauma and sexual abuse would be helpful. Beyond the initial training series, IDT members expressed a need for ongoing training regarding the complex relationships between various mental disorders and other chronic conditions in addition to innovative treatment modalities, such as motivational interviewing and dialectical behavioral therapy. Although IDT and workgroup members expressed that integrated care was presently being delivered in a more coordinated way, both groups of staff perceived that the standardization of clinical and operational processes would become forced and perhaps easier with the co-location and potential merger of the three organizations, which was expected to occur as the new Heart of the City Health Center opened in the fall of 2011.

When discussing their roles, several workgroup members described a general lack of understanding about the integration development as a barrier to advancing the initiative. Workgroup members specifically referenced the limited communication between the workgroup members and executive leaders regarding the initiative’s goals, processes, and timelines as problematic in terms of workgroup members’ awareness of how tasks related to

“[O]ne of the reasons to have this integrated healthcare team is because you can use motivational interviewing strategies and have a social worker do those motivational interviewing strategies in order for people to understand how to make changes in their life to address chronic health conditions like diabetes and losing weight and stopping smoking. For people who are on Medicaid served in federally qualified health plans you can’t use those codes to address behaviors for some of these primary healthcare conditions.”

~ Workgroup member

“And critically, how [the partner organizations] are funded to do the work that they do. Because funding is a critical piece of [the initiative], and it’s not one that I think has been figured out yet.”

~ Workgroup member

“(There is a need to) know more about the chronic illnesses that our population is likely to be dealing with. And, the treatment for that—the challenges that [patients] encounter not only from a medical regime—but also the psychological impact. Changing habits is a difficult thing.”

~ IDT member

“(T)here are staff who aren’t involved in the integration that are skeptical that this is actually going to work and happen.”

~ Workgroup member

“If [the three organizations] are not merged by the time we move into the [Heart of the City Health Center] building, which we probably won’t be, how are we going to live together in a building in the most efficient possible way? Can we bring, for example, our billing staff together to be one billing department? Can we have one finance department made up of the staff of the three agencies that still meets the needs of the three agencies but operates as a unit?”

~ Workgroup member

“I would say fear of the unknown. There is, I think, staff on all three levels, all three organizations that are fearful that after the integration comes their job will no longer exist. I think that holds back some people. Not necessarily the key people in the team, but certainly in the organizations I’ve heard that.” ~ Workgroup member
the initiative needed to be completed. In addition, workgroup members perceived limited awareness about the initiative among staff members who were part of the three partner organizations but not directly involved with the integration development as challenging since these workgroup members were required to complete additional tasks beyond their regular job responsibilities, which created tension with their uninvolved colleagues. Several workgroup members elaborated that the limited awareness among other staff members could exacerbate resistance to the initiative, hindering its rollout in the future. From both workgroup and IDT members’ perspectives, apprehension about the implications of the potential merger between the three organizations as well as the co-location of staff members and patients at Heart of the City Health Center were viewed as root causes of resistance and negative attitudes toward the integration initiative, which was perceived as the catalyst for the merger and co-location. For instance, some workgroup members indicated that they were uneasy about budget shortfalls and lay-offs stemming from the integration initiative’s progression.

Poor communication and delays with the completion of tasks among workgroups was also identified by workgroup members as a barrier to initiative’s progression. Workgroup members specifically described lacking leadership both within their groups as well as for the broader initiative as the main impediment to making headway. Within their workgroups, members indicated that for certain tasks no decisionmaker was designated, which halted activities as members would need to wait for additional information or approval passed through a long chain of command. Reflective of this confusion, several IDT members expressed that they were unaware of what the workgroups were tasked with and those activities they had completed thus far. Workgroup members suggested that increased direction from both organizational leaders regarding the initiative’s progression and workgroup leaders concerning more discrete tasks may ameliorate some of this confusion in the future. Members additionally indicated that with this structure or guidance in place, executive leaders’ empowerment of individual workgroups to take action and make decisions relatively quickly may expedite the initiative’s progress.

Key facilitators perceived as helping the integration development

A variety of factors were perceived among both IDT and workgroup members as facilitating the initiative’s progression during the integration development phase. Both workgroup and IDT members perceived their own buy-in to the initiative as well as support for the initiative among their colleagues and their abilities to effectively work with their colleagues as advancing the initiative’s progression. In addition, workgroup and IDT members viewed support from organizational leaders, in terms of leadership and the investment of resources, as a critical initiative facilitator. Government policies related to PCBH integration and community health needs were also current and future influences perceived as spurring the initiative forward.

Workgroup and IDT members described support from the organizational leaders as the shared vision for the initiative among the three organizational chief executive officers (CEO). Workgroup members further expressed appreciation regarding the commitment of time and energy to the initiative on the part of the CEOs and acknowledged the positive relationships existing between the CEOs and senior staff members at the three agencies. Dedicated building space for meetings and time for those staff members selected to participate in the workgroups or IDT, were also recognized as supporting the initiative. IDT members indicated that support from the organizational leaders in the form of dedicated time to practice with patients and participate in trainings has also encouraged work throughout the integration development phase. Along these lines, fiscal support garnered by organizational leaders through the local mental health authority, network180, was also recognized as facilitating

“I think some of our issues have been within our groups, not being empowered to make final decisions and move on. Each group within the organization had to go back and then have everything reviewed…”

~ Workgroup member

“[T]he three CEOs seemed to all be in sync; they have a mutual vision.”

~ Workgroup member

“Definitely the executive directors’ dedication to [the initiative] and their involvement with it. The three of them have just spearheaded it, I think in a lot of ways. I think they have been just really supportive.”

~ Workgroup member

“I think the agencies have just devoted a lot of resources. They have given us the time.”

~ Workgroup member
the development phase of the initiative. Although IDT and workgroup members commonly identified the investment of resources by organizational leaders, such as time to participate in initiative activities, as helping the initiative, most of these same individuals alternatively recognized that past and present levels of resource dedication would not be sufficient to achieve the outcomes intended during the initiative’s larger scale pilot phase.

Workgroup members commonly expressed that they were motivated to volunteer to be part of the integration development because they supported the vision for the initiative or possessed abilities that they believed could contribute to the initiative. Several workgroup members described that participation and discussion during workgroup meetings and assistance from members supported the completion of initial tasks. In turn, the initial completion of these tasks was viewed to lead to progress made on subsequent tasks, thereby supporting the initiative’s overall progression. Other workgroup members noted that they had felt supported by their colleagues and incentivized to fulfill their duties as part of a successful team. IDT members similarly described how they supported one another via routine communication, collaboration, and coordination during the initiative’s development phase.

As the health care reform legislation passed in March 2010 continues to unfold, policies related to primary care and behavioral health care integration were identified by many workgroup members as potentially exerting a positive influence on the initiative. Several workgroup members explained that in the current health care climate, the introduction of policies and funding mechanisms targeting FQHCs and other safety net providers integrating health care delivery could strengthen the initiative in the future. For instance, one workgroup member described a provision under the Patient Protection and Affordable Care Act that awards $25 million in grants as part of a coordinated care or “health home” model5 to state-designated organizations that provide services to patients with chronic conditions. Lastly, workgroup members frequently perceived the community’s need for integrated health care as advancing the initiative. Workgroup members attributed this need to the multifaceted determinants of health and related complexity of the public’s health.

Initial experiences among workgroup and IDT members

Understanding of integrated health care

Overall, workgroup and IDT members indicated that they had gained substantive understanding of integrated PCBH delivery during the initiative’s development phase. One workgroup member described the integrated approach to health care delivery as the “ability to provide care for consumer’s physical and behavioral health within the same confines.” Another IDT member further elaborated that through integrated PCBH, patients and health professionals will be able to create “treatment [for an array of health conditions that is] tied together.” Most IDT and workgroup members identified the integrated care model in terms of combined medical and behavioral health. One workgroup member specified that “if the primary diagnosis is a medical diagnosis, but behavioral issues impact the ability to get better, then behavior kicks in, and if it’s a behavioral issue but there are also medical variables that impact their ability to improve on behaviors, then medical gets involved. So it’s a holistic way of finding out what’s going on with this person with this disease or that disease.” IDT members expressed that improved communication was essential in order to increase awareness of integrated care delivery among the staffs of the three partner organizations. Staff members identified meetings, information posted on bulletin boards in common areas, and periodic e-mail communication to staff members about integrated care delivery as methods that increased understanding of the initiative.

“I was [motivated] from the beginning, because I see this as a clear initiative. It’s exciting to be in a cutting edge place in terms of what we are doing as organizations and also it seems to me to be imperative to [the] organizations that they make the move in this direction.”

~ Workgroup member

“We had a good team, a good committee team [workgroup]. So lots of participation, lots of discussion, and we walk through scenarios and talk about them so that made the actual task of flow charting easier, because I could get a visual for that in the meeting as we talked about it.”

~ Workgroup member

“If we only focus on people who have been identified with a behavioral health condition, we are going to miss a lot of people who we can serve well and improve their overall health and ultimately impact the cost of health care.”

~ IDT member

5 From section 2703.
Buy-in and attitudes toward the integration initiative

The highest level of buy-in and support toward the initiative was perceived to exist among those staff members who were the most involved with initiative activities. That is, IDT members who delivered integrated care to patients reported the highest level of support for the initiative. Both workgroup and IDT members linked a better understanding of what the organizations were trying to accomplish through the initiative to their increased levels of buy-in since they initially became involved with the initiative. As one staff member noted, “There is a renewed excitement [about] this common goal that has bound people together, a common vision.” Workgroup and IDT members additionally indicated that support for the initiative exists among staff members across the three partner organizations. Alternatively, limited buy-in and skepticism toward the initiative were generally perceived among staff members who were the least involved with the initiative. IDT and workgroup members commonly attributed these negative attitudes to a lack of communication and associated understanding regarding the initiative, particularly the potential benefits of integrating primary care and behavioral health. Activities that influenced staff members’ buy-in to the initiative included presentations and meetings that enhanced their understanding of the chronic care model and the positive outcomes expected for staff and patients across the three agencies. In addition, workgroup and IDT members expressed that their personal buy-in to the initiative was heightened by the executive leaders’ commitment to the initiative and promotion of collaboration among the three agencies.

Communication and collaboration related to the integration development

Workgroup and IDT members reported increased communication and collaboration within and across the three partner organizations during the initiative’s development phase. In general, workgroup and IDT members indicated that they work well together. IDT members specified that most team members know each other both professionally and personally due to the number of meetings and team building activities they were involved with, fostering greater communication and collaboration. IDT members also expressed that they felt more comfortable communicating with the organizational leaders because staff retreats and informal team building activities have provided them with opportunities to interact and better know the leaders outside of their work environment. One team member stated that as a result of being comfortable sharing information, “the team has gotten stronger.” Workgroup and IDT members further expressed that they expect communication and collaboration to continue improving as staff members become increasingly familiar with one another’s roles and responsibilities and their own roles become better defined.

Although workgroup and IDT members expressed that they were pleased with communication and collaboration between each other and the organizational leaders. Several team members suggested that, to improve communication and collaboration even further, educational sessions could be provided by the leaders “to make sure everybody is on the same page.” Team members additionally indicated that there were presently many uncertainties about the executive leaders’ expectations for the initiative and what the future holds. One team member stated, “It would be nice if [the leaders] went around [to] some of the sites in the community to say ‘hey, this is what we’re doing, this is what we know right now.’” Another suggestion was to develop a platform or a program whereby staff members could more easily post and share information versus solely through standard e-mail and telephone communication modes.
Standardization of clinical or operational processes relative to the initiative

Workgroup members identified changes in the standardization of some clinical and operational processes across the three partner organizations. One change described was the EHR platform, which was standardized across the three partner organizations, for the IDT. Other examples of process standardization across the organizations included the development of a uniform referral process and intake procedures. Workgroup and IDT members additionally noted that the three organizations have been sharing staff, scheduling, and IT resources.

However, a number of the workgroup members had not noticed any differences in the standardization of organizational processes. Some workgroup members indicated that there was a need for standardized billing processes across the partner organizations. As the initiative moves toward the pilot phase, one workgroup member concluded that the three organizations “have got to do things in a unified way.”

Initial experiences among patients who received integrated care

Perceived changes in self-efficacy and patient activation related to chronic conditions

According to Janz, Champion, and Strecher (2002), self-efficacy is “one’s confidence in one’s ability to take action” (p. 49). The definition of patient activation extends that of self-efficacy by also including patients’ empowerment, knowledge, skills, and beliefs related to the self-management of their health conditions (Hibbard, Stockard, Mahoney, & Tusler, 2004). Thus defined, self-efficacy and patient activation will be used as labels for those themes that most commonly emerged among patients who participated in the focus groups with respect to their initial experiences receiving care through the IDT.

Across focus groups, patients commonly reported better understanding their chronic health conditions as well as ways to self-manage these conditions since receiving integrated health care. Many patients specifically expressed an increased awareness of the medications necessary to effectively manage their chronic conditions. In some cases, patients attributed this heightened awareness to education provided by the IDT health coaches. As one patient explained:

Yeah, I started learning about my blood pressure, because I never had to deal with blood pressure. I kept hearing your blood pressure is high, then it was okay, then it was not. I [was] like, whatever. Now, it’s more I talk to my health coach about it, and she explains more about it, and that’s how I ended up getting on medication. I never actually got medication for my blood pressure until I got her. That’s how I ended up getting my medication for that, and [my blood pressure is] a lot better now.

In addition to changes in patients’ awareness of their chronic conditions and medication regimens to help manage these conditions, many patients expressed an increased awareness of health behaviors related to diet and exercise, which could help manage their conditions. Moreover, patients expressed that they had a better understanding of ways to cope with mental disorder symptoms. Across focus groups, patients also indicated that they had gained a general understanding of the synergistic benefits of medication adherence and other positive health behaviors since receiving services through the IDT.

Patients’ improved confidence in their abilities to self-manage their conditions since receiving integrated health care also emerged as a common theme across focus groups. Some
patients attributed this new found confidence to an improved relationship with the health professionals of the IDT, both in terms of the continuity of care provided through the IDT (i.e., receiving services from the same providers) and the level of cohesion among the IDT members. As one patient stated, “I just feel like my life is a lot more manageable having [the IDT services] in one place and having [the IDT members] talk to each other.”

**Perceived changes in health behaviors and chronic condition symptoms**

Beyond changes in self-efficacy and activation related to the self-management of chronic conditions, changes in actual health behaviors, such as adherence to medication regimens and the initiation of lifestyle modifications, commonly emerged as themes across focus groups with patients. These behaviors were frequently linked to a reduction in condition symptoms by patients. In some cases, patients further related any changes they perceived in either the self-management of their chronic conditions or the symptoms of their conditions to interactions that they had had with IDT members. For example, as one patient described:

Yes, my health coach focuses a lot on [healthy eating]. Sometimes, a little more than I want to, but she has helped me with making steps, writing in food journals. Sometimes I come up with new ideas. She focuses on it because it’s important, [and] I do overeat. … [I’ve] been making sure that I go work out or walk. I walk a lot. And, my health coach helps me, each day we see each other, with how [I’m] changing what I’m doing at home, because I have problems with that. I might get diabetes, if I’m not careful.

Although most patients focused primarily on changes in the self-management of chronic conditions traditionally treated in medical care settings, such as diabetes and high blood pressure, patients also described improvements related to their mental disorder symptoms since receiving IDT services (see the text box for illustrative quotations). For some patients with substance use disorders, changes noted included cessation in the use of tobacco, alcohol, or other illicit substances. In several cases, patients described these improvements in their mental disorder or substance use conditions by indicating that they had not been hospitalized since receiving IDT services. The reduction in hospitalizations among patients since receiving integrated health care was further substantiated by representatives from the three partner organizations during a presentation at the May 2011 CHCI-MP Joint Advisory Council and Participating Health Centers meeting, where it was reported that none of the 15 patients had been hospitalized since they began receiving health care through the IDT. During the 18 months prior to this, six of the IDT patients were documented as having had 11 hospital admissions, which totaled 114 inpatient days.

Similar to changes perceived in the self-management of their chronic health conditions, several patients related changes in the symptoms of their mental disorders to their interactions with the IDT. Along with the emergence of these themes regarding changes in patients’ self-management of their chronic conditions and condition symptoms, many patients expressed an understanding that self-management of such chronic conditions is an ongoing process. As one patient concluded, “I’m trying to get over a lifetime of destroying myself and get better. It’s going to take some time.”
Conclusion

As demonstrated by the existing literature and further validated by this case study’s findings, domestic PCBH integration efforts are motivated and influenced by a variety of factors. Although specific imperatives for integrated health care may differ according to the given initiative’s scale and the entities involved, a general recognition that the multifaceted health care needs of many populations may be more effectively addressed through an integrated health care delivery system is becoming more commonly recognized. As the health care reform legislation continues to unfold nationwide, fiscal and nonmonetary incentives may further motivate state and local health care systems to integrate primary care and behavioral health. In doing so, a multitude of models exist that may be adapted. However, as Butler et al. (2008) found, the level of health care system integration with respect to primary care and behavioral health may not be directly associated with the outcomes yielded. As Collins et al. (2010) further describe, the integrated care model of best fit may not necessarily be the most integrated model, but rather the model that is most likely to address the health care needs of the targeted population within the organizational parameters of the given health care system.

In adapting and implementing any integrated PCBH model, an array of contextual factors may help and hinder those activities and processes necessary to achieve the optimal state of PCBH integration (see table 5 for a summary of the factors found to support or impede integrated PCBH in this case study and substantiated by the literature review). These factors may originate in and influence one or many levels of the given health care system (Kaplan et al., 2010). Furthermore, the influence of such factors are typically impacted by individuals or actors who are involved in planning and implementing major redesign initiatives, such as the integration of PCBH (Kirchner et al., 2010). As Berwick (2003) and others (Lehman, Greener, & Simpson, 2002; Varkey & Antonio, 2010) have suggested, a health care system’s readiness to change may be predictive of those factors that help and hinder transformation processes, and will ultimately impact whether a system is indeed transformed into its ideal state.
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notwithstanding the challenges encountered by health care systems moving to integrate PCBH, such efforts have shown promise in producing positive outcomes related to the health status of patient populations as well as health care access, quality, and costs. Given the formative and qualitative nature of this single case study, it is not possible to draw valid, generalizable conclusions about the initial effects of the integrated care initiative on the patients, staff members, and organizations involved during the development phase studied. Nevertheless, by combining the case study’s data sources and employing an inductive approach to analyze the data, the validity of the findings may be enhanced. These qualitative findings suggest that both organizational staff members and patients who were directly involved with the initiative generally had positive experiences during the initiative’s development phase.

More specifically, organizational staff members who either participated in the initiative’s workgroups or IDT expressed that they gained a better understanding of integrated PCBH. They also tended to feel supported by and to hold a positive view toward the initiative, and experienced improved communication and collaboration with one another. Further, staff members observed increased standardization in operational and clinical processes during their involvement with the initiative.

Patients who received integrated health care through the IDT generally expressed that their awareness of their chronic conditions, in addition to their perceived self-efficacy and activation related to the self-management of these chronic conditions, had improved over the time they received care from the IDT. Moreover, these patients commonly indicated that they engaged in more positive health behaviors related to their conditions (e.g., adherence to their medication regimens, substance use cessation, healthy diet and exercise) than they

6 Response bias (i.e., the bias resulting from those who chose to participate in data collection activities versus those who did not) and social acceptability bias (i.e., the bias resulting from individuals providing responses that they believe are socially acceptable rather than entirely accurate) may have further skewed the qualitative findings.

<table>
<thead>
<tr>
<th>PCBH Integration Barriers</th>
<th>PCBH Integration Facilitators</th>
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<tr>
<td>Lack of awareness and understanding of PCBH among organizational staff members</td>
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</tr>
<tr>
<td>Cultural differences between primary care and behavioral health organizations and staff members</td>
<td>Buy-in and positive attitudes toward integrated PCBH</td>
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<tr>
<td>Limited leadership (i.e., lack of direction or guidance concerning staff members’ roles and responsibilities, lengthy or unclear decisionmaking processes)</td>
<td>Support from organizational leaders, both in terms of the investment of organizational resources and direction or guidance provided to the staff members involved</td>
</tr>
<tr>
<td>Lack of resources, including fiscal resources and protected or dedicated staff time</td>
<td>Collaboration among staff members, regardless of their respective disciplines, to complete necessary tasks or duties related to PCBH integration</td>
</tr>
<tr>
<td>Competing priorities (i.e., other job responsibilities or involvement with other organizational initiatives constraining available time)</td>
<td>Standardization of clinical and operational processes related to integrated PCBH delivery</td>
</tr>
<tr>
<td>Difficulties standardizing operational and clinical processes, particularly those related to reimbursement</td>
<td>Federal, state, or local governmental policies and programs supporting integrated PCBH</td>
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| Table 5. Commonly identified barriers and facilitators related to domestic PCBH integration |
had previously, and they were able to attribute improvements in the symptoms of their chronic conditions to these behaviors.

Others have also documented similar short-term outcomes (Krause et al., 2006) as well as longer-term outcomes reflective of improvements in patients’ actual health status as well as organizational effectiveness (Butler et al., 2008; Collins et al., 2010). Yet only a limited number of studies have longitudinally connected both the short- and long-term outcomes of integrated PCBH at both the patient and organizational levels with the processes whereby these types of initiatives or programs are adapted and implemented. What is more, few studies beyond the study conducted by Butler et al. (2008) have assessed the comparative effectiveness of various integrated PCBH models by type of health care system.

In determining the comparative effectiveness of domestic integrated PCBH programs and initiatives, it will become increasingly important for health care organizations to use similar measurement methods, namely those shown to be valid and reliable in capturing the outcomes sought. Additionally, to better define the pathways through which these outcomes are achieved as well as those factors that mediate and moderate the effects observed, mixed qualitative and quantitative methods of study will be essential. In line with this view, another limitation of this case study is the sole use of qualitative methods (i.e., key informant interviews and focus groups) to gather information. Although a structured questionnaire was electronically administered to workgroup members regarding workgroup functioning and improvement areas; this survey was administered prior to the study period and was solely intended to inform the partner organizations’ executive leaders of areas of satisfaction and dissatisfaction among workgroup members several months following the workgroups’ formation.

A patient satisfaction survey was administered annually to a random sample of adult CSHS patients that included those who were a part of this effort. In addition, two standardized, highly validated structured questionnaires, the Patient Activation Measure (PAM-13) and the EQ-5D (i.e., a measure of self-perceived health status), were also administered to eight of the 15 IDT patients at baseline (i.e., when patients initially started to receive care from the IDT) and during 3 and 6 months follow-up visits. However, given the likelihood of selection bias and response bias skewing the data provided by this very small, nonprobability sample, these survey results were not reported.

As the integrated PCBH initiative in Grand Rapids transitions into the piloting phase, a more rigorous approach to evaluation is planned. Along with the structured patient satisfaction survey, PAM-13, and EQ-5D (which will continue to be used), additional clinical measures will be added, such as those for depression (PHQ-9), anxiety (Generalized Anxiety Disorder 7-item Scale), substance abuse (Substance Use Disorder Outcome Tool), psychosis (Clinical Global Impression-Schizophrenia Scale), pain (the brief pain inventory), BMI, tobacco use, blood pressure, lipid profile, hemoglobin A1c, inpatient admissions and days, emergency room visits, and utilization of integrated PCBH services. These data will be collected over a 2-year period from a large cohort of 1,200 adult patients diagnosed with at least one chronic health condition. Half of these patients will be assigned to the intervention group (i.e., these patients will receive integrated PCBH services at Heart of the City Health Center) while the other half of patients will be assigned to the comparison group (i.e., these patients will continue to receive standard health care services through the partner organizations). This evaluation will be part of a behavioral health care home project overseen by network180 through which the effectiveness of several different integrated PCBH initiatives in Kent County, Michigan, will be assessed.
In closing, this case study’s findings as supplemented by the existing literature on domestic PCBH integration efforts provide some useful insights for other collaboratives of community-based health organizations undertaking similar endeavors. First, these findings point to the importance of assessments of organizational readiness at the onset of planning to engage in a significant system redesign, such as PCBH integration. In doing so, the given system’s strengths and weaknesses, including its context and actors, may be considered in the design of such an initiative or program. To facilitate such an assessment, Mauer and Druss (2007) and others propose that health care systems integrating PCBH should consider: (1) the array of and capacity of health services available in the community; (2) the existing capabilities of the health care workforce; (3) the level of organizational support for providing integrated health care; (4) how organizations will be reimbursed for the delivery of integrated care; (5) the socioeconomic composition of the population targeted for integrated health care; and (6) consumer preferences regarding the delivery of primary and behavioral health care.

By evaluating micro and macro systems conditions from the time of an initiative’s inception, it should be easier for organizations to troubleshoot as challenges arise during the initiative’s implementation. In addition, the ongoing determination of both needed improvements for and the effectiveness of PCBH integration through rigorous evaluation, including data gathered from both organizational staff members and patients, is crucial to better shaping such initiatives and establishing their worth. In turn, the timely dissemination and translation of evaluation findings to the wide range of stakeholders is essential to inform similar endeavors and to sustain integrated PCBH system efforts in the future. With the addition of such developmental evaluation, the successfulness and realization of optimal benefits from PCBH integration efforts should also be enhanced.
References


