



# Care Coordination Strategies for Patients Can Improve Substance Use Disorder Outcomes

Models that show promise focus on access to lifesaving medications

## Overview

Care coordination is considered a hallmark of patient-centered treatment and has been shown to improve health outcomes and patient satisfaction as well as reduce costs. Defined as organizing patient care activities and sharing information among all participants concerned with an individual's treatment plan in order to achieve safer and more effective results, care coordination is increasingly recognized as an important element in innovative models to deliver medical services.

People with chronic conditions typically have more complex medical needs and interact with multiple health care providers, so care coordination is particularly important for these patients. Health care systems have traditionally focused on coordinating care for patients with chronic conditions such as asthma, heart disease, and diabetes. Recently, they have expanded these efforts to include individuals with substance use disorder (SUD), which has shown promising results and provides lessons that could be more widely adopted through changes in state policy, including in Medicaid programs.

This document outlines key components of various models that use care coordination to improve outcomes for patients with SUD and discusses two examples—the nurse care manager model and the Medicaid health homes model—in detail. State policymakers should ensure that their state is using an approach such as one of these, particularly in the Medicaid program. This may involve funding care coordination services directly, revising state Medicaid policies, and removing barriers to receiving medications to treat SUD.

### Care coordination

Models vary widely, but include some common elements:

- Individualized plans of care based on an assessment of the patient’s needs, with ongoing review.
- A lead point of contact—one provider—who is responsible for ensuring that the care plan is implemented.
- Continual data-sharing and education for both providers and patients.

Care coordination models improve patient outcomes—such as 30-day readmissions, hospitalizations, and emergency department visits—as well as disease-specific outcomes related to diabetes, high blood pressure, asthma, and pneumonia.<sup>1</sup>

## Why individuals with SUD need care coordination

In 2018, more than 20 million people ages 12 and older had an SUD involving illicit or prescription drugs or alcohol—they are a significant public health concern.<sup>2</sup> And from 1999 to 2017, more than 700,000 people died from drug overdoses. In 2017 alone, there were more than 70,000 deaths, the majority of which involved opioids.<sup>3</sup>

Today SUDs are recognized as chronic, relapsing medical conditions.<sup>4</sup> Individuals with SUD may struggle to manage other medical conditions, also known as comorbidities. When SUDs are not addressed in the treatment of other conditions, patients may not properly take medications and suffer additional consequences, such as poor control of hypertension and diabetes, and increased risk for various cancers and other illnesses.<sup>5</sup> In addition, individuals with SUD have higher rates of emergency department visits and hospital readmissions,<sup>6</sup> and when left untreated, SUDs are associated with high rates of injury, disability, and death.<sup>7</sup>

To improve outcomes, health professionals are developing care coordination approaches that address SUDs and aim to increase patient engagement and retention in treatment, support better management of comorbid medical conditions, and ensure successful connections to medical and behavioral interventions.

Care coordination models for individuals with SUD share many core features but can differ in their designation of the entity or individual primarily responsible for coordinating care, where the coordination occurs, and how it is financed.

## Models for coordinating SUD care in Medicaid

Over the past decade, health care professionals working to implement care coordination strategies for individuals with SUD, including opioid use disorder (OUD), have focused on facilitating access to evidence-based practices, with a particular emphasis on medications.

Medication-based treatment is the gold standard for treating OUD, and patients can take one of three drugs approved by the Food and Drug Administration: methadone, buprenorphine, or naltrexone. Although these medications can be combined with counseling or other behavioral therapy, medication has proved to be effective for many people, even in the absence of regular counseling or other psychosocial supports.<sup>8</sup> Importantly, medication for OUD should not be withheld because counseling is either unavailable or the patient declines it. Two promising care coordination models focus specifically on ensuring that patients have access to medications for OUD.

### Nurse Care Manager Model

**Care coordinator:** nurse

**Location:** community health centers

**Financing:** Medicaid and state health department

## Nurse care manager model

Also known as “the Massachusetts model,” the nurse care manager (NCM) model was created to address a key barrier to integrating buprenorphine into OUD treatment: the lack of structured clinical support for physicians to prescribe and manage patients on the medication.<sup>9</sup>

A multidisciplinary team at Boston Medical Center implemented the NCM model in 2003 to expand medications and behavioral therapies for individuals with OUD. This program expanded in 2007 to include patients served in Massachusetts community health centers, 10 including people experiencing homelessness, those without insurance, and individuals with co-occurring physical or mental health disorders. The nurse care managers have the expertise in chronic disease management and patient education needed to deliver ongoing care for SUDs. In this model, NCMs take the lead in patient care and serve as the primary liaisons between patients and prescribing physicians, who then have the clinical support necessary to manage more patients on buprenorphine,<sup>11</sup> the medication most commonly used in office-based opioid treatment settings (OBOTs).<sup>12</sup>

There are four treatment stages in the NCM model:<sup>13</sup>

- 1. Screening and assessment.** The NCM conducts an initial patient screening, then works with a physician who assesses the individual. If appropriate, the physician prescribes buprenorphine for treatment of OUD.
- 2. Medication initiation.** The NCM works with the patient, in coordination with the prescribing physician, to directly supervise the initiation of treatment.
- 3. Stabilization.** The NCM serves as the primary point of contact for the patient throughout treatment, with initial weekly (or more frequent) follow-up visits, as well as phone communication for education and support.
- 4. Maintenance.** The NCM also regularly communicates with the prescribing physician and other clinical team members involved in the patient’s care, as is done to manage other chronic medical conditions.

A review of the NCM model over five years at Boston Medical Center found that of the individuals who remained in treatment for 12 months, 95 percent were no longer using illicit opioids or cocaine based on urine drug tests; a total of 49 percent of patients remained in treatment for 12 months or longer. Two percent of patients were tapered off of buprenorphine after six months’ time of adherence to treatment and absence of illicit drugs, and 6

percent voluntarily transferred to methadone maintenance treatment during the 12-month study period.<sup>14</sup>

Financing for the NCM approach comes from two sources. Nurses in Massachusetts' federally qualified health centers (FQHCs) can bill Medicaid, while the Massachusetts Department of Public Health reimburses FQHCs for care management of these complex patients with state general revenue or other federal funds, such as the Substance Abuse and Mental Health Services Administration block grant funding.<sup>15</sup>

### Medicaid Health Homes Model

**Care coordinators:** team of one nurse and one master's-level licensed behavioral health provider

**Location:** offices of providers prescribing buprenorphine

**Financing:** Medicaid

## Medicaid health homes model

The Medicaid health home state plan option, created under the Affordable Care Act,<sup>16</sup> is intended to promote access to and support coordination of physical and SUD services, as well as long-term services and support.<sup>17</sup>

Health homes must offer six core services: comprehensive care management, care coordination, health promotion, comprehensive transitional care/follow-up, individual and family support, and referral to community and social support services.<sup>18</sup> These models may be virtual or located in primary care or behavioral health providers' offices, or other settings that meet beneficiaries' needs.

To be eligible for health home services, an individual must be diagnosed with either: two chronic conditions, including SUD; one chronic condition, and be considered at-risk for a second; or a serious mental health condition. The health home approach relies on a multidisciplinary team that can include physicians, nurse care coordinators, nutritionists, social workers, behavioral health professionals, or others who can support access to physical and behavioral health services, including medications for OUD.

Vermont operates a Medicaid health home program in an effort to create a coordinated, systemic response to the complex issues of opioid addiction among the state's Medicaid population. The program focuses specifically on medications and behavioral therapies for OUD.<sup>19</sup> This "hub and spoke" model has two care components:

- Hubs, based in opioid treatment programs (OTPs), are highly regulated regional specialty treatment centers for individuals with complex addictions and comorbid mental health conditions; they can dispense both methadone and buprenorphine for OUD.
- Spokes, which are based in OBOTs.

Under this model, hub staff members at OTPs assess patients at intake and determine whether a hub or a spoke is the more appropriate placement. If patients begin treatment at a hub, they are assessed for potential referral to a spoke provider once they are considered to be stable on buprenorphine. Spoke providers include a range of practitioners—such as internists, psychiatrists, and obstetricians—working in FQHCs, private group practices, hospital-owned practices, and solo practices. Spoke physicians consult with hubs, which each include a board-certified addiction specialist, as needed on any questions regarding patients.<sup>20</sup>

Spoke practices are also supported by teams consisting of one registered nurse and one master's-level licensed behavioral health provider per 100 Medicaid OBOT patients. The teams work with the sites to coordinate patient care through the following activities:

- Teams travel to multiple sites for prescribers with few patients but embed in practices with a large number of OBOT patients. They also meet with the spoke physicians regularly to discuss cases, protocols, and coordination among staff.
- Nurses from the teams meet with all new hub and spoke patients, review contracts and consents, arrange for insurance authorization and urine drug testing, authorize buprenorphine refills to pharmacies, and oversee diversion control through random callbacks and monitoring of Vermont's Prescription Monitoring System.
- Master's-level behavioral health providers from the teams coordinate counseling, manage acute crises, provide brief supportive check-ins, assist with practical issues, and coordinate referrals between the spoke practice and hub.<sup>21</sup>

Among its hub and spoke patients, Vermont has achieved the following:<sup>22</sup>

- 96 percent decrease in opioid use.
- 89 percent decrease in emergency department visits.
- 92 percent decrease in injection drug use.
- 90 percent reduction in illegal activity and police detentions/arrests.
- \$6.7 million estimated decrease in health care expenditures between 2012 and 2013 for the 2,164 patients served by the program.
- Among a study of 80 hub and spoke patients, none reported an overdose in the previous 90 days while in treatment, while 25 percent of the 80 patients report having overdosed in the 90 days prior to entering treatment.

Vermont's Medicaid health homes employ two reimbursement policies: one payment for hubs and a separate payment for spokes. The hub payment is a monthly, bundled rate per patient that incorporates employment costs for six key hub health professionals (full-time employees) to provide face-to-face treatment services, such as counseling, as well as health home services for 400 individuals served by the hub. Spoke payments use the same bundled rate methodology but base the monthly payments off two health professionals serving 100 individuals.<sup>23</sup>

## Conclusion

SUDs are chronic medical conditions with high rates of comorbidities, but emerging models that seek to coordinate care for patients can deliver higher-quality treatments and better outcomes. By updating Medicaid policies and leveraging other state funding streams, state policymakers can draw on the lessons from these models to spur greater adoption of care coordination approaches for SUD.

## Endnotes

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