



U.S. Department of Health and Human Services
Assistant Secretary for Planning and Evaluation
Office of Disability, Aging and Long-Term Care Policy

INTEGRATING PHYSICAL HEALTH CARE IN BEHAVIORAL HEALTH AGENCIES IN RURAL PENNSYLVANIA

January 2014

Office of the Assistant Secretary for Planning and Evaluation

The Office of the Assistant Secretary for Planning and Evaluation (ASPE) is the principal advisor to the Secretary of the Department of Health and Human Services (HHS) on policy development issues, and is responsible for major activities in the areas of legislative and budget development, strategic planning, policy research and evaluation, and economic analysis.

ASPE develops or reviews issues from the viewpoint of the Secretary, providing a perspective that is broader in scope than the specific focus of the various operating agencies. ASPE also works closely with the HHS operating agencies. It assists these agencies in developing policies, and planning policy research, evaluation and data collection within broad HHS and administration initiatives. ASPE often serves a coordinating role for crosscutting policy and administrative activities.

ASPE plans and conducts evaluations and research--both in-house and through support of projects by external researchers--of current and proposed programs and topics of particular interest to the Secretary, the Administration and the Congress.

Office of Disability, Aging and Long-Term Care Policy

The Office of Disability, Aging and Long-Term Care Policy (DALTCP), within ASPE, is responsible for the development, coordination, analysis, research and evaluation of HHS policies and programs which support the independence, health and long-term care of persons with disabilities--children, working aging adults, and older persons. DALTCP is also responsible for policy coordination and research to promote the economic and social well-being of the elderly.

In particular, DALTCP addresses policies concerning: nursing home and community-based services, informal caregiving, the integration of acute and long-term care, Medicare post-acute services and home care, managed care for people with disabilities, long-term rehabilitation services, children's disability, and linkages between employment and health policies. These activities are carried out through policy planning, policy and program analysis, regulatory reviews, formulation of legislative proposals, policy research, evaluation and data planning.

This report was prepared under contract #HHSP23320095642WC between HHS's ASPE/DALTCP and Mathematica Policy Research. For additional information about this subject, you can visit the DALTCP home page at http://aspe.hhs.gov/office_specific/daltcp.cfm or contact the ASPE Project Officers, Hakan Aykan and David de Voursney, at HHS/ASPE/DALTCP, Room 424E, H.H. Humphrey Building, 200 Independence Avenue, S.W., Washington, D.C. 20201. Their e-mail addresses are: Hakan.Aykan@hhs.gov and David.DeVoursney@hhs.gov.

INTEGRATING PHYSICAL HEALTH CARE IN BEHAVIORAL HEALTH AGENCIES IN RURAL PENNSYLVANIA

Angela M. Gerolamo
Jung Y. Kim
Jonathan Brown

Mathematica Policy Research

January 2014

Prepared for
Office of Disability, Aging and Long-Term Care Policy
Office of the Assistant Secretary for Planning and Evaluation
U.S. Department of Health and Human Services
Contract #HHSP23320095642WC

The opinions and views expressed in this report are those of the authors. They do not necessarily reflect the views of the Department of Health and Human Services, the contractor or any other funding organization.

TABLE OF CONTENTS

ABSTRACT	iii
ACRONYMS	iv
EXECUTIVE SUMMARY	v
I. INTRODUCTION	1
A. Background	1
B. Program Description	2
C. Purpose of Study	5
II. METHODS	7
A. Sources	7
B. Analysis	8
III. RESULTS	9
A. Integrating Nurses and Adapting Workflows and Processes for Case Managers and Peer Specialists	10
B. Providing Training and Ongoing Support for Physical Health and Behavioral Health Integration.....	12
C. Identifying and Engaging Consumers in Wellness and Physical Health Goals.....	13
D. Tracking Consumers' Progress and Using the Web Portal.....	14
E. Strengthening Relationships with Primary Care Providers	15
F. Consumers' Views on the Integration of Physical Health and Behavioral Health.....	16
IV. DISCUSSION	17
V. IMPLICATIONS FOR BEHAVIORAL HEALTH SERVICES	19
REFERENCES	22

LIST OF TABLES

TABLE I.1.	Agency Characteristics	3
TABLE II.1.	Topics Discussed During Each Round of Information Gathering	7
TABLE III.1.	BHHP Implementation Strategies, Challenges, and Solutions.....	9

ABSTRACT

As states and communities undertake efforts to integrate physical health and behavioral health services, it is critical to understand how these efforts are organized and implemented. This study examined the early implementation of the Behavioral Health Home Plus program in two county behavioral health agencies in rural Pennsylvania. With support from a behavioral health managed care organization, each agency hired a registered nurse, provided training for its case managers and peer specialists in wellness coaching, and used a web-based tool for tracking consumer outcomes. Findings suggest that agencies successfully trained their staffs in wellness coaching, integrated registered nurses into agency functions, developed care planning processes that incorporate physical and behavioral health goals, and increased awareness and knowledge of physical health and wellness among behavioral health staff and consumers. Given the complexity of introducing physical health services into behavioral health care settings, the agencies experienced several early implementation challenges including staff role confusion, difficulty establishing new procedures and communication protocols among staff members, discomfort among case managers and peer specialists in identifying and addressing physical health concerns, difficulty developing collaborative relationships with primary care providers, and slower-than-expected uptake of the web-based tools. The agencies were able to overcome many of these challenges with support from the behavioral health managed care organization. The study provides insights into the practical aspects of integrating care and offers recommendations for future efforts.

ACRONYMS

The following acronyms are mentioned in this report and/or appendices.

BHHP	Behavioral Health Home Plus
CCBH CMSU	Community Care Behavioral Health Columbia, Montour, Snyder, and Union
FTE	Full-Time Equivalent
PCP	Primary Care Providers
SMI	Serious Mental Illness

EXECUTIVE SUMMARY

Background

Individuals with serious mental illnesses (SMI) have high rates of chronic physical health conditions, including metabolic disorders and cardiovascular disease (De Hert et al. 2011; Newcomer 2007; Newcomer and Hennekens 2007; McEvoy et al. 2005). Unfortunately, the delivery of behavioral and physical health care for people with SMI is fragmented and poorly coordinated (Collins et al. 2010). In response, the Substance Abuse and Mental Health Services Administration, state Medicaid programs, health plans, and mental health systems are making efforts to integrate care for this population. Embedding or co-locating physical health providers in specialty behavioral health care settings (often referred to as reverse co-location) is one of several strategies proposed to improve the integration of services for people with SMI (Collins et al. 2010). Even though interventions that incorporate the co-location of physical health providers in behavioral health care settings has yielded some promising results (Druss et al., 2010), relatively little is known about how behavioral health agencies incorporate physical health services into their organizations and workflows.

Under the leadership of Community Care Behavioral Health (CCBH), the Behavioral Health Home Plus (BHHP) program was implemented in two community behavioral health agencies that serve five rural counties in Pennsylvania. BHHP aimed to improve the integration of physical and behavioral health services for Medicaid beneficiaries with SMI through several activities: (1) embedding a registered nurse in each behavioral health agency to develop an interdisciplinary care team and address consumers' physical health conditions; (2) training case managers and peer specialists within the behavioral health agencies to become wellness coaches, thereby helping consumers identify and address physical health and wellness goals; (3) tracking consumers' progress in reaching wellness goals, including their use of a web-based portal; and (4) strengthening collaborations between behavioral health agencies and primary care providers (PCPs) in the community. The program targeted Medicaid beneficiaries with SMI (including schizophrenia, bipolar disorder, major depression, or borderline personality disorder) who received services through the Columbia, Montour, Snyder, and Union counties and Northumberland County behavioral health agencies.

Methods

The study presents the early implementation experiences of BHHP in order to explain: (1) how the agencies integrated physical health care into routine practice; (2) the types of training and support needed to co-locate nursing staff and orient agency staff to physical health care; (3) the strategies used to identify consumers in need of physical health care and wellness services; (4) the approaches for strengthening

collaborations with PCPs in the community; and (5) consumers' perception on this new model of care. We used a qualitative case study approach to generate in-depth information about BHHP's early implementation and to gather real-world experiences with the model from staff, consumers, and other key stakeholders. We collected qualitative information during two rounds of site visits that included discussions with agency staff and stakeholders, consumer focus groups, observations of the program environment, and document reviews. We used inductive and deductive analytic techniques to identify themes from the qualitative data.

Results

The development of BHHP involved an extensive planning process that included stakeholders from several counties and input from consumers. Findings suggest that the behavioral health agencies successfully trained their staffs in wellness coaching and integrated registered nurses into agency functions. Other short-term outcomes that emerged include the development of care planning processes that incorporate physical and behavioral health goals and an increased awareness and knowledge of physical health and wellness among behavioral health staff and consumers. Given the complexity of introducing new processes of care to behavioral health agencies, they experienced several challenges during the program's early implementation. These challenges included, staff role confusion, difficulty establishing new procedures and communication protocols among staff members, discomfort among case managers and peer specialists in identifying and addressing physical health concerns, difficulty building collaborative relationships with PCPs, and slower-than-expected uptake of web-based tools for tracking consumer outcomes.

Agency staff and CCBH developed several strategies to overcome the challenges of integrating nurses and expanding the roles of case managers and peer specialists. CCBH worked with agency leaders to clarify roles and develop written job descriptions for both nurses and case managers to help delineate their roles and responsibilities. A high-risk care manager from CCBH initiated meetings with nurses on a weekly basis to assist with role clarification, provide a resource for information, and discuss ongoing wellness activities. In an effort to improve communication and coordination across the care team, leaders from one agency included the nurse in daily meetings with supervisors and invited her to attend weekly meetings with case managers to discuss consumers engaged in wellness activities.

Some case managers and peer specialists struggled to assume their new role as wellness coaches. At the program's outset, their discomfort contributed to their tendency to refer almost all consumers with physical health problems, even relatively minor problems, to the nurse. Some case managers also expressed concern about whether consumers would be comfortable with case managers functioning as wellness coaches--not because of concerns related to privacy but rather because some consumers did not perceive that physical health or wellness fell within case managers' scope of practice.

Agencies and consumers experienced difficulty in tracking consumers' progress toward physical health and wellness goals. Consumer and staff use of the web portal was much more modest than expected; some staff noted the challenges of technology use in a rural setting, including the lack of Internet connectivity and/or computer access. Agencies needed to create more formal mechanisms for tracking processes of care to monitor who received wellness coaching and what the coaching included.

Engaging PCPs was challenging for agencies; barriers included the competing demands of primary care staff and their limited familiarity with behavioral health services, case management, and peer services. Nurse attendance at PCP appointments with consumers was cited as an effective way to interact with PCPs and demonstrate the value of the wellness program to primary care staff.

Consumers in the focus groups were uniformly positive about their experience in receiving care from the nurse. However, some consumers noted that they were not comfortable disclosing physical health information to case managers, but other consumers welcomed and expected their case managers to communicate with other agency staff about their physical health and wellness goals.

Discussion

Developing a service setting that integrates primary care and behavioral health services is a long-term process that requires substantial investment in staff training and other resources (Heath et al. 2013; Kim et al. 2012). As with other complex interventions, changing staff roles and responsibilities and adapting well-established workflows involve trial and error (Campbell et al. 2007). The study highlighted early implementation challenges as well as key successes of the agencies in incorporating wellness coaching into their regular routines, integrating registered nurses into agency functions, developing care planning processes that incorporate physical and behavioral health goals, and increasing awareness and knowledge of physical health and wellness among behavioral health staff and consumers. Findings suggest that training case managers to function as wellness coaches, integrating a nurse into a behavioral health agency, implementing web-based health assessment tools for people with SMI, and strengthening collaborations with PCPs are ambitious tasks that require a significant culture shift for both providers and consumers. Based on the successes and challenges of BHHP, similar efforts would benefit from: (1) adequate planning to clarify the team's roles and responsibilities and to establish mechanisms for regular communication; (2) committing to ongoing training to help staff become more comfortable in addressing physical health needs and implementing wellness coaching; (3) obtaining ongoing input from consumers and staff to guide program development; and (4) developing mechanisms to track physical health and wellness activities and consumer outcomes.

I. INTRODUCTION

A. Background

Individuals with serious mental illnesses (SMI) have high rates of chronic physical health conditions, including metabolic disorders and cardiovascular disease (De Hert et al. 2011; Newcomer 2007; Newcomer and Hennekens 2007; McEvoy et al. 2005). These health conditions are associated with high rates of tobacco use and obesity and the side effects of antipsychotics and other psychiatric medications (De Hert et al. 2011; Lieberman et al. 2005). Although estimates vary, evidence suggests that these chronic physical conditions and health behaviors contribute to premature mortality among individuals with SMI (Laursen 2011; Colton and Manderscheid 2006; Parks et al. 2006).

The literature clearly demonstrates that the delivery of behavioral health services and physical health care for people with SMI is fragmented and poorly integrated (Collins et al. 2010). Individuals with SMI and comorbid diabetes or cardiovascular disease receive suboptimal care (Mitchell et al. 2012; Clark et al. 2009; Nasrallah et al. 2006; Frayne et al. 2005; Desai et al. 2003), and few receive comprehensive services. Recent research has found that only 11 percent of Medicaid beneficiaries with schizophrenia or bipolar disorder receive a comprehensive physical health examination during the year and that fewer than half of those receiving antipsychotics obtain annual laboratory monitoring to screen for cardiovascular disease or diabetes (Brown et al. 2012). The low figures may be partly attributable to the fact that only one-third of community mental health centers have the capacity to provide on-site medical care (Druss et al. 2008).

The Substance Abuse and Mental Health Services Administration, state Medicaid programs, health plans, and mental health systems are engaged in efforts to integrate care for this population. Embedding or co-locating physical health providers in specialty behavioral health care settings (often referred to as reverse co-location) is among several strategies advanced to improve service integration (Collins et al. 2010). Policymakers, researchers, advocates, and providers have proposed that increasing the capacity of specialty behavioral health care settings to function as comprehensive health homes may be a particularly promising strategy for individuals with SMI. For such individuals, specialty behavioral health care settings are often their primary or only point of contact with the health care system (Alakeson et al. 2010). In 2009, the Substance Abuse and Mental Health Services Administration and the Health Resources and Services Administration launched an initiative that provides grants to community mental health providers to build their capacity to function as health homes that provide comprehensive physical and behavioral health services. At the same time, state Medicaid programs and managed care organizations have been experimenting with models of care that seek to improve the integration and coordination of services for the

SMI population in an effort to improve quality of care while reducing costs (Greenberg 2012; Kim et al. 2012; Hamblin et al. 2011).

Drawing largely on the Chronic Care Model (Wagner et al. 1996), strategies to improve the integration of physical and behavioral health services typically involve some combination of staff training and realignment of staff roles, co-locating providers when possible, strengthening collaborative relationships between/among providers, sharing health information between/among providers and/or payment systems, and empowering and educating consumers (Collins et al. 2010). A recent meta-analysis concluded that intervention strategies involving some combination of these components improve depressive symptoms, quality of life, and role functioning, but it notes that more research is needed to understand how the strategies work in specialty behavioral health care settings among populations with heterogeneous mental health conditions (Woltmann et al. 2012).

A growing body of evidence suggests that co-location strategies in behavioral health care settings and other care management interventions can improve the use of physical health services, health-related quality of life, and metabolic functioning (Druss et al. 2010) and may reduce emergency department utilization and inpatient hospitalization among people with SMI (Kim et al. 2012). To complement the evidence in the literature, additional studies are needed to examine the implementation of these strategies in specialty behavioral health care settings to inform their replication and dissemination. The need for research that examines the strengths and limitations of co-location strategies in behavioral health settings is particularly acute given the increased pressure on these settings to serve as health homes for the SMI population, especially in rural and underserved communities where the resources for both physical and mental health services are limited.

B. Program Description

Beginning in November 2011, Community Care Behavioral Health (CCBH) piloted the Behavioral Health Home Plus (BHHP) program in two community behavioral health agencies that serve five rural counties in Pennsylvania. CCBH provided leadership and guidance to the agencies during program implementation. Although CCBH was the key driver of program development and was available to provide ongoing clinical and administrative support, the ultimate goal was for agencies to take ownership of the program.

Pennsylvania operates a county-based capitated behavioral health carve-out wherein CCBH, a behavioral health managed care organization, manages behavioral health care for Medicaid beneficiaries. At the pilot's outset, a separate noncapitated primary care case management program (not managed by CCBH) provided physical health services.¹ CCBH selected the Columbia, Montour, Snyder, and Union (CMSU)

¹ The counties are currently transitioning to managed care for physical health services.

Counties Program and Northumberland County Behavioral Health/Intellectual Development Services to participate in the pilot because these two agencies provided a comprehensive array of services and expressed interest in the program. The two agencies also provided, either directly or through contracts with other community organizations, crisis intervention and clubhouse recovery centers. In Table I.1, we present the characteristics of each agency.

TABLE I.1. Agency Characteristics		
	CMSU	Northumberland
Catchment Area	Columbia, Montour, Snyder, and Union counties	Northumberland County
County Population	166,000 (all counties combined)	95,000
Services Offered	Mental health case management, drug and alcohol case management, 2 clubhouse recovery centers, outpatient recovery services, psychiatric rehabilitation, crisis intervention, and 24-hour crisis hotline	Case management, medication clinic, family-based mental health services, peer-to-peer services, and outpatient services (contracts with other organizations for additional services)
Type and Number of Case Managers and Average Caseload ^a	Resource coordinators, 12 FTE (average caseload of 40) Intensive care managers, 5 FTE (average caseload of 20)	Blended case managers, 9 FTE (average caseload of 30)
Number of Certified Peer Specialists and Size of Caseload	2 full-time (caseload of 7-10) 2 part-time (caseload of 3) ^b	County contract with 2 peer specialists from Community Services Group (caseload ranges from 10 to 17)
<p>a. As of January 2013. The number of case managers fluctuates. Both agencies also employ crisis intervention staff and administrative case managers who serve consumers with less intensive needs. In addition, CMSU employs dedicated drug and alcohol case managers.</p> <p>b. CMSU employs 17 additional certified peer specialists who hold various positions within the agency that do not involve one-on-one peer work with consumers.</p>		

BHHP targeted Medicaid beneficiaries with SMI (including schizophrenia, bipolar disorder, major depression, or borderline personality disorder) who received services through the CMSU and Northumberland community behavioral health agencies. Based on 2009 claims, CCBH estimated that 2,741 Medicaid beneficiaries age 18 and older in the five-county region (or 15.8 percent of the Medicaid population) had an SMI diagnosis. Among the SMI population, 25 percent (692 individuals) had at least one case management or peer specialist claim, and 68 percent (1,871) had at least one case management, peer specialist, or outpatient behavioral health claim. Adults with SMI were likely to have comorbid conditions as evidenced by the presence of claims for substance use disorders (14 percent), diabetes (14 percent), pulmonary conditions (25 percent), and cardiovascular conditions (33 percent).²

BHHP’s aim was to provide a health home for Medicaid beneficiaries with SMI and to improve the integration of physical and behavioral health services through several

² CCBH identified these conditions by using the Chronic Illness and Disability Payment System diagnostic classification system, which Medicaid programs can use to make health-based capitated payments for Medicaid beneficiaries with disabilities (University of California 2012).

activities: (1) embedding a registered nurse in each community behavioral health agency to create an interdisciplinary care team equipped to address physical health conditions and problem health behaviors; (2) training case managers and peer specialists employed by community behavioral health agencies to become “wellness coaches” to help consumers identify and address physical health and wellness goals (for example, smoking cessation and weight management); (3) tracking consumers’ progress in reaching wellness goals, including use of a web-based portal; and (4) strengthening collaborations between behavioral health agencies and primary care providers (PCPs) in the community to improve care coordination among providers for individuals with SMI and physical health comorbidities.

CCBH established an enhanced case management service rate for the agencies to support the nurses’ salaries.³ The agencies partnered with the Health Care Quality Unit of Geisinger Health System, a major health system in north central Pennsylvania, to identify and hire a nurse for each agency. Given that Geisinger’s Health Care Quality Unit retained clinical and administrative oversight of the nurses, Geisinger staff provided the nurses with ongoing mentoring, resources, and support.

CCBH contracted with an expert in psychiatric rehabilitation,⁴ to conduct the training in wellness coaching. The training followed a train-the-trainer approach that combined didactic and experiential learning and targeted agency leaders who, in turn, trained case managers and peer specialists within their respective agencies. The train-the-trainer program consisted of a seven-session curriculum (six two-hour sessions and one full-day session), and the training for case managers and peer specialists consisted of five sessions. The training for trainers focused on peer-to-peer, in-office contact with consumers. Nurses attended a separate training session, similar in content as the one for trainers. The training for case managers and peer specialists focused on the knowledge and skills (including motivational interviewing) needed to engage consumers in physical health care and wellness activities. For the latter training, the trainers modified the training somewhat to reflect case managers’ activities outside the office and to include additional content on physical health conditions. During the training sessions, the agencies introduced a physical wellness planning tool--a five-page worksheet to help consumers identify wellness goals, challenges, action steps, and resources based on their areas of strength, areas of need, and satisfaction with six life domains (diet and nutrition, physical activity, sleep/rest, relaxation/stress management, medical care/screening, and habits and routines/other).

In addition to the training, CCBH implemented a web-based portal that permitted consumers to complete health screening tools and track their sleep, weight/body mass

³ No other changes were made to Medicaid reimbursement related to BHHP.

⁴ CCBH contracted with Dr. Margaret Swarbrick to conduct the training. Dr. Swarbrick is the Training Director of the Collaborative Support Programs of New Jersey and serves on the steering committee that guides the Substance Abuse and Mental Health Services Administration’s Wellness efforts.

index, and tobacco use.⁵ CCBH expected staff at the behavioral health agencies to introduce the web portal to consumers and motivate them to use it. CCBH also provided ongoing technical support to the behavioral health agencies, including regular meetings to discuss implementation challenges and develop strategies for identifying consumers with chronic physical health conditions or those at risk of developing such conditions. As the intervention progressed, CCBH made available a high-risk care manager to meet with the nurses weekly, serve as a liaison between the CCBH and the agencies, and discuss specific cases as needed. Finally, CCBH created an environment that encouraged problem solving to address the challenges of delivering integrated care.

All consumers who came into contact with the agencies to receive wellness coaching from nurses, case managers, or peer specialists. Consumers could request to receive wellness coaching or physical health services through either self-referral or referral from a staff member but it was the expectation that staff would integrate physical health care and wellness coaching into their routine encounters with all consumers.

C. Purpose of Study

The study sought to generate information that policymakers, state Medicaid programs, managed care organizations, providers, and advocates could use to design and implement similar intervention strategies. It set out to answer the following questions:

1. How did the county behavioral health agencies integrate nurses and adapt workflows and processes to accommodate the delivery of physical health care and wellness goals?
2. What types of training and support were needed in order for behavioral health agency staff and nurses to implement wellness coaching?
3. How did nurses, case managers, and peer specialists identify consumers with physical health or wellness needs and engage them in wellness activities?
4. How did behavioral health agency staff and consumers track progress toward reaching wellness goals, including use of the web-based portal?
5. What strategies did the behavioral health agencies use to strengthen their relationships with PCPs?
6. How did consumers view the adoption of physical health care and wellness coaching in behavioral health care settings?

⁵ The screening tools included the SF-12 v2 and Patient Assessment of Care for Chronic Conditions, which could be completed upon initiation to the web portal and every six months. The sleep, weight, and tobacco use tracking tools could be completed up to once per day.

Given the developmental nature of the BHHP pilot and its recent implementation, we conducted a formative evaluation to understand early implementation successes and challenges in order to guide the refinement of BHHP, and inform the future evaluation of outcomes. Further, the evaluation highlighted the real-world experiences of implementing a reverse co-location model in a rural setting in an effort to provide a rich description of the intervention's components, implementation challenges, and solutions, which may be useful for other states and communities seeking to implement similar efforts. We used a qualitative case study approach to yield in-depth information about program implementation by conducting a series of discussions with stakeholders, focus groups with consumers, and program observations.

II. METHODS

A. Sources

We collected qualitative information through two rounds of site visits that included consumer focus groups, stakeholder discussions, direct observations of the program environment, and document review. Information gathering took place in June and July 2012, and the second round took place between January and March 2013. A two-person team (one led the discussion, one took notes) conducted semistructured discussions with key stakeholders including agency leaders, case management staff and supervisors, peer specialists, psychiatrists, the wellness nurses hired for BHHP and their supervisors at Geisinger Health System, and CCBH representatives.⁶ Our discussions with each group of staff were tailored to their role in the clinic and involvement with the intervention. During each round of site visits, a two-person team conducted two focus groups, with up to nine consumers in each group. The discussions and focus groups covered the topics summarized in Table II.1. We toured the wellness clinic and a clubhouse in Northumberland and the outpatient clinic in CMSU. After each site visit, we conducted phone calls with additional agency staff and CCBH representatives by telephone.

TABLE II.1. Topics Discussed During Each Round of Information Gathering		
	Round 1	Round 2
Staff Discussions	Health care context and funding for services Involvement in program design Process for identifying consumers with physical health problems or wellness needs Staff training and support Use of web portal Provider-agency interactions Information exchange between providers and agencies Care transitions and care planning	Ongoing training and support Changes to staff roles Case manager versus peer specialist roles Changes to agency workflows and processes Changes to web portal use Changes to provider-agency interactions Changes to care transitions and care planning Expectations of outcomes and sustainability Implementation lessons learned
Consumer Focus Groups	Frequency and type of contact with case managers Communication between case managers and other providers Services provided by case managers Developing wellness goals and plans Use of web portal Introduction to wellness nurse Frequency and type of contact with wellness nurse Nurse's role in managing physical health Coordination and communication between/ among wellness nurse, agency staff, and health care providers Emergency room visits and hospitalization	Interactions with case managers Developing wellness goals and plans Interactions with peer specialists Interactions with wellness nurse Use of web portal Introduction to wellness nurse Frequency, mode, and type of contact with wellness nurse Role of wellness nurse in care transitions Perceptions about adequacy of interactions with wellness nurse Coordination and communication between wellness nurse and other providers

⁶ During the second round of information gathering, we attempted but were unable to contact primary care physicians to obtain their perspectives about BHHP and learn about their experiences working with the behavioral health agencies and wellness nurses.

B. Analysis

After each discussion or focus group, one researcher finalized the notes, consulting the audio recording to verify information as needed; the second researcher reviewed the notes. Both researchers identified major themes that emerged from the discussions, using inductive techniques to identify themes and hypotheses in our discussion guides and deductive techniques to derive themes from the discussions and focus groups. The researchers compared themes and triangulated them across respondent types to ensure that the findings were shaped by the respondents and not by researcher bias or interest. The researchers then met to discuss the themes and to resolve any areas of disagreement. A third researcher who did not directly participate in the site visits or discussions also reviewed the notes to identify themes and major findings.

III. RESULTS

CCBH and leaders from the behavioral health agencies used several strategies to implement the following key components of BHHP: (1) integrating nurses and adapting workflows and processes for case managers and peer specialists; (2) providing training and ongoing support for case managers, peer specialists, and nurses; (3) identifying and engaging consumers in wellness and physical health goals; (4) tracking consumers' progress toward wellness goals and use of the web portal; and (5) strengthening relationships with PCPs. Agencies successfully trained their staffs in wellness coaching, integrated registered nurses into agency functions, developed care planning processes that incorporate physical and behavioral health goals, and increased awareness and knowledge of physical health and wellness among behavioral health staff and consumers. As expected with any complex intervention that introduces new processes of care, the agencies encountered several early implementation challenges and, in collaboration with CCBH, identified solutions to those challenges (Table III.1). Below, we describe each of the implementation strategies, challenges, and solutions as related to the research questions.

TABLE III.1. BHHP Implementation Strategies, Challenges, and Solutions		
BHHP Component and Implementation Strategies	Challenges	Solutions to Address Challenges
Integrating Nurses and Adapting Workflows and Processes		
<ul style="list-style-type: none"> • Nurses hired through Geisinger Health System's Health Care Quality Unit • CCBH funded wellness nurse position 	<ul style="list-style-type: none"> • Unclear roles and responsibilities of nurse, leading to role confusion • Absence of detailed operational discussions about integration, leading to impaired communication • Lack of integration of wellness assessment and planning tools into case managers' and peer specialists' existing workflows • Case managers' limited time to complete additional paperwork needed for developing wellness goal plans 	<ul style="list-style-type: none"> • Developed and disseminated written descriptions of roles and responsibilities of nurses and case managers • Identified high-risk care manager to meet weekly with wellness nurses to assist with role clarification and provide an information resource • Included nurse in weekly staff meetings with case managers and in daily meetings with agency supervisors • Established cross-departmental meetings
Providing Training and Ongoing Support for Case Managers, Peer Specialists, and Nurses		
<ul style="list-style-type: none"> • CCBH conducted review of existing training programs that could be adapted • Agency staff attended training program for trainers • CCBH conducted separate training for newly hired nurses • Agency staff conducted wellness coaching training for case managers, peer specialists, and supervisors 	<ul style="list-style-type: none"> • Culture change took more time than expected • Lack of clinical knowledge and confidence among case managers in assuming role of wellness coach 	<ul style="list-style-type: none"> • Contracted with physician to conduct module-based training on specific strategies for staff use when working with consumers on weight management and smoking cessation • Provided ongoing support and technical assistance, including monthly meetings to discuss implementation

TABLE III.1 (continued)		
BHHP Component and Implementation Strategies	Challenges	Solutions to Address Challenges
Identifying and Engaging Consumers in Wellness and Physical Health Goals		
<ul style="list-style-type: none"> Using their judgment, case managers and peer specialists referred consumers to nurse Nurses engaged consumers through group education Nurses visited inpatient hospital psychiatric units to educate staff about nurse's role at agency Consumers self-referred Case managers, peer specialists, and nurses used wellness assessment and planning tools to engage consumers in wellness and physical health goals 	<ul style="list-style-type: none"> Data delays hindered efforts to prioritize consumers to be targeted for wellness and physical health goals planning Lack of established criteria for case managers and peer specialists to determine need for referral, resulting in unnecessary referrals Lack of integration of peer specialists into care team A few consumers were not comfortable disclosing physical health information to case managers Case managers had little time to address physical health and wellness during routine interactions with consumers; such interactions typically focused on immediate psychosocial needs 	<ul style="list-style-type: none"> Developed criteria for referring consumers to nurse Initiated joint team meetings to engage consumers in wellness goals Convened cross-departmental meetings to identify consumers who use various services across the agency in order to promote greater coordination
Tracking Consumers' Progress and Using Web Portal		
<ul style="list-style-type: none"> CCBH adapted existing web portal to permit consumers to track progress toward wellness goals related to sleep, smoking cessation, and weight management Nurses registered consumers to use web portal Nurses documented time spent on wellness activities and submitted to supervisors at Geisinger Health System 	<ul style="list-style-type: none"> Lack of systematic method for tracking case managers' and peer specialists' integration activities Consumers' lack of interest in using web portal or computer Consumers' difficulty in remembering passwords Consumer and staff preferences for using paper to track health information Absence of training function for staff to practice use of portal Lack of interactive functionality of web portal 	<ul style="list-style-type: none"> Developed process of care performance measures for nurses Incorporated additional information into portal to make it more appealing to consumers Developed webinar training module to assist staff in using web portal
Strengthening Relationships with PCPs		
<ul style="list-style-type: none"> CCBH hosted dinner at local restaurant to introduce program to PCPs One agency sent letter with information about program to PCPs Nurses visited PCP offices to discuss program with office staff Nurse from one agency and case managers from the other attended appointments with consumers 	<ul style="list-style-type: none"> Community providers' lack of time Limited familiarity with behavioral health services, especially case management and peer services 	

A. Integrating Nurses and Adapting Workflows and Processes for Case Managers and Peer Specialists

Nurses, case managers, and peer specialists needed clearly defined roles and responsibilities. Several staff, including nurses, noted confusion about nurses' roles and responsibilities. For example, some staff members thought that the nurse would be an external resource for the agencies, not a resource that needed to be integrated into other agency functions; others expected that the nurse would travel to

meet with consumers and conduct provider outreach rather than be stationed within the agency. In response, CCBH worked with agency leaders to clarify roles and to develop written job descriptions for nurses and case managers. In addition, about five months into implementation, a CCBH high-risk care manager began meeting with the nurses on a weekly basis to assist with role clarification and discuss ongoing wellness activities and specific cases, as needed.

Agencies needed significant time to expand the role of case managers and peer specialists to address wellness and physical health needs more formally.

Case managers and peer specialists were introduced to BHHP during the training in wellness coaching. As described below, the training in coaching focused on general strategies for helping consumers develop wellness plans and engaging them in achieving their wellness goals, but it did not provide instruction on the protocols that case managers and peer specialists should use to incorporate wellness coaching into their routine encounters with consumers. Further, the wellness assessment and planning tools were not integrated into case managers' existing case management service plans. As a result, many case managers viewed wellness assessment and planning as an additional burden.

Given their lack of formal medical education, case managers noted the value of relying on the nurse to explain and interpret medical information. Case managers were responsible for the same number of consumers in their caseloads as before the program was implemented, with some noting that sometimes the required wellness paperwork prevented them from encouraging consumers to identify a wellness goal unless the consumer demonstrated strong commitment or interest. In general, case managers believed that the nurse was more qualified than they were to interact with medical providers and develop wellness plans with consumers.

Defining the role and functions of the nurse unfolded differently in each agency. Nurses were uniformly positive about engaging consumers in wellness planning and assisting them in managing their physical health conditions. Because the nurse's role was new, the behavioral health agencies gave the nurses a fair amount of latitude in defining their role. One feature that characterized the role of the nurses was their engagement with PCPs and medical specialists. The nurse at CMSU attended medical appointments with consumers; in Northumberland, case managers did so. However, the nurse in the latter agency believed that nurses' interactions with PCPs and other providers would prove valuable.

The CMSU nurse assumed responsibility for providing wellness coaching to 46 consumers; conducted weekly group education sessions; and functioned as a resource for agency staff (for example, providing education on common physical health conditions). She assigned a high priority to accompanying consumers to medical appointments to ensure that they understood what was discussed during the appointments. She coordinated her interactions with consumers around their other provider visits (for example, she scheduled meetings with them before or after their appointments with their psychiatrist or therapist). After a doctor's appointment or

hospital discharge, she provided follow-up education to make sure consumers understood their discharge instructions and filled prescriptions for new medications. For example, for a consumer with a new diabetes diagnosis, she provided follow-up instruction in how to use a glucometer and interpret readings. As a Geisinger Health System employee, the nurse was authorized--with consumer consent--to access the electronic health records for about two-thirds of the consumers in her caseload, enabling her to identify patterns in service use across the health system, including when a consumer was admitted and discharged from the emergency department. She also initiated team meetings for consumers with more complex medical needs to ensure that everyone on the team was conveying the same messages to the affected consumers.

At the time of our last site visit, the wellness nurse's role was in transition in Northumberland. Agency leaders emphasized the importance of case managers serving as the health navigator/wellness coach and the nurse serving as a consultant for addressing health crises in a time-limited way. The nurse had 20 open cases but felt that she could manage more. She also conducted staff education and group education in community settings.

Creation of regular opportunities for formal and informal interaction fostered collaboration and communication between agency staff and nurses. Agencies required several months to integrate the nurse into the care team and to develop strategies to ensure communication and coordination across the team. At the program's outset, agencies did not specify the mechanisms or frequency with which the nurses should interact with other agency staff members. Some staff noted that they would have benefited from regular meetings with the nurse to discuss the status of consumer referrals. The somewhat isolated location of the nurse's office may have further impeded communication between the nurse and case managers within one agency. To improve communication, agency leaders included the nurse in daily meetings with supervisors and invited her to attend weekly meetings with case managers in order to review new referrals and ongoing cases. In Northumberland, the nurse's office was located in the waiting room of the outpatient clinic, thereby increasing consumers' access to the nurse when consumers visited their psychiatrist. The arrangement also provided opportunities for informal interaction between the nurse and case managers and psychiatrists. Nurses also spent two days each week at different agency clubhouses, creating opportunities to interact spontaneously with consumers and other staff members.

B. Providing Training and Ongoing Support for Physical Health and Behavioral Health Integration

Changing processes of care to incorporate physical health and behavioral health care requires a commitment to ongoing training and support. Although case managers recognized the importance of integrating care, due to their lack of medical education, they were apprehensive about addressing physical health conditions. Given that CCBH and agency leaders recognized that staff would benefit

from more in-depth education on acute and chronic physical health conditions, CCBH contracted with a physician after the program's launch to conduct module-based training in strategies for working with consumers on weight management and smoking cessation. The in-person training provided workbooks for staff on engaging consumers. Agency leaders and staff recognized that case managers do not have the time to participate in lengthy training given their need to meet productivity requirements for billing purposes. Nonetheless, case managers uniformly agreed that they would benefit from still more training in wellness coaching, management of physical health conditions, and use of the web portal (described below).

The nurses reported that they received an appropriate amount of training and support for their roles. They were uniformly positive about the training in wellness coaching. They received ongoing support from their nurse supervisors at Geisinger Health System, through which they had access to various training, continuing education, and professional development opportunities. In turn, the nurses educated agency staff by, for example, posting educational information in locations throughout the agency and discussing physical health topics during staff meetings.

C. Identifying and Engaging Consumers in Wellness and Physical Health Goals

Agencies relied largely on consumer self-referral and the judgment of case managers, peer specialists, and nurses to identify consumers for participation in the program. At the program's outset, the agencies did not establish criteria for assessing how to identify consumers with physical health or wellness needs or when to refer consumers to the nurse; instead, the agencies left the case finding process and referral decisions to case managers and peer specialists. Given their reluctance to distinguish between minor and severe physical health concerns, case managers and peer specialists often referred consumers with any type of physical health complaint--regardless of severity--to the nurse. In response, CCBH and agency leaders developed a list of criteria for case managers and peer specialists to use when making referrals to the nurse. Consumers also self-referred to the nurse by expressing interest in addressing a physical health concern or participating in wellness activities. In addition to accepting referrals within their agencies, the nurses attempted to increase referrals to the program by collaborating with social workers associated with the psychiatric units of two local hospitals and including information about the agencies' wellness programs as part of the hospitals' discharge instructions.

CCBH had hoped to use physical health cost and utilization data from the Pennsylvania Department of Public Welfare to target wellness services to consumers at high risk for physical health problems or those with chronic physical health conditions. However, delays in obtaining the data prevented such recruitment. Six months after program implementation, the agencies received the data; by this time, agency leaders reported that the agencies already knew the majority of consumers with high physical

health utilization and costs and did not use the data to identify or prioritize potential consumers.

Peer specialists were a valuable resource for consumers but were not fully integrated into care teams or routine agency functions. The use of peer specialists was a relatively new endeavor for the agencies, and each agency relied on a different management structure for peer specialists. In Northumberland, the agency did not directly employ the peer specialists and had not yet fully integrated them into agency functions (for example, peers did not participate in staff meetings and routine care planning meetings). Conversely, CMSU directly employed peer specialists in an arrangement that seemingly facilitated integration with the care team. For example, at CMSU, team meetings between case managers and other behavioral health providers took place more regularly in the case of consumers with a higher level of need; to promote greater coordination, the agency was starting to hold cross-department meetings to identify consumers who used various services across the agency. As a result, agency staff knew which consumers worked with a peer, which was not the case at BHHP's outset.

D. Tracking Consumers' Progress and Using the Web Portal

Although CCBH monitored use of the web portal and completion of surveys and health trackers, the agencies lacked a system to document integration activities. Agencies had not established a process for case managers and peer specialists to document activities related to wellness coaching as a means of assessing the types of services provided to consumers. Even though agencies created paper-based forms for referring consumers to the nurse and for wellness planning, the information from the forms was not compiled in a format readily available for analysis. In contrast to the case managers and peer specialists, wellness nurses documented how they spent their time and then submitted such information to their supervisors at Geisinger Health System. Further, at the conclusion of our study, CCBH was discussing process-of-care measures for the nurses with agency leaders (for example, tracking the number of consumers assessed for wellness goals). CCBH was also planning to collaborate with the agencies to develop outcome measures and link performance on these measures with the enhanced case management rate.

Consumer and staff use of the web portal was more modest than expected; some staff noted the challenges of implementing such technology in a rural setting. Agency leaders, case managers, peer specialists, and the wellness nurses uniformly agreed that it was difficult to motivate consumers to use the web portal. About one year after the portal's implementation, fewer than 50 consumers had completed one of the assessment tools, and even fewer had completed one of the trackers. Agency staff acknowledged that both consumers and staff experienced difficulty in accessing the web portal. Many staff and consumers were more accustomed to using paper for tracking health information. Some case managers noted that it was helpful when the

nurse registered consumers for use of the portal after conducting education sessions in community settings where a computer was available.

Some agency staff perceived that some consumers lacked motivation and/or interest in using of the portal, whereas others noted issues related to the rural setting, such as limited computer access and transportation. For example, use of the portal required a consumer's investment of time that often could not be coordinated with the pick-up and drop-off schedule of the public transportation services. Some consumers participating in the focus groups expressed a lack of interest in using a computer while others reported that they had used the portal but had difficulty remembering their password. Some agency staff also noted mental health symptoms such as paranoia as a challenge to using the web portal. Some staff identified that the portal's absence of a training function was a deterrent to use by case managers because they could not experiment with it or gain proficiency in its use. Finally, some suggested that the web portal should be more interesting and interactive and that others implementing a similar technology should consider ways to provide ongoing support and update information to ensure that the portal continues to engage consumers. To address some of these challenges, CCBH enhanced the web portal's content and developed a webinar training module for staff.

E. Strengthening Relationships with Primary Care Providers

Nurse presence at PCP appointments with consumers was an effective way to interact with providers and demonstrate the value of the wellness program. CCBH envisioned that the program would facilitate partnerships between behavioral health agencies and PCPs, thereby resulting in improved provider-to-provider communication and, ultimately, better consumer outcomes. The agencies varied in their approaches to engagement. As mentioned, Northumberland leaders tasked case managers with engaging PCPs, whereas the CMSU wellness nurse assumed the same responsibility. CMSU leaders noted that case managers' attendance at PCP appointments did not have the same effect as nurse engagement because case managers were unfamiliar with medical terminology.

The CMSU nurse embraced the role of consumer-provider liaison, initiating contact with PCPs and specialists who provided care for about half the consumers in her caseload. She introduced herself during PCP and specialist office visits and was responsive to consumers' immediate health concerns, such as a heart condition or a high-risk pregnancy. The nurse viewed her role as that of consumer advocate, which meant helping to ensure that PCPs and specialists addressed consumers' physical health needs and that consumers understood physician instructions. Some consumers, case managers, and agency leaders perceived that some medical providers were more receptive to physical health concerns of individuals with SMI when a nurse was there to help present all aspects of a consumer's health. In general, agencies found it difficult to engage PCPs given the competing demands of PCPs' busy schedules. In addition, some agency staff perceived that PCPs were not aware how behavioral health services

such as case management and peer services could provide support for consumers they jointly serve.

F. Consumers' Views on the Integration of Physical Health and Behavioral Health

Consumers were receptive to receiving services from the nurse but differed in their perspectives regarding sharing medical information with case managers and peer specialists. Consumer input was incorporated into program development during the planning process through state and regional-wide member advisory groups that CCBH convened. Consumers in the focus groups were uniformly positive about working with the nurse both individually and in groups. They especially enjoyed the group education sessions on nutrition and diet. Several consumers also noted that they appreciated that the wellness nurse advocated for their needs with their PCPs. One consumer emphasized that the wellness nurse provided a unique service that no one else at the agency could provide.

A few consumers noted that they were reluctant to disclose physical health information to their case managers. These consumers either viewed their physical health information as personal or preferred not to impose an additional burden on their case managers. Case managers confirmed this impression, noting that some consumers questioned why they would address a physical health goal with their case manager; according to case managers, in such instances, consumers did not view knowledge of their physical health information as within the purview of their case manager's/social worker's role. Even though some consumers indicated that they viewed case managers as helping them only with mental health issues and transportation, others welcomed and expected their case managers to communicate with other agency staff about their goals (including physical health goals).

IV. DISCUSSION

Developing a service setting that integrates primary care and behavioral health services is a long-term process that requires substantial investment in staff training and commitment to change (Heath et al. 2013; Kim et al. 2012). This study highlighted the key successes of the agencies in incorporating wellness coaching into their regular routines and integrating registered nurses into agency functions. As expected with these types of interventions the first year of implementation brought several challenges. These included staff role confusion, difficulty in establishing new procedures and communication protocols among staff members, discomfort among case managers and peer specialists regarding their ability to identify and address physical health concerns, difficulty in engaging PCPs, and slow uptake of web-based tools for self-care and tracking consumer outcomes. As with the launch of other complex interventions, the assignment of new staff responsibilities and the adaptation of workflows involve trial and error (Campbell et al. 2007). As described above, the stakeholders involved in the effort developed several strategies to overcome these challenges. CCBH and its partners are currently refining the BHHP model and expanding it to 11 counties with grant funding from the Patient Centered Outcomes Research Institute.

Consistent with current frameworks for integrated health care, on-site collaboration that involves some system integration may result in tension as “practice boundaries loosen” (Heath et al. 2013) and new procedures are established. The study produced several positive outcomes that provide a foundation for further integration of primary care and behavioral health services: the development of care planning processes that incorporate physical and behavioral health goals, increased awareness of physical health and wellness among behavioral health staff and consumers, and the sharing of information between nurses and behavioral health staff. Moreover, agency leaders and CCBH created an environment that encourages problem solving aimed at addressing the challenges of delivering integrated care. Several of the factors that led to these successes—including the commitment of senior leaders, encouraging communication among staff, and the proximity of behavioral health and physical health staff—are the same factors that promote integration of behavioral health services within primary care settings (Kirchner et al. 2004; Valenstein et al. 1999).

Although the adaptation of interventions to the specific contexts of the service environment and community is not unique to behavioral health (Damschroder et al. 2009; Greenhalgh et al. 2004), some characteristics of the intervention and target population may have posed challenges during the process of adaptation. First, the identification and referral of consumers with physical health needs was left to the discretion of nurses, case managers, and peer specialists. Given their lack of medical training, case managers and peer specialists were reluctant to fulfill their roles without clearly specified guidelines. Access to formal procedures and tools would help them function as wellness coaches. Second, agencies exercised latitude in the extent to

which they incorporated peer specialists into wellness planning, leading to some role confusion and possibly missed opportunities for peer specialists to engage consumers in wellness planning and physical health care. Behavioral health agencies often struggle with defining the role of peer specialists (Repper and Carter 2011) and may benefit from identifying strategies for better incorporating them into treatment planning and wellness activities. Finally, the role and functions of each nurse differed at the two agencies. Given that some case managers felt uncomfortable engaging consumers in physical health care and that some consumers felt uncomfortable disclosing medical information to case managers, it is essential to grant agencies flexibility to determine which staff function in the role of assisting consumers with medical appointments. To mitigate role confusion, programs may benefit from providing guidance on the roles and responsibilities of team members well before program implementation. Providing such direction must be balanced with an overly prescriptive approach that would otherwise dissuade agencies from taking ultimate ownership of a program or would discourage them from adopting care integration strategies.

The web portal was an innovative approach to help track progress toward reaching wellness goals, but the use of the portal was more modest than expected. Similar to other efforts that have sought to use web-based systems and patient portals to promote self-care (Goel et al. 2011; Sarkar et al. 2011), some of the staff and/or consumers reported lack of access to a computer or the Internet as well as a lack of interest in using the portal. Outside the realm of behavioral health, other efforts to encourage the use of web portals have found that patients may require considerable orientation to the portal and may worry that the use of technology will erode their relationships with providers (Zickmund et al. 2008). Some studies have revealed that only one-third of individuals with SMI use the Internet and that, among those, only half is accustomed to seeking online health information (Borzekowski et al. 2009), suggesting that consumers may need ongoing support and encouragement to use the web portal. Although further research is needed to understand more fully the strengths and limitations of computer-assisted self-care for the SMI population, some promising web-based programs designed to promote self-monitoring of symptoms and functioning for this population may provide models for other interventions (Välimäki et al. 2008; Rotondi et al. 2007).

Finally, the agencies' rural location posed barriers to engaging consumers in wellness activities and physical health care. Case managers often met consumers in their homes or elsewhere in the community; in rural areas, case managers were not likely to engage as many consumers as in other areas because of the distance between consumers' homes. Further, the amount of time required to travel between consumers' homes limited nurses' ability to conduct home visits. In addition, counties facing budget shortfalls have reduced or eliminated public transportation options.

V. IMPLICATIONS FOR BEHAVIORAL HEALTH SERVICES

Agencies that adopt an approach to integration similar to that reviewed here should be mindful that, in this case study, successful implementation depended on: (1) establishing a systematic approach to identifying consumers with physical health or wellness needs; (2) providing clear guidance on staff roles and responsibilities; (3) prioritizing time for case managers, peer specialists, and nurses to engage in ongoing training and take advantage of opportunities for regular communication; (4) ensuring that changes in job responsibilities are integrated into existing workflows; and (5) having strong leadership support.

The findings from the study suggest that, in the case of these two counties, case managers and peer specialists could have benefited from structured guidance on when and how to refer consumers to nurses and how to support consumers in their efforts to reach their wellness goals. Case managers might adopt new responsibilities that both fit into their existing workflows and do not substantially reduce their productivity. Engaging case managers early in discussions about their expanded roles--well before the agency conducts initial training or makes changes to existing processes--can facilitate their buy-in and potentially identify efficient ways to integrate their new responsibilities. Focus groups or informal discussions with case managers and peer specialists could provide opportunities to solicit input on the feasibility of their assuming responsibility for wellness coaching. Clarifying role functions and expectations through a process of engaging staff in decision making about their jobs is essential to successful program implementation (Fixen et al. 2005).

Behavioral health agencies integrating nurses into their staff would benefit from direction at the program's outset on how to prioritize nurse activities. In particular, nurses can play a unique role as a clinical bridge to PCPs and specialists because they and PCPs speak a common language. Experienced nurse care managers at behavioral health managed care organizations can assist agencies in identifying the appropriate roles for a nurse operating within the behavioral health setting. Hiring nurses from a large hospital system that serves the majority of an agency's consumers seems to have benefited the program by allowing the nurses access to clinical information in real time. Further research is needed to understand whether and how access to clinical information influences consumer outcomes.

It is important for agencies implementing a new program to establish structured and regular opportunities for staff members to meet to ask questions, clarify roles, discuss whether new processes are working as intended, and share common challenges and solutions. Such communication facilitates teamwork and ensures that consistent messages are conveyed to consumers. Examples include the participation of the wellness nurse in weekly case manager meetings and daily supervisor meetings,

thereby helping build rapport and open communication across staff members, and the institution of cross-department management meetings to encourage collaboration and information sharing. Meetings at all staff levels might also improve the consistency and quality of care across the agency, both vertically and horizontally.

Consumer input is critical during planning and implementation of integration efforts. Obtaining consumer input on an ongoing basis during implementation may especially benefit at least two aspects of similar programs in the future--use of the web portal and interdisciplinary care team meetings. Developers of web-based applications and web portals targeted to individuals with SMI have noted the importance of engaging consumers in design choices (Välämäki et al. 2008) and have documented that typical web layouts are often incompatible with how individuals with cognitive differences process information (Rotondi et al. 2007). Gathering input on the usability of the web portal as the intervention progresses may facilitate making adjustments to increase its use. In addition, consumers who participated in the focus groups welcomed and, in some cases expected, all staff involved in their care to meet jointly to discuss their care plans. Such consumer input may have signaled to the agencies the need for formally instituting interdisciplinary care team meetings, especially for those with complex needs. Implementing interdisciplinary care team meetings early in program implementation also could have facilitated communication among agency staff members and the nurse about their respective roles in working with consumers.

Behavioral health agencies need ways of systematically monitoring processes associated with integration activities and the outcomes of those activities. Process measures--such as the number of referrals made to the nurse, contacts with consumers by staff members, the implementation of wellness plans or goals, and so on--can help identify whether staff members understand and follow established processes (for example, are the number of referrals and contacts within the expected range based on the level of staff activity?) and whether the processes seem to work as intended or need to be adjusted (for example, do the number of nurse contacts with consumers align with the number of referrals?). Outcomes--for example, improvements in functioning and quality of life, weight loss or maintenance, and reductions in emergency department use or hospitalizations--can help agencies assess whether the program is producing the intended effect on consumers and whether the processes in place lead to improved outcomes.

The early implementation experiences of the behavioral health agencies in this study provide valuable information for the consideration of program developers, state officials, and policymakers seeking to integrate care for individuals with SMI. Findings suggest that training case managers to function as wellness coaches, integrating a nurse into a behavioral health agency, implementing web-based health assessment tools for people with SMI, and partnering with PCPs require a significant culture shift for

both providers and consumers. Early implementation of BHHP highlights the importance of adequate planning to clarify staff roles and responsibilities and to implement effective communication strategies; obtaining input from consumers and staff to guide program development; committing to ongoing training; and developing mechanisms to track integration activities and consumer outcomes.

REFERENCES

- Alakeson, V., R.G. Frank, and R.E. Katz. "Specialty Care Medical Homes for People with Severe, Persistent Mental Disorders." *Health Affairs*, vol. 29, no. 5, May 2010, pp. 867-873.
- Borzekowski, D.L., J. Leith, D.R. Medoff et al. "Use of the Internet and Other Media for Health Information among Clinic Outpatients with Serious Mental Illness." *Psychiatric Services*, vol. 60, no. 9, 2009, pp. 1265-1268.
- Brown, J., A. Barrett, H. Ireys, E. Caffery, and K. Hourihan. "Evidence-Based Practices for Medicaid Beneficiaries with Schizophrenia and Bipolar Disorder." Washington, DC: U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, 2012. Available at <http://aspe.hhs.gov/daltcp/reports/2012/ebpsbd.shtml>. Accessed on February 15, 2013.
- Campbell, N.C., E. Murray, J. Darbyshire et al. "Designing and Evaluating Complex Interventions to Improve Health Care." *British Medical Journal*, vol. 334, 2007, pp. 455-459.
- Clark, R.E., S. Weir, R.A. Ouellette, J. Zhang, and J.D. Baxter. "Beyond Health Plans: Behavioral Health Disorders and Quality of Diabetes and Asthma Care for Medicaid Beneficiaries." *Medical Care*, vol. 47, no. 5, May 2009, pp. 545-552.
- Collins, C., D.L. Hewson, R. Munger, and T. Wade. "Evolving Models of Behavioral Health Integration in Primary Care." *Milbank Memorial Fund*, 2010.
- Colton, C.W., and R.W. Manderscheid. "Congruencies in Increased Mortality Rates, Years of Potential Life Lost, and Causes of Death among Public Mental Health Clients in Eight States." *Preventing Chronic Disease*, vol. 3, no. 2, April 2006, p. A42. Available at http://www.cdc.gov/pcd/issues/2006/apr/05_0180.htm. Accessed on April 25, 2013.
- Damschroder, L.J., D.C. Aron, R.E. Keith, S.R. Kirsh, J.A. Alexander, and J.C. Lowery. "Fostering Implementation of Health Services Research Findings into Practice: A Consolidated Framework for Advancing Implementation Science." *Implementation Science*, vol. 4, 2009, pp. 50-65.
- De Hert, M., C. Correll, J. Bobes, M. Cetkovich-Bakmas, D. Cohen, I. Asai, J. Detraux, S. Gautam, H. Moller, D.M. Ndeti, J.W. Newcomer, R. Uwakwe, and S. Leucht. "Physical Illness in Patients with Severe Mental Disorders. Prevalence, Impact of Medications and Disparities in Health Care." *World Psychiatry*, vol. 10, no. 1, February 2011, pp. 52-77.
- Desai, M., R.A. Rosenheck, B.G. Druss, and J.B. Perlin. "Mental Disorders and Quality of Diabetes Care in the Veterans Health Administration." *American Journal of Psychiatry*, vol. 159, no. 9, September 2003, pp. 1584-1590.

- Druss, B.G., S.A. von Esenwein, M.T. Compton, K.J. Rask, L. Zhao, and R.M. Parker. "A Randomized Trial of Medical Care Management for Community Mental Health Settings: The Primary Care Access, Referral, and Evaluation (PCARE) Study." *American Journal of Psychiatry*, vol. 167, no. 2, 2010, pp. 151-159.
- Druss, B.G., S.C. Marcus, J. Campbell et al. "Medical Services for Clients in Community Mental Health Centers: Results from a National Survey." *Psychiatric Services*, vol. 59, no. 8, 2008, pp. 917-920.
- Fixsen, D.L., S.F. Naoom, K.A. Blase, R.M. Friedman, and F. Wallace. "Implementation Research: A Synthesis of the Literature." Tampa, FL: University of South Florida, Louis de la Parte Florida Mental Health Institute, National Implementation Research Network (FMHI Publication #231), 2005. Available at <http://nirn.fpg.unc.edu/resources/implementation-research-synthesis-literature>. Accessed on April 24, 2013.
- Frayne, S.M., J.H. Halanych, D.R. Miller et al. "Disparities in Diabetes Care: Impact of Mental Illness." *Archives of Internal Medicine*, vol. 165, no. 22, 2005, pp. 2631-2638.
- Goel, M.S., T.L. Brown, A. Williams, A.J. Cooper, R. Hasnain-Wynia, and D.W. Baker. "Patient-Reported Barriers to Enrolling in a Patient Portal." *Journal of the American Medical Informatics Association*, vol. 18, Supplement 1, 2011, pp. 8-12.
- Greenberg, L. "Best Practices Compendium for Serious Mental Illness." Washington, DC: Medicaid Health Plans of America Center for Best Practices, 2012. Available at http://www.mhpa.org/upload/SMICompendiumFINALweb_744522.pdf. Accessed on March 20, 2013.
- Greenhalgh, T., G. Robert, F. Macfarlane, P. Bate, and O. Kyriakidou. "Diffusion of Innovations in Service Organizations: Systematic Review and Recommendations." *Milbank Quarterly*, vol. 82, 2004, pp. 581-629.
- Hamblin, A., J. Verdier, and M. Au. "State Options for Integrating Physical and Behavioral Health Care." ICRC Technical Assistance Brief, 2011. Available at http://www.integratedcareresourcecenter.com/pdfs/ICrC_bh_briefing_document_1006.pdf. Accessed on April 20, 2013.
- Heath, B., P. Wise Romero, and K. Reynolds. "A Standard Framework for Levels of Integrated Healthcare." Washington, DC: SAMHSA-HRSA Center for Integrated Health Solutions, March 2013.
- Kim, J.Y., T.C. Higgins, D. Esposito, A.M. Gerolamo, and M. Flick. "SMI Innovations Project in Pennsylvania: Final Evaluation Report." Report prepared for the Center for Health Care Strategies. Princeton, NJ: Mathematica Policy Research, 2012. Available at http://www.chcs.org/usr_doc/Mathematica-RCP-FinalReport-2012.pdf. Accessed on February 15, 2013.
- Kirchner, J.E., M. Cody, C.R. Thrush, G. Sullivan, and C.G. Rapp. "Identifying Factors Critical to Implementation of Integrated Mental Health Services in Rural VA Community-Based Outpatient Clinics." *Journal of Behavioral Health Services and Research*, vol. 31, no. 1, 2004, pp. 13-25.

- Laursen, T.M. "Life Expectancy among Persons with Schizophrenia or Bipolar Affective Disorder." *Schizophrenia Research*, vol. 131, 2011, pp. 101-104.
- Lieberman, J.A., T.S. Stroup, J.P. McEvoy et al. "Effectiveness of Antipsychotic Drugs in Patients with Chronic Schizophrenia." *New England Journal of Medicine*, vol. 353, no. 12, 2005, pp. 1209-1223.
- McEvoy, J.P., J.M. Meyer, D.C. Goff et al. "Prevalence of the Metabolic Syndrome in Patients with Schizophrenia: Baseline Results from the (CATIE) Schizophrenia Trial and Comparison with National Estimates from NHANES III." *Schizophrenia Research*, vol. 80, no. 1, 2005, pp. 19-32.
- Mitchell, A.J., V. Delaffon, D. Vancampfort, C.U. Correll, and M. De Hert. "Guideline Concordant Monitoring of Metabolic Risk in People Treated with Antipsychotic Medication: Systematic Review and Meta-Analysis of Screening Practices." *Psychological Medicine*, vol. 42, 2012, pp. 125-147.
- Nasrallah, H.A., J.M. Meyer, D.C. Goff et al. "Low Rates of Treatment for Hypertension, Dyslipidemia and Diabetes in Schizophrenia: Data from the CATIE Schizophrenia Trial Sample at Baseline." *Schizophrenia Research*, vol. 86, nos. 1-3, 2006, pp. 15-22.
- Newcomer, J.W. "Metabolic Syndrome and Mental Illness." *American Journal of Managed Care*, vol. 13, no. 7, November 2007, pp. S170-177.
- Newcomer, J.W., and C.H. Hennekens. "Severe Mental Illness and Risk of Cardiovascular Disease." *Journal of the American Medical Association*, vol. 298, no. 15, 2007, pp. 1794-1796.
- Parks, J., D. Svendsen, P. Singer, and M.E. Foti (eds.). "Morbidity and Mortality in People with Serious Mental Illness." Alexandria, VA: National Association of State Mental Health Program Directors (NASMHPD), October 2006. Available at <http://www.nasmhpd.org/docs/publications/MDCdocs/Mortality%20and%20Morbidity%20Final%20Report%208.18.08.pdf>. Accessed on March 12, 2013.
- Repper, J., and T. Carter. "A Review of the Literature on Peer Support in Mental Health Services." *Journal of Mental Health*, vol. 20, no. 4, 2011, pp. 392-411.
- Rotondi, A.J., J. Sinkule, G.L. Haas, M.B. Spring, C.M. Litschge, C.E. Newhill, R. Ganguli, and C.M. Anderson. "Designing Websites for Persons with Cognitive Deficits: Design and Usability of a Psychoeducational Intervention for Persons with Severe Mental Illness." *Psychological Services*, vol. 4, no. 3, 2007, pp. 202-224.
- Sarkar, U., A.J. Karter, J.Y. Liu et al. "Social Disparities in Internet Patient Portal Use in Diabetes: Evidence That the Digital Divide Extends beyond Access." *Journal of the American Medical Informatics Association*, vol. 18, no. 3, 2011, pp. 318-321.
- University of California, San Diego. "Chronic Illness and Disability Payment System." 2012. Available at <http://cdps.ucsd.edu/>. Accessed on April 5, 2013.

- Valenstein, M., M. Klinkman, S. Becker et al. "Concurrent Treatment of Patients with Depression in the Community: Provider Practices, Attitudes, and Barriers to Collaboration." *Journal of Family Practice*, vol. 48, 1999, pp. 181-187.
- Välimäki, M., M. Anttila, H. Hätönen, M. Koivunen, T. Jakobsson, A. Pitkänen, J. Herrala, and L. Kuosmanen. "Design and Development Process of Patient-Centered Computer-Based Support System for Patients with Schizophrenia Spectrum Psychosis." *Informatics for Health and Social Care*, vol. 33, no. 2, 2008, pp. 113-123.
- Wagner, E.H., B.T. Austin, and M. Von Korff. "Organizing Care for Patients with Chronic Illness." *Milbank Quarterly*, vol. 74, no. 4, 1996, pp. 511-544.
- Woltmann, E., A. Grogan-Kaylor, B. Perron, H. Georges, A.M. Kilbourne, and M.S. Bauer. "Comparative Effectiveness of Collaborative Chronic Care Models for Mental Health Conditions across Primary, Specialty, and Behavioral Health Care Settings: Systematic Review and Meta-Analysis." *American Journal of Psychiatry*, vol. 169, no. 8, 2012, pp. 790-804.
- Zickmund, S.L., R. Hess, C.L. Bryce, K. McTigue, E. Olshansky, K. Fitzgerald, and G.S. Fischer. "Interest in the Use of Computerized Patient Portals: Role of the Provider-Patient Relationship." *Journal of General Internal Medicine*, vol. 23, no. 1 (supplement), January 2008, pp. 20-26.

CENTER OF EXCELLENCE IN RESEARCH ON DISABILITY SERVICES AND CARE COORDINATION AND INTEGRATION (CERDS)

REPORTS AVAILABLE

Abstracted List of Tasks and Reports

HTML <http://aspe.hhs.gov/daltcp/reports/2014/CERDS.shtml>
PDF <http://aspe.hhs.gov/daltcp/reports/2014/CERDS.pdf>

Association between NCQA Patient-Centered Medical Home Recognition for Primary Care Practices and Quality of Care for Children with Disabilities and Special Health Care Needs

HTML <http://aspe.hhs.gov/daltcp/reports/2014/ChildDisV3.shtml>
PDF <http://aspe.hhs.gov/daltcp/reports/2014/ChildDisV3.pdf>

Children with Disabilities and Special Health Care Needs in NCQA-Recognized Patient-Centered Medical Homes: Health Care Utilization, Provider Perspectives and Parental Expectations Executive Summary

HTML <http://aspe.hhs.gov/daltcp/reports/2014/ChildDisES.shtml>
PDF <http://aspe.hhs.gov/daltcp/reports/2014/ChildDisES.pdf>

Descriptive Study of Three Disability Competent Managed Care Plans for Medicaid Enrollees

Executive Summary <http://aspe.hhs.gov/daltcp/reports/2014/3MCPlanses.shtml>
HTML <http://aspe.hhs.gov/daltcp/reports/2014/3MCPlans.shtml>
PDF <http://aspe.hhs.gov/daltcp/reports/2014/3MCPlans.pdf>

Effect of PACE on Costs, Nursing Home Admissions, and Mortality: 2006-2011

Executive Summary <http://aspe.hhs.gov/daltcp/reports/2014/PACEeffectes.shtml>
HTML <http://aspe.hhs.gov/daltcp/reports/2014/PACEeffect.shtml>
PDF <http://aspe.hhs.gov/daltcp/reports/2014/PACEeffect.pdf>

Effectiveness of Alternative Ways of Implementing Care Management Components in Medicare D-SNPs: The Brand New Day Study

Executive Summary <http://aspe.hhs.gov/daltcp/reports/2014/OrthoV2s.shtml>
HTML <http://aspe.hhs.gov/daltcp/reports/2014/OrthoV2.shtml>
PDF <http://aspe.hhs.gov/daltcp/reports/2014/OrthoV2.pdf>

Effectiveness of Alternative Ways of Implementing Care Management Components in Medicare D-SNPs: The Care Wisconsin and Gateway Study

Executive Summary <http://aspe.hhs.gov/daltcp/reports/2014/OrthoV1es.shtml>
HTML <http://aspe.hhs.gov/daltcp/reports/2014/OrthoV1.shtml>
PDF <http://aspe.hhs.gov/daltcp/reports/2014/OrthoV1.pdf>

Evaluating PACE: A Review of the Literature

Executive Summary <http://aspe.hhs.gov/daltcp/reports/2014/PACELitReves.shtml>
HTML <http://aspe.hhs.gov/daltcp/reports/2014/PACELitRev.shtml>
PDF <http://aspe.hhs.gov/daltcp/reports/2014/PACELitRev.pdf>

Factors Predicting Transitions from Medicare-Only to Medicare-Medicaid Enrollee Status

HTML <http://aspe.hhs.gov/daltcp/reports/2014/MMTransV2.shtml>
PDF <http://aspe.hhs.gov/daltcp/reports/2014/MMTransV2.shtml>

Identifying Medicare Beneficiaries with Disabilities: Improving on Claims-Based Algorithms

Executive Summary <http://aspe.hhs.gov/daltcp/reports/2014/algorithmes.shtml>
HTML <http://aspe.hhs.gov/daltcp/reports/2014/algorithm.shtml>
PDF <http://aspe.hhs.gov/daltcp/reports/2014/algorithm.pdf>

Impacts of Waiting Periods for Home and Community-Based Services on Consumers and Medicaid Long-Term Care Costs in Iowa

HTML <http://aspe.hhs.gov/daltcp/reports/2014/IAWaitPd.shtml>
PDF <http://aspe.hhs.gov/daltcp/reports/2014/IAWaitPd.pdf>

Integrating Physical Health Care in Behavioral Health Agencies in Rural Pennsylvania

Executive Summary <http://aspe.hhs.gov/daltcp/reports/2014/ruralPAes.shtml>
HTML <http://aspe.hhs.gov/daltcp/reports/2014/ruralPA.shtml>
PDF <http://aspe.hhs.gov/daltcp/reports/2014/ruralPA.pdf>

Non-Elderly Disabled Category 2 Housing Choice Voucher Program: An Implementation and Impact Analysis

Executive Summary <http://aspe.hhs.gov/daltcp/reports/2014/Cat2Housinges.shtml>
HTML <http://aspe.hhs.gov/daltcp/reports/2014/Cat2Housing.shtml>
PDF <http://aspe.hhs.gov/daltcp/reports/2014/Cat2Housing.pdf>

Parent Perspectives on Care Received at Patient-Centered Medical Homes for Their Children with Special Health Care Needs

Executive Summary <http://aspe.hhs.gov/daltcp/reports/2014/ChildDisV2es.shtml>
HTML <http://aspe.hhs.gov/daltcp/reports/2014/ChildDisV2.shtml>
PDF <http://aspe.hhs.gov/daltcp/reports/2014/ChildDisV2.pdf>

Physician Perspectives on the Influence of Medical Home Recognition on Practice Transformation and Care Quality for Children with Special Health Care Needs

HTML <http://aspe.hhs.gov/daltcp/reports/2014/ChildDisV1.shtml>
PDF <http://aspe.hhs.gov/daltcp/reports/2014/ChildDisV1.pdf>

Strategies for Integrating and Coordinating Care for Behavioral Health Populations: Case Studies of Four States

Executive Summary <http://aspe.hhs.gov/daltcp/reports/2014/4CaseStudes.shtml>
HTML <http://aspe.hhs.gov/daltcp/reports/2014/4CaseStud.shtml>
PDF <http://aspe.hhs.gov/daltcp/reports/2014/4CaseStud.pdf>

Transitions from Medicare-Only to Medicare-Medicaid Enrollment

HTML <http://aspe.hhs.gov/daltcp/reports/2014/MMTransV1.shtml>
PDF <http://aspe.hhs.gov/daltcp/reports/2014/MMTransV1.pdf>

To obtain a printed copy of this report, send the full report title and your mailing information to:

U.S. Department of Health and Human Services
Office of Disability, Aging and Long-Term Care Policy
Room 424E, H.H. Humphrey Building
200 Independence Avenue, S.W.
Washington, D.C. 20201
FAX: 202-401-7733
Email: webmaster.DALTCP@hhs.gov

NOTE: All requests must be in writing.

RETURN TO:

Office of Disability, Aging and Long-Term Care Policy (DALTCP) Home
http://aspe.hhs.gov/office_specific/daltcp.cfm

Assistant Secretary for Planning and Evaluation (ASPE) Home
<http://aspe.hhs.gov>

U.S. Department of Health and Human Services (HHS) Home
<http://www.hhs.gov>