



Planning Framework for Data Sharing and Integration Strategies

The Housing and Services Partnership Accelerator (HSPA) provides opportunities for states with a Centers for Medicare & Medicaid Services (CMS) approved section 1115 demonstration or 1915(i) state plan benefit covering housing-related services and supports for individuals experiencing or at risk of homelessness to:

- accelerate effective implementation, expansion, and improvement of the delivery of these services; and
- strengthen the state and local agency and community-based organization partnerships across health, housing, homelessness, aging, and disability.

This brief is part of a series highlighting lessons learned from states¹ who received intensive technical assistance and peer learning opportunities during the first Housing and Services Partnership Accelerator (HSPA) cohort.

Overview

Cross-system data sharing and integration are crucial for states' effective implementation of Medicaid 1115 demonstrations or section 1915(i) state plan benefits with housing-related supports and services (HRSS). With cross-system data, states can assess population health needs, inform planning, prioritize resources, identify service gaps, improve service quality and performance, and evaluate outcomes.

The exchange of housing, health, and social care data also can have important benefits for the individuals served and their service providers. Benefits may include:

- Streamlined experience for individuals through backend coordination of service delivery across sectors to help minimize the time that individuals experience or are at risk of homelessness.
- Maximization of service capabilities as providers use the data to braid resources to support individuals in accordance with their person-centered plan for housing stabilization.
- Reductions in the time that providers spend on dual data entry or other administrative requirements.

¹ The first HSPA cohort, initiated in 2024, includes eight states (Arizona, California, Hawaii, Maryland, Massachusetts, Minnesota, North Carolina, Washington) and the District of Columbia.

Opportunities for data sharing and integration continue to improve in part because of technological advances and infrastructure development. Also, state interagency councils on homelessness and Medicaid programs addressing health-related social needs have helped drive data-sharing innovations for population identification, screening, eligibility assessments, referrals, and more. Such accomplishments—and their related infrastructure—can be a springboard for additional improvements within the state to support Medicaid HRSS.

Developing systems and processes for data sharing/integration is complicated. States need a clear goal and strategy that state Medicaid programs can pursue in partnership with other stakeholders.

Accordingly, this brief provides a planning framework for developing a comprehensive strategy for the sharing of housing, health, and social care data across sectors. It includes a tool that states can use to get started with their data-sharing planning. Also, short profiles of the data strategies used by Arizona and Massachusetts describe plan components that other states may consider adapting. The resource list supports further learning and action.

Keys to Success

Strategy Components:

- Data Goal
- Partnerships
- Buy-in from Key Leaders and Partners
- Privacy and Confidentiality Protections and Legal Frameworks
- Infrastructure Investments and Planning
- Eligibility and Assessments

Setting the Stage for Data Sharing/Integration

Data sharing/integration are complex endeavors with many players to engage and considerable administrative and legal minutia to work through. Before state teams start exploring options for cross-system data sharing/integration, agency leaders often want a clear plan for handling legal issues. They also are likely to want the resulting strategy to leverage existing data exchange systems and infrastructure (state or local) as a way to minimize barriers and accelerate implementation.

Because workflows, data governance, and terminology in each sector are unique, co-design is a growing best practice. Co-design entails a process to systematically work through these details with involvement of stakeholders, including decision-makers, data owners and users, and a broad array of provider types. States will need to also periodically consult with data vendors and potentially with funders, other government agencies, and ancillary groups.

In addition, new cross-system data-sharing/integration efforts should be aligned with standards, legal frameworks, and practice recommendations that national data standards bodies, such as [Gravity Project](#), [Direct Trust](#), and [Health Level Seven International \(HL7\)](#), have established. This alignment enables states to:

- Adopt/adapt tested standards and best practices instead of creating new ones, which may have unforeseen difficulties.
- Protect privacy.
- Streamline workflows across systems and organizations.
- Enhance the overall quality and usability of integrated data systems.

- Foster efficiency and transparency in government operations.

Six Components of a Data-Sharing/Integration Strategy

Well-designed strategies for data sharing and/or integration have six basic components essential for states and their partners to put in place for effective design and implementation. If a state team is in an exploratory phase, that is without an approved solution, the components in this strategy framework can be used to consider different options. Teams that have an approved solution would develop the components (described below) to support effective implementation.

1. Data Goal

States and their partners would benefit from first setting a goal and then shaping the other five supporting components. A goal for data sharing/integration can encompass a variety of aims and should articulate the data exchange level(s) needed to meet those aims, such as across state data systems, between state and local systems, or between local systems. The data goal should be SMART: **s**pecific, **m**easurable, **a**chievable, **r**elevant, and **t**ime-bound. If a goal is highly ambitious or complicated, states can divide it into a sequence of subgoals that gradually builds the data exchange systems and infrastructure.

States and communities have developed data systems for a variety of HRSS-related goals. Some of their goals were to better:

- Understand priority populations' HRSS needs.
- Determine eligibility for different types of assistance.
- Identify and prioritize individuals for housing and services.
- Screen for and flag housing status in other systems' data.
- Assess and address disparities.
- Make the case for investment in and evaluation of supportive housing.
- Improve care coordination with, for example, hospitals and emergency departments, behavioral health systems, health plans, social care providers, and others to improve outcomes for individuals served.

2. Partnerships

Effective data-driven strategies for delivering HRSS necessitate robust partnerships across sectors that own or utilize data about individuals' housing and service needs and usage. This component not only identifies the data owners, administrators, and users, but also establishes a process to understand each partner's needs and priorities. Such insights are crucial in developing a sustainable solution that incentivizes long-term partner engagement.

Because of the vast diversity in community providers' data systems, states should ensure that their co-design process engages a broad array of providers such as behavioral health, aging and disability services, homeless services, and housing. Medicaid beneficiaries and caregivers, for example, would have valuable insights regarding information releases, eligibility assessments, care planning, housing navigation, etc.

To facilitate community-level identification and analyses of population needs and resources available, a growing number of states want to integrate Medicaid and other state or local health system data with Homeless Management Information System (HMIS) data. The principal challenge in many states has been that local Continuum of Care (CoC) partners operate their own HMIS; as a result, many states lack a single (statewide) pool of HMIS data to pair with statewide Medicaid data. Two state strategies to overcome this challenge include a statewide HMIS data warehouse with voluntary cooperation from local CoCs and use of a third-party data administrator.

Strategy developers also will want to better understand the data infrastructure and use by community-based health, homeless services, housing, and aging and disability services providers. Data users in both frontline positions, such as housing navigators and options counselors, and in roles that manage caseloads and track performance have essential insights. Specifically, they are using the data infrastructure daily to collect and use data as they assist individuals. These local providers also are the ones that obtain individuals' consent for information sharing. Understanding their perspectives will help states ensure that the prospective data sharing/integration system will actually support effective and efficient service delivery.

3. Buy-In from Key Leaders and Partners

Early in the planning stage, states should identify a champion for the strategy. The champion should be a well-connected or strategically positioned individual leader or entity. In recent years, interagency councils on homelessness have driven data sharing innovations and may have insight into leaders who might be suitable.

In addition to finding a champion, states will need to develop a process to secure buy-in from other leaders/partners. This process should anticipate that:

- State leaders will want a clear plan for the resolution of legal issues before providing approval.
- The Medicaid agency's counsel may have specific steps or items needed for its approval process.
- Other partners may have additional restrictions or requirements based upon the regulations that oversee their funding and resources.
- Each champion may have different expectations and outcomes for data-sharing processes.

4. Privacy and Confidentiality Protections and Legal Frameworks

Because privacy, confidentiality, and other legal requirements for data vary by sector, states and their partners will need to gather key legal frameworks and protections that must be addressed when developing the eventual solution. The state team will then map out how they will develop data use/sharing agreements, create an approval process for data-sharing requests, and establish consent/release of information processes. The latter two processes would then need to be integrated into data systems such as the HMIS.

Mapping out transfers, access, and use between parties can be a long process, so states will want to start developing data-use/sharing agreements early. Planners will have to ensure the agreement adheres to data protection, confidentiality, and other legal requirements. Some data solutions also may need a governance charter, which is a formal document regarding the authority, structure, and responsibilities for managing data. The resource list below provides seminal toolkits and background information to assist with this component.

5. Infrastructure Investments and Planning

Across the United States, state and/or local partners are sharing data, and this existing infrastructure may have valuable components that can be leveraged instead of duplicated. Accordingly, states will want a data/technology inventory of existing data and analytic capacity, data sets, requirements, and system attributes. In addition, they need an inventory regarding funders' (e.g., Medicaid, HUD) requirements for data, information exchange, and workflow. Teams will use this information to explore potential areas for alignment that will advance the data exchange goal.

This component also entails a plan to support both:

- Infrastructure investments, including community-based providers' capacity, workforce training, and data systems.
- Ongoing operations and maintenance.

Aspects to consider include data interoperability, technology platforms, data staff/capacity, statewide integrated data warehouses, data quality strategies and initiatives, and analysis via research/academic partners. A co-design process with diverse community-based providers will help ensure that planned investments address capacity needs and yield desired efficiencies and outcomes.

6. Eligibility and Access

Connecting Medicaid beneficiaries to HRSS generally begins with determining intervention eligibility criteria for Medicaid and other types of assistance. This policy-level work occurs as state Medicaid agencies and partners strive to align eligibility under their 1115 or 1915(i) programs with non-duplicative, longer-term housing supports funded by non-Medicaid resources. Such policies can then be operationalized through:

- Streamlined referral pathways that connect individuals needing HRSS to community-based providers.
- Data exchange platforms that providers use as they assist individuals.
- Strategies that engage the priority population in eligibility checks and service utilization.

HMIS, especially CoCs' real-time lists of people experiencing homelessness (also called "by-name lists"), is one existing asset that states and communities are leveraging to establish eligibility and to prioritize participants for available housing options.

Get Started

The HSPA [data strategies worksheet](#) has the planning framework components described in this brief. Using the simple worksheet instructions, a working group can develop a draft high-level goal and the necessary strategy components to realize that goal.

Use this initial outline to discuss the goal and strategy with leaders and stakeholders and then build out each component. Once necessary buy-in and funding is secured, the state team—likely with additional members—builds an action plan to support strategy implementation and track progress. The resulting action plan should include processes to engage data users, administrators, and service providers from the sectors that assist your priority populations in co-designing the data-sharing/integration system.

Finally, as partners make progress on the initial goal, they can begin laying the groundwork for the next goal.

State Examples

Arizona and Massachusetts provide two different approaches to data sharing/integration that support effective HRSS delivery. The six components of a data strategy (underlined) are identified in the following examples.

Also learn about North Carolina's and Oregon's approaches to data sharing in the Centers for Medicare & Medicaid Services webinar: [Data Sharing to Support Medicaid Section 1115 Demonstrations](#).

Arizona

Arizona's primary goal has been to align housing resources and Medicaid health-related social needs service eligibility criteria by integrating HMIS data with Medicaid data. These capabilities will help service providers more seamlessly bring together available resources to assist individuals exiting homelessness.

Their solution—Data Warehouse Enterprise for Linkage (DWEL-AZ)—is a statewide data warehouse that integrates data across Arizona's HMIS databases, Medicaid information systems, and other relevant human services data. In addition to the state's three CoCs, other key DWEL-AZ partners include:

- A vendor that is developing the data warehouse which will eventually support data integration with the appropriate client consent and protections. Using an administrative operator provides a neutral entity for ongoing data management.
- A technical assistance collaborative with three state universities to leverage their expertise in program evaluation and populations with complex needs.

To provide the necessary privacy and confidentiality protections, legal teams and representatives from the CoCs and data contributors designed a comprehensive data governance structure for managing data. These efforts produced both a data-sharing agreement across all contributing partners and a governance charter that links to the data agreement. The

system centers on receiving individuals' consent so that Medicaid can share eligibility and other data elements with the data warehouse to support efficient service planning and delivery.

State and partner organizations all contribute to the DWEL-AZ budget [buy-in]. This shared funding model promotes sustainability because each has an ongoing incentive to actively participate in data exchange and the collaborative decision-making process. This team has adopted a phased, iterative approach to data sharing through DWEL-AZ. Once the initial system is online, the partners will invest in additional functionality, including data analyses and other research to improve homeless services and Medicaid programs. For example, analysts will identify Medicaid beneficiaries with intensive, expensive care needs and predict who may need certain services. This information will help the funding partners refine how they have aligned prioritization criteria across housing and Medicaid resources.

Massachusetts

The Executive Office of Housing and Livable Communities (HLC) has attained the goal of establishing a statewide HMIS data warehouse to overcome the fragmentation of homelessness data across what was originally 18 (now 11) CoCs. Over several years, these agencies collaborated to secure buy-in from each of the state's CoCs through significant outreach and negotiation. Once the CoCs agreed to participate, they and HLC created a governance structure under which CoC partners meet quarterly to manage data access and make decisions as the ultimate owners of the data. The commonwealth also hired a data administrator to support technical implementation and data integration.

The resulting Re-Housing Data Collective (RDC) now provides a repository for all HMIS information. The result is a more comprehensive view of homelessness across the state that informs policy, including a recent change to provide 24-months continuous Medicaid eligibility for individuals experiencing homelessness.

Because the current governance does not enable MassHealth, Massachusetts' Medicaid program, to directly access the HMIS data, the state tasks the RDC data administrator with matching HMIS data to Medicaid identifiers through the MassHealth Eligibility Verification System. A list of Medicaid identifiers for the individuals experiencing homelessness as documented in the RDC is provided by the RDC data administrator to MassHealth on a weekly basis.

Conclusion

Cross-system data integration and sharing is essential for enhancing the effectiveness of Medicaid programs, particularly in the context of HRSS. To generate the needed benefits, states should set deliberate goals for data exchange and develop a strategy with five other components: partnerships; buy-in from leaders and partners; privacy and confidentiality protections and legal frameworks; infrastructure investments and planning; and eligibility and access. Leveraging existing systems and models from other states can provide a springboard to accelerate data exchange.

Useful Resources

Federal Resources

- [Accessing Enhanced Federal Medicaid Matching Rates for State Information Technology Expenditures to Improve Access to Mental Health and Substance Use Disorder Treatment and Care Coordination](#), Centers for Medicare & Medicaid Services
- [Community Care Hub IT Playbook](#), Administration for Community Living
- [Community Care Hub IT Playbook: Best Practices and Tools for Transforming Information and Technology](#), Administration for Community Living
- [Glossary of Terms—ACL Social Care Referrals Challenge](#), Administration for Community Living
- [Health Information Technology Adoption and Utilization in Behavioral Health Settings](#), Assistant Secretary for Planning and Evaluation
- [Homelessness and Health Data Sharing: Why and How Communities Are Sharing Data to Improve Outcomes for People Experiencing Homelessness](#), U.S. Department of Housing and Urban Development
- [How Health Information Exchanges Support Integration for Behavioral Health Settings](#), Assistant Secretary for Planning and Evaluation
- [Medicaid-Funded Housing Services: Opportunities for Alignment and Coordination with Housing Resources within Homeless CES](#), U.S. Department of Housing and Urban Development
- [Policy Approaches to Improve State and Local Data Sharing](#), Association of State and Territorial Health Officials

Materials from States

- [Bridging a Gap: Using Data to Support Health and Housing for People Experiencing Homelessness](#), Michigan Department of Health and Human Services
- [Demonstrating Value with Social Determinants of Health Use Cases of HIE](#), Oregon Health Authority
- [DWEL-AZ](#), Solari Crisis and Human Services
- [The Rehousing Data Collective Public Dashboard](#), Massachusetts Executive Office of Housing and Livable Communities
- For additional state examples, see [Data Sharing Resources for Health and Housing Partnerships](#), National Academy for State Health Policy

Others

- [Breaking Down Silos: How to Share Data to Improve the Health of People Experiencing Homelessness](#), California Health Care Foundation
- [Consensus Standards on Social Determinants of Health](#), Gravity Project
- [Data Sharing Resources for Health and Housing Partnerships](#), National Academy for State Health Policy
- [How to Share Data: A Practical Guide for Health and Homeless Systems of Care](#), Center for Health Care Strategies
- [Involving Community Partners in Data and Policy Initiatives to Advance Health Equity](#), Center for Health Care Strategies

- [SDOH & Health Equity: Where Standards & Technology Meet Community](#), HL7
- [Social Care Co-Design Final Report, Gravity Project](#), Civitas, HealthBegins
- [Social Care Domain Requirements: Basic Principles and Referral for Further Assessment Use Case](#), Direct Trust

Reference

Woodsby, A. 2024. Fundamentals of Operationalizing State Data Goals. Presentation at Housing, Health and Social Care Conference.

<https://acl.gov/HousingAndServices/advancing-partnerships-conference>