Advancing Sustainable Improvements in Population Health: Integrating Population Health into State-Wide System Transformation

A Roadmap for States

Prepared by the National Governors Association
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**Purpose of the Roadmap**

This roadmap was developed, with input from national, state, and federal experts, to help state leaders integrate population health into the design and implementation of health system transformations.

States are already working to improve health, improve quality of care, and reduce costs through multiple initiatives. Some of the steps in this roadmap may overlap with efforts currently underway. The tool is designed so that a state may use all or portions of the roadmap as it applies to their unique situation. States may consider revisiting the tool as health systems evolve and new opportunities emerge. For additional information about the roadmap contact Sandra Wilkniss at swilkniss@nga.org.

**Defining Population Health**

The term “population health” is used in a number of ways and a clear definition is essential to successful policy and delivery system reform efforts. For the purposes of this resource, population health is defined as the health outcomes of a group of individuals within a defined geographic area, including the distribution of such outcomes within the group. Population health outcomes are the product of many determinants of health, including medical care, public health, genetics, behaviors, social factors, and environmental factors.

The ways to achieve population health can vary. Population health strategies can include traditional clinical approaches, innovative patient-centered care, and community-wide interventions for health improvement. Experts suggest that the greatest improvements in population health can be achieved when these strategies are utilized in coordination with stakeholders and address multiple factors contributing to health, including social and environmental factors.

The following is an example of a population health approach, with a prevention focus, for a person with asthma, who lives with someone who smokes in a home with mold and ventilation problems:

<table>
<thead>
<tr>
<th>Traditional Clinical</th>
<th>Patient-Centered Care</th>
<th>Community-Wide Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Diagnosis</td>
<td>• Home visit by community health worker</td>
<td>• Community standards on housing</td>
</tr>
<tr>
<td>• Treatment action plan</td>
<td>• Assess triggers and counsel patient</td>
<td>• Limits to indoor/outdoor pollutants</td>
</tr>
<tr>
<td>• Medication management</td>
<td>• Refer to community services (for example, mold removal)</td>
<td>• Reductions in smoking rates</td>
</tr>
<tr>
<td>• Clinical guidance</td>
<td>• Prioritize and incentivize innovative approaches (for example - community health workers)</td>
<td>• Channel resources to community-wide health efforts</td>
</tr>
</tbody>
</table>
| • Incentivize immunizations and screenings to reduce complications

*(Example taken from a presentation by John Auerbach, Associate Director for Policy, Centers for Disease Control and Prevention)*
Overview: Integrating Population Health into State-Wide System Transformation

1. Get Smart on Existing Transformation Landscape and Set Vision for Population Health
2. Set Priorities and Lay Foundation for Integration
3. Execute on Priorities and Move from Health Care to Health
Step 1: Get Smart on Existing Transformation Landscape and Set Vision for Integration (3-6 months)

**Identify Transformation and Financial Levers and Conduct High-Level Data Scan**
Take inventory of state health transformation efforts, financial mechanisms, high-level data that present opportunities and intel for integration of population health approaches.

**Identify or Create Population Health Integration Team**
Designate integration team that owns development and execution of a strategic plan for population health integration.

**Ensure Key Decision Makers Are Involved**
Integration team identifies key decision makers to review and validate transformation levers and provide preliminary high-level priorities for integration.

**Connect with Priority Stakeholders and Set Vision**
Integration team convenes priority stakeholders to assess current environment, determine status of current efforts, and establish a clear vision for integration, considering high-level priorities.

Identify staff to review:
- State Health Improvement Plan
- SIM+ Plan
- Medicaid authorities
- Contracting authorities
- Traditional health system payments
- Incentive/disincentive payments
- Braiding/blending flexibility
- Financing mechanisms
- High-level, publically available data
(See Appendix A for list of transformation/financial levers and data sources.)

Compose, or draw from existing personnel, a population health integration team with direct report to cabinet level officials (determine FTEs’ needed)
Use inventory to inform team composition
Identify team lead who is engaged in state health reform, and who has:
- Visibility over all state transformation work; and
- Ability to elevate key issues to ultimate decision makers.

Identify and engage key decision makers to:
- Familiarize them with population health effort
- Obtain their high-level priorities
Key decision makers may include:
- SIM+ Lead
- Public Health Lead
- Medicaid Director
- Secretary of Corrections
- Secretary of Education
- Secretary of Housing
(See Appendix A for more comprehensive list of key decision makers.)

Hold meetings (e.g., 2-5) with priority stakeholders to:
- Determine position on continuum from acute to community-integrated health care (Halfon 1.0, 2.0, 3.0*)
- Identify major state-specific challenges related to political environment, cultural competency, etc.
- Develop a vision statement to guide priority setting (1, 2, 5-10, and 20+ year time horizons)
(See Appendix A for list of priority stakeholders.)

Outputs:
1. Transformation levers identified
2. Vision for population health integration established
   - Informed by current state landscape
   - Shaped by key decision makers and priority stakeholders
   - Owned by population health integration team

*See Appendix C for a glossary of acronyms, terms, and concepts.
Step 2, Set Priorities and Lay Foundation for Integration (1 year)

- Determine Priorities
- Set Goals and Map Priorities to Existing Efforts
- Set Objectives and Identify Infrastructure Gaps
### Step 2, In-Depth: Set Priorities and Lay Foundation for Integration (1 year)

#### Determine Priorities
**(Owner: Integration Team; Timeframe: 4 months)**

1. **Analyze data to understand specific population health needs in the state**
   - Collect and analyze data *(see Appendix B for types of data)*
   - Vet data insights with key stakeholders for reliability
   - Map data insights to evidence base for viable interventions, assess ROI* and time horizons, looking at all sources

2. **Garner priority stakeholder input on needs, feasible solutions, existing initiatives**
   - Hold meetings (e.g., 2-3) with priority stakeholders and neutral/trusted experts to interpret data insights, review evidence base, and inform priorities (including frank discussion on feasible solutions, existing initiatives, and tradeoffs)
   - Priority development should consider the development of a balanced portfolio* that includes short, medium, long-term, and legacy priorities and financial levers

3. **Set concrete priorities for population health integration that allow for achievement of vision, align needs and feasible solutions, and build on innovations**
   - Establish list of 3-5 priorities for population health

4. **Establish a communications plan for engagement around priorities**
   - Build from or align as appropriate with existing communications strategies

#### Set Goals and Map Priorities to Existing Efforts
**(Owners: Integration + Project Teams; Timeframe: 4 months)**

1. **Set specific goals for each population health integration priority**
   - Stratify goals by short (1-2 years), medium (3-5 years), long-term (10+ years), and legacy (20+ years) scope

2. **Determine which transformation and finance effort(s)/instruments will serve as vehicles for achieving those goals (SIM*, SHIP*, Medicaid, state employee coverage, etc.**)

3. **Assign leadership roles and build project teams around goals**
   - Determine how additional work can flow through current governance structures/project teams (e.g. Medicaid director empowers team to change MCO* contract requirements)
   - Adjust project teams to meet goals and achieve cross-sector/agency collaboration (include all relevant state agencies and/or private sector/community partners)

4. **Establish accountability for population health goals**
   - Assign leads from project teams to meet quarterly to ensure alignment across initiatives
   - Build on or establish processes for performance monitoring, reporting, and quality improvement

5. **Partner with key stakeholders**
   - Share common goals publicly to develop buy-in and establish collective accountability

#### Set Objectives and Identify Barriers and Opportunities
**(Owners: Project Teams; Timeframe: 4 months)**

1. **Determine objectives and assess feasibility with priority stakeholders, consider the following areas:**
   - Legal/regulatory issues
   - Contracts/agreements
   - Payment and financing arrangements (considering balanced portfolio* and bridge funding)
   - Quality and accountability metrics
   - Information technology

2. **Revise objectives based on feasibility**

3. **Identify resource gaps and potential solutions in the following areas:**
   - Workforce
   - Information technology/data exchange
   - Measurement and evaluation

4. **Identify missing links across sectors, government (state, county, local), and community**
   - Assess need for new linkages based on objectives and gaps (e.g., state government and community integrator)

   *See Appendix C for glossary of acronyms, terms, and concepts*
Step 3, High-Level: Execute on Priorities/Move From Health Care to Health (1 – 5 years)

Priorities, Goals, Objectives

1. Develop Work Plan
2. Implement Plan
3. Monitor and Evaluate
Step 3, In-Depth: Execute on Priorities/Move From Health Care to Health (1 – 5 years)

Develop Work Plan
(Owners: Project Teams; Timeframe: 3 months)

1. Develop a work plan or identify an existing vehicle (e.g. SHIP+ and PHIP+) from which an actionable work plan can be developed to achieve defined objectives. The plan could include:
   - The specific interventions that will be pursued
   - Payment and financing strategy, with special consideration for:
     - Inclusion of at least one rapid ROI+ element and the analysis of potential medium to long term investments (considering balanced portfolio+)
     - Identification of payment streams that yield little value/reallocation of resources to evidence-based programs
   - Solutions to address critical resource gaps (workforce, IT+, evaluation)
   - Ongoing stakeholder collaboration process across state agencies and public and private sectors
   - A communications plan
   - Clear action steps that drive toward stated objectives, such as:
     - Obtain legal/regulatory approvals (waiver, SPA+, legislative, regulatory)
     - Build infrastructure to support collection and monitoring of quality/shared (or complementary) accountability metrics
     - Negotiate contracts
     - Institute new training program to accommodate shifts in workforce

Continuously Monitor and Evaluate*
(Owners: Integration + Project Teams; Timeframe: 1-5 years)

1. Implement rapid cycle performance monitoring, reporting, and quality improvement strategies
   - Meet regularly (e.g., quarterly) to report on activities and ensure alignment
   - Connect monitoring, reporting, quality improvement strategies to existing framework (e.g. dashboards, assessments, other reporting requirements)

2. Make programmatic adjustments based on evaluation
   - Create a clear set of criteria for program adjustment, such as:
     - Are proxy measures/objectives/quality and accountability metrics being met?
     - Are there emerging best practices that should be incorporated into objectives and work plans?
     - Is the workload manageable and sustainable?

3. Consider scalability and spread of projects as core component of review process
   - Example: Citywide asthma management pilot program demonstrates a 30% reduction in ED+ visits for the intervention population and has a 2:1 ROI+
     - Expand pilot program to all urban areas and consider adaptations to implement a similar pilot in a rural area

*Monitoring and evaluation should take place continuously over the course of implementation.

Priorities, Goals, Objectives

*See Appendix C for a glossary of acronyms, terms, and concepts.
Examples of Possible Work Plan Deliverables Across Various Stages of State Transformation: Early Stage

1.0* Acute Care System
- Care coordination payment for Medicaid, Medicaid MCO*, state employee coverage
- Align existing needs assessments to avoid duplication and help draw attention to common goals

2.0 Coordinated Health System
- Medicaid reimbursement for community health workers, allowing a broad range of services
- Population health scorecard/dashboard

3.0 Community-Integrated System
- New financing methods to advance evidence-based population health interventions (SIBs*, etc.)
- Engage with community coalitions

Example of possible deliverables for a state in early stage of system transformation and population health integration.

*See Appendix C for glossary of acronyms, terms, and concepts
Examples of Possible Work Plan Deliverables Across Various Stages of State Transformation: Intermediate Stage

1.0* Acute Care System
   - Incorporation of population health data in sharing and interoperability efforts (e.g. HIE+)
   - Incorporation of population health measures* in Medicaid, MCO+ contracts, and state employee plan contracts
   - Coordinate non-profit hospital needs assessments and other needs assessments (e.g. transportation and housing) to guide uniform approach to community need

2.0 Coordinated Health System
   - Build payment mechanisms into risk-based contracts with providers to incentivize inclusion of community-level population health measures (e.g. obesity)
   - Build payment mechanisms into risk-based contracts with providers to incentivize inclusion of community-level population health measures (e.g. obesity)
   - Common accountability metrics across sectors (e.g., education, health, and housing) used to inform policy priorities and resource allocation

3.0 Community-Integrated System
   - Common accountability metrics across sectors (e.g., education, health, and housing) used to inform policy priorities and resource allocation
   - Coordinate non-profit hospital needs assessments and other needs assessments (e.g. transportation and housing) to guide uniform approach to community need

*See Appendix B for examples of population health measures
* See Appendix C for glossary of acronyms, terms, and concepts

Example of possible deliverables for a state in intermediate stage of system transformation and population health integration.
Examples of possible work plan deliverables across various stages of state transformation: Late Stage

1.0* Acute Care System

- “Health in all policies” approach across sectors (e.g. education, health, and, housing), including common accountability metrics to inform policy priorities and resource allocation

2.0 Coordinated Health System

- Sustainable funding strategy includes flexibility to braid/blend* funds (e.g., Medicaid pays for supportive housing)

3.0 Community-Integrated System

- Test use of community integrators under Accountable Communities of Health or similar models

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*See Appendix C for glossary of acronyms, terms, and concepts

Example of possible deliverables for a state in late stage of system transformation and population health integration.
Appendix A

1. **Transformation and Financial Levers.**
   - **Medicaid authorities.** Section 1115 Demonstrations (including Delivery System Reform Incentive Payment), Section 1915(a) Voluntary Managed Care, Section 1915(b) Mandatory Managed Care, Section 1915(c) Home and Community Based Services (HCBS), Section 1915(i) HCBS State Plan Option, Section 1915(j) Self Directed Personal Assistance Services, Section 1915(k) Community First Choice, Section 1932(a) State Plan Amendment, Section 1937 Benchmark/ Benchmark-Equivalent Benefit Plans, Section 2703/1945 Health Home State Plan Option.
   - **Contracting.** Medicaid, state employee plan, other payers.
   - **Traditional health system payments.** Fee-for-Service (FFS), bundled payments, partial capitation, full capitation, global payments.
   - **Incentive/disincentive payments.** Pay-for-Performance (P4P), Value-Based Purchasing (VBP), shared savings/risk.
   - **Financing mechanisms.** State general revenue/dedicated state pools, federal waivers and state plan options (Designated State Health Programs, Delivery System Reform Incentive Payment, Intergovernmental Transfers, Certified Public Expenditures), provider taxes, administrative claiming, grants, community benefit, Community Development Financial Institutions (CDFI), Pay for Success (PFS)/Social Impact bonds (SIB).
   - **State/regional planning.** Economic development, housing, transportation, zoning.

2. **High-level, publically available data.** Health Indicators Warehouse (CDC), Healthy People 2020/DATA2020 (ODPHP), America’s Health Rankings (UnitedHealth), County Health Rankings & Roadmaps (RWJF).

3. **Key Decision Makers.** Governor’s Health Policy Advisor, Insurance Commissioner, Medicaid Director, Public Health/SHIP Lead, Secretary of Administration/Lead for Employee Benefits, Secretary of Corrections, Secretary of Economic and Community Development, Secretary of Education, Secretary of Health, Secretary of Housing, Secretary of Human/Social Services, Secretary of Transportation, SIM Lead, State Lead for American Indian Services, Tribes.

4. **Priority Stakeholders.** Key decision makers (see above), consumers, federal government, county and local government, commercial payers, providers, business community/private entities.
Appendix B

1. **Types of data**. The following are examples of the key data sources your state may consider reviewing in order to determine priorities for population health integration.
   - **Claims data (medical and behavioral health)**. Medicaid claims data, Medicare claims data, state employee claims data, all-payer claims data.
   - **Needs assessments**. Community development needs assessments, hospital community health needs assessments, local health departments’ community health assessments, transportation needs assessments.
   - **National-level data sources**. Chronic Conditions Data Warehouse (CMS), Medical Expenditure Panel Survey (AHRQ), VitalStats (CDC).
   - **State-level data sources**. Behavioral Risk Factor Surveillance System (CDC), CDC Sortable Stats, Scorecard on State Health System Performance (Commonwealth Fund), Trust for America's Health State Data, State Health Facts (Kaiser Family Foundation), State Snapshots (AHRQ).
   - **County- and local-level data sources**. Area Resource File (HRSA), Community Health Needs Assessment (IP3), Community Health Status Indicators (CDC), Consolidated Planning Data (HUD), County Health Calculator (Virginia Commonwealth University), SMART: BRFSS City and County Data (CDC), County Health Rankings (RWJF), Homeless Management Information Systems (HUD), electronic medical and behavioral health records.

2. **Population health measures**. The following are population health measures your state may consider incorporating into Medicaid, MCO contracts, and state employee plan contracts.
   - High school graduation rates, childhood poverty rates, air quality index, community walkability, access to healthy foods, childhood immunization rates (Institute of Medicine, *Vital Signs: Core Metrics for Health and Health Care Progress*)

Please consult the following resources for a robust list of data sources:
*Partners in Information Access for the Public Health Workforce* [http://phpartners.org/health_stats.html];
Appendix C

Glossary – Acronyms, Terms, and Concepts

• **Balanced Portfolio**: A portfolio of interventions that is balanced in terms of time frames, investment risk, and scale of return as described by Jim Hester, et al in: *Towards Sustainable Improvements in Population Health: Overview of Community Integration Structures and Emerging Innovations in Financing*, CDC Health Policy Series, No. 2 published in 2015.

• **Blended Funding**: Blending funding involves combining multiple funding streams into one "pot" to pay for a single initiative or program. When funds are blended there is no need to track which funding stream paid for exactly which expense.

• **Braided Funding**: Braided funding involves multiple funding streams utilized to pay for single initiative or program. When funds are braided they are never fully combined (as opposed to blended funds) and therefore require careful accounting of how each funding stream is spent in order to report to funders.

• **ED**: Emergency Department

• **FTE**: Full-Time Equivalent Employee

• **Halfon 1.0, 2.0, 3.0**: The three-stage evolution of the health care delivery system developed by Neal Halfon, et al and published in *Health Affairs* in November 2014: *Applying A 3.0 Transformation Framework To Guide Large-Scale Health System Reform*.

• **HIE**: Health Information Exchange

• **IT**: Information Technology

• **MCO**: Managed Care Organization

• **PHIP**: Population Health Improvement Plan

• **ROI**: Return on Investment

• **SHIP**: State Health Improvement Plan

• **SIB**: Social Impact Bond

• **SIM**: State Innovation Model

• **SPA**: State Plan Amendment
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