



# A Sustainable Financial Model for Improving Population Health

---

NNPHI:  
Leading Change Through Innovative Solutions  
May 20, 2014

**Jim Hester**





**CHAOS – Where Brilliant Dreams Are Born™ – I CHING IMAGE™, image #3**

*Before the beginning of great brilliance, there must be Chaos.*

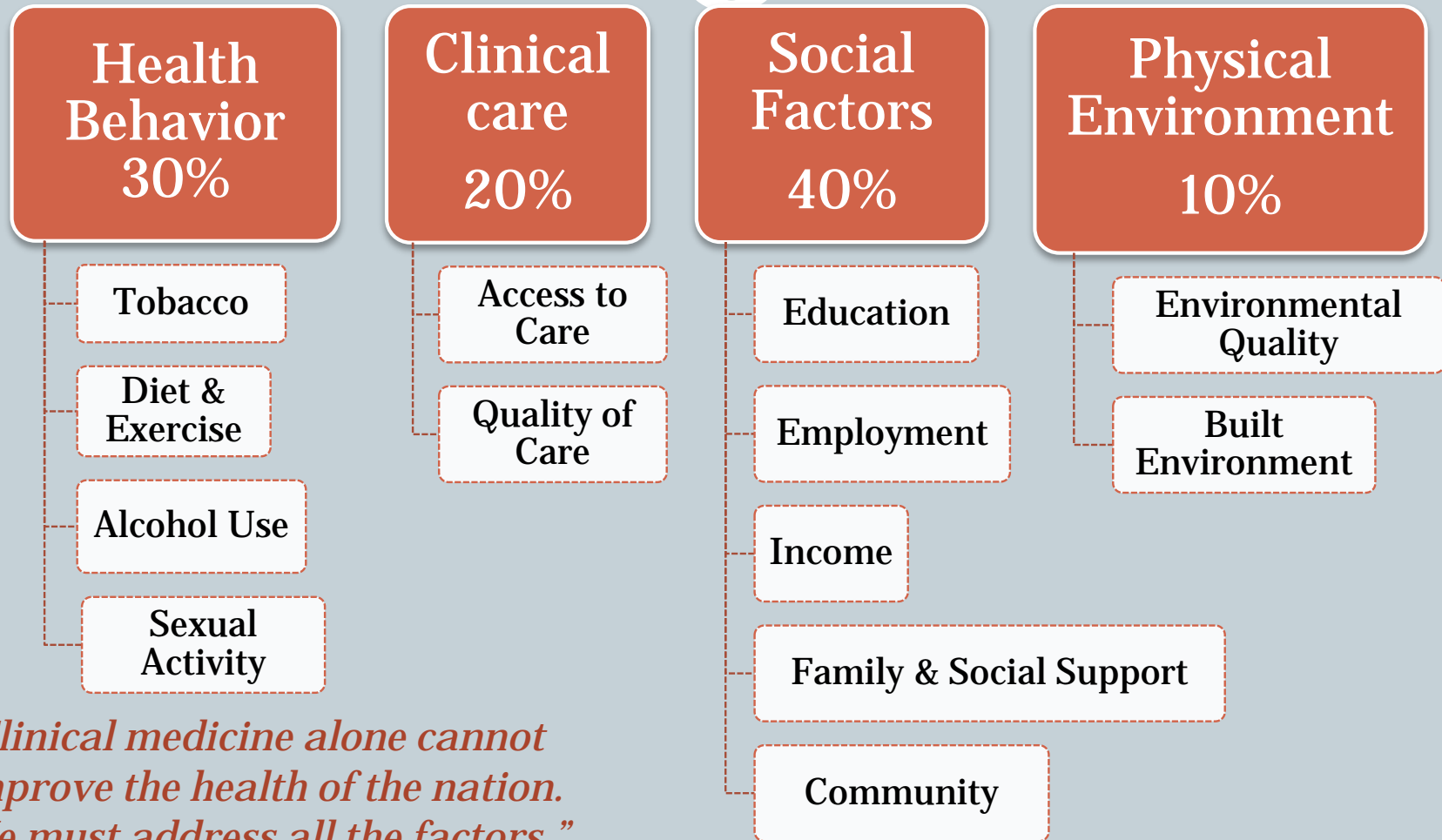
*Before a brilliant person begins something great, they must look foolish to the crowd.*

# What's the Problem?

Example: St. Albans VT presentation to SIM population health workgroup 5/13/14

- Broad based community coalition led by Northwestern Medical Center
- Clear understanding of determinants of health
- Data driven needs assessment
- Clear measureable goals

# Factors Affecting Health Outcomes



*“Clinical medicine alone cannot improve the health of the nation. We must address all the factors.”*

# Focusing Our Efforts



- ❖ The Committee used Results Based Accountability (RBA), data, and evidence-based practice to identify key outcomes:
  - ❖ Increase the overall health of residents by decreasing the percentage of **overweight and obese** individuals;
  - ❖ Expand resources for **biking and walking**;
  - ❖ Increase the number of **employers offering a wellness program** in which greater than 50% of the employees participate.
- ❖ The Committee has done research on evidence-based best practices to guide our strategy.

# The Dream: A Solution That

- Implements multiple interventions with widely varying timeframes and options for funding
- Manages the process over extended period of time
- Provides a transition to sustainable funding from short term start up grants

# Theme

- The health care system is transitioning from payment rewarding volume to value based on the Triple Aim
- This could enable more sustainable funding for improvements in population health by tapping both payment streams and new sources of capital.
- A sustainable model will include a community health system integrator and a balanced portfolio of interventions financed by diverse funding vehicles
- However, key building blocks are missing and need to be developed rapidly before the window of opportunity closes

# Outline

- ✓ Integrating population health into delivery system reform
- ✓ Improving health: theory of action
- ✓ Components of a sustainable model
  - ✓ Community Integrator
  - ✓ Building and managing a portfolio
- ✓ Case Study: Vermont
- ✓ Seizing the opportunity



# I. Integrating Population Health into Delivery System Payment Reform

- ✓ Strategy
- ✓ Status
- ✓ Challenges

# Why Delivery System Reform?

## Goal:

Access to affordable, quality health care for all

## Issue:

Performance of existing system results in unsustainable costs

## Approach:

*Transformation* of the current system to achieve and reward the Triple Aim outcomes

New aligned payment model is a necessary but not sufficient condition for transformation

# US Health Care Delivery System Evolution

## Health Delivery System Transformation Critical Path

### Acute Care System 1.0

Episodic Non-Integrated Care

- Episodic health care
- Lack integrated care networks
- Lack quality & cost performance transparency
- Poorly coordinated chronic care management

### Coordinated Seamless Healthcare System 2.0

Outcome Accountable Care

- Patient/person centered
- Transparent cost and quality performance
- Accountable provider networks designed around the patient
- Shared financial risk
- HIT integrated
- Focus on care management and preventive care

### Community Integrated Healthcare System 3.0

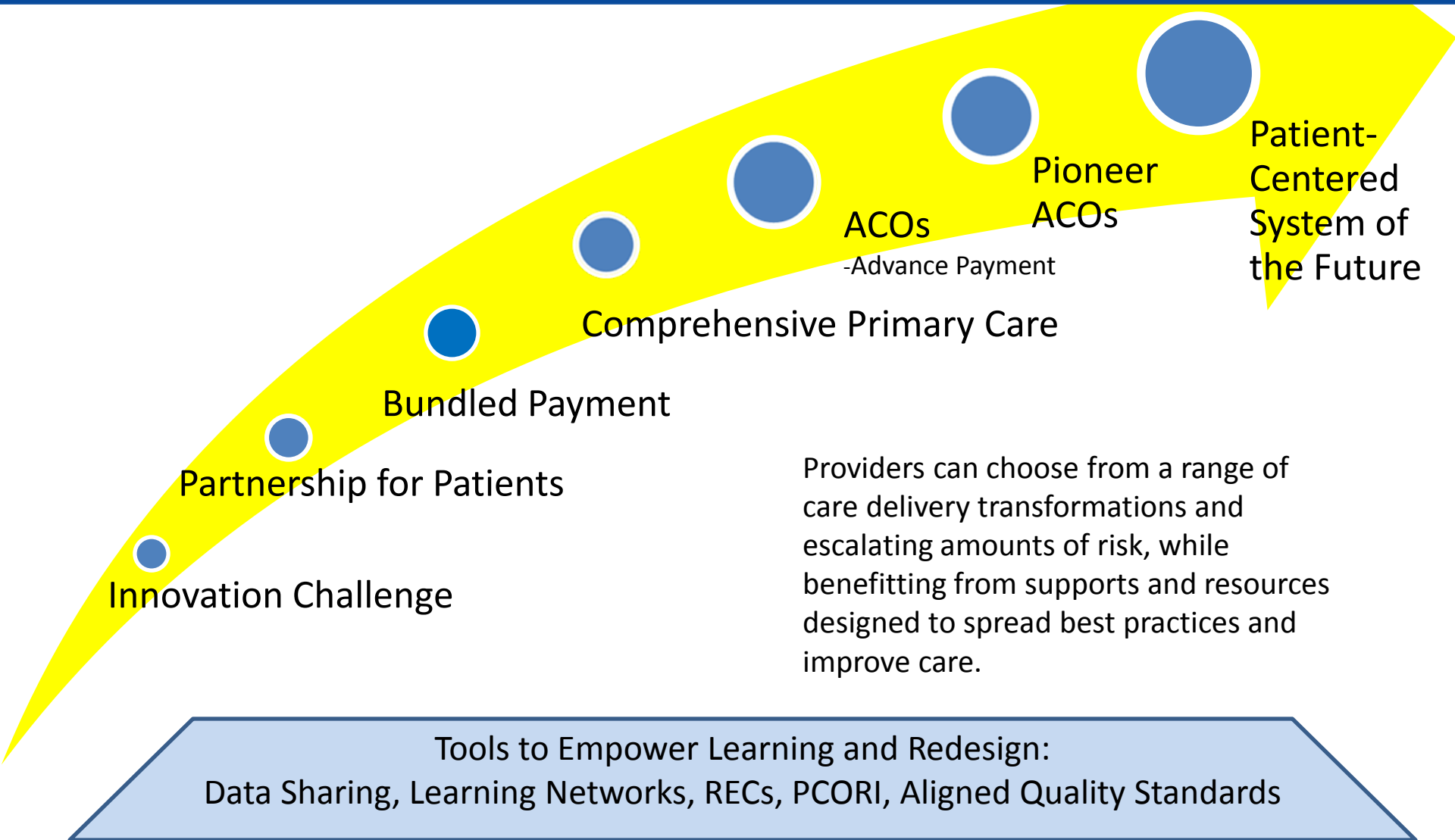
Community Integrated Healthcare

- Healthy population centered
- Population health focused strategies
- Integrated networks linked to community resources capable of addressing psycho social/economic needs
- Population-based reimbursement
- Learning organization: capable of rapid deployment of best practices
- Community health integrated
- E-health and telehealth capable

# Measures of Success

- Better health care:** Improving patients' experience of care within the Institute of Medicine's 6 domains of quality: *Safety, Effectiveness, Patient-Centeredness, Timeliness, Efficiency, and Equity.*
- Better health:** Keeping patients well so they can do what they want to do. Increasing the overall health of populations: address behavioral risk factors and focus on preventive care.
- Lower costs through Improvement:** Lowering the total cost of care while improving quality, resulting in reduced expenditures for Medicare, Medicaid, and CHIP beneficiaries.

# ***Delivery Transformation Continuum***



# State Innovation Models

6 testing states and 19 design states

**State Health Care Innovation Plans:** refers to a document that describes a broad array of transformative strategies with the focus on:

1. Comprehensive delivery system redesign and payment reform.
2. Strategies to integrate community- based healthy living interventions that improve population health.
3. Transformation of the health care payment model to reward for continuous improvement and value based health outcomes containing the total cost of care.

# Providers Are Driving Transformation

- More than 50,000 providers are providing care to beneficiaries as part of the Innovation Center's current initiatives
- 488 ACO's: doubled in last year (253 Medicare ACOs)
- More than 5 million Medicare FFS beneficiaries are receiving care from ACOs
- More than 1 million Medicare FFS beneficiaries are participating in primary care initiatives

# Status: Growing Opportunity

- Broad diffusion of language supporting better health for populations
- New payment models being tested at scale
- Signs of payers aligning in initial regional markets, e.g., Comprehensive Primary Care Initiative
- **BUT**, delivery system evolution lags rhetoric, with broad distribution across Halton's scale
  - A very few exploring path to 3.0



# Challenges for Population Health Financial Models

- Other dimensions of value have a long history in payment models
  - Interventions better understood
  - Measures and instruments developed
  - Accountability more clear cut
- Tasks of transforming to managing total cost and patient experience are all consuming
- Population health business case is complex and involves impacts from multiple sectors over extended times
- Confusion between quality of care and population health

# Threats

Payment models for population health in early stage

- Population health traditionally funded by grants
- Infrastructure and tools for population health are not well developed.
  - Analytic models for projecting long term impacts
  - Evidence for business case – fundamentally different from impact on risk factors (CMS vs. CDC)
  - Robust measures for learning, accountability and payment
- Risk: new payment models will be established with no meaningful population health component

## II. Improving Population Health

- ✓ Determinants of health model
- ✓ Strategy

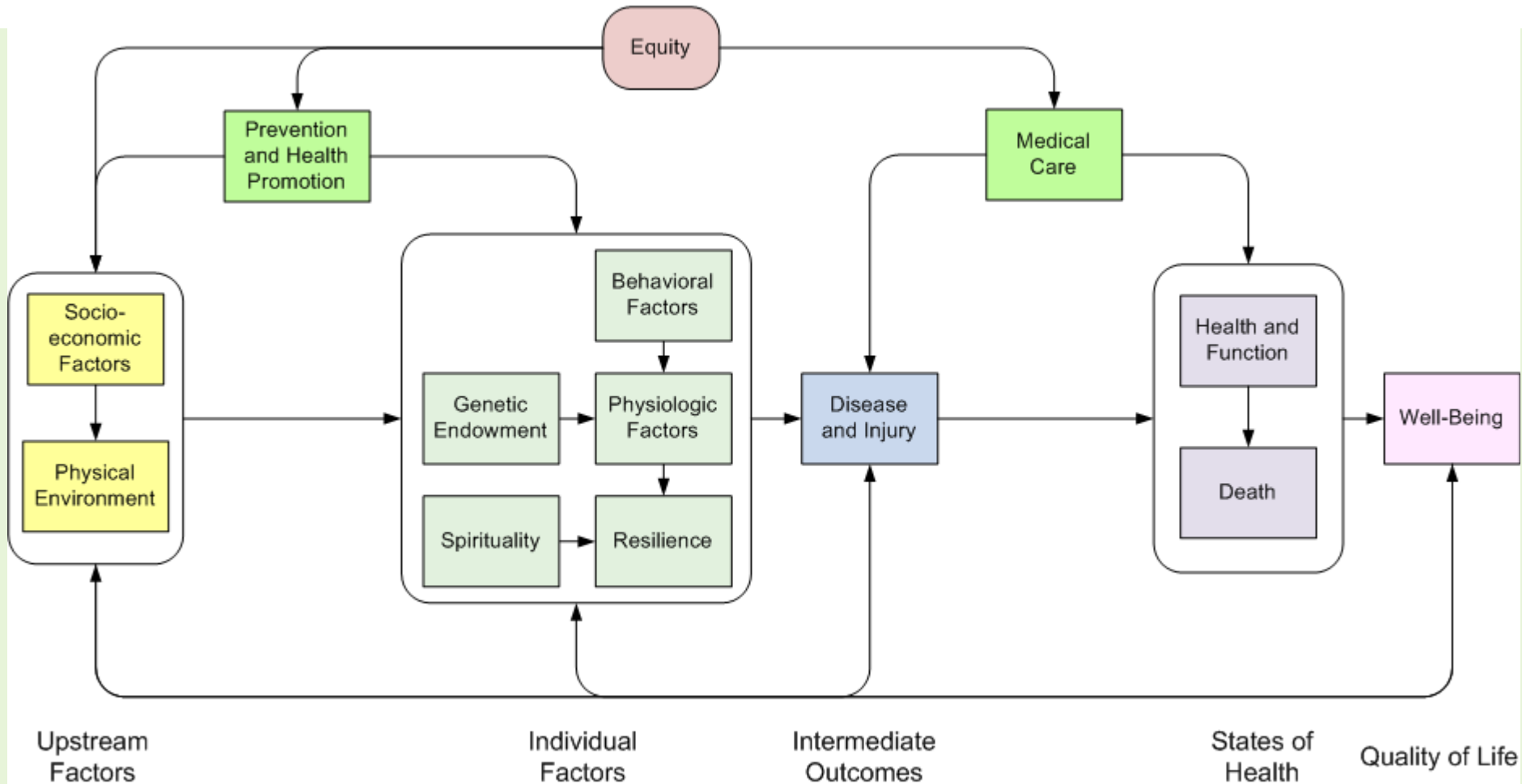
# Definitions

- Public health refers to programs and infrastructure, i.e., the means
- Population health refers to the outcome of improved longevity and quality of life

*Population health is the health outcomes of a group of individuals, including the distribution of such outcomes within the group... It is understood that population health outcomes are the product of multiple determinants of health, including medical care, public health, genetics, behaviors, social factors and environmental factors.*

IOM Roundtable on Improving Health 2013

# Population Health



M Stiefel 11/14/2011

# Theory of Action

- Multiple levels of action: practice, community, region/state, federal
- Integration at community level of clinical services, public health programs and community based interventions
- Balanced portfolio of interventions with
  - full spectrum of time horizons
  - different degrees of evidence (critical to include tests of innovations)



# Theory of Action (cont.)

- Address need for both operating revenue stream and capital for infrastructure development
- Multi-sector investments and benefits
- Capture portion of savings/benefits for reinvestment for initial sustainability
- Tap into innovative sources of capital

# III. Key Components of Sustainable Financial Model

- ✓ Overview of growing inventory of innovative financing vehicles
- ✓ Building a balanced portfolio of interventions
- ✓ Community level structure:  
Community Health System



# Inventory of Financing Models

- Payment for clinical services- (2.0 based)
  - Global Budget/Capitation
  - Shared savings
  - PMPM care coordination fee modified by performance
- Multi-sector programs
- Other funding sources

# Inventory of Financing Models

- Multi-sector programs
  - Blended: comingled
  - Braided: coordinated targeting
  - Medicaid/Medicare waiver:
    - TX 1115 for social determinants of health
    - MD global hospital budget

# Inventory of Financing Models

## Other funding sources

- Hospital community benefit
- Community development, e.g., CDFI
- Social capital, e.g., social impact bonds
- Foundations: Program Related Investments (PRI)
- Prevention/wellness trusts

**Issue: fragmentation, lack of coordination**

IOM Roundtable on Pop Health 2/2014

# Model: Charitable Hospital Community Benefit

- Payment mechanism: how does it work
  - 3000 tax exempt hospitals/systems must file an annual report (schedule H) of their “community benefit” with IRS.
  - \$15-20B federal/state/local tax exemption benefits
  - Heavy accounting for ER-based charity care/Medicaid losses
- Time frame: Annual –linked at IRS reporting on community health needs assessment
- Risk profile: Low/Medium
- Status: As ACA coverage for current uninsured increases, charity care should decrease, freeing resources for non-clinical investments
- Examples/Resources:
  - Cincinnati Children’s Hospital Community Health Initiative (CHI): Asthma Readmissions/Housing Policy ++
  - Catholic Health Association (900 Hospitals)  
[www.chausa.org/communitybenefit](http://www.chausa.org/communitybenefit)

# Model: Community Development Financing (CDFI)

- Payment mechanism: how does it work?
  - Tied to banks' Community Reinvestment Act compliance
  - Helps structure subsidized financing to community development corporations and other investors for projects in low income areas
  - Heavy emphasis on affordable housing, but moving to support development of community health centers, grocery stores, and other “upstream” areas
- Time frame: Longer term (10-30 years)
- Risk profile: CDFI functions to reduce financial risk for projects
- Status: ~1,000 nationwide, weighted toward urban areas
- Example(s) and resources:
  - The Reinvestment Fund: Pennsylvania Fresh Food Financing Initiative
  - New Jersey Community Capital (NJCC): construction of child care facilities

# Model: Pay for Success or Social Impact Bond

- Payment mechanism: how does it work?
  - Publicly financed program identified with known interventions and proven returns. Capital needed to scale intervention Create investment model for returns based on performance metrics an private investors deliver capital.
- Time frame: Short term (1-3 years)
- Risk profile: Moderate (with experience). Needs risk mitigation and high financial returns to attract capital.
- Status: Started in UK... implemented in social sector. Some uptake in USA in social sector/early in health
- Example(s) and resources:
  - Health Impact Bond (Fresno), asthma—Collective Health LLC/The California Endowment, MediCal program
  - Rikers Island/NYC: recidivism Goldman Sachs/Bloomberg Foundation
  - Utah: early childhood education: Pritzker/Goldman Sachs/United Way

# Building a Balanced Portfolio

No silver bullet – need to

- Build case and close on specific transactions
- Balance portfolio in terms of
  - Spectrum of time horizons for impacts
  - Level of evidence/risk: test innovative interventions
  - Scale
- Aggregate and align revenue streams and capital
- Manage and leverage private and public investment to achieve greater impact

**TABLE 1** Sample Balanced Portfolio for Community Health System

<b>Intervention</b>	<b>Target population</b>	<b>Implementation partners</b>	<b>Financing vehicle</b>	<b>Time frame</b>	<b>Risk/evidence</b>	<b>Savings sharing vehicle</b>
Intensive care coordination	Dual eligible high utilizers	Accountable care organizations	Shared savings	Short	Low risk	Community benefit
Integrated housing-based services	Medicaid eligible, multiple chronic illness	Medicaid managed care plan, housing corporation	Capitation	Short	Low risk	Performance contract
Innovative use of remote monitoring	Medicare eligible, multiple chronic illness	Medicare Advantage Plan, private foundation	Grant	Short	High risk	None
YMCA diabetes prevention program	Commercial insured and self insured	Commercial health plan, self-insured employers	Shared savings	Medium	Medium	Performance contact
Expand early childhood education	Reduce adverse childhood events	Preschool educators	Pay for Success, Social Impact Bonds	Long	Medium	Investing in Social Impact Bond
Community walking trails	Community	Nonprofit hospital	Community benefit	Long	Medium	

Source: Hester, J.A. and P.V. Stange. 2014. *A sustainable financial model for community health systems*. Discussion Paper, Institute of Medicine, Washington, DC. <http://www.iom.edu/Global/Perspectives/2014/SustainableFinancialModel>.



# Community Level Structure: Community Health System



# Building a Community Health System

‘Every system is perfectly designed to obtain the results it achieves.’

## Approach

- System redesign at multiple levels
  - Primary care practice level: Enhanced medical homes
  - Community health system: ‘neighborhood’ for medical home
  - State/regional infrastructure and support e.g. Health IT, multi-payer payment reform
  - National: Medicare participation
- Start in pilot communities

# Structure of an CHS

The CHS is made up of

- Backbone organization for governance structure and key functions
- Intervention partners to implement specific short, intermediate, and long term health-related interventions
- Financing partners who engage in specific transactions



# Key Functions of a CHS

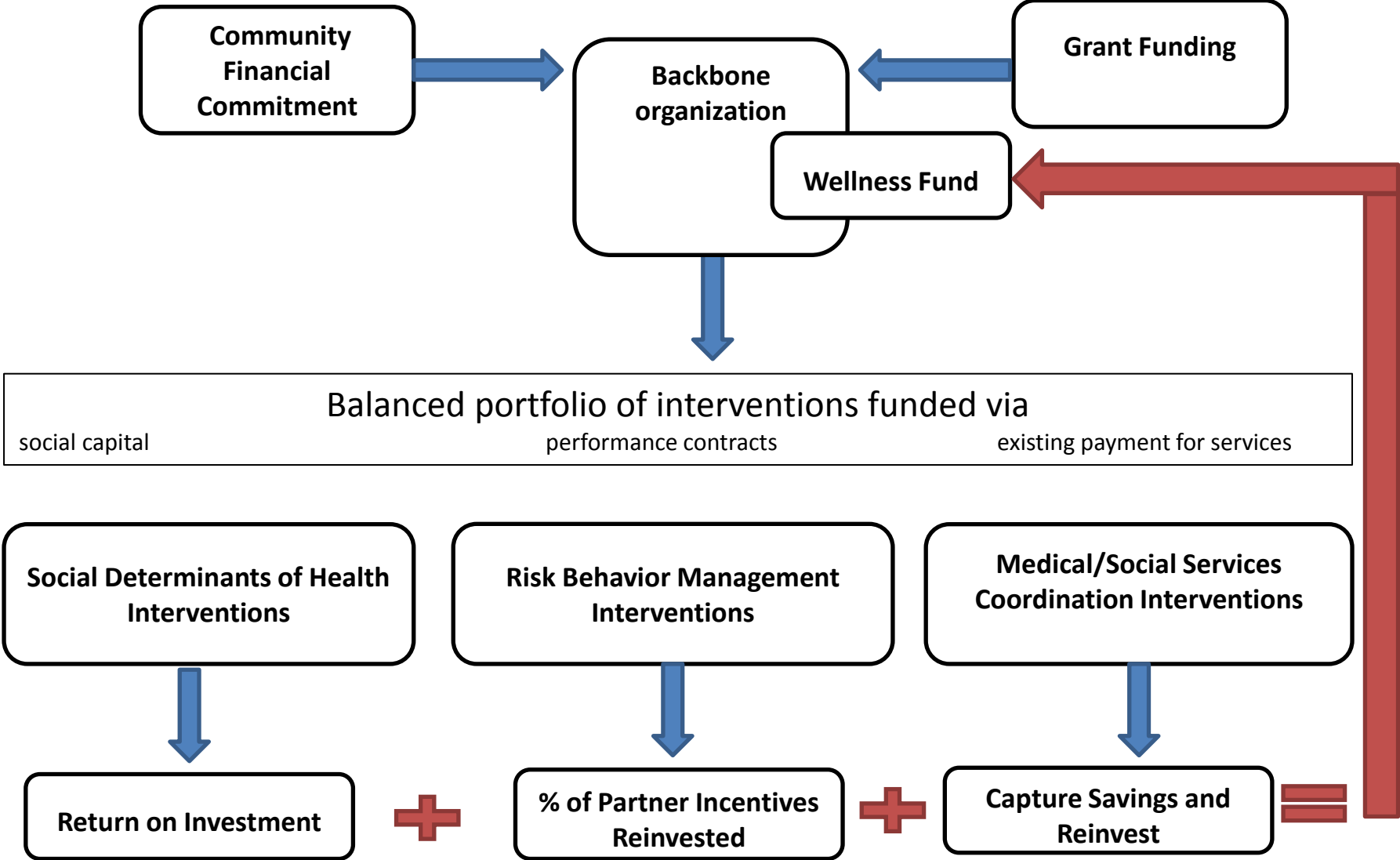
A community centered entity responsible for improving the health of a defined population in a geographic area by integrating clinical services, public health and community services

- Convene diverse stakeholders and create common vision
- Conduct a community health needs assessment and prioritize needs
- Build and manage portfolio of interventions
- Monitor outcomes and implement rapid cycle improvements
- Support transition to value based payment and global budgets
- Facilitate coordinated network of community based services

# CHS: Enhanced Financial Role

- **Oversees the implementation of a balanced portfolio of programs**
- **Uses a diverse set of financing vehicles to make community-wide investments in multiple sectors**
  - **Builds business case for each transaction specific to population and implementation partner: ~ bond issue**
- **Contracts with Intervention partners for short, intermediate, and long term health-related interventions**
- **Measures the "savings" in the health care and non-health sectors and captures a portion of these savings for reinvestment**
- **Supports transition to value based payment**
  - **Potential vehicle for global payments for integrated bundle of medical and social services**

# Backbone Organization's Aggregation and Alignment of Investments and Reinvestments



# Partial Examples

- Akron, Ohio (Accountable Care Community)
- Minnesota (Accountable Health Community)
  - Hennepin Health: Hennepin County
  - SIMs testing award
- ReThink Health communities
  - Atlanta: ARCHI
  - Upper Connecticut River Valley
  - Pueblo, Colorado

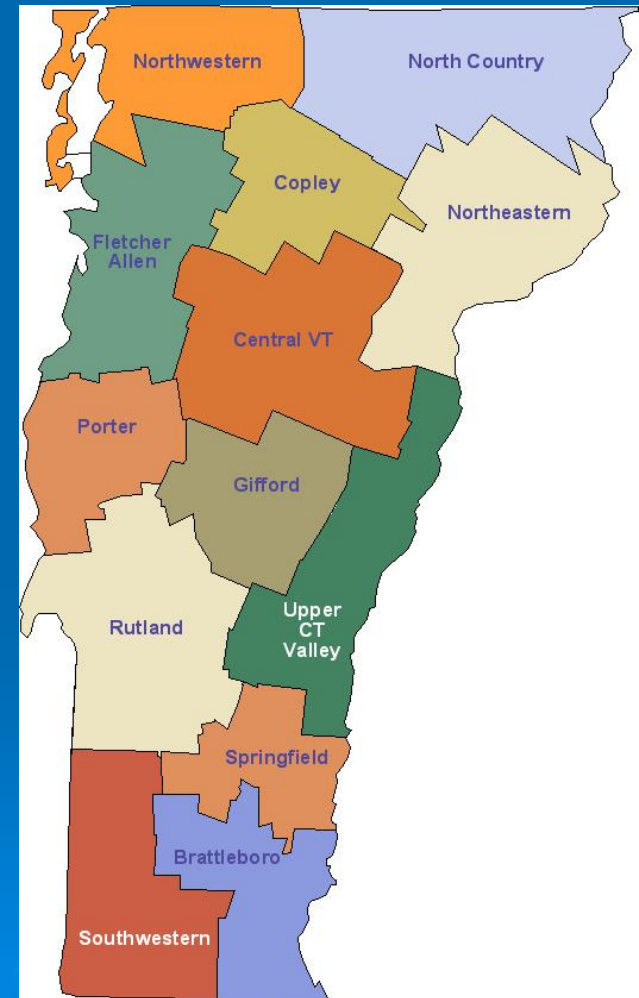
# IV. Case Study: Vermont

600,000 total population

13 Hospital Service Areas  
define 'community  
systems'

Payers: 3 major  
commercial + 2 public

History of collaboration:  
bipartisan and multi-  
stakeholder





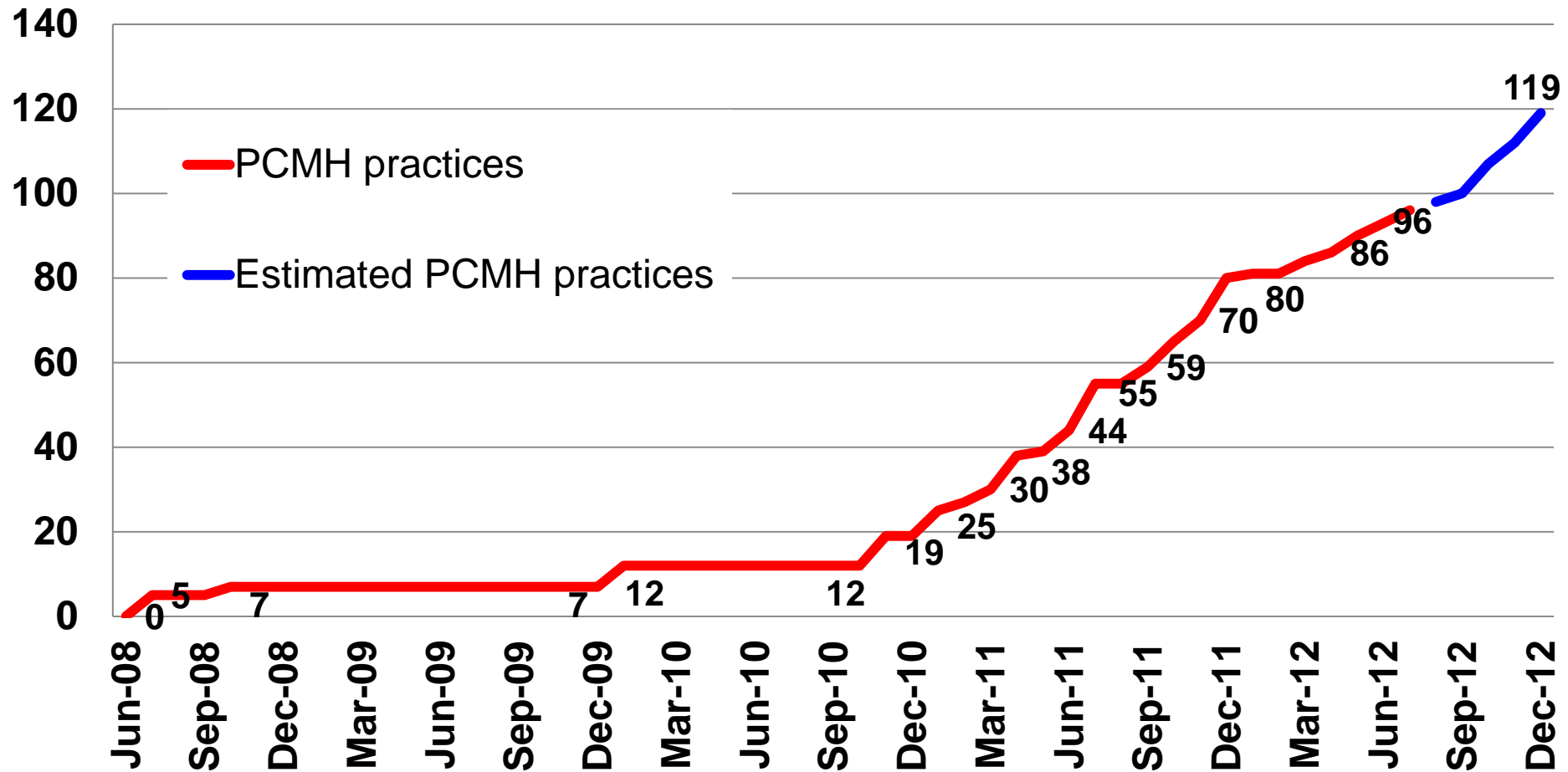
# Vermont's Reform Strategy

1. Coverage expansion (Green Mountain Care 2007): reduction in uninsured to 8%
2. Health IT Fund for HIE and EMR (2008) as catalyst for improved performance
3. Green Mountain Care Board (2010): consolidate state powers
4. Move toward single payer 2017
5. State Innovation Model implementation grant
6. Delivery system reforms spread statewide
  - Blueprint for Health: Chronic illness prevention and care
  - ACO: Statewide (OneCare), ~ 50% of residents

# Blueprint for Health: Building a Primary Care Foundation

- ❑ Advanced Primary Care Practices (PCMHs)
- ❑ Community Health Teams – Core & Extended
- ❑ Multi-Insurer Payment Reforms
- ❑ Health Information Infrastructure
  - Central Clinical Registry
  - Health Information Exchange
  - Evaluation & Reporting
- ❑ Community Self-Management Programs

## Patient Centered Medical Homes # NCQA Recognized Practices in Vermont



# Vermont SIM Grant

## Population Health Workgroup

**Charge:** resource for the other working groups: payment models, performance reporting, service coordination

- ways to incorporate population health principles
- how to contribute toward improving the health of Vermonters

### **Priorities:**

- Measures of population health eg ACO payment and monitoring
- Test innovative financing options for paying for population health and prevention
- Identify and support exemplars of effective community-focused interventions such as St Albans RISE and Rethink Health of the Upper Valley.

## RETHINK HEALTH UPPER VALLEY: SHARED VISION

*“Healthy people, healthy communities.”*

We will be an exceptional place for individuals and families to live, play and work; a region where we individually and collectively recognize and act on our right and responsibility to shape our own health and health care system. To support this vision, **we will develop a sustainable, integrated community-centered health, healthcare and human services system** that makes the Upper Connecticut River Valley a region with:

- (a) the healthiest population;
- (b) timely access to what is needed to be healthy;
- (c) the highest quality, lowest cost health care possible;
- (d) a vibrant, innovative economy; and
- (e) a population engaged in shaping our own health system.

# Provider-Overview Vital Communities Service Area

**Gifford Medical Center**  
 Randolph  
 CAH - 25 Beds  
 Incl. Integrated Nursing Home (Menig)

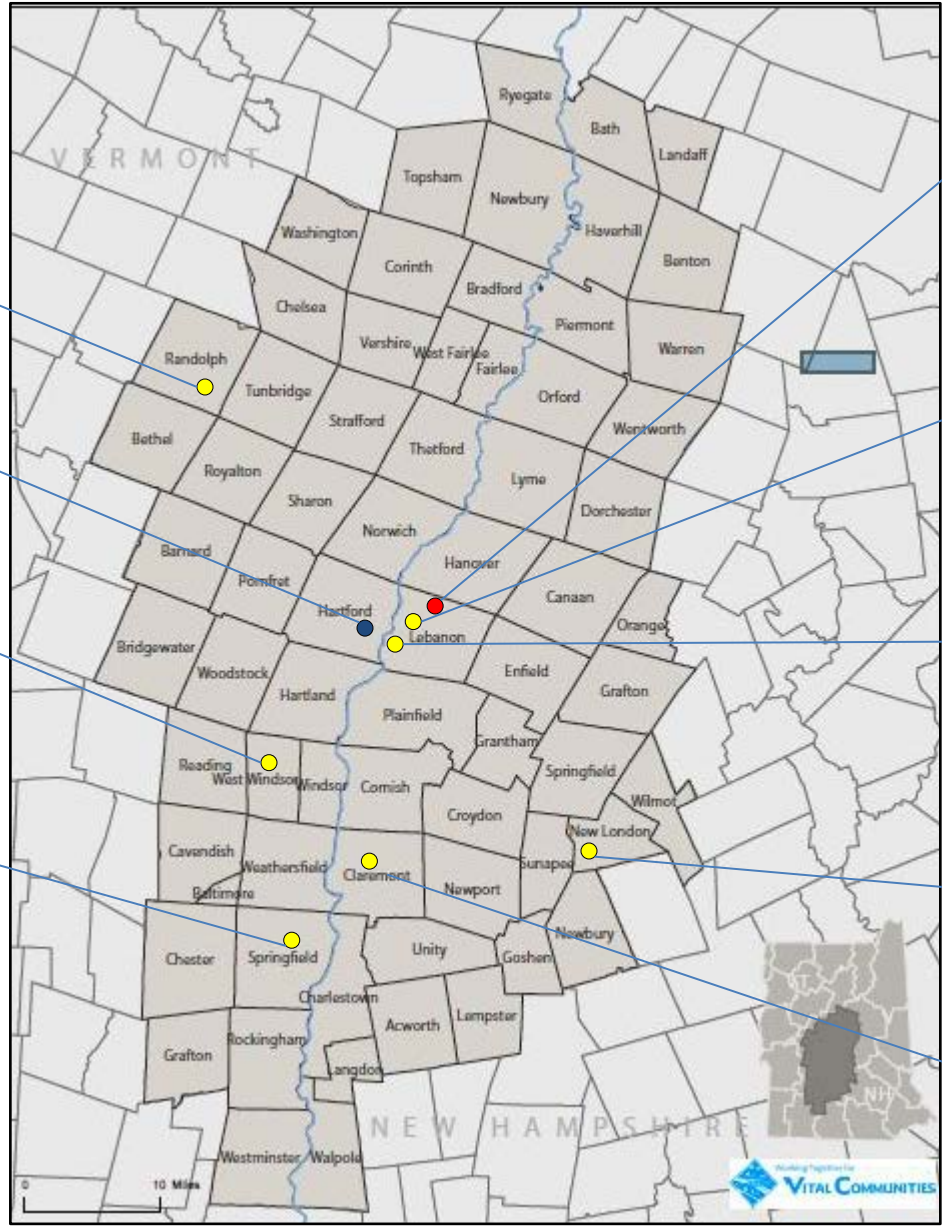
**VA Medical Center**  
 White River Jct./Hartford  
 Veteran's Hospital - 74 Beds

**Mt. Ascutney Hospital & Health Center**  
 Windsor  
 CAH - 25 Beds  
 Incl. Integrated Inpatient Rehabilitation

**Springfield Hospital**  
 Springfield  
 CAH - 25 Beds  
 Incl. 7 Integrated Federally Qualified Health Centers

- **Academic Medical Center**
- **Critical Access Hospital**
- **Veteran's Hospital**

**Population: 185,000**



**Dartmouth-Hitchcock Medical Center**  
 Lebanon  
 AMC (PPS)- 396 Beds  
 Incl. Integrated Ambulatory Surgery Facility

**Alice Peck Day Memorial Hospital**  
 Lebanon  
 CAH - 25 Beds  
 Incl. Integrated Assisted and Independent Living Facilities (Woodlands/Harvest Hill)

**Visiting Nurse & Hospice of Vermont and NH**  
 W. Lebanon  
 Home Health & Hospice  
 Service area 3,300 sq. mi.

**New London Hospital**  
 New London  
 CAH - 25 Beds  
 Incl. Integrated Long-term Care Facility (Clough)

**Valley Regional Hospital**  
 Claremont  
 CAH - 25 Beds

# Strategy

Build a balanced set of initiatives –combining both upstream and downstream interventions as well as balancing focus on specific populations and the entire population

Create a sustainable funding structure for initiatives:

- Identify strategies for reinvesting a portion of healthcare savings upstream in creating a Healthy Community
- Explore using community benefit funds to seed a Wellness Trust

Shift health care payment models to align financial incentives with desired results: Analyze options for

- Transitioning to global health care payment programs and
- Aligning provider incentives with value

Sequence the implementation of initiatives in the context of both short term and long term strategies

# V. Seizing the Opportunity

- ✓ Experimentation and accelerated development
- ✓ Concluding thoughts



# Period of Experimentation to Create

- Working examples of community integrators with enhanced financial competencies
- Successful collaboration with stakeholders with innovative financing vehicles
- Better tools
  - Analytic models for projecting impacts
  - Measures for monitoring, accountability and payment: FFRDC project
- Evidence on financial impact across sectors

# Challenges

- **Timeline: Need to lengthen/reframe time for outcomes**
  - Federal agencies more likely to follow than lead:
    - CMS culture, eg HCIA guidelines
    - Issues around CBO/OMB scoring of waivers
- **Tapping shared savings from medical and other sectors**
  - Link to CHNA for hospitals
- **Creating community Integrator:**
  - Develop financial role of managing balanced portfolio, closing transactions with partners
  - Avoid competing integrator models
- **Collaborating with and adding value to innovative financing sectors**
- **Clash of cultures of major stakeholders: hospital executives, public health officers, CMS operating engine, private investors**

# Some Promising Opportunities for Developing Working Models

- CMS State Innovation Models: 6 testing and 19 design states
- Possible CMS test of models that incentivize lifelong health management eg community Accountable Health Systems (Aspen Institute 9/25/13)
- Way to Wellville contest (HICcup): 5 communities for 5 years
- Advancing Frontiers in Sustainable Financing: ReThink Health/RWJ
- Healthy Base Initiative & Operation Live Well: DOD
- Moving Health Care Upstream: Nemours and UCLA/Kresge

# Moving Health Care Upstream

Nemours and UCLA project funded by Kresge Foundation

**Goal:** The Moving Health Care Upstream Initiative aims to identify, support, and spread innovative health system strategies to improve community health.

**Three networks of 3.0 communities:** 1) Collaborative Innovation, 2) Learning and 3) Interest

**Tactics:**

- Develop and test innovations to identify promising tools and strategies.
- Harness and share best and promising practices for improving community health.
- Catalyze cross-sector stakeholders to spread the adoption of innovative community health delivery strategies.

# Evolving Role for Public Health

- **Major implications for Public health enterprise**
  - More collaborative role likely
  - What is our new value add? How build on known PH strengths?
  - New competencies and tools needed
- **PHI's can play a key role in accelerating the transition**

# What Can PHI's Do?

- Help identify and create initial success stories in community integrators
- Invite stakeholders from innovative finance vehicles to the table: seek them out
- Learn their language and culture
- Identify the new value add/role of public health and facilitate the transition
- Come to the breakout session

# How to Finance Population Health?

A simple question to ask, but one remarkably difficult to answer

We won't get the community health system we need until we learn how to answer it.

*It may be when we no  
longer know what to do,  
we have come to our real work,  
and that when we no longer know  
which way to go,  
we have begun our real journey*

Wendell Berry