

# Improving the Physical Health of Adults with Serious Mental Illness

## Key findings:

- Grant programs had mixed success integrating primary care and behavioral health services for people with serious mental illness.
- Participating consumers were likely to receive primary care services once they were enrolled in the program; fewer consumers engaged in wellness services and activities.
- Health outcomes for consumers who received integrated services improved for some chronic conditions—diabetes, cholesterol, and hypertension—but not for obesity and smoking.
- Three features of programs were associated with greater consumer access to integrated services: co-location of services, integration of practices, and staff perceptions of belonging to a team.

Serious mental illness (SMI)—which includes schizophrenia, bipolar disorder, and major depression—affects more than 4 percent of adults in the United States. Persons with SMI often carry the added burden of physical health problems. Compared with adults without mental illness, people with SMI have higher rates of chronic disease, such as hypertension, diabetes, and obesity, and are more than twice as likely to die prematurely from these conditions, in part because they experience significant barriers to accessing primary and preventive medical care.

Behavioral health care settings are a trusted site in which people with SMI can seek care. Thus, integrating primary care with behavioral health care offers a promising strategy for improving this population’s access to a fuller

range of health care services. To promote better integration of behavioral health care and physical health care, the Substance Abuse and Mental Health Services Administration (SAMHSA) developed the Primary and Behavioral Health Care Integration (PBHCI) program, which is intended to offer primary care to adults with SMI in community mental health centers and other community-based behavioral health settings. Grant recipients received up to \$500,000 annually to develop integrated services that include four core features: (1) screening and referral for physical health care, (2) a tracking system for consumers’ physical health needs and outcomes, (3) care management, and (4) prevention and wellness services.

SAMHSA commissioned RAND to evaluate the program’s success in integrating services and improving consumer health. Over the course of three years, the RAND team examined 56 PBHCI programs, using site visits, a web-based survey of providers, and physical health screening of consumers. RAND’s evaluation addressed three questions:

1. To what extent were programs able to integrate primary and behavioral care services, and how did this influence access to care?
2. Did use of integrated services improve consumers’ health outcomes?
3. What program features were associated with improvements in access to integrated services?

## Programs Had Mixed Success Integrating Services

The evaluation assessed the integration of behavioral health and primary care services along four dimensions:

1. **co-location of services** in the same building
2. **shared structures and systems**, including the use of electronic health records and care coordination by a case manager

This research highlight summarizes RAND Health research reported in the following publication:

Scharf DM, Eberhart NK, Hackbarth NS, Horvitz-Lennon M, Beckman R, Han B, Lovejoy SL, Pincus HA, and Burnam MA, *Evaluation of the SAMHSA Primary and Behavioral Health Care Integration (PBHCI) Grant Program: Final Report (Task 13)*, Santa Monica, Calif.: RAND Corporation, RR-546-DHHS, 2014 (available at [http://www.rand.org/pubs/research\\_reports/RR546.html](http://www.rand.org/pubs/research_reports/RR546.html)).

3. **integrated practice**, including the degree of communication and the number of meetings among different providers
4. **practice culture**—staff perceptions of how much they feel like part of a team.

These four scores were averaged into a score for overall integration.

The results showed considerable variation in the extent to which programs succeeded in integrating primary care and behavioral health care services. On average, programs were most successful in co-locating services and in creating shared structures and systems, and they struggled most with creating an integrated practice culture. Overall, the majority of programs were judged to be moderately integrated across all measures. Barriers to integration reported by many programs included the challenge of creating integrated health records; long-term financial sustainability, particularly for non-billable services (such as wellness programs); recruiting and retaining qualified staff; and engaging consumers in integrated services over time.

Integrated programs reported early enrollment success. More than half of consumers used basic integrated services in the first year, including screening for physical health problems, primary care, and case management. However, rates of service use were not different for consumers with and without an identified physical health care need, suggesting that programs were not necessarily successful at targeting consumers likely to benefit most from integrated care. Consumer enrollment after the first year was often lower than expected.

### Health Outcomes Improved for Some Conditions

To understand the effects of integrated care on consumer health, the RAND team compared changes in physical and behavioral health indicators among consumers at three PBHCI sites and three comparable control sites. The results showed that consumers treated at PBHCI clinics experienced greater improvement in some indicators related to diabetes, dyslipidemia (cholesterol), and hypertension compared with consumers treated at control sites (see table). There was no similar improvement in indicators related to obesity and smoking. The smoking result provided evidence that smoking-cessation programs at PBHCI clinics needed improvement; steps have already been taken in this direction.

The analysis found no clear connection between integrated care and most behavioral health outcomes. This result was somewhat expected because PBHCI did not target behavioral health issues and because most consumers were already in behavioral health care prior to enrolling in PBHCI.

### Integrated Care Improved Outcomes for Some Chronic Health Conditions

Chronic Condition	Indicator: PBHCI Sites Compared with Control
Diabetes	Hemoglobin A1c (a measure of blood sugar)
	Plasma glucose (a measure of blood sugar)
Dyslipidemia	HDL cholesterol
	LDL cholesterol
	Total cholesterol
	Triglycerides
Hypertension	Diastolic blood pressure
	Systolic blood pressure
Obesity	Body mass index (BMI)
Smoking	Self-reported smoking status

NOTE: Green shows greater reductions in risk indicators among consumers at PBHCI clinics; yellow shows no difference; red shows a greater reduction in risk indicators among consumers at control clinics. HDL = high-density lipoprotein; LDL = low-density lipoprotein.

### Some Features of Service Integration Were Connected with Better Access to Care

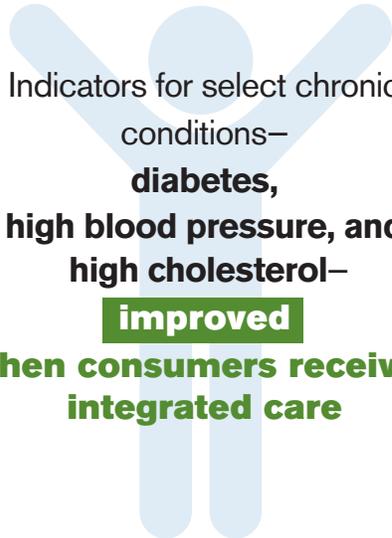
The final phase of the evaluation examined whether particular program features were associated with improved consumer access to services or improvements in health. Three of the dimensions of integrated services described earlier—co-location of services, integrated provider practices, and staff perceptions of belonging to a team—were associated with greater consumer access to care. Shared structures and systems, such as electronic health records, were associated with lower access to care, a counterintuitive result that may reflect reduced consumer “face time” with providers or program focus on infrastructure development at the expense (at least early in the program) of clinical care. In addition, consumers demonstrated greater access to care if programs offered more days per week of primary care and held more regularly scheduled meetings between integrated staff teams.

### Conclusions and Implications for Program Improvement

The PBHCI programs succeeded on several fronts, most notably in building integrated, multidisciplinary teams and practices that offered an array of services to a clientele whose health outcomes improved in several areas. The programs encountered difficulties in other areas, most notably maintaining consumer enrollment and engagement over multiple years, implementing wellness programs and shared information systems, and planning for the financial sustainability of the program beyond the grant period.

# Integrated Care

CONTRIBUTED TO IMPROVEMENTS  
IN PHYSICAL HEALTH



Indicators for select chronic conditions—  
**diabetes,**

**high blood pressure, and**  
**high cholesterol—**

**improved**

**when consumers received**  
**integrated care**

Consumers were more likely to  
access integrated services when...



behavioral health and  
primary care practices were  
**co-located** in the same building

**co-location**



behavioral and mental health  
providers spent **time together at**  
**weekly meetings**

**practice integration**



provider staff members perceived  
that they were **part of a team**

**shared culture**

To help programs build on their success and address these challenges, the RAND team recommended several steps for improvement:

- Stakeholders in the field can develop clearer performance expectations, national quality indicators for accountability in integrated programs, and performance monitoring requirements.
- Programs can strengthen their wellness services by monitoring how faithfully evidence-based wellness programs are put into action.
- Programs can increase consumer enrollment and engagement by investing in strategies to improve access to care among harder-to-reach adults with SMI.
- Programs can enhance service integration by educating staff about the nature and scope of integrated services available to their clientele.

RAND is conducting additional evaluation activities to quantify program costs and service use and to compare the effectiveness of alternative models of integrated care. This work should further clarify the value of integrated care for improving the physical health of adults with SMI.

The research was sponsored by the Substance Abuse and Mental Health Services Administration and the Assistant Secretary for Planning and Evaluation in the Department of Health and Human Services.

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