



Strategies to Increase Health System Referrals to Chronic Disease Prevention and Management Programs



System Change Strategies

System Change strategies include:



**Team-Based
Care**

AND



**Addition of
Clinics**

Refer to [Key Takeaways](#) for more information



U.S. CENTERS FOR DISEASE
CONTROL AND PREVENTION

National Center for Chronic Disease Prevention and Health Promotion
Division of Diabetes Translation

Purpose

This resource describes System Change strategies that can be used to increase health system referrals to chronic disease prevention and management programs or preventive services. Health system referrals are a process by which a health care provider recommends that a patient receives a specific service or attends a specific program delivered by another entity (clinical or community based).

SYSTEM CHANGE includes large-scale strategies that involve the movement of health staff, expansion of roles for existing staff, integration of nontraditional staff into the care team, relocation of clinics, or financial arrangements for referrals, such as incentives.

Who Is This For?

This resource is for organizations working to increase health system referrals to evidence-based chronic disease prevention and management programs and preventive services, such as the National Diabetes Prevention Program (National DPP) and diabetes self-management education and support (DSMES) services.

These organizations could include:

- State and local health departments
- Chronic disease programs
- Community-based organizations and health centers
- Health systems

How to Use This Document

This resource:

- Contains specific strategies within the System Change strategy type.
- Describes strategies that show promising or emerging evidence for effectiveness if they represent potentially valuable approaches for implementation.
- Links to additional documents that provide more details on the other specific strategy types, including strategy spotlights and implementation considerations.
- Categorizes the evidence for whether the specific strategy increased referrals. Categories include:

Strong Evidence

There was enough high-quality evidence to conclude that the strategies in this category increased health system referrals.

Promising Evidence

There was enough evidence to conclude that these strategies increased health system referrals despite potential weaknesses in the evidence.

Emerging Evidence

There was not enough evidence to conclude that these strategies increased health system referrals. Programs intending to use these strategies could evaluate their effectiveness within their respective health systems.

Team-Based Care

This strategy includes adding a new team member to the health care team or expanding an existing team member's role to focus on facilitating referrals to chronic disease management and prevention programs within the health system. Team-based care can also include adding trained staff to implement new patient-focused activities.

Strategy Spotlight #1

Higher Referrals for Diabetes Education in a Medical Home Model of Care

PURPOSE

To compare referrals for diabetes education among patients receiving care from a medical home model versus a traditional primary care practice

PATIENT POPULATION

Adult patients with prediabetes or type 2 diabetes (intervention n = 155, control n = 807)

PARTICIPATING STAFF

Primary care physicians

INTERVENTION

Patients were part of a patient-centered medical home (PCMH) model, which embraced a team-based, interdisciplinary approach to patient care, including care management, to allow for greater access and follow-up to health care services.

PROGRAM OR SERVICE REFERRED TO

Diabetes education

SETTING

Primary care practices in Missouri, USA

INTERVENTION LENGTH

2 years

IMPACT ON REFERRALS

The intervention increased referrals to diabetes education.

 **24%** 

of PCMH patients were referred to diabetes education, compared to only 13.5% of non-PCMH patients ($p < 0.001$).

 **3X** 

PCMH patients were almost 3 times more likely to receive a referral for diabetes education than non-PCMH patients (odds ratio 2.7; 95% confidence interval [CI], 1.7–4.4).

Strategy Spotlight #2

[TrueBlue Model of Collaborative Care](#)

PURPOSE	To test the effectiveness of a collaborative care model to increase referrals to physical activity programs and mental health services
PATIENT POPULATION	Patients with depression and type 2 diabetes or depression and heart disease (intervention n = 206, control n = 194)
PARTICIPATING STAFF	Practice nurses and general physicians
INTERVENTION	A primary care nurse acted as a case manager to facilitate referrals. Practice nurses received training in a 2-day workshop to prepare them for their enhanced roles in nurse-led collaborative care. The intervention was designed to fit into normal clinic operation.
PROGRAM OR SERVICE REFERRED TO	Physical activity/nutrition programs and mental health services
SETTING	Five primary care practices in Australia
INTERVENTION LENGTH	12 months

IMPACT ON REFERRALS

The intervention increased referrals to physical activity programs and mental health services. In addition, referrals to mental health services were sustained over the 12 months.

 **16%** 

increase in referrals to **physical activity programs** among participating practices compared to a 5% decrease in referrals among nonparticipating practices ($p < 0.001$).

 **17%** 

increase in visits to **mental health services** among patients from participating practices compared to a 3% reduction in visits to mental health services among patients from nonparticipating practices ($p < 0.044$).

Addition of Clinics

This strategy involves adding a specialty clinic in a primary care setting to facilitate referrals to chronic disease programs or preventive services.

Strategy Spotlight

Enhancing Dementia Care

PURPOSE

To help improve care for patients with cognitive impairments by implementing an interdisciplinary memory clinic within a primary care clinic

PATIENT POPULATION

Patients with cognitive impairments or dementia (n = 151)

PARTICIPATING STAFF

Primary care physicians, social workers, registered nurses, geriatricians, receptionists, and pharmacists

INTERVENTION

Referring family physicians were encouraged to inform patients about the memory clinic assessment. Referring physicians were informed when patients declined to schedule an assessment, and clinic staff were available to help physicians use strategies to increase referral acceptance.

PROGRAM OR SERVICE REFERRED TO

Alzheimer's and dementia care

SETTING

Primary care practices in Ontario, Canada

INTERVENTION LENGTH

3 years

IMPACT ON REFERRALS

The intervention did not directly measure referral rates. Although chart audits by two independent doctors suggest that the intervention led to appropriate referrals, there is limited evidence that it increased referrals.



Implementation Considerations for System Change Strategies

Overall, team-based care strategies demonstrate increases in referrals.

The considerations listed below can inform your implementation of system change strategies:

- **Consider additional opportunities to evaluate Addition of Clinics as a strategy**, as less is known about whether this strategy will increase referrals.
- **Primary care settings were most common** for System Change strategies. Other settings may work as well, but less is known about them.
- **Focusing System Change strategies on the entire team** may be an effective approach, because these strategies change how health care team members can work together to increase referrals.
- **Consider accounting for the level of collaboration between staff members when implementing System Change strategies.**
- **Consider implementing System Change strategies in a way that is mutually agreeable for all provider types involved.**
- **Evaluate evidence of chronic disease prevention and management programs** for evidence of increasing referrals in specific populations. Most studies did not report on patient characteristics, and therefore the effectiveness of System Change strategies at increasing referrals for specific populations is not known.

Related Resources

For a high-level overview of all the referral strategies, refer to [Strategies to Increase Health System Referrals to Chronic Disease Prevention and Management Programs: Key Takeaways from a Systematic Review](#).

For detailed findings on all the referral strategies from a systematic review of the literature, refer to [Strategies to Increase Health System Referrals to Chronic Disease Prevention and Management Programs](#).

References

[Learn more about the study characteristics of System Change strategy references.](#)

NOTE

* References with an asterisk indicate studies that were included in determinations of whether specific strategies had evidence of increasing health system referrals. Noncomparative studies were excluded from the effectiveness analysis.



Team-Based Care

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Addition of Clinics

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