



# Building Complex Care Programs

## A ROAD MAP FOR STATES

- ▶ Improving Health Outcomes and Reducing Cost of Care for Populations with Complex Care Needs

## **ACKNOWLEDGMENTS**

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# Building Complex Care Programs: A Road Map for States

## EXECUTIVE SUMMARY

### Background

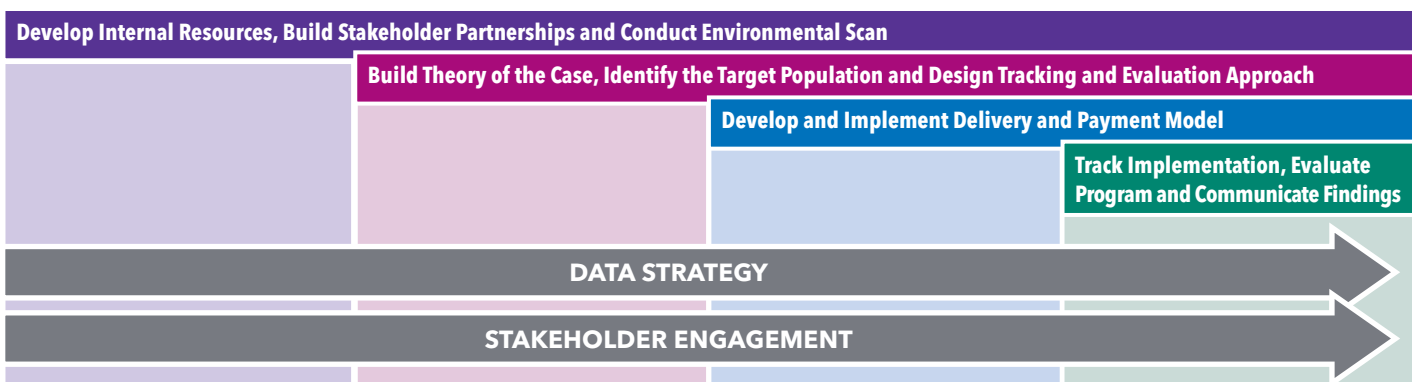
States pursuing the three-part aim of improved health, high quality care, and reduced costs often start with programs for complex care populations. These programs target high-need, high-cost Medicaid enrollees who are the most frequent users of costly sites of care, such as emergency departments and inpatient settings, but whose needs are often best met in the community. Nationally, they account for approximately 50 percent of Medicaid spending despite representing only 5 percent of those enrolled. As discussions continue around changes to the Medicaid program at the national level, states are continuing to seek innovative solutions for complex care populations. Effective complex care programs prioritize increased access to primary care, timely transitions from acute care settings and a multi-disciplinary approach which prioritizes care coordination and includes pharmacy, behavioral health and social support services in the community (such as housing, employment and transportation).

### Complex Care Projects

Since 2013, the National Governors Association Center for Best Practices (NGA Center) Health Division has worked with 10 states and one territory, providing technical assistance to develop state-level solutions for complex care populations.

This roadmap guides state leaders in establishing and advancing complex care programs. It includes lessons learned from our work with states and effective practices gleaned from multiple pioneering state and local complex care initiatives.

**SEE PROGRAM DETAILS SECTION FOR EXAMPLES FROM PARTICIPATING STATES:**  
Alaska, Colorado, Connecticut, Kentucky, Michigan, New Mexico, Puerto Rico, Rhode Island, West Virginia, Wisconsin, Wyoming



### LESSONS LEARNED

**Alignment across state and local health reform initiatives** that affect complex care populations allows for comprehensive and precise care delivery and payment strategy development, creates efficiencies by avoiding duplication of effort and leveraging resources for common goals, streamlines workflows and reporting for providers and simplifies consumer engagement with the health and social services systems.

**A data-driven approach is the cornerstone of successful, sustainable programs.** From identifying the target population to monitoring progress, tracking outcomes and implementing a robust program evaluation, these strategies help to drive sustainable programs that measure and identify return on investment.

**Make sure the right people are at the table,** are bought-in early and are engaged in implementation. State policy work relies on strong stakeholder relationships. Internal engagement includes key decision makers from all relevant state agencies. External engagement includes key stakeholders from the provider, payer and consumer communities that have a vested interest in the program.

**Develop a care delivery and payment approach that incentivizes access to cost-effective interventions** for the target populations. Evidence-based solutions for this population span a very fragmented system of care across the medical, mental health, substance use and social support domains. Ensuring the delivery of meaningful care coordination and multi-disciplinary, person-centered care is key.





# INTRODUCTION ▶

## Introduction to Complex Care Programs

**Over the past several decades, persistent growth in health care costs has generated immense pressure on state budgets. Since 2009, Medicaid spending has consistently outpaced spending in elementary and secondary education programs, accounting for an average of 29 percent of state budgets (including federal and state expenditures).<sup>1</sup> Evidence shows that higher spending has resulted in neither better health care nor better outcomes.<sup>2</sup> Consequently, governors are assertively pursuing solutions to achieve high quality health care that results in improved outcomes while reducing financial costs for individuals, employers and the government.**

At the forefront of these efforts are initiatives that target Medicaid enrollees with complex care needs, who are the most frequent users of costly sites of care such as emergency departments (EDs) and inpatient settings. These individuals represent approximately 5 percent of Medicaid beneficiaries but account for an estimated 50 percent of total Medicaid spending nationally. They have complex health and psychosocial needs that require multidisciplinary solutions. Eighty percent have three or more chronic conditions and 60 percent have more than five.<sup>3</sup> The majority of these individuals have mental illness, trauma histories, and/or substance use disorders (SUDs) and are dealing with a host of social challenges, such as unemployment, homelessness and social isolation.<sup>4</sup>

With this array of challenges, cost-effective solutions for individuals with complex care needs are not uniform. To meaningfully affect change, successful state-level initiatives tailor policy, administrative and purchasing strategies to target populations whose needs are best met in the community rather than in acute care settings. Evidence shows that increased access to primary care, closely coordinated with pharmacy, behavioral health (BH) and social support services, can catalyze change for this

population.<sup>5</sup> In addition, evidence that adverse experiences in childhood (ACEs) contribute significantly to complex health, behavioral health, and social difficulties is strong and trauma-informed approaches are implicated in effective program design.<sup>6</sup> Doing so, however, requires the integration of siloed, fragmented services and support.<sup>7,8</sup> Limited access to mental health (MH) and substance abuse services, safe and affordable housing, employment opportunities, transportation and self-management supports characterize the current delivery system.

Effective complex care programs that bridge these gaps, improve outcomes and provide significant return on investment (ROI) have emerged locally and on the state level. Governors are uniquely positioned to capitalize on lessons learned from those models and support complex care initiatives in their own states. This work will be increasingly important in the context of health reform in which value-based solutions are paramount. The road map is intended to guide state health policy leaders in that undertaking. It was built through a synthesis of best practices across multiple pioneering state and local complex care initiatives and three years of the NGA Center Health Division intensive technical assistance (TA) with states.

## NGA Center's Work on Complex Care Programs

Over the past three years, the NGA Center's Health Division has worked with 10 states and one territory, providing intensive TA to develop state-level solutions for complex care populations. This road map is a step-by-step guide for state leaders to establish and advance complex care programs built from a compilation of lessons learned from our work with those states and effective practices gleaned from multiple pioneering state and local complex care initiatives.

### The road map foundation: taking cues from pioneering models

While the evidence for effective complex care programs is still emerging, several successful programs have blazed the trail. Local and county pioneers such as the Camden Coalition of Healthcare Providers (NJ)<sup>9,10</sup> and Hennepin Health (MN)<sup>11</sup> brought national attention to the promise of improved health and well-being for people with complex care needs.<sup>12</sup> Statewide efforts such as those in Maine, Missouri, North Carolina, New York, Oregon, Vermont and Washington demonstrate the power of state-level solutions to build effective, sustainable programs that improve outcomes and significantly reduce costs.<sup>13</sup> Typically, these models target the highest users of potentially preventable ED services or inpatient care. They build resources necessary to redirect those individuals to high-quality care outside acute care settings. State models have successfully shifted use of costly ED and inpatient services to well-coordinated outpatient care, thereby improving health and quality of life of patients and saving millions annually. Specific outcomes include significant reductions in potentially preventable ED visits and the number and length of inpatient stays as well as increased access to primary care. In addition, many have demonstrated significant improvement in chronic disease outcomes (such as better control of diabetes, hypertension, cardiovascular disease and depression) and increased access to needed social supports.

Models vary in execution and focus, reflecting the unique needs of each targeted population and community. However, **common elements** include:

- ✓ Targeting an "impactable" subset of individuals identified through data analysis and matching to best practice interventions;

- ✓ Facilitating real-time or near real-time identification of target individuals in acute care settings, rapid communication among providers and 'bedside' engagement to foster care transitions; and
- ✓ Investing in person-centered engagement, comprehensive care coordination and a multidisciplinary care team approach, emphasizing linkages among the primary care home, BH services and social supports.

See Appendix A for additional details on pioneering models.

### Refining the road map: NGA Center Health Division's work with states

Using the foundational elements from pioneers, the NGA Center Health Division worked with the following states to establish or advance complex care programs: cohort 1 (Alaska, Colorado, Kentucky, New Mexico, Puerto Rico, West Virginia and Wisconsin) and cohort 2 (Alaska, Colorado, Connecticut, Kentucky, Michigan, Rhode Island, West Virginia, Wisconsin and Wyoming). These states developed and implemented comprehensive work plans aimed at identifying and implementing opportunities for state-level intervention. Three general approaches emerged: (1) supporting effective local programs, (2) partnering with managed care organizations (MCOs) to encourage greater access to evidence-based interventions and (3) bolstering locally driven solutions through regional partnerships.

**PLEASE SEE THE PROGRAM DETAILS SECTION FOR DETAILED EXAMPLES OF EACH STATE'S COMPLEX CARE PROGRAM.**

### Key road map components include:

- ✓ Building internal capacity and conducting an environmental scan of existing health reform initiatives (on state and local levels) that affect the complex care population of interest;
- ✓ Partnering closely with key stakeholders to design and implement a meaningful and effective program or to scale and spread existing programs;
- ✓ Taking a rigorous, data-driven approach, from identifying the population to evaluating the program; and
- ✓ Implementing delivery and payment reforms that focus squarely on the three-part aim of improved outcomes, high-quality care and reduced costs.

# Building Complex Care Programs: Governor's Leadership

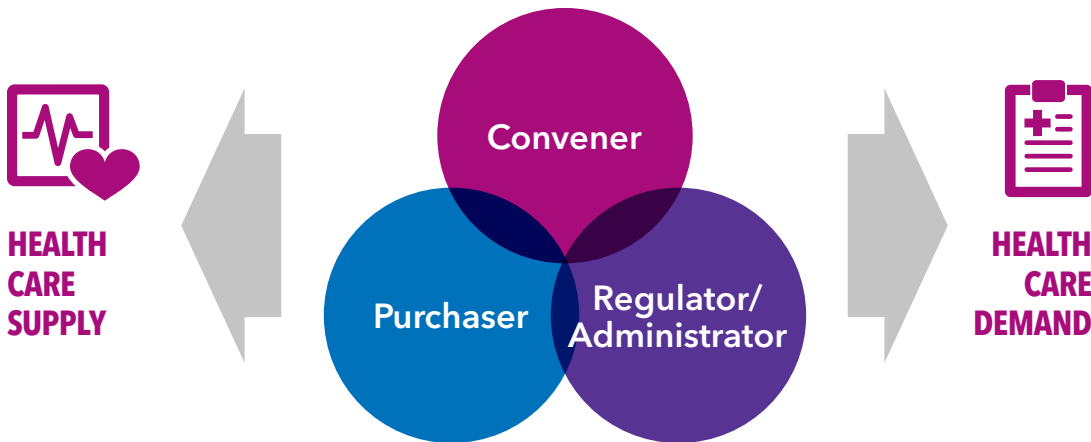
**A governor's leadership is instrumental in setting a vision for the state, engaging stakeholders and achieving meaningful outcomes.**

Governors play a critical role in transforming health care, and many start by focusing on complex care populations—an opportunity to substantially improve lives and deliver a meaningful ROI for taxpayers. Governors are uniquely positioned to set a statewide vision for complex care populations and to convene key stakeholders across public and private sectors to communicate the vision and obtain buy-in. As regulators and administrators,

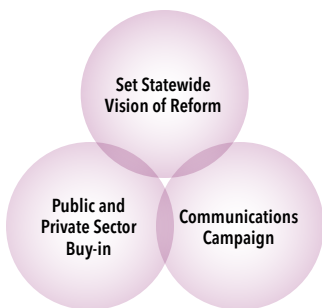


governors have the ability to unify public and private reforms, including coordinating public health investments and workforce supply, both of which are critical to complex care programs.<sup>14</sup> Governors are also shaping the health care system through payment and delivery reform, using their role as purchasers for Medicaid, the state Children's Health Insurance Program (CHIP), state employee health coverage, state retiree health coverage and indigent care.

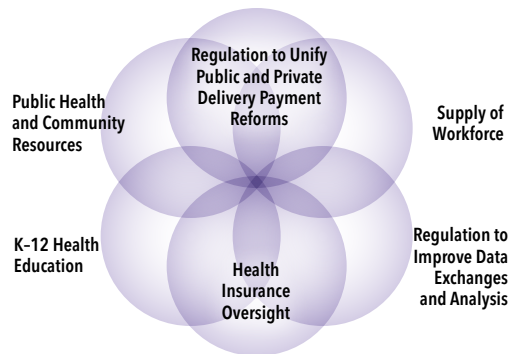
## GOVERNOR'S ROLES



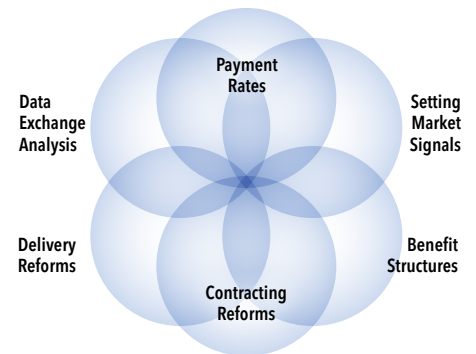
### GOVERNOR AS CONVENER



### GOVERNOR AS REGULATOR/ADMINISTRATOR



### GOVERNOR AS PURCHASER





# About This Road Map

## How to use the road map

The road map is a tool to help states improve the health of their residents in a cost-effective manner given increasing budget constraints. It serves as a step-by-step guide to help states assess their capacity to create complex care programs, select evidence-based practices to maximize outcomes, implement effective targeting and evaluation strategies and consider lessons learned from early adopters. The road map is designed as a program development tool, allowing states to use all or portions of the road map as it applies to their unique situations. It was developed in close consultation with providers, national experts, and local, state and federal officials.

## What to expect

Readers will find as they progress through the road map:

- ▶ An introduction to NGA Center's work with states on building effective interventions for complex care populations
- ▶ A step-by-step guide for overlapping stages of implementation:
  - Building capacity internally and with stakeholder partners and scanning for existing initiatives in the state
  - Developing a robust data strategy to effectively target interventions and evaluate them for cost-effectiveness
  - Implementing delivery and payment models that support evidence-based interventions
- ▶ A look at key program details including workforce considerations and state examples
- ▶ Appendices with detailed state approaches and additional resources

**Over the past three years, the NGA Center has compiled lessons learned (LL) from direct work with states in creating complex care programs and in close consultation with successful pioneer programs. Readers can find LLs scattered throughout the document in bright red circles.**





# Building Complex Care Programs: Road Map Overview

## Develop Internal Resources, Build Stakeholder Partnerships and Conduct Environmental Scan

### KEY COMPONENTS:

Assemble a group of key decision-makers from all relevant agencies to identify and serve as internal advisors to the core team. The core team will comprise a subset of key decision-makers (or their direct reports), including the governor's health policy advisor.

Identify and commit staff resources to support the work of the core team.

Establish or engage an existing external stakeholder advisory group to participate in program design.

With input from internal and external advisors, conduct an environmental scan:

- ▶ Scan health care delivery system reform efforts across the state, and specify how they do or may affect the complex care population and align approaches accordingly
- ▶ Scan existing complex care programs among providers, payers, counties and communities

## Build Theory of the Case, Identify the Target Population and Design Tracking and Evaluation Approach

### KEY COMPONENTS:

#### Foundation Phase:

Use existing information to build a theory of the case.

Determine data collection and analytic capacity; and fill gaps with strategic partnerships

#### Design Phase:

Identify the target population

- ▶ Start with utilization and cost data
- ▶ Analyze characteristics and determine which are "impactable"
- ▶ Vet preliminary results with external stakeholders to match to evidence-based interventions and assess availability

While determining the delivery and payment model:

- ▶ Build an evaluation strategy, including establishing a core set of metrics to evaluate impact and measure ROI; and
- ▶ Design an implementation monitoring and tracking approach, including rapid-cycle evaluation for continuous program improvement and to capture early findings.

## Develop and Implement Delivery and Payment Model

### KEY COMPONENTS:

With the external stakeholder advisory group, identify the scope of care delivery and payment model based on the identified population and availability of best practice interventions.

Decide on one of three general state approaches: partnering with MCOs, partnering directly with providers or a regional approach.

Select the specific care delivery and payment model:

- ▶ Prioritize evidence-based interventions when determining the incentive approach
- ▶ Ensure that care delivery and payment strategies align with major initiatives in the state that affect the target population
- ▶ Review delivery and payment models used successfully in other states and determine feasibility of adoption based on current state programs and initiatives
- ▶ Consider risk sharing strategies and the state's role in supporting models

Enroll target population and administer the program (including adjudicating payments as agreed to)

## Track Implementation, Evaluate Program and Communicate Findings

### KEY COMPONENTS:

Execute the monitoring and tracking plan to maintain implementation and collect data for evaluation.

Using core metrics, evaluate progress:

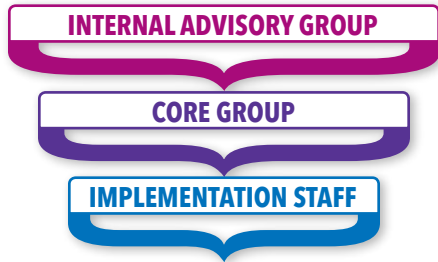
- ▶ Inform continuous program improvement and report early findings through rapid cycle evaluation
- ▶ Conduct comprehensive evaluation including cost-effectiveness/ROI analysis

Tell the story and move toward sustainability

### DATA STRATEGY

### STAKEHOLDER ENGAGEMENT

# Develop Internal Resources, Build Stakeholder Partnerships and Conduct Environmental Scan



**Assemble a group of key decision-makers from all relevant agencies to identify and serve as internal advisors to the core team**  
 .....  
**The core team will consist of a subset of key decision-makers (or their direct reports), including the governor’s health policy advisor**

The key decision-makers should include representatives from agencies involved in the administration, regulation and financing of initiatives that affect complex care populations. Initially, scanning the target populations and interventions in successful state and local programs across the country can define who is needed on the core team. As the core team completes the state’s environmental scan and data analyses to identify the specific target populations, team composition may evolve to include the relevant agencies involved with the target populations.

**Consider the following agency leads for the internal advisory group:**

- ▶ Health and human services
- ▶ Medicaid
- ▶ State Innovation Model (SIM) or state health policy innovation group
- ▶ BH or both MH and SUD authorities (where separate)
- ▶ Department of housing (and housing finance agency)
- ▶ Department of corrections
- ▶ Tribal health
- ▶ State budget office
- ▶ Information technology (IT)

**Identify and commit staff resources to support the work of the core team**

Implementation staff often sit in the health and human services agency—in a Medicaid office or in divisions dedicated to health policy, innovation or evaluation. Most states have limited capacity to hire new staff and, instead, supplement with fractions of full-time equivalents (FTEs) of several strong program staff to be responsible for implementation.

To be most effective, the staff should have access and capacity to analyze relevant data (for example, Medicaid claims and pharmacy) or oversee such analyses; have the authority to arrange key decision-maker meetings; and be empowered to own the completion of a work plan, with goals and timelines. In addition, many states supplement limited staff time through strategic partnerships with external stakeholders such as academic medical centers and associations (for example, the state ED physicians and hospital associations). Washington State is a good example of using a strong stakeholder group with common interests in reducing unnecessary utilization and costs driven by state budget constraints.<sup>15</sup>

**Interaction among implementation staff, core team and key decision-makers:**

Implementation staff execute at the direction of the core team, which consists of a subset of key decision-makers (or direct reports). The core team engages other key decision-makers at critical junctures in program design and execution, using them as advisors and communicators of key findings. Key decision-maker roles include interpreting the environmental scan, setting program goals and objectives that align with other state initiatives, developing relationships with key stakeholders, supervising program development, implementation and evaluation, and communicating progress and findings with the governor and key stakeholders for sustainability planning.

**LL**  
 Find and build internal capacity among the state team to analyze and use data. This may include strategic partnerships where internal capacity is inadequate (for example, with academic institutions).

**LL**  
 Use the environmental scan to inform core team and key decision-maker group composition.

## Develop Internal Resources, Build Stakeholder Partnerships and Conduct Environmental Scan

**Establish or engage an existing external stakeholder advisory group to participate in program design, including informing environmental scans**

### Key considerations:

- ▶ The success of state-led health initiatives depends on the meaningful partnership with stakeholders both internal and external to state government.
- ▶ The external stakeholder advisory group could include key stakeholders from provider, payer, employer and consumer communities who will play a role in the program.
- ▶ When engaged throughout, key stakeholders not only contribute to effective targeting strategies, care delivery and payment design and program implementation, but also serve as program champions. Successful state efforts have:
  - Created opportunities for stakeholders to engage with the state and one another regularly on program development and have brought in needed expertise to refine and sustain efforts.
  - Engaged stakeholders in person and in their communities whenever possible to understand their perspectives, show commitment to the partnership and facilitate rollout of programs.

**LL**

Consult with stakeholder advisory group throughout to help scan the state for what is working, determine where to target resources, identify the target population, design and implement the program and communicate successes.

**LL**

Creating opportunities for and dedicating resources to a learning collaborative among stakeholder partners can sustain momentum toward a common goal, facilitate ideas and spur innovation.



# Develop Internal Resources, Build Stakeholder Partnerships and Conduct Environmental Scan

## Conduct an environmental scan to identify opportunities to align state health system transformation initiatives and to catalyze change

Alignment across health and social service initiatives that affect complex care populations allows for comprehensive and precise care delivery and payment strategy development, creates efficiencies by avoiding duplication of effort and using resources for common goals, streamlines workflows and reporting for providers, and simplifies consumer engagement with the health and social services systems.

TASK	GOAL	WHY IT MATTERS
<p><b>Scan health care delivery system reform efforts across the state and specify how they may affect the complex care population.</b></p> <div data-bbox="126 926 451 1255" style="border: 2px solid red; border-radius: 50%; padding: 10px; text-align: center; margin: 10px auto; width: 150px;"> <p style="font-size: 24px; font-weight: bold; color: white;">LL</p> <p style="color: white; font-size: 12px;">Scan efforts beyond the health system as well, to determine the availability of key social services (such as housing) needed to meet the full continuum of this population’s needs.</p> </div>	<p>The core team identifies reforms and existing initiatives that could be aligned with or used for complex care programs. The scan should be broad, including all initiatives that touch on best practice interventions the target population needs, including:</p> <ul style="list-style-type: none"> <li>• Governor’s initiatives (for example, Healthiest State initiatives) and existing workgroups</li> <li>• Medicaid waivers, state plan amendments (SPAs), managed care and Behavioral Health Organization contracts</li> <li>• SIM grant work (and associated Population Health Plan)</li> <li>• Health Homes</li> <li>• State Health Improvement Plan (SHIP)</li> <li>• MH and SUD initiatives (for example, Substance Abuse and Mental Health Services Administration [SAMHSA] block grant work; Screening, Brief Intervention and Referral to Treatment [SBIRT]; and Certified Community Behavioral Health Clinic work, any institutional care)</li> <li>• Housing finance agency priorities</li> <li>• Department of corrections programs that involve the complex care population</li> <li>• Human and social services programs (for example, food supports, supported employment, supported education)</li> <li>• Office of children and family services (including any information about juvenile justice programs, youth-in-transition initiatives, etc.)</li> </ul>	<p>Creates efficiencies across state initiatives and potential to use existing efforts and momentum to aid design and implementation of complex care program.</p> <div data-bbox="1187 961 1474 1304" style="text-align: center;"> </div>
<p><b>Scan existing complex care programs among providers, payers, counties and communities.</b></p>	<p>The core team identifies programs and their funding streams already in existence in the state and brings them to key decision-makers, who then consider these in conjunction with state-level delivery system initiatives and reforms under consideration.</p> <ul style="list-style-type: none"> <li>• Consider conducting an asset and service mapping<sup>16</sup> to understand the state role in services available in the state and funding sources. This map will also reveal opportunities for braiding and blending funds to maximize investment.</li> <li>• Consider reviewing the following for effective local programs:                         <ul style="list-style-type: none"> <li>– Academic medical centers/universities</li> <li>– BH providers (MH and SUD providers, if not combined)</li> <li>– Housing providers</li> <li>– Case management efforts through human services providers, such as Temporary Assistance for Needy Families (TANF); Women, Infants, and Children (WIC); and domestic violence service providers</li> <li>– Employer programs to address the population</li> <li>– Managed care and commercial insurance programs that address the population</li> </ul> </li> </ul>	<p>Identifies successful efforts that inform analysis of the state role in scaling and spreading, protects against avoidable redundancies with existing programs and highlights possible areas of collaboration.</p> <div data-bbox="1187 1696 1463 1843" style="text-align: center;"> </div>

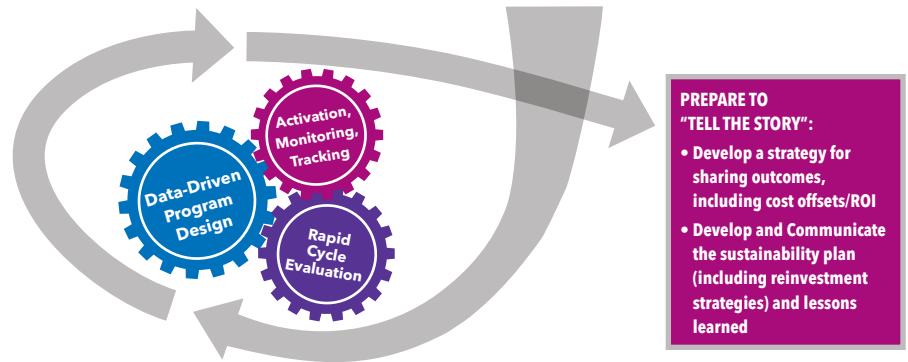
# Data Strategy: Overview

## Foundation Phase



**Foundation Phase:** Build a theory of the case from existing information.

## Design, Implementation and Evaluation Phases



LL

Develop a robust evaluation plan from the start and share findings to build sustainable solutions.

**Design Phase:** Use data to determine the target population, match to evidence-based interventions needed and build an implementation tracking and evaluation strategy based on the delivery and payment model selected.

**Implementation Phase:** Operationalize the program, monitor and track implementation and activate a rapid-cycle evaluation plan.

**Evaluation Phase:** Conduct a comprehensive prospective or retrospective evaluation.

A data-driven strategy is at the heart of successful complex care programs and cuts across all elements of design and execution, from building a theory of the case to communicating outcomes. States, plans, and provider partners can collaborate on data collection, analysis and information exchange to ensure that they have the information they need to support a successful complex care program. This also promotes buy-in from all partners and efficient use of resources.

### KEY COMPONENTS INCLUDE:

- ▶ Careful identification of the target population;
- ▶ Matching to evidence-based interventions and determining access opportunities and gaps;
- ▶ Monitoring and tracking to maintain implementation and for performance improvement; and
- ▶ Rapid-cycle evaluation to capture early outcomes and a more comprehensive evaluation that measures program effectiveness in core elements: improved outcomes, increased access to evidence-based care and reduced cost of care.

The following pages describe the data strategy at each stage of program development and execution.



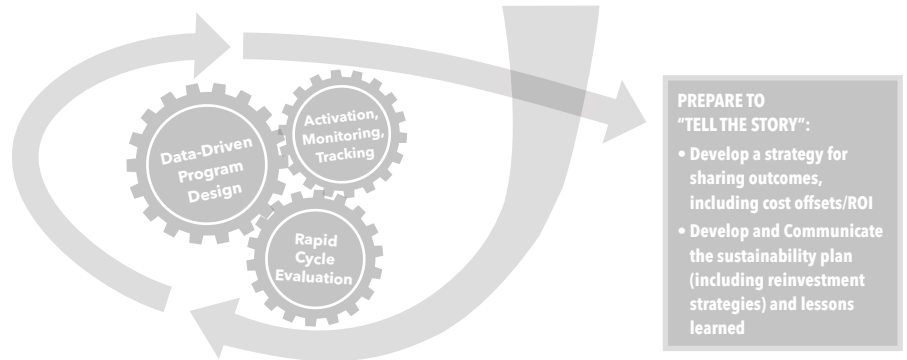
# Build Theory of the Case, Identify the Target Population and Design Tracking and Evaluation Approach

## Foundation Phase



**Foundation Phase:** Build a theory of the case from existing information.

## Design, Implementation and Evaluation Phases



### FOUNDATION PHASE

#### The core team will:

- ▶ Based on findings from the environmental scan, set the vision and highest level goals for the program with desired outcomes in mind (improved health, increased access to evidence-based interventions, reduced cost).
- ▶ Run available, useable data to build a "theory of the case" (acknowledging any limitations) and shares findings with key decision-makers to direct the data strategy.
- ▶ Engage key internal and external stakeholders to collaborate on the data strategy needed to achieve the goals.
- ▶ Identify which data are available and reliable, where they reside (for example, Medicaid Management Information Systems, claims, pharmacy data, clinical records) and whether the state has legal access.
- ▶ Determine human and IT resources needed to retrieve, aggregate, analyze, manage and share data on ongoing basis and reviews core team composition to ensure that data analytic capacity exists or can be built through strategic partnerships with external stakeholder partners (for example, academic medical centers).
- ▶ Establish or use existing legally compliant data privacy and security infrastructure.<sup>17</sup>

**LL**

Evaluate and address opportunities and challenges in provider-level data sharing that can drive program success.

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[See NGA Center Roadmap](#)



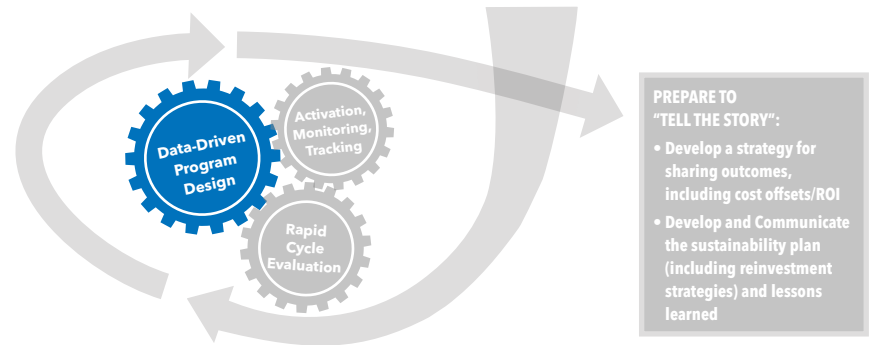
# Build Theory of the Case, Identify the Target Population and Design Tracking and Evaluation Approach

## Foundation Phase



**Design Phase:** Use data to determine the target population, match to evidence-based interventions needed and build an implementation tracking and evaluation strategy based on the delivery and payment model selected.

## Design, Implementation and Evaluation Phases



### DESIGN PHASE

#### Identify target population

- ▶ Determine the "look-back" period for identifying the target population (based on available and reliable data, such as Medicaid claims and pharmacy data).
- ▶ Decide on preliminary [metrics](#) to define the target population based on potentially preventable use and cost (for example, total cost per month, frequency of avoidable ED or inpatient use).
- ▶ Collect, aggregate and analyze data to reveal information about population characteristics commonly shared by individuals who meet those criteria (perform cluster analysis, geospatial analysis, etc.).
- ▶ Determine the "impactable" population (that is, those whose needs are best served in less costly sites of care given adequate access to best practice). Several programs have identified strategies for determining impactability.<sup>18</sup>
- ▶ Map the availability of those best practices onto patient characteristics and the services they need, including physical health, BH and social supports, to determine the feasibility of intervening and gaps to fill.
- ▶ Develop rule-in/rule-out criteria for the population based on services needed, available or for which access is being expanded.

**LL**

Focus data analysis on identifying the target population based on how "impactable" they are.

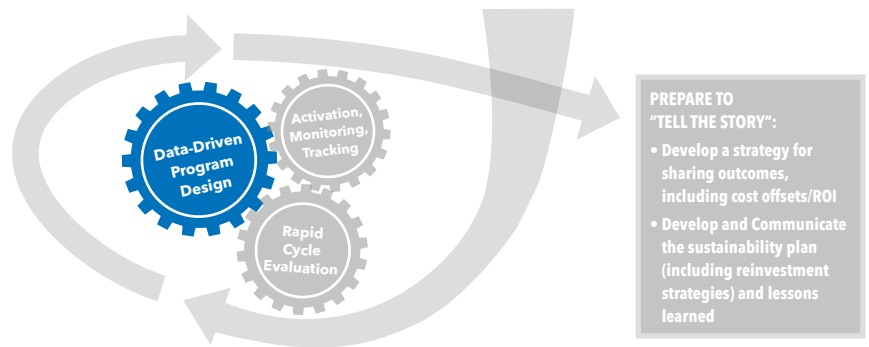
# Build Theory of the Case, Identify the Target Population and Design Tracking and Evaluation Approach

## Foundation Phase



**Design Phase:** Use data to determine the target population, match to evidence-based interventions needed and build an implementation tracking and evaluation strategy based on the delivery and payment model selected.

## Design, Implementation and Evaluation Phases



### DESIGN PHASE

Building the Implementation and evaluation approaches should occur simultaneously with choosing the delivery and payment strategy.

#### Implementation elements

While determining the intervention approach, the core team works with key external stakeholders involved with implementation to establish referral process to the complex care program:

- ▶ Identify mechanism for locating target population:
  - *Retrospective:* Apply criteria to claims, pharmacy and geospatial data to establish a list of patients to share with parties responsible for implementation (limited efficacy).
  - *Prospective:* At the site of intervention, use criteria to rule individuals in or out.
    - *ADVANCED option:* Use predictive analytics to identify the target population going forward.<sup>19</sup>

#### Evaluation elements

- ▶ Design a comprehensive evaluation approach before launching the program, including either a prospective or retrospective evaluation of the program over a predetermined period of implementation. Cost-effectiveness analysis is key.
- ▶ Work with stakeholders to establish a core set of measures for both rapid-cycle and long-term evaluation of program performance and to establish benchmarks.
- ▶ If using risk-based payments, reach an agreement on how measures inform such payments.
  - **Key considerations:**
    - 1.) Start with a basic, core set of [metrics](#).<sup>20</sup>
    - 2.) [Metrics](#) that allow ROI calculation are key to determining and building support for sustainability.
    - 3.) Consider streamlining outcome measures required of providers with those they must already report for other purposes.

**LL**

Start with a basic, core set of metrics to get the program launched rather than building a complex set of outcome variables to track at the outset. Start small and build as you learn.

# Develop and Implement Delivery and Payment Model

## Decide on the state approach based on the identified population and availability of best practice interventions

Core teams should consult with external stakeholder advisory groups to determine approach. There are three general approaches to serving complex care populations: (1) partner with MCOs to encourage them and their provider partners to improve access to best practice incentives for the target population; (2) partner with providers (such as academic medical centers) to build provider-initiated pilot programs, and fold in payer and community partners as needed; or (3) develop regional approaches to devolve funding and accountability to regional entities that coordinate care for the target population through a local network of providers. (See Program Details section for more information)

State teams will need to determine which of these approaches they will take to serve the population before working with stakeholders to choose the payment and delivery model that best meets the needs of the target population.

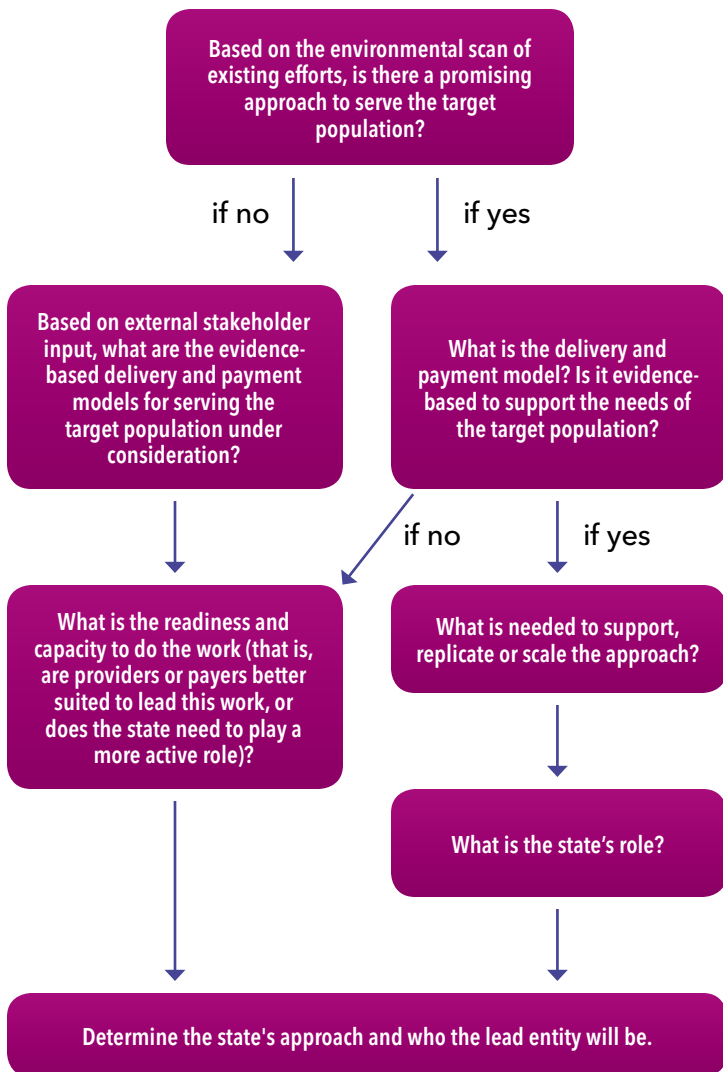
### KEY CONSIDERATIONS

#### Assessing provider and payer readiness and capacity:

- ▶ Core teams will need to assess the ability of payers and providers, as well as, market dynamics to determine which entities are best suited to deliver care management activities to the identified target population. Core teams should establish a robust set of criteria to review characteristics of health systems and providers, including capital, experience with complex populations, capacity and capabilities.
- ▶ Considerations include:
  - Market dynamics—whether there are dominant payers or providers and whether the state is heavily managed care;
  - The financial and administrative capacity of MCOs and providers;
  - The care needs of the target population and whether providers are already delivering these services or MCOs are already paying for it; and
  - Whether the care model includes opportunities and flexibility to invest in supportive and other noncovered services.

#### Determining the state's role in the complex care model:

- ▶ Core teams will need to consider what role the state will play in administrative functions as well as how prescriptive or flexible they wish to be in the program's design.
- ▶ Core teams will need to work with the lead entity to determine the timeline for implementation and whether a phased-in approach is necessary.
- ▶ Core teams will need to work with the lead entity to determine the structure of the payment model (and how MCOs will be involved if providers are leading this work) and communicate how outcomes will be measured.



# Develop and Implement Delivery and Payment Model

## Determine specific delivery and payment model.

- ▶ Based on the needs of the identified target population and considering the environmental scan of health and social services system reform initiatives in the state, the core team should consider best practice delivery models and how to encourage greater access to those models.

Commonly used delivery and payment approaches, including the benefits and challenges of each, are presented on the following pages. (Appendix B includes specific state examples of each approach, with model and payment details.)

- ▶ Teams then determine whether the delivery model under consideration can be built on existing delivery payment models in the state or those in the pipeline (for example, health homes, patient centered medical homes and community health teams [CHTs], managed care contracts that include special requirements for the target population).
- ▶ At a minimum, ensuring that selected care delivery and payment strategies align with major initiatives in the state that affect the target population will optimize ROI.

### KEY CONSIDERATIONS

- ▶ Prioritize evidence-based interventions when determining the incentive approach (see tables on the following pages).
- ▶ Recognizing the multidisciplinary care needs, consider the specific workforce needed as it relates to the implementation of the chosen care delivery model. **(See the section "Program Details" for more detail on workforce considerations.)**
- ▶ Consider models that will also encourage providers to move toward value (for example, shared savings or global capitation models).

**LL**

Focus on community-based approaches with robust care coordination. Require a multidisciplinary team-based approach, including nontraditional workforces, where applicable.

**LL**

Bidirectional integration of physical and behavioral health is cost-effective.

**LL**

Include a health and housing strategy for the unstably housed population.

↓

For more information see **Program Details section** or click to access **Housing as Health Care Road Map**

**LL**

Encourage evidence-based interventions matched to the needs of the population and discourage interventions that don't work.

**LL**

Incorporate assessment of social support needs into the overarching care plan and care delivery.

# Develop and Implement Delivery and Payment Model: Common Approaches

This section was written by the Center for Health Care Strategies.

States have typically used one of the following delivery and payment models to deliver services to complex care populations. States should consider the feasibility of implementing the care model in service of the target population in their state based on the environmental scan and capacity assessments. They can also consider which enhancements may be needed to provide evidence-based interventions to the target population, how prescriptive the state wants to be, which federal authorities are needed and which payment incentives will facilitate and encourage care coordination among providers to deliver patient-centered and team-based care. The next two tables describe common delivery and payment approaches, the benefits and challenges of each and a more detailed look through state examples.



[See Appendix B for State Examples and<sup>21</sup> for additional MCO contract strategies]

## COMMON DELIVERY MODEL APPROACHES

	Patient-centered medical homes and community health teams (CHT)	Health homes	Accountable care organization (ACO)	Managed care contracting
<b>Benefits of care delivery model</b>	<ul style="list-style-type: none"> <li>For patients with complex care needs, use CHTs to extend the reach and scope of patient-centered medical homes beyond the walls of the primary care practice to coordinate with other needed services and supports.</li> <li>Use risk stratification to identify patients most likely to benefit from CHT services.</li> </ul>	<ul style="list-style-type: none"> <li>The Patient Protection and Affordable Care Act (ACA) Section 2703 allows states to pay for care management/care coordination services for individuals with chronic conditions, with a focus on service integration.</li> <li>States may consider this care delivery model to serve populations with complex care needs to enhance care coordination services.</li> <li>There is a 90/10 federal match for the first eight quarters.</li> </ul>	<ul style="list-style-type: none"> <li>ACOs are networks of providers and hospitals with shared accountability for total cost and quality of care for a defined population.</li> <li>States may consider using such networks to deliver care to their complex care populations and encourage whole-person care.</li> </ul>	<ul style="list-style-type: none"> <li>States can take advantage of existing care management responsibilities or add evidence-based care management responsibilities to contracts.</li> <li>Contract requirements can include financial incentives and quality measures that spur innovation.</li> </ul>
<b>Enhancements needed for focus on complex care needs</b>	<ul style="list-style-type: none"> <li>Prioritize CHTs to serve complex care patients, so team composition should match population needs.</li> <li>Enhanced health IT for regular and real-time communication among providers is needed (for example, electronic health record [EHR]; health information exchange [HIE]; admission, discharge and transfer [ADT] feeds).</li> </ul>	<ul style="list-style-type: none"> <li>Target criteria to prioritize enrollment of complex care enrollees.</li> <li>Payment models should enable intensive care coordination approaches (for example, inclusion of BH costs).</li> </ul>	<ul style="list-style-type: none"> <li>Include MH and SUD treatment providers to address the BH needs of complex care patients.</li> <li>Include BH costs in shared saving and total cost of care arrangements.</li> </ul>	<ul style="list-style-type: none"> <li>New contractual requirements specific to complex care interventions may be needed</li> <li>There is greater accountability and financial alignment with new or enhanced responsibilities for the complex care population.</li> </ul>
<b>Prescriptiveness of care model</b>	<ul style="list-style-type: none"> <li>High</li> </ul>	<ul style="list-style-type: none"> <li>High</li> </ul>	<ul style="list-style-type: none"> <li>Low</li> </ul>	<ul style="list-style-type: none"> <li>Increasing</li> </ul>
<b>Federal considerations</b>	<ul style="list-style-type: none"> <li>Authority to pursue this model, including state plan option, Medicaid demonstration and waivers, is referenced in the Integrated Care Models SMD letter: SMDL #12-002.<sup>21</sup></li> </ul>	<ul style="list-style-type: none"> <li>Health homes authority is provided by a 2703 SPA. See SMDL #10-024.<sup>22,23</sup></li> </ul>	<ul style="list-style-type: none"> <li>Authority is provided through Medicaid Section 1115 waivers or SPA, depending on consumer choice, scope of services and other program attributes. See SMDL #13-005.<sup>24</sup></li> </ul>	<ul style="list-style-type: none"> <li>Compliance with new managed care regulations is required, including the final rule<sup>25</sup>, which finalizes changes consistent with the Informational Bulletin on "The Use of New or Increased Pass-Through Payments in Medicaid Managed Care Delivery Systems".<sup>26</sup></li> </ul>
<b>Payment models</b>	<ul style="list-style-type: none"> <li>Per-member per-month (PMPM) care coordination fees.</li> </ul>	<ul style="list-style-type: none"> <li>PMPM care coordination fees are used most frequently, but states can choose other models.</li> </ul>	<ul style="list-style-type: none"> <li>Shared savings/risk, global payments</li> <li>Camden Coalition – including Hennipin Health</li> </ul>	<ul style="list-style-type: none"> <li>Capitation, global payment</li> </ul>
<b>Examples</b>	<ul style="list-style-type: none"> <li>Maine</li> <li>North Carolina</li> <li>Vermont</li> </ul>	<ul style="list-style-type: none"> <li>Missouri</li> <li>New York</li> <li>Washington State<sup>27</sup></li> </ul>	<ul style="list-style-type: none"> <li>New York</li> <li>Maine</li> <li>Minnesota</li> <li>Vermont</li> </ul>	<ul style="list-style-type: none"> <li>Arizona</li> <li>Oregon (Coordinated Care Organization)</li> </ul>

# Develop and Implement Delivery and Payment Model: Common Approaches

This section was written by the Center for Health Care Strategies.

[See Appendix B for State Examples]

## COMMON PAYMENT MODEL APPROACHES

	PMPM care coordination fee	Shared savings/risk	Global payments
<b>Benefits of payment model</b>	<ul style="list-style-type: none"> <li>Directly funds the care coordination services critical to preventing avoidable acute care utilization</li> <li>Can be targeted to complex care patients with clear expectations</li> <li>Can be structured to encourage ongoing engagement of new complex care patients and step-down or “graduation” of patients whose needs have stabilized</li> </ul>	<ul style="list-style-type: none"> <li>Rewards cost reduction through a focus on generating savings</li> <li>Implicitly encourages focus on complex care populations, given high ROI potential</li> <li>Offers flexibility to invest in supportive and other noncovered services</li> </ul>	<ul style="list-style-type: none"> <li>Ability to capitalize on savings through rate development and ability to lower trend on the back end</li> <li>Creates predictability by shifting risk from the state, aligns incentives for provider teams to invest in care models and may orient providers toward a population-based budgeting approach</li> <li>Offers flexibility to invest in supportive and other noncovered services</li> </ul>
<b>Challenges of payment model</b>	<ul style="list-style-type: none"> <li>Unclear whether incentives align with cost reduction or address social determinants</li> <li>Broadly set rates and caseloads may not be sufficient for complex care individuals</li> <li>Graduating rates efficiently</li> <li>Sustainability relies on the continued ability to reduce costs in existing or newly identified populations</li> <li>Prescriptiveness of the care model approach required for payment</li> </ul>	<ul style="list-style-type: none"> <li>Does not cover upfront staff/investments</li> <li>Requires targeted metrics to ensure quality</li> <li>Requires minimum patient enrollment to enable savings calculations</li> <li>Not specific to complex care patients</li> </ul>	<ul style="list-style-type: none"> <li>Financial reserves needed—only feasible for large organizations</li> <li>Requires provider financial sophistication</li> <li>Requires targeted metrics to ensure quality</li> </ul>
<b>Theory of change</b>	<ul style="list-style-type: none"> <li>Enhanced upfront payment enables providers to pay for care teams to provide services otherwise not covered and essential to effectively managing complex care patients</li> </ul>	<ul style="list-style-type: none"> <li>Shared savings create incentives to improve approaches to care and outcomes for patients with significant avoidable health care costs</li> </ul>	<ul style="list-style-type: none"> <li>A single prospective payment for all services and all patients covers upfront costs and provides cost-reduction incentives, enabling providers to make investments necessary to improve quality and cost of care for complex care patients</li> </ul>
<b>Funding sources</b>	<ul style="list-style-type: none"> <li>Health homes 90/10 match for eight quarters or reallocated health plan care management fees</li> </ul>	<ul style="list-style-type: none"> <li>State, federal, health plan portion of savings achieved</li> </ul>	<ul style="list-style-type: none"> <li>Direct state funding; health plan pass through</li> </ul>
<b>Methodology</b>	<ul style="list-style-type: none"> <li>Prospective monthly fee structured to cover a defined set of care management and care coordination services; examples included a flat PMPM, tiered PMPM and rate-cell structured PMPM</li> </ul>	<ul style="list-style-type: none"> <li>Retrospective payment based on savings achieved, comparing actual spend with projected total cost of care; payments are usually made annually or quarterly</li> </ul>	<ul style="list-style-type: none"> <li>Prospective monthly fee structured to cover health services, care management and other supportive services; rate settings mirror the methods used for health plan rate setting</li> </ul>
<b>Examples</b>	<ul style="list-style-type: none"> <li>New York, Washington State, Missouri</li> </ul>	<ul style="list-style-type: none"> <li>Maine, Minnesota, Vermont</li> </ul>	<ul style="list-style-type: none"> <li>Minnesota (Hennepin Health), Oregon (coordinated care organization)</li> </ul>

**LL**

Design payment approaches with an eye toward sustainability; consider providers/payers taking on increasingly more risk.

**LL**

Ensure adequate resources are available for care management and coordination activities.

**LL**

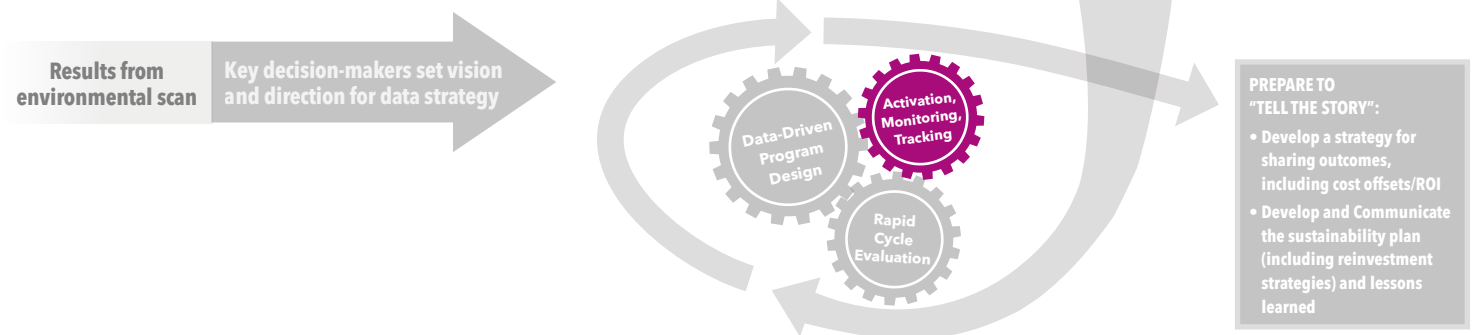
Link financial incentives to broader outcome goals and use clearly defined standardized performance measures to award incentives.



# Track Implementation, Evaluate Program and Communicate Findings

## Foundation Phase

## Design, Implementation and Evaluation Phases



### ENROLL TARGET POPULATION AND ACTIVATE, TRACK AND MONITOR

During the implementation process, tracking and monitoring systems help ensure that patients are being enrolled as planned and implementation is on track and occurring with fidelity to the intervention model. In addition, data are collected to inform rapid-cycle evaluation.

### LL

Build linkages among acute care and community-based providers, both for diversion from acute care settings and for timely outpatient followup. Use real-time alerts where possible.

### Core elements

- ▶ Enroll patients (using selected prospective, retrospective, or predictive modeling approach).
- ▶ Collect measures agreed on in the Design Phase (e.g. ED use, avoidable readmissions, primary care use, etc.).
- ▶ Activate the tracking protocol to capture implementation progress, identify barriers to effective program implementation and share process measures with program administrators.

### Advanced elements

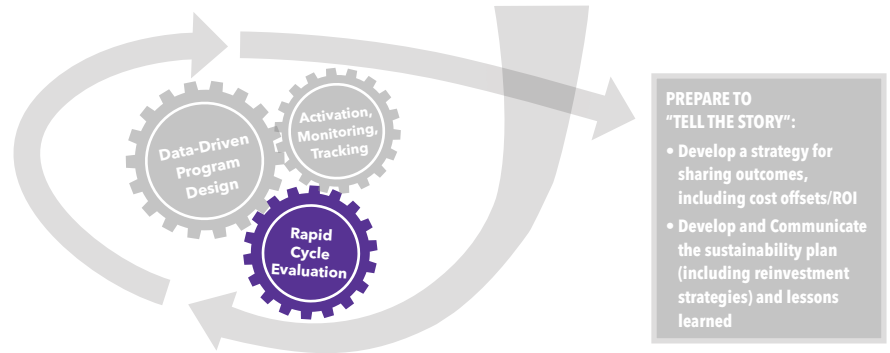
- ▶ Integrate clinical and nonclinical data.
- ▶ Move toward real-time data capture and exchange.
- ▶ Establish criteria for interactive, real-time "alerts" (for example, ADT feeds) and how to communicate them.
- ▶ Analyze results to adjudicate payments and continue to improve program management and tell the story.

# Track Implementation, Evaluate Program and Communicate Findings

## Foundation Phase



## Design, Implementation and Evaluation Phases



### RAPID-CYCLE EVALUATION

Programs that target the complex care population are likely to go through several iterations of design as states use data to learn about this population's needs. Over time, the results of rapid-cycle evaluation can be used to better define this population and identify the most affected populations for improved health and lower costs. Where the evaluation design allows, programs may go through several evaluation cycles, continuously refining and redesigning the program until optimal results are achieved. The program refinement needs should be balanced against the integrity of overall program evaluation. Capturing ROI and engaging key partners in a sustainability plan is a priority.

#### Core elements

- ▶ Initiate an evaluation protocol designed to capture ROI, adjusting to accommodate program modifications resulting from rapid-cycle evaluation learning as indicated by evaluation design. Consider measuring every six months.
- ▶ Determine the impact and develop a sustainability approach.

#### Advanced elements

- ▶ Evaluate clinical and nonclinical outcomes.
- ▶ Design an automated system of feedback loops to support refining the program based on findings. Move toward real-time data capture and exchange.

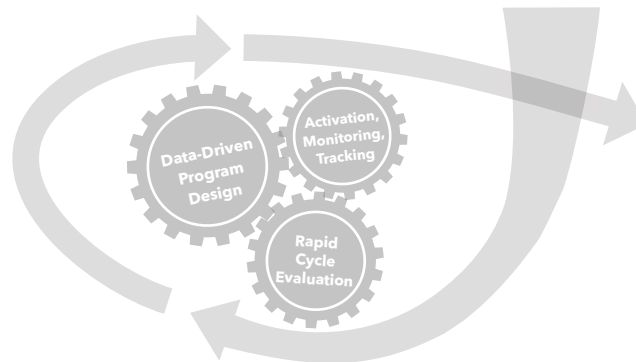


# Track Implementation, Evaluate Program and Communicate Findings

## Foundation Phase



## Design, Implementation and Evaluation Phases



**PREPARE TO "TELL THE STORY":**

- Develop a strategy for sharing outcomes, including cost offsets/ROI
- Develop and Communicate the sustainability plan (including reinvestment strategies) and lessons learned

### TELL THE STORY AND MOVE TOWARD SUSTAINABILITY

Develop a strategy for sharing outcomes, including cost offsets/ROI. Interpret findings with an eye toward sustainable solutions. Develop and communicate a sustainability plan. To be effective, the sustainability plan should include a reinvestment strategy for savings accrued to the Medicaid program or health system that are attributable to other parts of the health system or other interventions (such as CHTs, supportive housing and supported employment). Just as withdrawing health treatments needed to stabilize a chronic medical condition often leads to worsening status, withdrawing interventions that maintain reduced use of EDs and inpatient services too soon may result in a return to prior utilization levels.

### Core elements

- ▶ Use evaluation results to make the business case for investment.
- ▶ Where possible, identify the interventions critical to program success and build them into a sustainability plan that includes data-supported reinvestment. Ensure adequate resources for access to those critical components (for example, care transitions protocol with home visit, care coordinator, pharmacist time for medication reconciliation, ADT feeds to the primary care provider, supportive housing).
- ▶ Communicate results to external stakeholders, internal advisors, elected officials, families and others, including health and improvement outcomes, ROI, rationale for sustainability plan and lessons learned.

### Advanced elements

- ▶ Measure and evaluate the impact that complex care programs may have outside of health, such as reduced incarceration rates and housing stability.



## **PROGRAM DETAILS** ▶ Three State Approaches in Detail

# Detailed Overview of Three State Approaches

	STATE ROLE	LEAD ROLE	KEY CONSIDERATIONS
MCO approach	<ul style="list-style-type: none"> <li>• Convene MCOs, providers and other stakeholders to participate in program design.</li> <li>• Provide MCOs with state-level data about the target population.</li> <li>• Use MCO contracts as a vehicle to encourage improved health, higher quality care (including evidence-based interventions) for the target population and reduced costs.</li> <li>• Encourage partnerships with implicated provider partners needed for implementation.</li> <li>• Partner with MCOs and providers to create a sustainable model based on early findings.</li> </ul>	<ul style="list-style-type: none"> <li>• MCOs work closely with provider partners to inform feasible program design within parameters the state lays out.</li> <li>• MCOs dedicate resources to bolster care coordination and engagement approaches either internally or by partnering with providers (best practice = in person).</li> <li>• MCOs forge new partnerships to address gaps in evidence-based interventions or social supports that the target population requires.</li> <li>• MCOs collect, analyze and report outcomes (including ROI).</li> </ul>	<ul style="list-style-type: none"> <li>• Use contract language to mandate or encourage best practices and services that the target population needs, such as housing-related services and tenancy support, care coordination and medication-assisted treatment.</li> <li>• Also evaluate payment strategies because current Medicaid managed care rate-setting methodologies do not reward long-term investment in social supports: Those investments cannot be counted in rates for subsequent years. Some states are exploring piloting alternatives that may result in reduced costs overall, which also affects future rates.<sup>28</sup></li> </ul>
Provider approach	<ul style="list-style-type: none"> <li>• Set the overall vision, goals and parameters for state-led pilots or determining state role in supporting and scaling provider-initiated models.</li> <li>• Provide data to assist in targeting the “impactable” population and help match the population to available best practices and support to address patient needs.</li> <li>• Identify other resources that the state may provide or use to support local pilots.</li> <li>• Facilitate partnerships with other clinical and nonclinical stakeholders (such as MCOs, BH providers and housing providers) to assist in the development of a comprehensive complex care program.</li> <li>• Provide a core set of outcome metrics; finalize those metrics with provider input (balancing meaningful information and provider burden).</li> </ul>	<ul style="list-style-type: none"> <li>• Providers build programs by reallocating existing resources to evidence-based interventions needed to improve health and reduce unnecessary use of costly sites of care.</li> <li>• Providers use EHR data to supplement claims for optimal targeting of the population and matching to intervention.</li> <li>• Providers rely on academic medical center expertise to inform the program, develop a robust evaluation approach and tell the story to key stakeholders (including “C suite” individuals in the organization).</li> </ul>	<ul style="list-style-type: none"> <li>• Consider the state’s role in building provider capacity to implement the program.</li> <li>• Consider the state’s role in facilitating information exchange among key stakeholders (for example, privacy issues, access to real-time ADT information).</li> <li>• Providers are powerful champions in delivery system reform when programs results in health improvement.</li> </ul>
Regional approach	<p>Convene stakeholders regularly to develop a regional plan:</p> <ul style="list-style-type: none"> <li>• Gather stakeholders who are needed to implement the program and will comprise regional entities. Primary care, hospitals and BH are priorities. Allow regions and communities to identify other key stakeholders.</li> </ul> <p>With stakeholder input, design the “chassis,” or basic frame, of the regional program:</p> <ul style="list-style-type: none"> <li>• Generally includes a global budget model paid to the regional coordinated care (backbone) entity that serves a partnership of providers, community members and stakeholders in the health system that have financial responsibility over the population they serve. Savings and risk are shared across the partnership.</li> <li>• Includes a core set of benchmarked outcome metrics to ensure that regional programs are producing desired outcomes and allow for cross-region comparison.</li> </ul> <p>Facilitate exchange of best practices within the state, and create a forum for regions to solve problems together.</p>	<ul style="list-style-type: none"> <li>• Regional entities collaborate with the state to design a chassis that will lead to success.</li> <li>• Regional backbone entities organize themselves to (1) own the care delivery plan in their region, (2) develop a coordinate care delivery model with provide partners to meet the aims of the program, (3) adjudicate payments to providers based on the delivery requirements and the regionally determined care delivery plan and (4) collect data to report back to the state.</li> </ul>	<ul style="list-style-type: none"> <li>• The chassis is the framework from the state outlining financing and payment mechanisms and basic delivery model requirements (such as core providers) to the regions and the outcome metrics the state expects in return.</li> <li>• The chassis should be as simple as possible to allow for maximum regional innovation and tailoring.</li> <li>• The state could provide data analyses to assist regions in identifying the impactable population and assist in identifying providers or building capacity to ensure access to evidence-based practices and social supports that the target population requires.</li> <li>• The state could support peer-to-peer exchange of best practices among leads of regional entities.</li> </ul>





## Workforce Strategy

**An essential premise of any complex care program is that a multidisciplinary, multiprofessional team-based approach is needed to deliver services effectively. Primary care providers are typically at the center, with close linkages to MH and SUD service providers, and a care coordinator who helps link to needed housing, employment and other essential social support services. Nontraditional providers are considered the glue for ongoing engagement, care coordination, health literacy, self-management training and other key aspects of supporting this population in the community.**

### Determine the types of providers and core competencies needed to deliver services to the target population

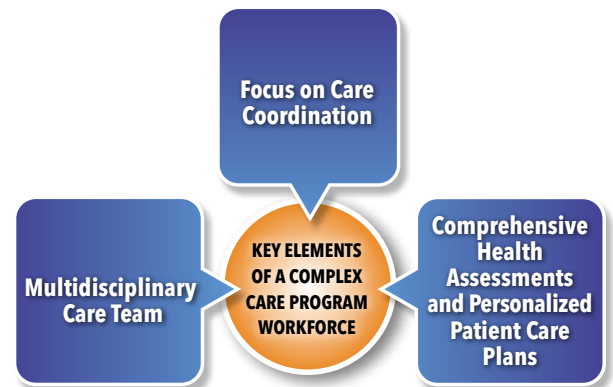
State teams will need to tailor the composition of the health workforce based on the chosen target population and care delivery model. However, there are common key elements of successful complex care programs, including:

Building a multidisciplinary care team led by a one or more primary care managers:

- Typically, a comprehensive care team consists of a diverse set of clinical and nonclinical health providers, including primary care providers (physicians, nurses, physician assistants [PAs]), specialists, BH providers, pharmacists and social services providers. Care managers are typically nurses, although social workers and community health workers may also take on this role, specifically when working with patients who have significant psychosocial barriers to care. In more rural areas, the entire team may consist of a nurse and social worker or community health worker receiving guidance from specialists remotely.

Focusing on care coordination and building trust and rapport with patients:

- The dedicated care team focuses on providing comprehensive care coordination, which involves a “warm handoff” between providers to ensure smooth transitions among the various clinical and nonclinical systems.
- Care teams also work with patients, their caregivers and providers to share information, secure referrals, help



patients access resources in health systems and find needed resources in their communities (for example, transportation to appointments, health and wellness coaching).

- Care teams should be community-based.

Conducting a comprehensive health assessment and building personalized patient care plans:

- Care teams conduct a bio-psych-social assessment that takes into account gaps in care as well as functional status, patient activation, BH, social services needs and barriers to care for that individual.
- Care teams also work with patients and their caregivers to develop a comprehensive treatment plan best suited to meet their needs, meeting patients where they are. Optimally, the entire team follows and informs this plan.
- Care teams often use motivational interviewing to encourage patient activation and self-management.

### KEY CONSIDERATIONS

#### Scope of practice vs. competency

State teams will need to consider current state scope of practice laws and regulations when building care teams. “Scope of practice” refers to a provider’s ability to legally deliver services as part of his or her professional license or certification. Alternatively, “core competencies” refers to the knowledge, skills and expertise providers should be able to deliver as part of a successful care management program. For instance, community health workers are typically trained to provide care coordination services (a key element of a complex care program) and may be credentialed through state practice acts.

#### Sharing resources

State teams also will need to consider contextual factors such as practice size and location in an urban or rural area. Smaller practices in rural areas may need to share staff compared with their urban counterparts. For example, BH providers and pharmacists may be shared across multiple care teams.

#### Payment approach

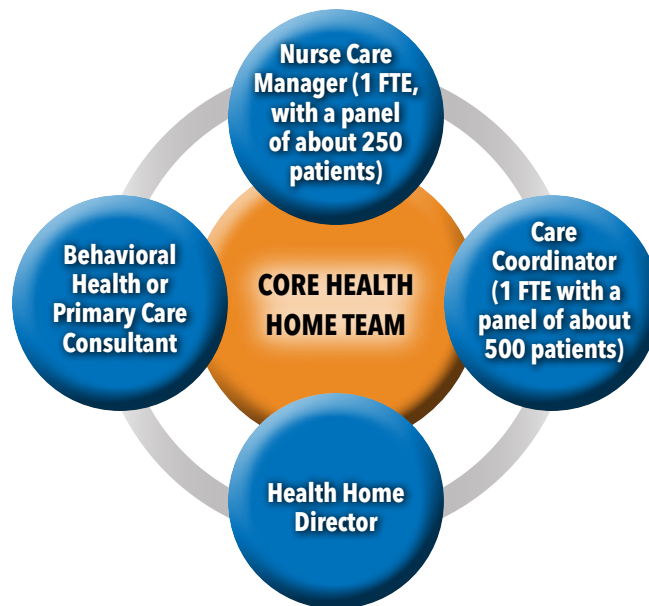
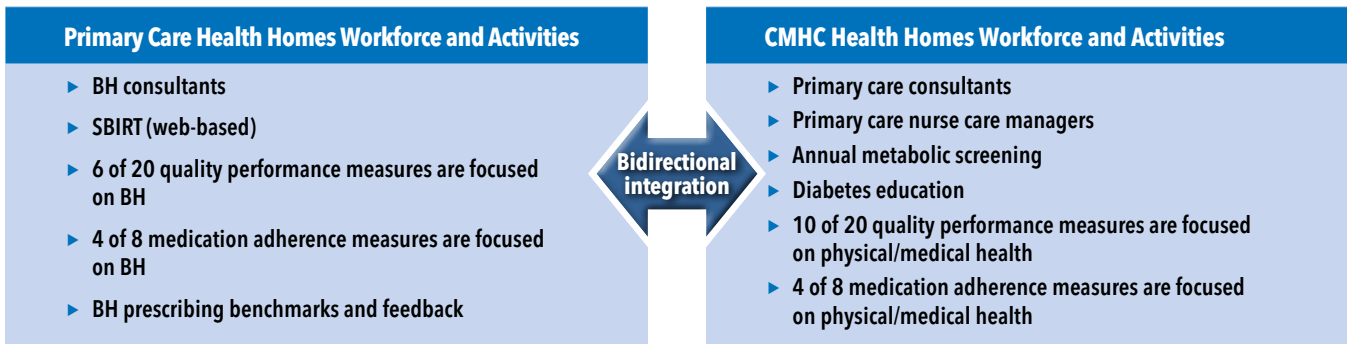
State teams may consider workforce needs and capacity consistent with best practice when choosing delivery and payment approach.

# Snapshots of Workforce Strategies

## Missouri's Health Homes Program<sup>29</sup>

The Missouri Health Homes program effectively coordinates and manages care for complex care populations capitalizing on two options for the health home model under section 2703 of the ACA: those for people with (1) multiple chronic comorbidities (the FQHC-based model) or (2) serious mental illness and one or more comorbid physical health conditions (community mental health center [CMHC]-based model). A central tenet of the Missouri program is bidirectional integration of physical and BH services. Regardless of which health home a patient is enrolled in, all health home teams integrate primary care and behavioral health. They consist of a nurse care manager, a care coordinator, a health home director and a BH consultant (primary care) or primary care consultant (BH). Notably, improvement in key health indicators was equivalent in both types of health homes, suggesting that this integration approach works (see Appendix A for information on outcomes and savings).

Health home teams routinely participate in learning collaborative training to deliver whole-person and patient-centered care. For example, care teams at primary care health homes also deliver SBIRT services and must meet quality and medication adherence measures focused on BH. A BH consultant integral to the care team to address BH components. Similarly, care teams at CMHC health homes deliver services related to chronic diseases such as diabetes and must meet outcome measures related to physical health. Primary care consultants on the care teams help address the physical health needs of each patient at CMHCs.



## Snapshots of Workforce Strategies

### Community Care of North Carolina's (CCNC) Pharmacy Homes Project<sup>30</sup>

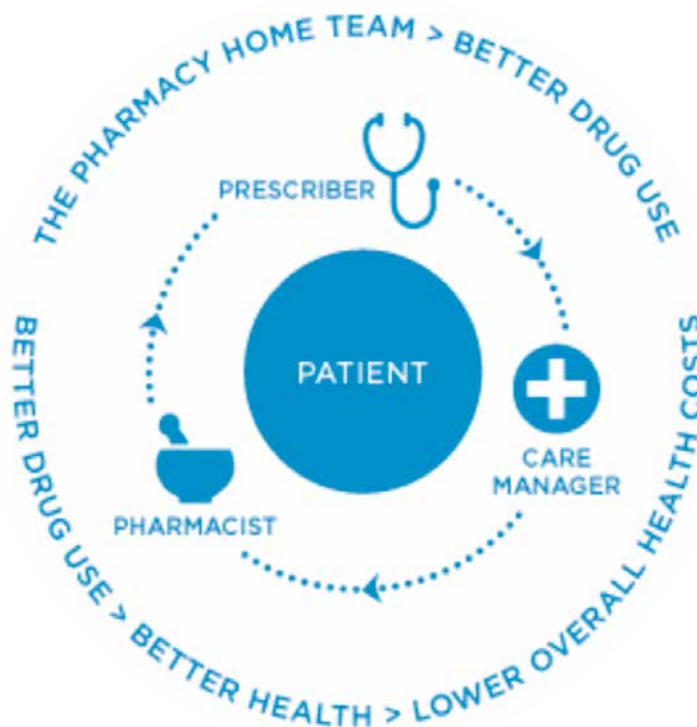
Evidence-based medication management and medication reconciliation are essential tools for effective complex care programs. Typically, patients receive multiple prescriptions from different providers without one central source to reconcile a safe and effective medication regimen, which could lead to significant health complications, an increase in preventable ER visits, hospitalizations and readmissions. To address this problem, CCNC's Pharmacy Home Project aims to encourage patients and their providers to develop a well-coordinated, evidence-based medication management plan to improve overall patient health.

As part of this initiative, the pharmacist is a core member of the patient care team and works with a network of physicians, nurses and other health care professionals to deliver care and share responsibility for meeting patient-specific health care goals. Pharmacists and care managers on the Pharmacy Home Project team work in patient-centered medical homes and hospitals across the state. There are more than 650 case managers and 50 pharmacists who provide care to roughly 1.2 million patients during transitions of care. A significant subset are individuals with complex care issues.

Pharmacists on the team are either network or clinical pharmacists. Most CCNC networks have one full-time network pharmacist and a clinical pharmacist. Network pharmacists spend about 40 percent of their time in clinical work and 60 percent as a resource to educate other providers in evidence-based medication treatment algorithms and Medicaid drug policy issues. By comparison, clinical pharmacists spend about 95 percent of their time on clinical tasks. They are responsible for a wide spectrum of activities, including curbside consults, completion of medication reconciliation and comprehensive medication reviews and management of medication regimens.

Care managers, often nurses or social workers, also play an important role on the care team. They are primarily responsible for identifying patients with complex care needs and helping them coordinate care, assisting the providers and pharmacists in disease management education and collecting data about process and outcome measures. Care managers are the main source of referrals to pharmacists for medication management. They participate in a variety of activities, including gathering medication lists, identifying drug therapy problems and providing patient education.

Providers participating in the Pharmacy Home Project have access to decision support tools that aid in comprehensive medication management. The use of this technology also promotes "team-based" decision-making, makes communications among providers more efficient and reduces duplication of services.



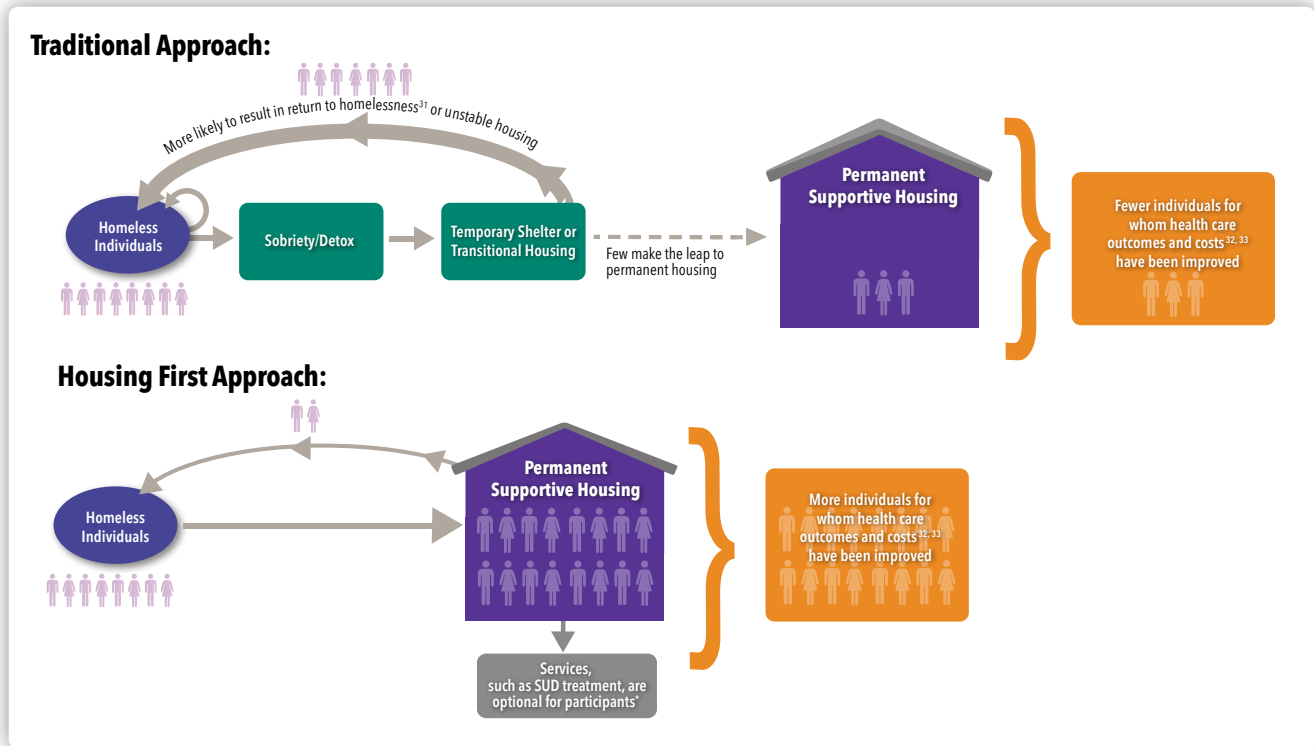
Source: pharmacyhomeproject.com





# Housing First

Understanding Housing First approaches can help states as they gather evidence-based practices that yield positive health outcomes and cost savings.



\*Note: In a study of 250 chronically homeless individuals with severe mental illness, of whom 90 percent had a drug or alcohol problem, over half of those assigned to Housing First opted to utilize voluntary substance use services in the 24 months the study followed the tenants.<sup>34</sup>

Housing First is a proven approach to chronic homelessness that provides individuals and families stable, permanent housing.<sup>35</sup> The Housing First approach is an evidence-based model for ending chronic homelessness, keeping homeless individuals and families stably housed, improving health outcomes and reducing the costs associated with avoidable ED visits. The approach does not require sobriety, employment or other stipulations as a condition of their housing, but makes substance use treatment and other services available for individuals if they choose. Numerous studies have demonstrated that Housing First is associated with superior housing retention, decreased substance use, longer engagement in treatment, improved quality of life, lower health system costs and decreased involvement in the justice system compared with treatment as usual.<sup>36</sup>

## Return on Investment

A study of chronically homeless individuals in central Florida found a total of cost of \$31,065 per person per year in inpatient hospitalizations, ED visits, incarceration and other system costs compared with \$10,051 per person per year to provide individuals with supportive housing.<sup>37</sup>

## Case Study: Oregon

A 2016 study of Housing First for formerly homeless, high-need individuals in Portland, Oregon, found that one year after housing, residents had improved access to care, stronger primary care connections and improved self-reported health outcomes. Evaluation of Medicaid claims data showed that higher quality care was accompanied by reduced expenditures, primarily in ED and inpatient care. After one year of housing, those with Medicaid showed an average annual reduction in costs of \$8,724 per person. Reduced expenditures were maintained in year two of the program.<sup>38</sup>

## Case Study: Chicago

A 2009 study showed that housing and case management for the homeless with chronic medical illness reduced hospital days and ED visits compared to usual care.<sup>39</sup>

# Supportive Housing

Supportive housing is an evidence-based intervention for chronically homeless individuals that improves health outcomes and reduces cost by providing support services and tenancy supports to low- or no-income individuals in affordable housing settings.

## Core Principles

### Housing Principles

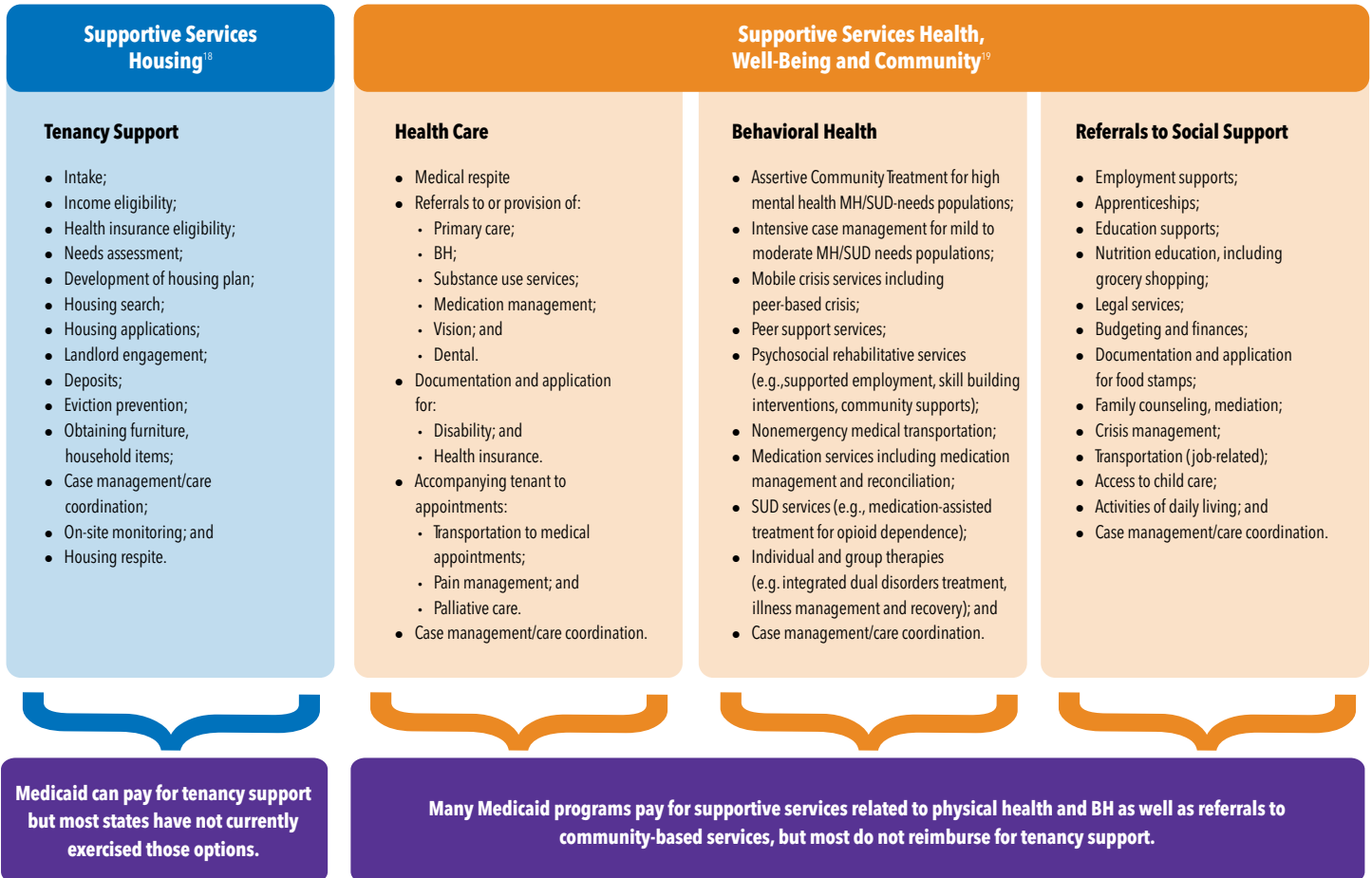
- Considered “permanent;”
- Integrated into the community;
- Tenant is offered choices;
- Heavily subsidized;
- Targets chronically homeless adults; and
- Tenants are likely to have SUDs, chronic health conditions or BH needs.



### Services Principles

- Voluntary participation (Housing First approach);
- Comprehensive: Includes medical and BH, tenancy support and social services;
- Community-based or provided on site;
- Tailored to each tenant’s needs so that he or she can live independently in the community;
- Care teams consist of case workers, housing specialists, clinicians; and
- May be provided through a partnership with a federally qualified health center (FQHC) or other community based provider.

## Services Provided to Tenants of Supportive Housing\*



\*Note: This list is not exhaustive but rather intended to serve as an example of the most commonly offered services. For more information on supportive housing, see: <https://www.usich.gov/solutions/housing/supportive-housing>



## State Examples

The next section highlights specific elements of the road map using examples from the following states that participated in NGA Center complex care project:



▶ **Kentucky:** Laying the foundation and developing internal resources



▶ **Rhode Island:** Aligning multiple state initiatives that affect complex care populations



▶ **Alaska:** Identifying and matching the intervention to the target population



▶ **Connecticut:** Using data to identify the impactable population



▶ **Wyoming:** A comprehensive data and evaluation approach



▶ **Wisconsin:** Using MCO partnerships



▶ **West Virginia:** Provider-led pilots



▶ **Colorado:** Locally derived first-responder intervention



▶ **Michigan:** Housing as a social determinant of health



▶ **Puerto Rico:** Improved outcomes and reduced costs

## KENTUCKY: Laying the Foundation and Developing Internal Resources (Building Programs Across Administrations)



Establishing or maintaining complex care initiatives across governors' administrations requires a thorough environmental scan of state and local efforts, conducting or updating data analyses to inform the scope of the work and reviving strategic partnerships that are the driving forces. Kentucky is a good example of a state that is using existing efforts while aligning complex care initiatives with the priorities of the new governor. State health leads are using existing foundational data to tell the story and get buy-in from internal and external stakeholders to set policy and target resources. This step-by-step approach, as outlined in the first phase of this road map, includes identifying the current problem, building a core team to strategize and implement solutions aligned with the new administration's priorities, inventorying resources and aligning ongoing or planned initiatives that affect the target population. Below is a description of work completed to date.<sup>40</sup>

### Assemble the core team and identify external stakeholders

The secretary of the Cabinet for Health and Family Services appointed the core team, with representation from Medicaid; the Department of Behavioral Health, Developmental and Intellectual Disabilities; the Department of Public Health; and the Cabinet for Education and Workforce Development.

The team is collectively identifying the key internal and external stakeholders needed to incorporate complex care strategies into new approaches to improve outcomes and reduce cost of care.

### Preliminary identification of the target population to inform planning

Using existing foundational data from 2013, the team can tell the story and plan for future work, including informing policy directions and allocation of resources.

The team will update and conduct analyses with currently available data and reexamine targeting and the segmenting strategy accordingly.

### CONCURRENT PROCESSES

### Result of the environmental scan

Internal capacity currently exists to continue data analysis on Medicaid claims. Capacity-building planning is underway for a sustainable approach to the data strategy, from identifying the population to evaluation of findings.

MCO encounter data – a record of health services paid by the MCO – will be an additional, rich source of information. The state is planning to partner with MCOs on detailed data analysis. The first step is cataloguing the data MCOs hold that are supplemental and can be shared. Contract revisions are also underway to make MCO data sharing more standardized and meaningful. Finally, all MCOs are required to participate in a statewide performance improvement plan, and the next iteration represents an opportunity to make progress both with environmental scanning and possibly enacting principles of health homes.

Possible opportunities to adapt, adopt and enhance existing pilots include:

- Health homes – possibility of alignment with case management;
- Current 1115 waiver underway for an alternative expansion approach and alignment of the complex care strategy to help garner resources and attention; and
- Ability to use MCO contracts and performance improvement outcome measures as incentives.

### Inventory existing complex care efforts

The initial assessment revealed an existing data analysis of the complex care population (conducted in 2013). Data were based on 10 or more ED (ER) visits in 12 months or 3 or more inpatient admissions in 12 months. Characteristics of the target population were consistent with national trends—a constellation of chronic medical illnesses and frequently co-occurring MH or SUDs.

The analyses led to a statewide approach: ER Supportive Multidisciplinary Alternatives and Responsible Treatment (ER SMART) initiative. The model includes a community clinical coordinator (CCC) who receives daily, real-time alerts through the Kentucky Health Information Exchange (KHIE) when a target individual enters the ER. The clinical notification acts as a flag to aid in the coordination of care and helps providers make information-driven decisions at the point of care. The program showed a significant reduction in potentially preventable use of ER and inpatient services for the target population and provides a key starting point to build the complex care approach in the commonwealth.

### WHERE KENTUCKY IS HEADED NEXT:

- ▶ **Analyze data:** MCOs have been granted access to KHIE and are preparing to make utilization data available to providers.
- ▶ **Define the target population:** Use data to understand the impact on especially vulnerable populations that may be significantly impactable.
- ▶ **Define the intervention:** Incorporate waiver considerations into decisions and strategy.
- ▶ **Update MCO contracts:** Opportunity to address this population's needs in the next round of contracting.
- ▶ **Use momentum:** Identify ways to use the waiver currently in progress.

# RHODE ISLAND: Aligning Multiple State Initiatives That Affect Complex Care Populations



Alignment across major state health initiatives is key to driving effective and efficient reform of the health care system within a state. Efforts to improve outcomes and reduce cost of care for complex care populations can serve as a catalyst for change, given the clear opportunity to achieve the three-part aim of improved health, improved quality of care and reduced costs. Specifically, aligning the design and roll-out of state programs that address this population will optimize impact and ROI.<sup>41</sup>

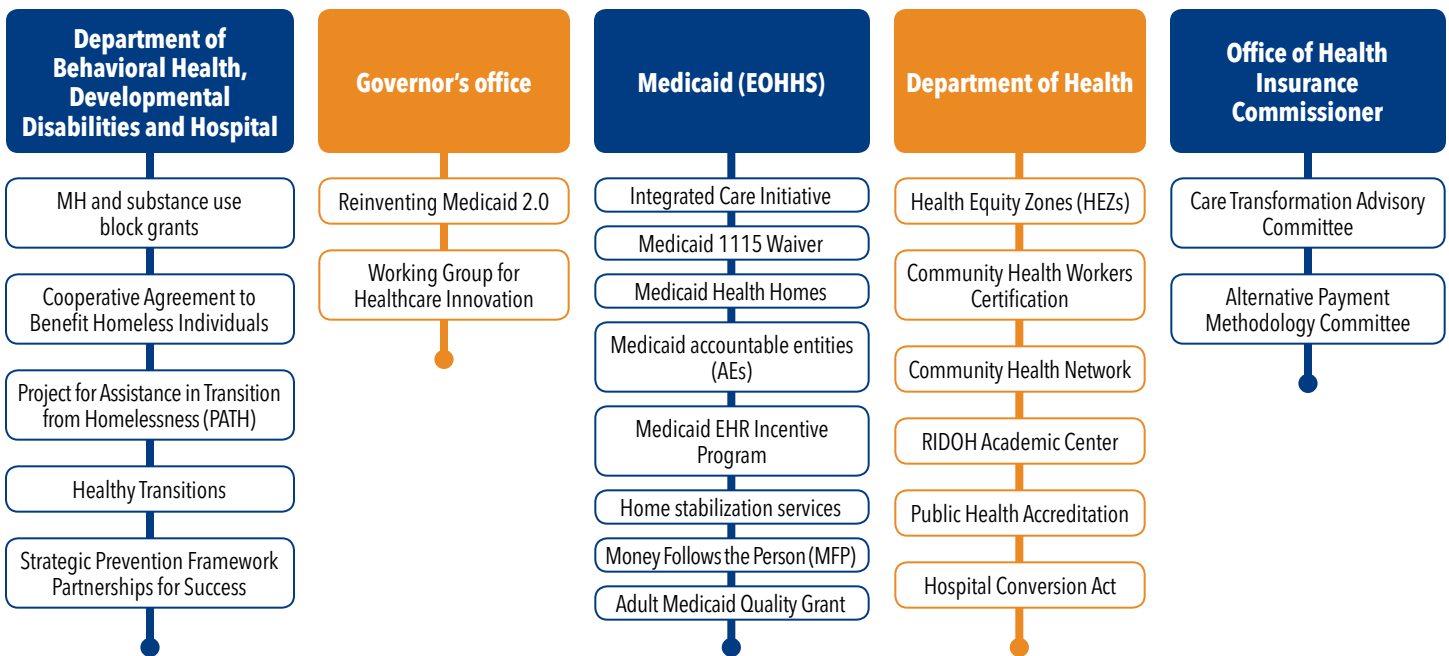
Rhode Island undertook an alignment process to build a collaborative, multipayer, multiagency approach to expand community health teams (CHTs) across the state, including coordinating overarching complex care criteria. This work builds on the existing state CHT network, which is linked to primary care and consists of at least one community-based, licensed health professional and two community health workers (CHWs). Through this collaborative work, CHWs are now eligible for certification in Rhode Island and a new career path, which is key to supplementing multidisciplinary teamwork and coordination. Through analysis of claims data, the complex care project team identified a need for an additional CHT to serve FFS Medicaid enrollees not already receiving case management (Community Health Team of Rhode Island [CHT-RI]). That CHT is included in the coordinated effort, and the targeting strategy informs development of complex care criteria.

Partners and process: The state team developed and held multiple meetings of a statewide CHT Program Development Group to inform policy, identify areas of opportunity and alignment for support of CHTs, reach an agreement to collaboratively develop common outcome metrics and standardize operational approaches across CHTs. This effort included a partnership with

Medicaid’s Executive Office of Health and Human Services (EOHHS); the SIM team; Care Transformation Collaborative-RI; the Rhode Island Department of Health (RIDOH); the Office of the Health Insurance Commissioner (OHIC); the Department of Behavioral Healthcare, Developmental Disabilities and Hospitals (BHDDH); UnitedHealthcare and other payers; the Cedars Program (home health care program); the Rhode Island Parent Information Network; Thundermist Health Center; and many more. As a result of this process, CHT-RI incorporated the collaboratively agreed-on criteria to guide and further refine the team’s implementation and evaluation approach.

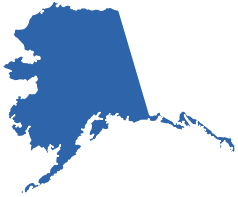
Rhode Island Medicaid’s EOHHS is working closely with the SIM team in the rollout of the CHTs, which included investment in the CHT-RI Medicaid Fee for Service CHT (only for those not in managed care). As part of the state SIM plan, the team is funding at least two more CHTs in a consolidated operations model under that plan. In addition, the SIM CHTs (and existing teams that wish to also participate) will be integrated with Screening, Brief Intervention and Referral to Treatment for SUDs to create a more centralized referral mechanism and more inclusive system for addressing the social, environmental and behavioral health needs that lead to improved health and well-being.

## SIM ALIGNMENT WITH OTHER INITIATIVES





## ALASKA: Identifying and Matching the Intervention to the Target Population



Because of the size, climate and road system in the state, Alaska faces unique challenges in developing and administering cost-effective health care to all residents. Data-driven solutions that provide a programmatic and geographical overview of Medicaid investments and outcomes to help identify gaps and potential solutions and manage evidence-informed allocation of resources are critical in this setting.

Over the past 2.5 years, the state's stepwise approach to developing its complex care program has involved using Medicaid claims analysis and "hot-spotting" strategies to establish and continuously improve its efforts.<sup>42</sup>

### Step 1: Targeting and Developing Local and Statewide Rollout

In 2013, the state launched the Alaska Medicaid Coordinated Care Initiative (AMCCI), a statewide initiative focused on addressing the health care needs of the state's complex care patients. Through an analysis of Medicaid claims data and by mapping existing care management and coordination efforts across the state, the team defined the following inclusion criteria for their target population:

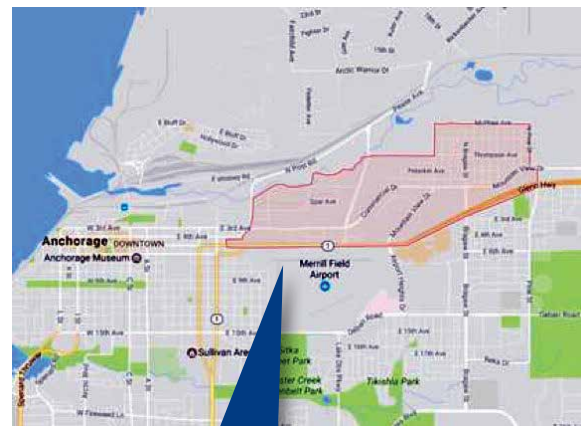
- High ER utilizers (five or more ER visits per year; subsequently changed to three or more in Step 2)
- Involvement with the Office of Children Services, which oversees youth in state custody
- Provider or self-referral (the program is open to individuals who self-refer or those whom providers recommend)
- Excluded from the initiative: individuals who received case management services from other state or tribal entities

#### LOCAL APPROACH

Geographic mapping identified a hot spot in the Mountain View neighborhood of Anchorage for immediate intervention (see inset). The state also developed a broader local strategy focused on the Anchorage area. The state partnered with local vendor, Qualis Health, to implement an evidence-based, in-person care management program for people with complex care needs who are among the top users of ER services, with the goal of reducing preventable use of acute health care settings when needs are best addressed in the community. Payment was in the form of an hourly rate (see next page for detail).

#### STATEWIDE APPROACH

To address the needs of the other areas of this massive frontier state, Alaska partnered with a vendor (MedExpert) to provide telephonic case management services to the target population statewide. This telephonic model was deemed promising for the statewide approach given its successful adoption by the Centers for Medicare & Medicaid Services (CMS) for Medicare case management. Services included regular outreach by the vendor to the target population, provider education and immediate telephonic contact with a vendor representative when an AMCCI member initiated contact. The state used on-staff doctors and registered nurses to address health care questions, provide case management and coordinate care with the AMCCI member's health care providers. The vendor was paid \$5 per member per month (see next page for detail).



### Hot spotting: targeting resources for early wins

In January 2014, the AMCCI team identified a hot spot of potentially preventable ER use in Mountain View, Alaska (map inset). The state found that 25 percent of the ER use statewide came from enrollees from that single Anchorage neighborhood. Further analysis showed that about half of those visits were for nonemergent conditions. Those findings led to the reopening of a community health clinic through an agreement between the Alaska Regional Hospital and the Anchorage Community Land Trust in January 2015. This intervention resulted in an increase in access to evidence-based primary care and significant cost savings to the health care system.<sup>43</sup>

# ALASKA: Identifying and Matching the Intervention to the Target Population

## Step 2: Data Refresh and Alignment with Other State Health Initiatives

**Additional inclusion criteria:** In 2015, the data run was refreshed and criteria revisited in collaboration with case management providers. As a result of Medicaid expansion implementation in the state in September 2015, 2,154 newly covered members with chronic conditions were added to the total population.

**Note:** In June 2016, Governor Bill Walker signed into law a comprehensive Medicaid reform bill (S.B. 74). This legislation calls for significant reforms to Alaska's Medicaid program, including implementation of coordinated care demonstration projects that will pilot comprehensive primary care-based management for medical assistance services, such as behavioral health services and long-term services and support. S.B. 74 also directs the Alaska Department of Health and Human Services (DHHS) to redesign the state Medicaid program to include enhanced care management and care coordination, alignment with community and social support services and enhanced IT. DHHS is also charged with examining new payment approaches, including bundled payments and global and capitation payments. As the state embarks on planning and instituting these new statewide reforms, the complex care team is working to align AMCCI with the various statewide initiatives, including working with the state behavioral health and housing agencies to develop a comprehensive care management program that will meet the needs of Alaskans.

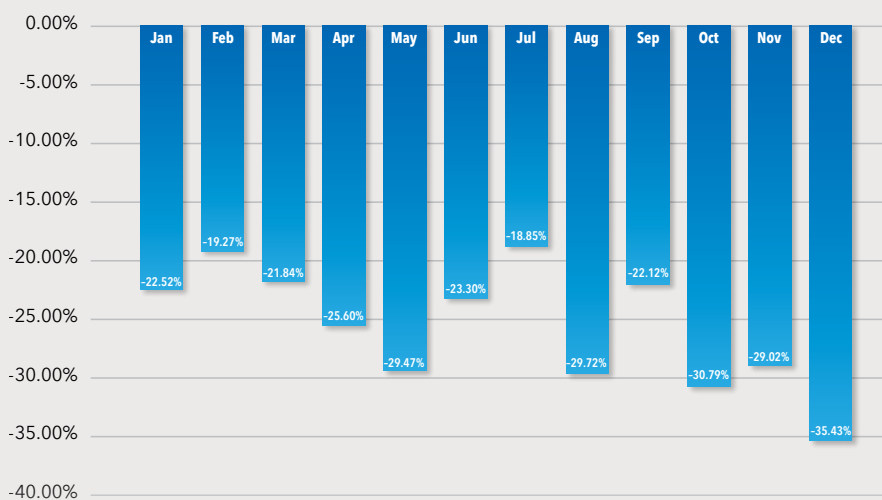
### MEDEXPERT HIGH-LEVEL RESULTS/OUTCOMES<sup>44</sup>

In 12 months of implementation, MedExpert went from serving 4,795 individuals to 120,000 individuals and had the following outcomes:

- Reduction in the number of ER visits (AMCCI population): 25.66 percent
- Reduction in the costs for ER visits (AMCCI population): 15.22 percent

### Change (Decrease) in Emergency Room Visits for Alaska Super Utilizer Population

Comparison 2014 and 2015; Based on Service Date



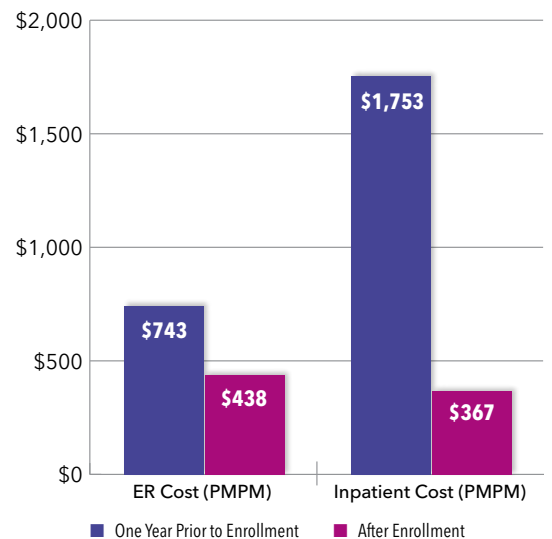
CP4s used are: 99281, 99282, 99283, 99284, 99285 | Revenue codes are: 450 and 451

## QUALIS HEALTH OUTCOMES

(November 2015–November 2016)<sup>45</sup>

### Average Per Member Per Month Costs Before and After Enrolment

(All 48 Enrolled members)



### Preliminary Results and Outcomes from Face-to-Face Coordination Services:

Approximately 63 members actively managed (48 are AMCCI members) AMCCI members' results:

- Number of ER visits ..... ↓ **41%**
- Costs for ER visits ..... ↓ **34%**
- Inpatient cost ..... ↓ **79%**
- Inpatient admissions ..... ↓ **66%**
- \$331,637 savings in one year for an ROI estimated at 2.21 (\$2.21 saved for every \$1 invested) (conservatively estimated)



## CONNECTICUT: Using Data to Identify the Impactable Population



To design a complex care program that successfully improves health outcomes and reduces costs, administrators must first understand who this population is, why they are using costly sites of care and which services they need to achieve stability and self-management of health conditions. In Connecticut, the first step included an analysis of Medicaid claims data. The state team sought to first understand its complex care needs population to define their service needs.<sup>46</sup>

### DEVELOP METHODOLOGY TO IDENTIFY COMPLEX CARE PATIENTS

**The state team pulled Medicaid claims data and sorted members into four cohorts:**

- 1.) Highest cost members
- 2.) Highest utilizers of the ED (at least three ED visits within six months)
- 3.) Highest utilizers of inpatient hospitalization (at least two admissions within the same six months)
- 4.) Top 10 percent from each of the above three cohorts

### DEFINE TARGET POPULATION AND CHARACTERISTICS

An analysis of the data revealed that the highest cost members did not necessarily have the highest ED or inpatient usage because costs are often driven by other factors, such as pharmacy spending. The team deemed it essential to focus on those patients who were (1) both high cost and high need and (2) the most impactable (those who would most likely experience improved outcomes and use fewer costly services with the right intervention). A significant subset of this group had a primary or secondary BH diagnosis as well as chronic medical conditions. That subset formed the final target population based on the evidence of impactability of this group and current resources available to intervene with this population. The state identified the following selection criteria for a pilot intervention: minimum of three ED visits and two inpatient admissions within six months.

### DESIGN AN INTERVENTION BASED ON TARGET POPULATION PATTERNS OF UTILIZATION AND NEEDS

The state identified members who were already receiving intensive care management (ICM)/peer services from the administrative services organization (ASO). A decision was made to use the existing ASO care managers assigned to specific hospitals for outreach, engagement, and a new, evidence-based, transitional care approach. The state identified the six highest volume hospitals and freestanding centers (such as detoxification facilities with complex care patients) for the pilot intervention based on selected criteria. This approach allowed for efficient use of existing case management resources by moving them to settings where they may have the greatest impact. Hospitals without embedded case management dedicated to the target population will serve as a quasi-control group.

### UNDERSTAND THE TARGET POPULATION TO TAILOR THE OUTREACH AND ENGAGEMENT STRATEGY

**The process for outreach and engagement within the six hospital sites includes:**

- ▶ The ASO generating a list of members who meet the requirements of the target population (see above);
- ▶ The ICM/peer team using this list to reach out to those members within the six hospital sites;
- ▶ ICM/Peer activities assisting members with care coordination: connect to community providers and support (develop a person-centered Wellness Recovery Action Plan, provide telephonic and in-person support, use motivational interviewing techniques, meet with providers, support members to develop short- and long-term recovery plans); and
- ▶ Tiered approach based on low, moderate or acute severity determining the number of contacts and level of engagement.

## WYOMING: A Comprehensive Data and Evaluation Approach

The foundation of any complex care program is a robust data strategy—that is, using data to communicate the theory of the case to key stakeholders; identifying the impactable population; monitoring, tracking and effectively linking that population to providers in an evidence-based way; and capturing improved outcomes and ROI. From the outset, Wyoming built a data and evaluation plan that incorporates all those elements. Below is a description of the state team’s data strategy.<sup>47</sup>

### Data-driven approach to the Wyoming Super-Utilizer Program (WySUP)

► **The team conducted a historical Medicaid claims data analysis to determine the characteristics of the complex care population to build buy-in and design the program by:**

- Identifying the top 5 percent of Medicaid spenders in the state
- Evaluating the highest users for both ER and inpatient settings
- Further refining the group through rule-out criteria based on cost areas that had interventions already in place that made up a majority of the top 5 percent of Medicaid spenders:
  - Of the remaining population, the top diagnosis family was mental disorders

► **Predictive modeling:**

- Developed two predictive risk-scoring approaches, one based on utilization and one based on clinical factors
- Two-stage model to determine the association between past diagnosis and utilization information on health care costs 12 months into the future
- Diagnosis-based score based on demographic factors: age, gender, disability status and Chronic Illness and Disability Payment System (CDPS) categories (based on diagnoses and prescriptions)
- Utilization-based score based on health expenditures in the past 6 and 12 months, inpatient stays and ER visits

### OUTCOME METRIC CONSIDERATION

Most programs begin with a small, core set of metrics that capture health improvement, utilization and cost. (For more information, see NGA’s issue brief on Promising Practices for Evaluation Metrics)

- Initially, the utilization-based risk score appeared to predict future PMPM expenditures, but that has yet to be borne out in the actual randomized controlled trial (RCT)
- **Evaluation and RCT:**
  - Randomly assigned 1,500 patients to the control or treatment group
  - Those in the treatment group receive face-to-face complex care management through a vendor (Optum)
  - PMPM will be tracked for both groups for a year, and retrospective analysis will be conducted at 12 months. The analysis will determine which risk-scoring group was most impactable and which demographic groups or counties demonstrate the best outcomes (as in, saw the largest increase in individual health and had a reduced cost)
  - The state will then build a custom risk-scoring model to identify individuals most likely to benefit from the intervention (“impactability algorithm”) to be used to build sustainable interventions going forward

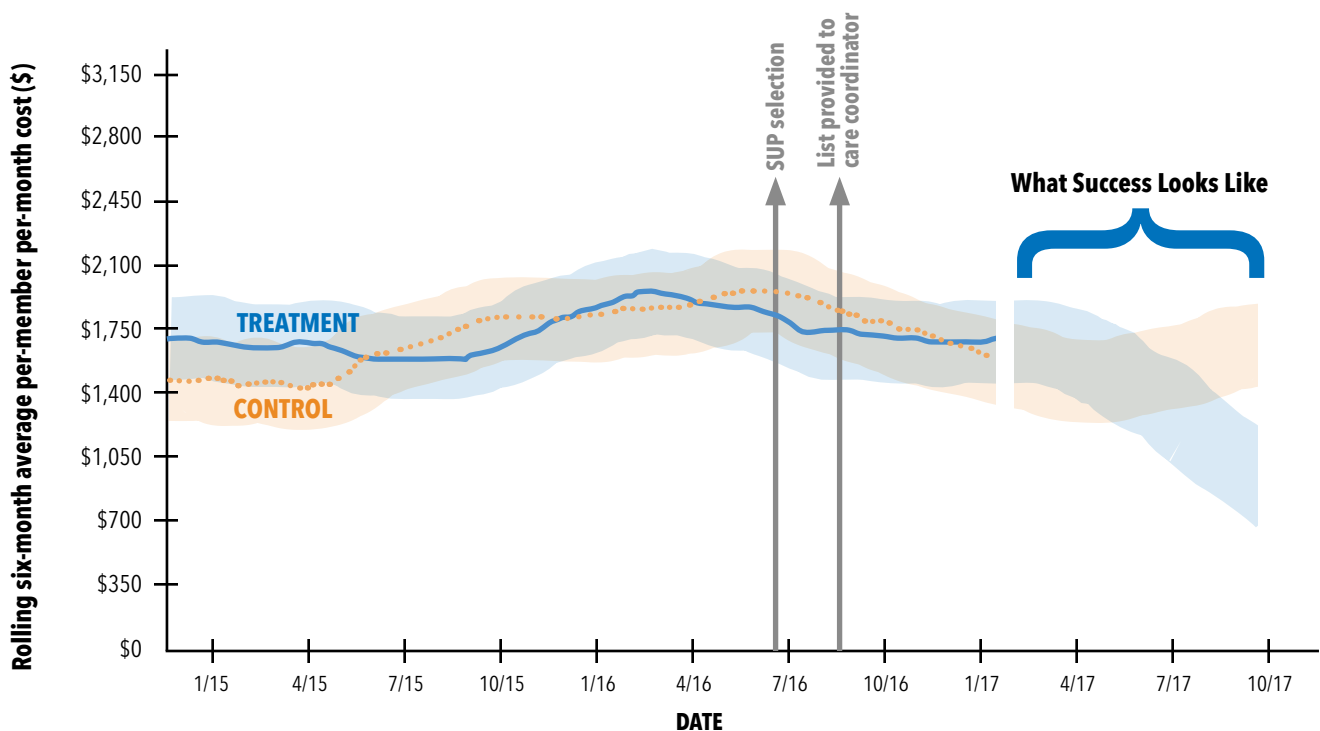
Notably, Wyoming’s approach included a sophisticated evaluation approach. Most programs use a basic pre-intervention/post-intervention comparison design. However, including a comparison group allows for more meaningful attribution of findings to the intervention, such as differences-in-differences design (or using a before-and-after group compared with a similar nontreatment group). The gold-standard research design is an RCT in which participants are randomly assigned to the treatment or control group. Especially when programs have limited capacity to serve the entire population identified, random assignment to treatment (with opportunity for the remaining individuals to get treatment when capacity permits) is a reasonable approach programmatically and provides for important insights. Wyoming included a two-pronged RCT in its WySUP complex care program design to control for any findings not attributable to the intervention itself and yield insights on how best to capture the most impactable population.

## WYOMING: A Comprehensive Data and Evaluation Approach

The graph shows how PMPM payments for the treatment and control groups (selected in June 2016) were not statistically significantly different from each other at the outset. This is expected from a random assignment methodology, where there is no systematic reason for the groups to be different from one another initially. As the successful intervention takes hold over time, it is expected that the groups will diverge, and per-member costs go down for the intervention group.<sup>48</sup> Going forward, the health department will look for the following two indicators of success:

- ▶ If the model is predictive (one year after selection), the control PMPM should remain the same as usual or increase.
- ▶ If the treatment is effective, the treatment PMPM should decrease significantly below the control level to show the reduction in cost associated with an effective intervention (this is represented in the “what success looks like” portion of the graph).

In addition to this monthly PMPM tracking, the department will analyze the full year of the intervention to determine whether there were statistically significant savings.



## WISCONSIN: Using MCO Partnerships



Closely collaborating with Medicaid MCOs to encourage evidence-based care delivery models tailored to the target population's needs can be a key strategy. Wisconsin provides a good example of this approach that resulted from a large, multi-stakeholder meeting to plan the accelerated transition from fee for service to a value-based system.<sup>49</sup>

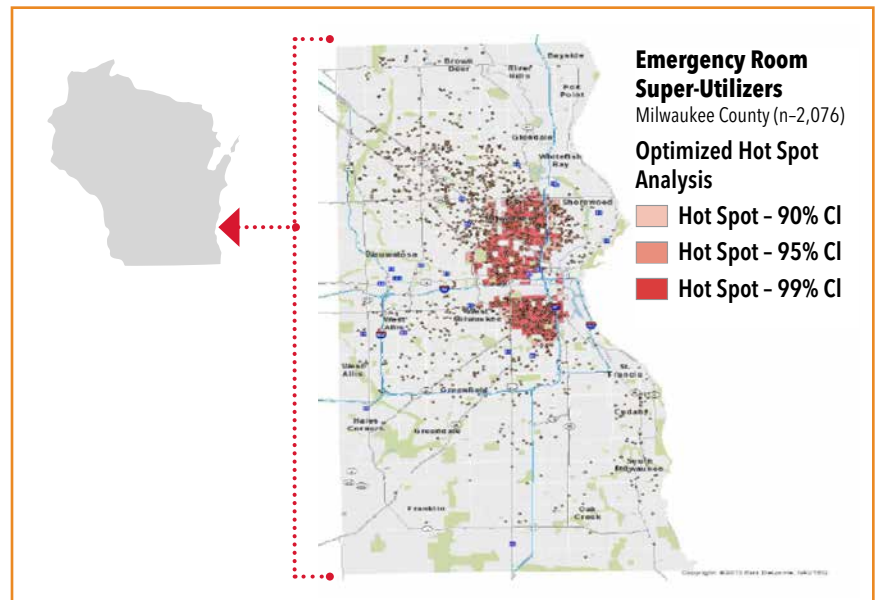
### Hot-Spotting and Pilot Population

The state began by using a robust data strategy to identify its most impactable population to determine which individuals could benefit most from the complex care management (CCM) program intervention and where they reside. Using a hot-spotting approach, the state identified a cluster of significant need in Milwaukee County (see hotspot map). The following criteria were used to identify the target population:

- ▶ Social Security Insurance/elderly, blind or disabled Medicaid enrollees with eligible diagnostic conditions:
  - The state used the CDPS to identify the diagnostic conditions. These conditions include those related to cardiovascular; psychiatry; pulmonary; skeletal; gastrointestinal; substance use; central nervous system; diabetes; metabolic; renal; and depression, psychosis and bipolar disorders.
  - Exclusion criteria include individuals who are already receiving case management services through other state programs; those individuals with human immunodeficiency virus (HIV), acquired immune deficiency syndrome (AIDS), developmental disabilities and cancer; and those individuals who have had an acute incident that may have led to ER/inpatient services (for example, car accidents).
- ▶ Located in Milwaukee County
- ▶ Not enrolled in managed care or a health maintenance organization (HMO; less than five months in an HMO in a calendar year)
- ▶ Aged 19 and over
- ▶ Not dually eligible for Medicare
- ▶ Have three or more ER visits within a six-month period or members with annual expenditures of \$100,000 or more

### HMO Partnership

The CCM program design and implementation resulted from a close collaboration with the state Medicaid Supplemental Security Income (SSI) HMOs, which will provide outreach and engagement activities and deliver care coordination services to this population. Each Medicaid SSI HMO will develop its own care models with evidence-informed guidance from the state (see proposed SSI Care Management Changes box on next page).



After several years of intensive collaboration with plans and providers, the state has developed the following plan for implementing CCM:

- ▶ To successfully manage and address the needs of complex care patients, the fundamental structure of care management at the plan/provider level needed to be updated. These updates have been included in 2017 for all SSI managed care plans to improve quality of care that incorporates feedback from SSI HMOs, members, advocates and providers over the past two years.
- ▶ Identify best practices for member enrollment strategies—target implementation year for 2017:
  - Work with HMOs, community organizations and advocates on ways to increase managed care enrollment.
- ▶ Implement a pilot CCM intervention—target implementation year for 2018:
  - Identified SSI Medicaid members receive a “wrap-around” intervention that includes CHWs and peer support, intensive outreach and engagement and linkages to health care and other services to meet immediate and long-term health care goals and needs.

# WISCONSIN: Using MCO Partnerships

## PROPOSED SSI CARE MANAGEMENT CHANGES

*Care management staff qualifications:* Standardize the qualifications of staff by ensuring cultural competency and strong motivational interviewing skills to better address the social determinants of health.

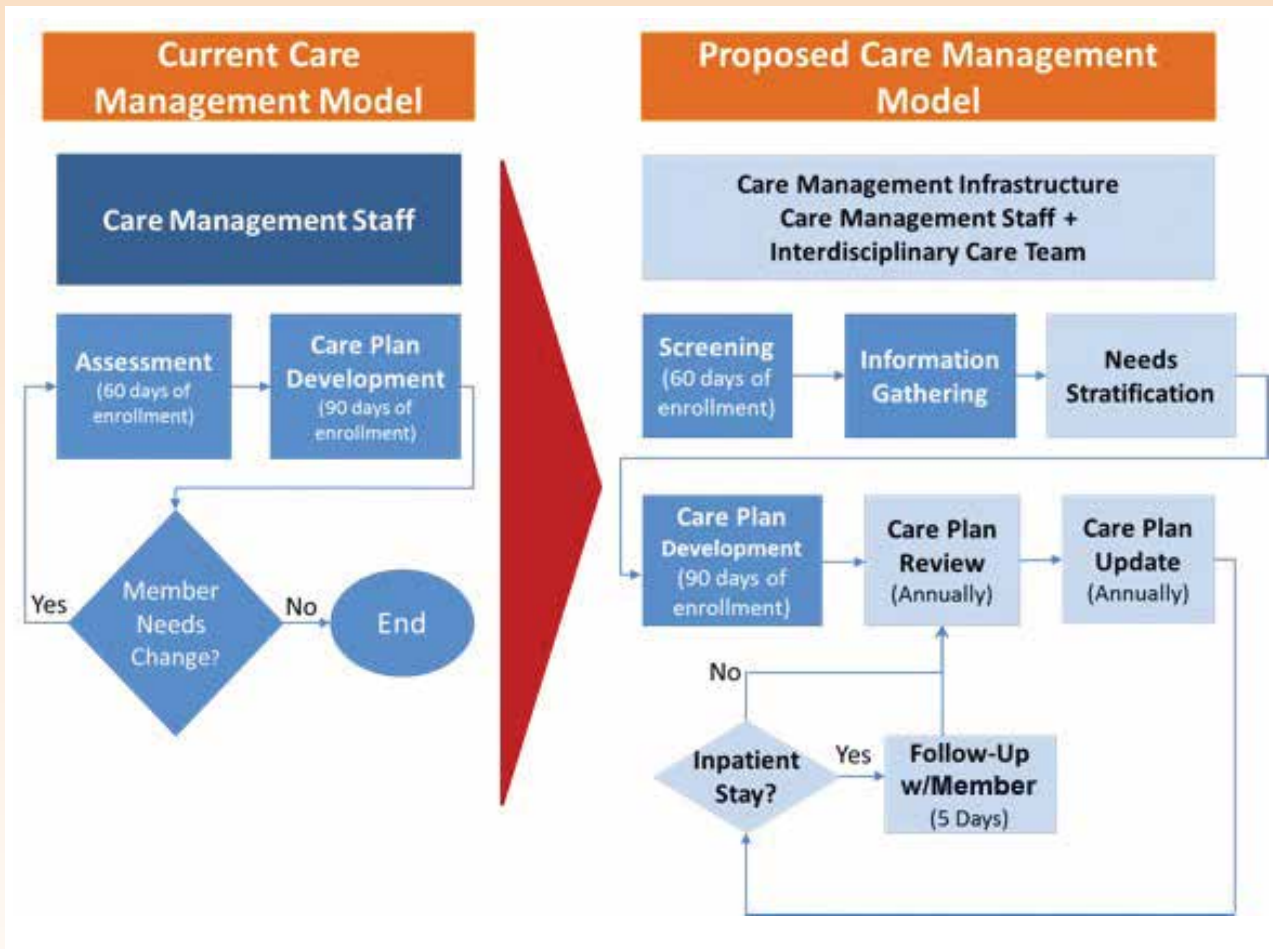
*Wisconsin Interdisciplinary Care Team (WICT):* Require HMOs to create WICTs to address the medical, behavioral and socioeconomic needs of complex care members.

*Screening and care plan development:* No change from current requirements; all SSI members should be screened within 60 days of HMO enrollment and have a care plan within 90 days of HMO enrollment.

*Needs stratification:* Ensure that HMOs have appropriate processes to stratify member's needs into case management services that vary in intensity.

*Care plan review and updates:* Require HMOs to review and update the care plan of every SSI member at least once annually.

*Transitional care:* Require HMOs to contact SSI members within five business days of discharge from an inpatient stay to ensure appropriate discharge planning.





## WEST VIRGINIA: Provider-Led Pilots



Some states are partnering closely with academic medical centers to learn what is working and how best to scale and spread effective local programs while allowing flexibility for unique local needs. Recognizing the capacity constraints on primary care clinics, especially in the most rural areas, West Virginia enlisted its academic medical centers and their health plan partners to serve as hubs for regional pilots and provide evidence-based interventions for Medicaid patients with complex care needs.

The approach hinges on enhancing, through state support, providers' existing complex care initiatives and fostering a collaborative working relationship among participating providers, MCOs and social services providers (such as housing, transportation and employment providers).<sup>50</sup>

### The state's role:

- ▶ Works collaboratively with provider partners to establish criteria for the target population (see below)
- ▶ Identifies eligible patients by area or network
- ▶ Shares Medicaid claims analysis with the partners to help them engage and manage patients
- ▶ Encourages collaboration with MCOs on current programs and developing new ones

### Academic medical center's role:

- ▶ Leads in identifying evidence-based interventions to implement and works with local providers to enhance access (see table below)
- ▶ Augments local providers' capacity through data collection, analysis and sharing in support of patient-centered care

The target population was selected based on degree of impactability and included patients with (1) 10 or more ER visits in the past 12 months; (2) 5 or more ER visits in past 6 months; and (3) 4 or more hospitalizations (inpatient or observation) in past 12 months. The

target population excluded patients with (1) advanced cancer, (2) end-stage renal disease on dialysis or end-stage liver disease (hepatorenal syndrome) and (3) those in hospice. Medical center physicians were consulted to refine target population criteria.

*Payment approach:* All pilot sites are working with MCOs under the existing payment schedule. No additional fees or funding were offered for interventions occurring under the pilot.

### Preliminary findings across all pilots show they are:

- ▶ Engaging medically homeless individuals and managing them through a primary care provider. This engagement has increased placement of unattached patients in a medical home;
- ▶ Identifying and implementing chronic disease management programs with participants;
- ▶ Enlisting providers and insurers to participate in the program with no promise of increased funding;
- ▶ Creating cooperative working relationship between the participating physicians' practices and the MCOs; and
- ▶ Providing coordinated care and continuity for patients.

### Interventions by Regional Pilots:

#### West Virginia University Medicine Morgantown region pilot site:

- Patient-centered medical homes
- Ambulatory case management
- Hospital-based transition team
- Transition care clinics
- Epic Population Health/Healthy Planet tools: Plan to incorporate ADT feeds for real-time notification of transitional care needs for the target population

#### Marshall Health and Aetna:

- Medical home model with focus on increased access to primary care
- Collaborative patient/member care plan
- Coordination between insurance plan case management and provider care coordination team
- Transitional care management
- High-risk obstetrics (OB) management (onsite Aetna obstetrics/neonatal abstinence syndrome [NAS] case manager)
- NAS program and referral to Lily's Place, a residential infant recovery center for babies born exposed to drugs, in Huntington, West Virginia
- Alternative access points for nonemergency health services (including evening clinic hours)
- Cost and Utilization Review Committee

#### CAMC Partners in Health and Aetna (PIHN):

- Case management in primary care to reduce unnecessary ER visits
- Comprehensive needs assessment
- Individualized care plan
- Patients receive services that address:
  - Medical/physiological needs;
  - BH/psychosocial needs;
  - Social determinants of health needs assessment (housing, utilities, food, transportation);
  - Referral to legal and judicial counseling;
  - Nutrition counseling; and
  - Pharmacy services.
- PIHN staff will obtain charge data from Medicaid MCOs for the following charges 6 months pre- and post-intervention: ER charges, primary care charges, hospitalization charges and less-than-30-day readmission charges

## COLORADO: Locally Derived First-Responder Intervention



Regional models often provide fertile ground for testing local interventions with nontraditional health care providers. Several programs across the country have recognized the potential value of crisis first responders in intervening with complex care individuals. They do this by triaging and diverting from a potentially avoidable ED visit to needed interventions in the community, many of which are social supports. The Colorado Community Assistance Referral and Education Services (CARES) program is a promising, unique partnership among first responders and a regional care collaborative provider network.<sup>51</sup>

### CARES Program

CARES currently operates in Regional Care Collaborative Organization (RCCO) 7 as a collaboration among the RCCO, Colorado Springs Fire Department and Memorial and Penrose Hospitals. The fire department acts as the entry point for engagement and diversion to more appropriate services when indicated for frequent 911 callers.

*Mission:* "To redirect patients from episodic to continuous care and change the current Emergency Medical System (EMS) model to help patients receive the Right Care at the Right Time in the Right Place by creating community partnerships for consistent, continuous care."

A mobile community response team takes calls through 911 dispatch, the state crisis line and follow-up with known patients. The team includes:

- ▶ *Fire medical provider:* Medically clears the patient in the field (protocols and point of contact);
- ▶ *Police officer:* Provides safety and controls the scene; and
- ▶ *Licensed social worker:* Assesses psychiatric need and stabilizes the patient, offers brief counseling or referral; de-escalates patients on scene and navigates them to appropriate resources and care.

Since deployment, only 13 percent of BH patients are transported to the ED. Senate Bill 16-069, passed in May 2016, creates the conditions for more widespread adoption of such interventions. It gives new certification requirements for community-based medical services (out of hospital):

- ▶ Defines "community paramedic" and "community integrated health care service"
- ▶ Authorizes the executive director of the Colorado department of public health and environment to adopt rules for the endorsement of emergency medical service providers as community paramedics and for the department to issue licenses for community-based integrated health care services
- ▶ Authorizes licensed entities (ambulance service, fire department, etc.) to establish CARES programs locally

### THE INTERVENTION

- Duration: 90–120 days
- Target population:
  - Medicaid enrollees with six or more ED visits per year; or
  - More than 30 prescriptions; or
  - Most frequent 911 callers; or
  - Referral from any provider.
- Initial contact made by a first responder—a fire department employee who is trusted in the community
- Home visits with a patient navigator and member of the fire department to conduct initial assessment of client needs
- Client connected with primary care medical home, if not already
- BH and SUD specialist conduct home visits as needed:
  - Includes a voluntary peer-to-peer mentoring program staffed by peers in recovery from addiction

### PRELIMINARY FINDINGS

- Findings validated that real-time identification of the target population is more effective than a static list.
- Found success with medication reconciliation and the time spent with patients understanding their health issues.
- Found challenges in greater than anticipated need for BH services and the need for legal interventions for some patients.
- BH and SUD specialist were frequently engaged because of high demand with positive results.
- Most likely scenario for ROI (from a range of possible outcomes using a differences-in-differences methodology): \$225 per enrollee per month savings: ROI = 3.87 percent, recoup initial \$2,000 investment after nine-month follow-up.

### NEXT STEPS

As a result of the positive impact on providers and enrollees, significant local interest in other regions and the promise of improved outcomes coupled with ROI, the state is developing plans to support replication of the model to other RCCOs.

# MICHIGAN: Housing as a Social Determinant of Health



The social determinants of health are nonclinical factors that have a direct impact on a person’s overall health and well-being. This includes access to housing, food, education, transportation and jobs, among other services. Housing is a cost-effective, evidence-based intervention that is shown to improve health outcomes and reduce costs, particularly for homeless individuals. Many states have used the Housing First approach in recognition that homeless and unstably housed individuals cannot self-manage health conditions until this basic need is met. Michigan determined that a Housing First approach should be central to its complex care interventions based on the evidence coupled with an analysis of its own health care and housing data.<sup>52</sup>

## Background

Michigan analyzed claims data and identified 2,700 Medicaid enrollees who had 20 or more ED visits in the previous 12 months. Of those, 1,530 met eligibility requirements for the 21 counties with FQHC health homes for individuals with chronic medical conditions. Of that 1,530, however, 83 percent had a psychiatric admission, a residential SUD intervention or a serious mental illness diagnosis, making any health home-eligible chronic medical condition likely more secondary to their primary needs.

- ▶ *Considerations:* Existing FQHC payment rates would likely not be sufficient to cover tenancy supports, and many of these patients are likely to have their care managed by CMHCs rather than or in addition to FQHCs based on the prevalence of mental illness or SUD diagnoses.

The state pursued a match of Medicaid claims and Homeless Management Information System (HMIS) data and was able to successfully link up 60 percent of HMIS and claims data. Even with the limited match, the state found that at least 16 percent of the 2,700 identified complex care patients in the state were homeless, with the highest concentrations in Wayne and Kent counties. Having demonstrated a clear link between high ED utilization and homelessness, the Housing Finance Agency was able to move swiftly to make changes that would target the housing needs of this population. A strong Medicaid-BH partnership allowed the state to identify existing tenancy supports and areas for future opportunity.

## Necessary State Partnerships

<p><b>Michigan State Housing Development Authority</b></p> <p>State housing finance and statewide public housing authority:</p> <ul style="list-style-type: none"> <li>• Revised Qualified Allocation Plan, Housing Choice Administrative Plan</li> <li>• Revamped system of preferences, prepared for future alignment with defined complex care population</li> </ul>	<p><b>State Medicaid Agency</b></p> <p>Agency within the Michigan Department of Health and Human Services (MDHHS) tasked with administering Medicaid and CHIP for nearly 2.3 million members:</p> <ul style="list-style-type: none"> <li>• Pulled claims data and ran analyses to help define target population and identified primary needs</li> <li>• Potential alignment with health homes, SIM and health plan contract innovations</li> </ul>	<p><b>Behavioral health</b></p> <p>State MH and SUD agency with the greatest access to and care of the target population:</p> <ul style="list-style-type: none"> <li>• Environmental scan included documentation of tenancy supports for CMHCs under 1915(b) (c) waivers that cover “community living supports”:                         <ul style="list-style-type: none"> <li>– Gaps in training and understanding of how to bill for this service</li> <li>– State-identified sources of TA</li> <li>– Plans to begin with select CMHCs, then expand</li> </ul> </li> </ul>	<p><b>Human services</b></p> <p>MDHHS agency with oversight of various assistance programs:</p> <ul style="list-style-type: none"> <li>• Human services-identified funding source to provide TA to CMHCs on billing for tenancy supports.</li> </ul>
<p>Key partners: Developers, supportive housing providers, homeless services/outreach</p>	<p>Key partners: Hospitals, physicians, Medicaid health plans, CHWs and others who regularly see and treat this population in the ER</p>	<p>Key partners: Community MH centers that provide this population with BH services and case management, including supportive housing and other service providers</p>	<p>Key partners: Community action agencies, homeless services providers, TA providers</p>

The 18-month policy academy created an opportunity to bring these agencies together regularly. Partnerships and collaboration were key outcomes of regular meetings. Together, these agencies have laid out a powerful and uncommon foundation for success. When the complex care needs program is in place, the housing system will be ready to serve this vulnerable population.

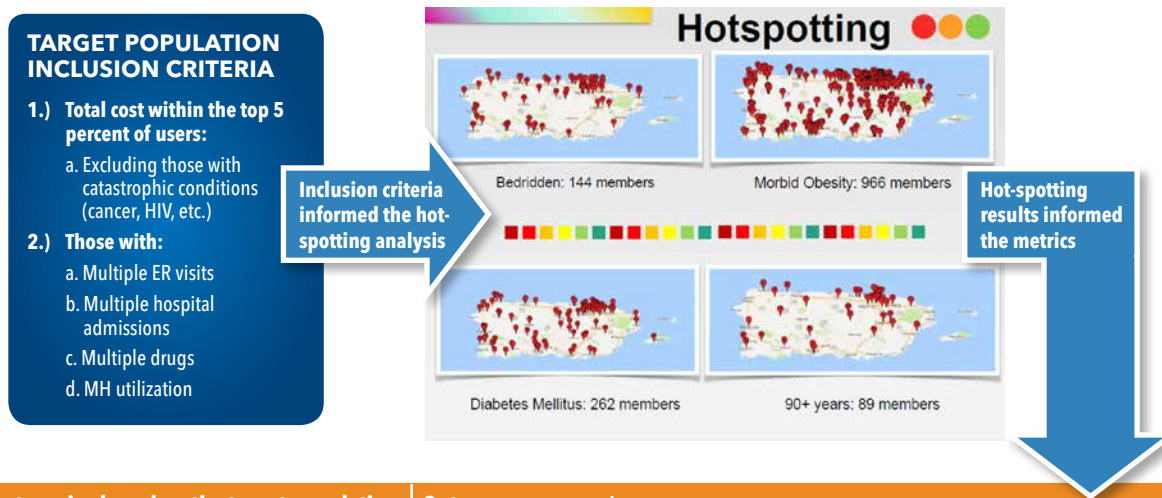


# PUERTO RICO: Improved Outcomes and Reduced Costs

Rigorous program evaluation is central to developing successful, sustainable complex care programs. By definition, these programs are about increasing access to evidenced-based interventions in the community, reducing unnecessary utilization of costly sites of care and improving health and well-being. Thus, most programs begin with core metrics that measure success in those domains. Puerto Rico provides an example of a collaborative effort among the state, health plans and providers to develop a simple set of core metrics that capture change in those domains, are informed by the characteristics of the target population and minimize additional burden on providers and patients.<sup>53</sup>

## The Program

Identifying the target population and where they are through historical Medicaid claims data analysis and a territory-wide hot-spotting approach (across the eight regions) narrowed the focus of the intervention and provided guidelines for the selected set of outcome metrics.



Metric categories based on the target population	Outcome measures*
<b>All members</b>	<ul style="list-style-type: none"> <li>• QoL indicators (using SF-8 Healthy Survey measures)</li> <li>• Follow-up after hospitalization/care transition within 30 days</li> <li>• Medicaid reconciliation within 30 days</li> <li>• Depression screening (using Patient Health Questionnaire [PHQ] 9)</li> <li>• Consumer Assessment of Healthcare Providers and Systems (CAHPS) member satisfaction survey (patient experience)</li> </ul>
<b>Members with diabetes</b>	<ul style="list-style-type: none"> <li>• Blood sugar control (HbgA1C &lt;8)</li> <li>• Flu and pneumococcal vaccine</li> </ul>
<b>Members with heart failure</b>	<ul style="list-style-type: none"> <li>• Compliance with medication therapy</li> <li>• Flu and pneumococcal vaccine</li> </ul>
<b>Members with hypertension</b>	<ul style="list-style-type: none"> <li>• Blood pressure &lt;140/90</li> <li>• LDL cholesterol &lt;100</li> <li>• Flu and pneumococcal vaccine</li> </ul>
<b>Members with asthma</b>	<ul style="list-style-type: none"> <li>• Members using controllers (ICS medications)</li> <li>• Flu and pneumococcal vaccine</li> </ul>
<b>Cost and utilization</b>	<ul style="list-style-type: none"> <li>• Total cost and total cost per member for the program time period</li> <li>• Total inpatient stays, total cost for inpatient stays and total inpatient stays and cost per member for the period</li> <li>• Total ER visits, total cost for ER visits, and visit number and ER cost per member for the period</li> <li>• Total number of prescriptions, cost of prescriptions and number and cost of prescriptions per member for the period</li> </ul>

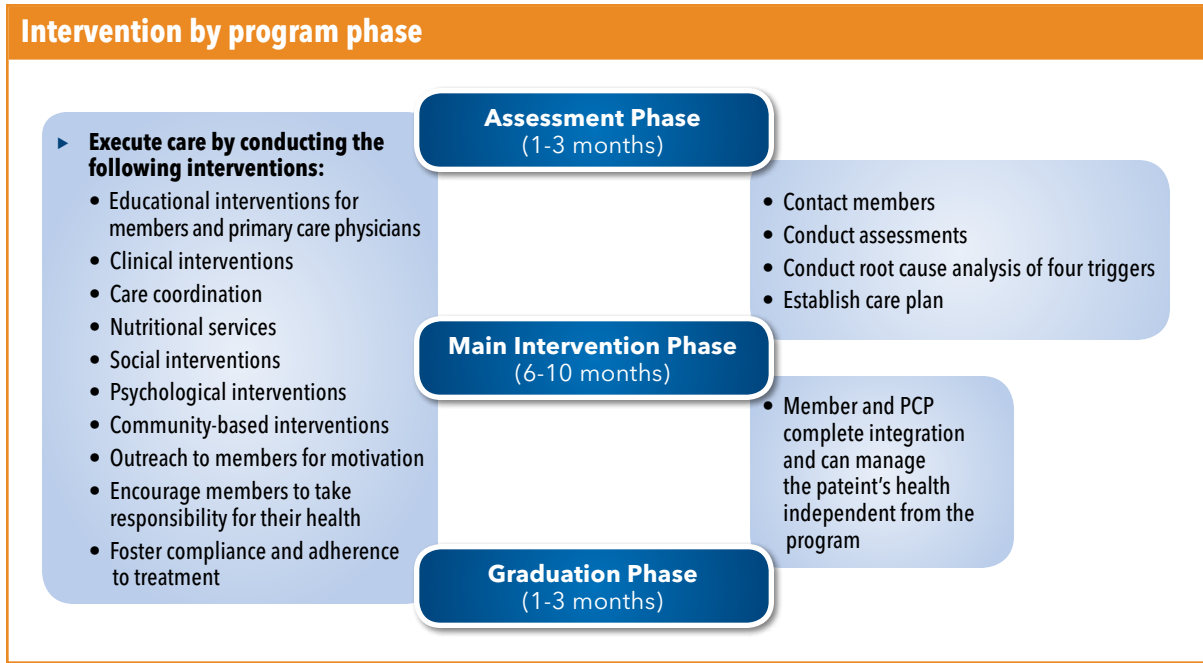
\*All measurements consistent with CMS requirements

# PUERTO RICO: Improved Outcomes and Reduced Costs

## The Intervention

### Core elements of the program

The intervention is a patient-centered, interdisciplinary care team that coordinates with the primary care provider to manage transitions to evidence-based community interventions and empowers patients to take control of their health.

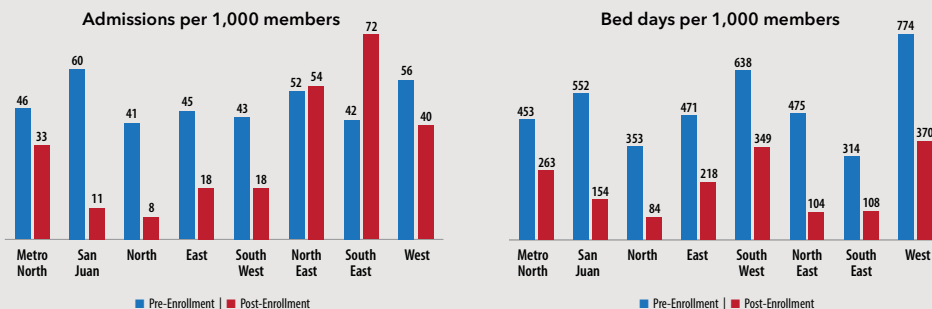


## Outcomes

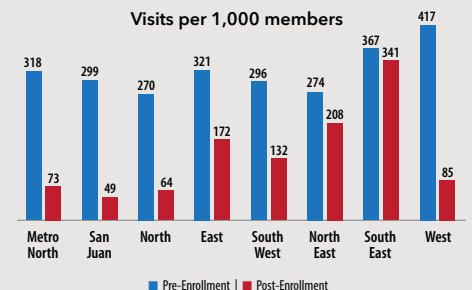
### After 12 months (measured from baseline/pre-assessment to graduation)

- ▶ 91 percent of those with depression saw a reduction in their depression.
- ▶ PMPM inpatient stay was reduced in every region, ranging from 84 percent to 39 percent less than before intervention.
- ▶ PMPM ER utilization was reduced in every region, ranging from 88 percent to 15 percent less than before the intervention.
- ▶ Average PMPM cost for the group was reduced by \$216, from \$499 pre-intervention to \$283 post-intervention.

### Inpatient utilization



### ER utilization





## **APPENDIX A** ▶ Pioneering Models in Detail

## APPENDIX A: Pioneering Models in Detail

### The Camden Coalition

The Camden Coalition of Healthcare Providers is a nonprofit, community-based coalition of providers that aims to improve lives and reduce cost of care for people with complex health and social needs. The model was developed by Jeffery Brenner in Camden, New Jersey, a private-practice family physician, to address inefficient, fragmented health services for complex care Medicaid enrollees. Camden Coalition is famous for using a person-centered, data-driven, hot-spotting approach to identify the geographic areas that have a high concentration of complex care patients to inform delivery reform. The coalition's early analyses of hospital claims data (2002 to 2007) showed that only 13 percent of individuals were responsible for 80 percent of the cost of care for a population of 98,000, and 20 percent of the population generated 90 percent of total cost.<sup>54</sup> Using these claims data, Camden Coalition segmented the population to identify top utilizers so that they could fully characterize their health needs and design interventions accordingly. Essential elements of their success include:

- ▶ Real-time identification of individuals in acute care settings;
- ▶ Bed-side engagement (with a trauma-informed, harm-reduction approach);
- ▶ Comprehensive psychosocial assessment;
- ▶ Transition planning, including links to primary care home and wrap-around services;
- ▶ Visiting patients at home to coordinate care and support self-management; and
- ▶ Broad information sharing among coalition providers through a dedicated health information exchange to coordinate care.

Early findings showed an approximate 40 percent reduction in ER and inpatient visits and a more than 50 percent reduction in hospital costs within six months (36 participants).<sup>55</sup> Most recently, Camden Coalition has formed a Medicaid ACO serving 37,000 of Camden's residents. The coalition is in the midst of a large RCT in collaboration with the Abdul Latif Jameel Poverty Action Lab to evaluate the program.<sup>56</sup>

## APPENDIX A: Pioneering Models in Detail

### The State of California

The Frequent Users of Health Services Initiative (FUSE), launched in 2002 as a joint project of The California Endowment and the California HealthCare Foundation, included six pilot programs in six counties throughout California that tested models of care for frequent ED users. The initiative found that of these high-utilizing patients, two-thirds had an untreated physical condition (such as diabetes, cardiovascular disease, or respiratory conditions), 58 percent had an SUD, one-third had a mental illness, half were homeless and 36 percent had three or more of these conditions.<sup>57,58</sup>

To address these needs, each of the six pilot programs developed criteria to identify the target population (for example, the number of ED visits within a certain time) and assembled a multidisciplinary team to address patient needs. All but one program connected homeless patients with housing services, such as transitional housing, permanent supportive housing, or both. All pilots found that intensive case management was crucial to the program's success. Each program had a low staff-to-patient ratio, frequent face-to-face contact, and care coordinators who routinely contacted the patients' clinicians.

Ultimately, the pilots collectively reduced ED visits and inpatient stays while improving the quality of care and health for patients. For patients tracked over two years, the program resulted in a 61 percent decrease in average ED visits, with a 59 percent reduction in average ED charges, and a 62 percent decrease in average hospital inpatient days, with a 69 percent decrease in average inpatient charges.<sup>59</sup>

### The State of Oregon

In 2011, the Oregon Legislature authorized the state's health system transformation. CMS approved a Medicaid section 1115 demonstration waiver, in effect from July 2012 to June 2017, providing the framework for implementation. Coordinated care organizations (CCOs) were established through the waiver, and both physical and BH outcomes were priorities.

CCOs are regional entities responsible for their members' health and are paid a capitated rate, with a fixed rate of growth. CMS authorized an additional \$1.9 billion in funding in exchange for a commitment from the state to cut Medicaid spending growth by 2 percent (from an assumed trend of 5.4 percent to 3.4 percent) without sacrificing the quality of care.<sup>60,61</sup> Failure to meet financial and quality goals is tied to \$511 million in penalties. The CCOs manage the entire Medicaid population, but identifying program efficiencies is key to their success, making frequent users of costly sites of care a focal point.

An essential ingredient to their success is that the state team engaged in an extensive stakeholder engagement process throughout waiver development and implementation. The state allowed the regions to define themselves according to their individual community needs within the broad parameters of the demonstration program and with accountability to a core set of outcome metrics. CCOs used their health data to develop strong patient identification algorithms and learned quickly that behavioral health needs were often underestimated.

## APPENDIX A: Pioneering Models in Detail

### The State of North Carolina

CCNC is a statewide public-private partnership that manages the care of Medicaid recipients through 14 regional nonprofit community care networks operating in all 100 counties. Each local community care network is a nonprofit that facilitates health care services through key partners in each region, including primary care physicians, hospitals, and county services. CCNC provides resources, TA, and strong informatics support to each network.<sup>62</sup> CCNC employs an evidence-based transitional care model to intervene with the aged, blind, and disabled population and those with complex care needs.<sup>63</sup> Essential elements include:

- ▶ Face-to-face contact with patients during inpatient admissions;
- ▶ Home visits within three days of discharge, which includes medication reconciliation;
- ▶ Patient self-management education; and
- ▶ Coordinating follow-up care and links with social support.

Based on decades of data collected about these populations, CCNC has developed an empirically derived scoring algorithm (the Complex Care Management Impactability Scores™)<sup>64</sup> to identify patients with complex care needs and determine deployment of resources. The targeted patient identification is essential to the program model. CCNC targets those patients who are most likely to benefit from the intervention through a balance of risk, which predicts patient health and cost outcomes in the future, and impactability, which predicts how much change can be expected through care management intervention. Independent analyses have shown that CCNC has yielded millions in savings to the Medicaid program each year and has an estimated 3-to-1 ROI.

### The State of Vermont

Vermont's Blueprint for Health is a state-led initiative to assist providers in meeting the medical and social needs of residents in their communities. At the center are medical homes linked with CHTs that offer free care coordination, counseling, substance use interventions, and self-management support. With the Support and Services at Home (SASH) program for older adults in affordable housing developments and the hub-and-spoke model and medication-assisted treatment (MAT) for people with opioid addiction, the state is tackling the three-part aim through the Vermont Chronic Care Initiative (VCCI) for those patients who are not dually eligible Medicaid enrollees with complex needs. Since 2008, this initiative has operated statewide. Through the program, complex care Medicaid enrollees (not enrolled in other CMS case management) receive short-term, holistic, intensive case management and care coordination with the goal of improving outcomes and reducing unnecessary utilization. VCCI is staffed by the state and a vendor. They use a proprietary data management system that offers targeted decision support tools, utilizing Medicaid claims data, individual health records and available population health data. In 2014, the program delivered a net savings to state Medicaid of \$30.5 million over anticipated costs, with a 15 percent decrease in unnecessary ER utilization, a 30 percent decrease in inpatient hospital stays, and a 31 percent decrease in 30-day hospital readmissions.<sup>65</sup> More recent analyses of health spending, utilization and quality for the whole population in Vermont, showed that linking beneficiaries with community-based social and economic supports was associated with reduced medical expenditures.<sup>66</sup>

## APPENDIX A: Pioneering Models in Detail

### The State of Washington

In July 2011, hospitals throughout Washington adopted recommendations developed by the Health Care Authority, Washington State Hospital Association, Washington State Medical Association and the Washington Chapter of the American College of Emergency Physicians to divert ER overuse. The program—ER is for Emergencies—is squarely focused on potentially preventable ER use. It employs a Seven Best Practices program and real-time data sharing among providers to redirect care from the ER to the most appropriate setting. Data sharing is enabled through an electronic HIE—the Emergency Department Information Exchange (EDIE)—that notifies the attending ER physician when he or she is treating a frequent ER patient. The physician receives details about the patient's treatment plan, prescription history, who the case manager is, and whether that patient is a frequent user of the ER.

In the program's first year, the rate of ER visits declined by 9.9 percent, and the rate of "frequent visitors" (that is, five or more visits annually) dropped by 10.7 percent. The rate of visits resulting in a scheduled drug prescription fell by 24 percent, and the rate of visits with a low-acuity (less serious) diagnosis decreased by 14.2 percent. In the first year, the program produced nearly \$34 million in savings.<sup>67,68</sup>

### The State of Missouri

The Health Home model (Section 2703 of the ACA) gives states an opportunity to improve care coordination and care management for complex care Medicaid enrollees. In 2011, Missouri became the first state to receive approval from CMS to establish Medicaid reimbursement for health homes. The state adopted two health home models: one based in CMHC serving people with serious mental illness and a second in primary care clinics (FQHCs, rural health clinics, and individual practices) serving people with multiple chronic conditions. A focal point of these companion initiatives is intentional bidirectional integration of primary and BH care tailored to the target population's needs. This is achieved through co-locating needed behavioral health staff and services in primary care homes and primary care providers in traditional BH settings. Selected outcome measurements reflect evidence-based interventions for comorbid conditions in both settings (diabetes, asthma, hypertension, screening for SUDs, BH prescribing benchmarking, etc.).

Primary care health homes saved \$30.79 per member per month, for a total cost reduction by mid-2015 of \$7.4 million. For CMHC health homes, the cost fell by \$76.33 per member per month for a total of \$15.7 million by mid-2015.<sup>69</sup> Notably, improvement in key health indicators was equivalent in both types of health homes, suggesting that this integration approach works.

As a precursor to the CMHC health homes, the state collaborated with the CMHCs to engage and intervene with a cohort of just under 3,700 high utilizers (called the "DM3700 initiative"). In an 18-month period, significant improvements in diabetes, hypertension and cardiovascular control were observed. Over that same period, cost decreased by \$614.80 per member per month, with a total cost reduction of \$22.3 million for the 3,560 people served.<sup>70</sup>

Examples of other high-need, high-cost programs and health home approaches are emerging around the country.<sup>71</sup>



## **APPENDIX B** ▶

Detailed Examples of State Delivery and Payment Approaches



## APPENDIX B: Develop and Implement Delivery and Payment Models—State Examples

This section was written by the Center for Health Care Strategies.

APPROACH	STATE EXAMPLES
Per Member Per Month (PMPM) Care Coordination Fee (PCMH + CHT)	<ul style="list-style-type: none"> <li>• <b>Maine:</b> Maine's Community Care Team (CCT) pilot focuses on patients with frequent hospital admissions, high ED utilization and those identified as in need of complex care. CCTs must at least employ a part-time medical director; a clinical care management leader; and a part-time CCT manager, director or coordinator. The CCT must also have an established partnership with a health home. Health home providers receive a PMPM payment for management services. An add-on CCT payment supports intensive care management services for the top 5 percent of referred complex care individuals.</li> <li>• <b>North Carolina:</b> CCNC prioritizes patients who have higher hospital costs, ED use and readmissions than are expected for their clinical risk group. Each of the 14 networks has a full-time program director, a medical director, a team of case managers, a steering committee and a medical management committee. Physician FFS reimbursement is supplemented by a PMPM fee for case management and network administration.</li> <li>• <b>Vermont:</b> Vermont's CHTs work with primary care providers to coordinate community-based support services. The composition of CHTs is locally determined but can include a nurse coordinator, nutrition specialists, social workers and public health specialists. Providers are paid PMPM for each patient they serve, and CHTs are funded by a capacity payment based on monthly attribution.</li> </ul>
PMPM Care Coordination Fee (Health Home)	<ul style="list-style-type: none"> <li>• <b>New York:</b> New York's health home has a rate-cell PMPM approach, with three tiers that are adjusted for clinical acuity, diagnostic codes, regional adjustment, and functional assessment. Payment is also adjusted for social factors such as homelessness or substance disorder. In addition, a flat-rate engagement fee is available to providers to help offset the labor-intensive activities associated with member engagement. Payment, ranging from \$73 to around \$400, is triggered by at least one core service being provided quarterly.</li> <li>• <b>Washington:</b> Washington built its tiered health home rates using a clinical and nonclinical staffing model combined with monthly service intensity. The three levels depend on who is providing the services and the intensity of the services determined by in-person, individualized interactions. Level 1 (engagement) includes health screening and assessments, development of a health action plan and assessing the member for self-management. Level 2 (intensive care coordination, with \$173 PMPM) and Level 3 (low-level care coordination, with \$68 PMPM) are delivered monthly as determined by need. Payment is triggered by at least one core service being provided monthly.</li> <li>• <b>Missouri:</b> Missouri has two health home models based on target population: serious mental illness (SMI) and chronic medical conditions. The flat-rate PMPM is determined by the target population and ranges from nearly \$60 to approximately \$80 PMPM. The monthly fee must be triggered by at least one core service being provided within the quarter. Note: the Missouri model is not exclusive to the complex care population.</li> </ul>
Shared Savings/Risk	<ul style="list-style-type: none"> <li>• <b>Maine:</b> Maine's Accountable Communities is a provider-led initiative that covers the full scope of services for physical and behavioral health, with an option to include long-term services and supports (LTSS) and dental. The payment model uses shared savings, with an option of one of two tracks: (1) upside only; and (2) upside/downside. The program focuses on 17 quality measures, including 14 core measures and 3 elective measures, all of which are tied to payment.</li> <li>• <b>Minnesota:</b> Minnesota's Integrated Health Partnerships is a provider-led initiative that covers a full scope of services in physical and behavioral health as well as pharmacy. They offer two tracks: (1) an integrated track for larger systems that provide inpatient and outpatient care and includes upside/downside risk; and (2) a virtual track for smaller systems not formally integrated with a hospital. This track only has upside risk. Minnesota uses 32 quality measures scored as 9 aggregate measures; all measures are reported in the first year, and then increasingly tied to payment over future years.</li> <li>• <b>Vermont:</b> Vermont's Medicaid Shared Savings Program is a provider-led initiative that covers physical health services with behavioral health, LTSS and pharmacy all being additional, optional services. The payment model includes shared savings using two tracks: (1) upside only; and (2) upside/downside. The program focuses on a core set of 28 measures, 8 of which are tied to payment.</li> </ul>
Global Payment	<ul style="list-style-type: none"> <li>• <b>Minnesota (Hennepin Health):</b> Hennepin Health receives prospective PMPM Medicaid payments to cover the cost of medical, dental, BH and some care coordination services. The partnering health plan pays providers on a fee-for-service basis and savings are calculated through a year-end settlement process. Through a prearranged formula, a certain percentage of annual savings is distributed among the partners, with the remainder reinvested in nontraditional health care services that are identified as providing short-term ROI opportunities, such as public housing vouchers, a detox center and co-locating dental services within primary care.</li> <li>• <b>Oregon (CCO):</b> Through its 1115 waiver, Oregon's CCO structure integrates physical, behavioral and oral health services. The CCO's global budget covers the total cost of care for all services for which the CCOs are responsible and held accountable for managing, either through performance incentives or being at financial risk for paying for health care services. CCOs can use their capitated payments for "flexible funding" purposes at their discretion, including covering the cost of nontraditional health care services such as purchasing air conditioners and blankets for members.</li> </ul>



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