Value-Based Purchasing Bootcamp
Addressing Health Risk Factors
An Overview and Roadmap

10 October 2017
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Ruth Ann Norton, President and CEO of the Green & Healthy Homes Initiative, is an expert on health-based housing program design. Ms. Norton leads GHHI’s ground breaking work in over 30 US cities that uses housing as a platform for improved health, economic and social outcomes. The architect of Maryland’s 98% reduction in childhood lead poisoning, she has led the development of numerous action plans including GHHI’s 5 year national Strategic Plan to End Lead Poisoning – A Blueprint for Action (2016) and a lead elimination plan for New Jersey (2017). She has authored 35 pieces of healthy housing legislation, served as a contributor to similar strategic plans for Pew Charitable Trust and the Center for Healthy Housing.

Ms. Norton has crafted numerous policy initiatives with a focus on advancing the role of the Medicaid, energy efficiency, education and philanthropic sectors as investors in healthy housing. An economist by training, Ms. Norton led GHHI to establish its cost benefit analysis practice to demonstrate the business case for scaling interventions that create healthy, safe and energy efficient housing. Honored by the Maryland AAP with its advocacy award, Ms. Norton served as a liaison for the CDC Advisory Committee on Lead Poisoning Prevention and was selected a Robert Wood Johnson Community Health Leader and Weinberg Foundation Fellow.
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Andrew and avid dog-lover and recreational sport enthusiast, who’s favorite type of animal is the non-bear bear.

His work includes health-policy planning and analysis, advanced economic and financial modeling, conducting state-wide medical claims analysis with predictive modeling, and publishing over a dozen works on public health including topics related to sustainable funding to address the social determinants of health through value-based purchasing, the economic dynamics of insurance markets, and innovative financing mechanisms such as Pay for Success.

He is an energetic and passionate former consultant specializing in areas of management, health care, finance, technology, and economic development. He currently holds six academic degrees or certifications in philosophy, psychology, foreign policy, international economic relations, business, and finance.
How we got here

GHHI has transformed to lead the Social Innovation Financing space in Public Health.

1986 Founded
Parents Against Lead became the Coalition to End Childhood Lead Poisoning

2009 Becomes GHHI
Expand scope and scale to break the link between unhealthy homes and unhealthy families nationally

2014 Johns Hopkins PFS
CMMI proposal leads to exploration of Pay for Success with Johns Hopkins’ MCO, Priority Partners

2015 Social Innovation Fund Award
Award expands to 6 national sites to advance Pay for Success across private business models

2016 Robert Wood Johnson Foundation
Award expands Pay for Success portfolio to 11 asthma projects including state governments

2016 National Lead Summit
Launched concept paper on addressing lead-poisoning through Social Impact Bond

2017 Multi-Agency Models
Began state-wide Social Innovation Financing projects bridging health and energy savings for healthy homes

Source(s): GHHI
In New York

GHHI has 2 active sites, 3 more joining this month, and two innovation projects in New York.

- **2011 Buffalo GHHI Site**

- **2015 Social Innovation Fund Award**
  Award to the YourCare of the Monroe plan and the Community Foundation for Greater Buffalo.

- **2016 Robert Wood Johnson Foundation**
  Recipient: Affinity Health Plan in New York City with local partners a.i.r. NYC, AEA, and the city health department.

- **2016 Syracuse GHHI Site**

- **2017 NYSERDA**
  NYSERDA contracted to develop a state-wide healthy and energy efficient homes project for agency collaboration

- **2017 Albany, Schenectady, and Troy (exp. 19 Oct)**

Today
Who We Are

Breaking the link between unhealthy homes and unhealthy families to improve health, economic, and social outcomes.

Philanthropy

Government

Private-sector

Accomplishments

- 98% reduction of lead poisoning in Maryland
- 35 pieces of legislation passed
- 25 GHHI-designated sites across the country
- Over $300 million raised
- Over 500,000 integrated healthy homes, lead hazard reduction, and energy efficiency units in partnership with HUD

System

- Single intake system
- Comprehensive assessment
- Coordinate services
- Integrated interventions
- Cross-trained workers
- Shared data

Outcomes

- Lead-hazard reduction
- Asthma-trigger control
- Household injury prevention
- Energy efficiency
- Weatherization
- Housing rehabilitation

Source(s): GHHI

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Why we’re here

How and why is a healthy and energy-efficient housing organization leading a value-based purchasing workshop?

Our programs improve health…
Our national work saves insurance companies and Medicaid programs money by preventing asthma, lead poisoning, and household injuries.

… the health benefits save insurers money (and Medicaid)…
Our programs benefit states but are paid for by foundations, so we set out to find a way to get those savings dollars back into our services.

… but our work is paid for by foundations not insurers?
Baltimore alone would need tens-of-billions of dollars to address lead poisoning in housing alone.

We want to be a social enterprise
We want to make good health good business so we can sustainably grow and be accountable for delivering benefits – we’ll save you money, if you share.
The asthma problem

Asthma is a $50 billion national problem and 40 percent of costs are tied to poor quality home environments that Medicaid does not address.

**Asthma in the U.S.  Per annum**

- 6 million children
- 8 million adults
- 18.7 million hospital days
- 1.58 billion in medical expenses
- $50 billion in medical expenses

**Asthma is:**
- The single most prevalent chronic juvenile condition
- The leading cause of school absences and third-leading cause of hospitalizations among children
- Caused or triggered by environmental factors

**An unhealthy home:**
- Is a primary environmental factor in health
- Can have substantial hidden costs to families

**Home-based interventions with managed care and remediation of environmental asthma triggers:**
- Have proven to reduce hospitalizations, emergency department visits, and other medical expenses
- Can generate healthy ROI from medical cost savings

Sources: GHHI, 2015, Sustainable Funding and Business Case for GHHI Home Interventions for Asthma Patients
The health system data records will target outreach and coordinate home-based environmental interventions that generate investor returns.

1. **Referral**
   Staff recruit and refer eligible parties into the program focusing on warm-handoffs into existing community-based programs.

2. **Assessment**
   Comprehensive assessments identify the environmental links to asthma for education, management, and remediation.

3. **Intervention**
   Targeted comprehensive home-based interventions address causes and triggers of asthma in the home.

Source(s): GHHI
The interventions build on the existing standard of care to prevent acute-care needs by addressing the causes and triggers of asthma.

**Clinical care**
Patients receive the existing standard of care for asthma, no appropriate services are denied to any person.

**Education**
Patients receive education on how to self-manage their specific environmental triggers in context.

**Environment**
The causes and triggers of asthma in the home are addressed to ensure immediate improvement.
Each site will have its own tailored set of services based on patient need, housing stock, and service capacity.

Typical asthma intervention services

Healthcare professionals

Care management
- Manage referrals to the program
- Coordinate home visits
- Coordinate clinic visits

Home visiting
- Provide asthma education
- Follow up as needed
- Deliver supplies

Healthy housing professionals

Assessment
- Assess health, safety, and weatherization needs

Remediation
- Perform asthma-related home renovation and repairs:
  o Mold remediation
  o Kitchen/bathroom ventilation
  o Plumbing
  o Integrated Pest Management (IPM)
  o Carpet/flooring
Addressing environmental asthma triggers can produce significant results.

The Fulton Family purchased their first house at a foreclosure auction as a way to build a family home. Even after passing three separate inspections, they soon discovered faulty plumbing causing water leaks, sewage back-spill, and black mold, all made worse by a growing termite problem.

It left their asthmatic children to develop pneumonia, requiring frequent emergency department visits, expensive medications, and chronic respiratory problems. Mr. Fulton was transferred to new out-of-town location for work and the family was struggling to keep out of the quicksand.

Prior to intervention
• 111 medical utilization events; and
• $800.00 average cost per event.
• Expensive medications including inhalers, steroids, and breathing machines.

After the intervention
• 11 such visits the year after.
• The family has donated their breathing machines because they don’t need them anymore.
• Medical savings: $80,000 one year.
Asthma patients are high-cost enrollees so preventing hospitalizations to save money is a no-brainer, except...

**Average Annual Cost to Medicaid Managed Care Company**

$\,$, thousands

- **Asthma costs**
  Managed care companies are paying between $7,500 and over $43,000 per year for individual asthma patients who have been hospitalized for respiratory issues.

- **Savings opportunity**
  If the research findings hold, we can save 40 percent of costs through comprehensive intervention strategies.

- **How do we get the savings dollars from our programs back into the services?**

Source(s): GHHI primary research with actuarial firm Milliman LLC.
... when we save a managed care organization money, they lose out in the next year and have to pay for the outcomes.

**Tier 3**
Payment rate: $2,000 per unit

- Year 1: $4,000
- Year 2: $2,000
- Year 3: $0

**Tier 2**
Payment rate: $200 per unit

- Year 1: $400
- Year 2: $400
- Year 3: $400

**Tier 1**
Payment rate: $20 per unit

- Year 1: $40
- Year 2: $60
- Year 3: $80

**Annual total:**
- Year 1: $4,440
- Year 2: $2,460
- Year 3: $480

**Key insight**
Long-term investment value is captured by the State not Managed Care providers, so MCOs have little ability or incentive to invest in prevention.

Source(s): GHHI analysis of publicly available information

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Paying for Value
How does this work

Setting up the value-based purchase is relatively straight forward, if there is an existing service provider who can take the financial risk for success.

<table>
<thead>
<tr>
<th>Development</th>
<th>Implementation</th>
<th>Payment</th>
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<td>Development</td>
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<td>Payment</td>
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<tr>
<td>Enrollment</td>
<td>Services</td>
<td>Evaluation</td>
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</table>

**Development**
Determine what programs you want to run, what the evidence base is and how to move forward.

**Implementation**
Build mechanisms for enrollment, service-delivery, evaluation, and payment.
- **Enrollment**: Who is eligible for the program?
- **Services**: What will you be doing for them?
- **Evaluation**: How will you measure success?

**Payment**
Determined by the terms of the value-based purchasing arrangement not standard service-reimbursement.

Source(s): GHHI
Setting up a program means getting key elements right.

**Technical feasibility**
Will your program have the desired impact on the population you’ve selected (evidence base)?

**Operational feasibility**
Can your program operators implement the model with fidelity at scale – who will do what?

**Economic feasibility**
Will the health impact produce enough cash-flow to scale the project?

**Sociopolitical feasibility**
Is the program internally and externally supported?

**Payment Mechanism feasibility**
Can you set up a workable payment arrangement?

**Capital availability**
Can you solve for the cash-gap?
Determining who will be eligible for your program and how to enroll them will shape your project.

**Target population size**
You will be allowed and required to have the services available to anyone who meets your enrollment criteria under Medicaid rules.

**Process elements**
Your enrollment triggers may determine what the best way to enroll people into your program (ex. Hospitalization, diagnosis, or social service).

**Determining payment through evaluation**
When determining the effectiveness of your program, you may need to apply similar criteria to your comparison group.
Services

Determining what services to offer is a key issue because the service provider is accountable for the cost-benefit, not the insurer.

Necessary components
What are the key elements of the research intervention that made a difference?

Process flow
• Who will do what, when, and how?
• Is it the same for all enrollees?
• How will you manage the process and the associated data as it flows?
Key question: Which design options should you consider?

- Are you trying to prove your intervention works in the first place? *(Medicaid appropriate?)*
- Are you trying to prove your intervention has broad impact?
- Are you trying to prove your intervention works at scale?
- Are you trying to prove that the business model of providing interventions at scale is viable?
- Do you know that the business model is viable and your are trying to stand up a new program to deliver services?

What you’re trying to accomplish makes a world of difference.
Example Project: GHHI Asthma Cohort
GHHI builds evidence-based programs that leverage existing community resources to address local problems, using feasibility studies as a vehicle.

Development
Conducting a feasibility study and capacity-building effort is an effective and comprehensive method.

Implementation
Build mechanisms for enrollment, service-delivery, evaluation, and payment.
- **Enrollment**: Medically-based enrollment criteria
- **Services**: Networks of local service providers
- **Evaluation**: Using more-rigorous actuarial analysis than standard for Medicaid

Payment
- Only after savings is payment disbursed to the service provider.
- Solve the cash-gap with innovation: Community Benefit Dollars, Pay for Success, and other innovations.
GHHI uses comprehensive feasibility studies to develop projects.

Technical feasibility
Using NIH meta-analysis, surgeon general’s call to action, and CDC recommendations or findings.

Operational feasibility
Local service providers with decades of experience working with local populations.

Economic feasibility
Advanced stochastic economic and financial modeling using actuarial analysis determines economic profile.

Sociopolitical feasibility
Leveraging community to build community support.

Payment Mechanism feasibility
National value-based purchasing standards.

Capital availability
Industry leader in Pay for Success project development.
Enrollments

The health system data records will target outreach and coordinate home-based environmental interventions that generate investor returns.

Enrollment Criteria

Health system filters its patient population for specific criteria.

Defining the target population in medical terms

The target population is defined as:
• Medicaid Managed Care Member,
• Hospitalized or seen in ED with asthma as any diagnosis code.

Stratification by subpopulations:
1. Hospitalized during timeframe,
2. Emergency department visit during timeframe, or
3. Both.

Asthma defined within diagnosis code family: 493
• 493.00, 493.01, 493.02, 493.10, 493.11, 493.12, 493.20, 493.21, 493.22, 493.81, 493.82, 493.90, 493.91, 493.92 – ICD9 codes only

Above listing is incomplete and representative of the type of work done.
The goal of the evaluation is to determine the marginal impact of marginally adding asthma intervention services.

**Medical utilization**

Value of services required over time

Without intervention group
Selected from the same enrollment criteria as the target population, ideally from broader data:
- Standard access to clinical services;
- Includes elements of ongoing community programs and provider group initiatives.

With intervention
This group is selected from the same enrollment criteria as the without intervention group:
- Same clinical services availability;
- Assessment of existing services they use; and
- Only provide new services not already getting.
We typically recommend arrangements that transform the actual payment for medical services, which makes them reimbursable.

Outcomes-based payments included in your capitation are accountable care programs

- Start with your existing capitation rate;
- Add in performance contracts for:
  - Shared-savings,
  - Risk-sharing, or
  - Paying for quality outcomes.
- The result is an advanced value-based purchase that allows you to:
  - Secure federal matching funds,
  - Drive down the cost of care by investing in prevention, and
  - Use investment dollars to improve local communities.

Source(s): Adopted from the Arizona Health Care Cost Containment System (AHCCCS)
https://www.azahcccs.gov/shared/Downloads/ACOM/PolicyFiles/300/315_16_A.pdf

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We recommend use of shared savings or risk payments based on matched-comparison groups in most of our projects.

**Outcomes-based payment**

**Key insight**
Despite variability, outcomes-based payments allow repaying investments over their useful life up to the cost-savings value.

*Note(s):*  
* Expectations could be based on historical projections or comparisons against a selected target population.

*Source(s):*  
GHHI analysis of publicly available information

**Outcomes based payments mechanism, 12 month period**

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<thead>
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<th>Month</th>
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**Final payment: $180 thousand**

**Outcomes-based payment**

$180,000
Advanced value-based purchasing arrangements let service providers innovate with no risk to federal or state money but create a cash-gap.

Service providers costs
- Service providers need capital to run their programs by the initial enrollments.
- May need funds to hire new staff and invest in new equipment as soon as signing the contract.

Service providers compensation
- Service providers don’t get paid until well after the services and only if they produce savings.
- Full compensation may not occur until after several payment cycles, which can take years.

How do you run a program without upfront funds?
At GHHI, we finance our projects with outside resources, usually a collective of philanthropic and investment interests call Pay for Success.

**Financing innovations**

- Evergreen community benefit funds use community benefit dollars to fund program start-ups where the payments create sustainable businesses.

- Pay for Success financing brings together philanthropy and investors to take risks on new public-goods.

**Financing**

- The service provider raises funds by promising to pass on their future payments.

- They can pay for it themselves, raise funds through traditional means, or innovate with partners.
At GHHI, we finance our projects with outside resources, usually a collective of philanthropic and investment interests call Pay for Success.

Value-based purchasing
Affinity agrees to pay service-providers for total cost of care reductions among enrolled persons v. a comparison group meeting the same criteria.

Service provision
Service providers finance their future payment opportunity with social-impact investors.

Financing: Pay for Success arrangement
The service provider gets paid up-front while the philanthropic partners and other funders agree to inherit the service-provider’s repayment from Affinity.

Specific arrangements are still in negotiation
Discussion
Webinars

Each item in the playbook will be the focus of our webinar series.

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<td>6. Outcomes-Based Payments Handbook: 20 October 2017 at 13:00 hrs</td>
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We’re always here to help.

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Email</th>
<th>Phone</th>
</tr>
</thead>
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<tr>
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<td>+1.410.534.6477</td>
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<td>Michael McKnight</td>
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</table>

Thank you for your time.
Thank you for your time!
With access to detailed information, matched comparison groups can be composed to increase validity in the comparison of sub-groupings.

External matched comparison group diagram

Comparison groups are constructed to matching groups on key criteria such as:

- Age,
- Comorbidities,
- Gender,
- Geography,
- Insurance plan,
- Medical risk,
- Family relations, and
- Others
Issue #1:
Reimbursements and revenue losses
Demonstration assumptions

In the following demonstration we make a number of simplifying assumptions.

Assumptions

- The medical expense in a year determines revenue in the following year.
- Investments are not considered medical expenses.
- All parties are happy with a break-even scenario.¹
- We do not investigate administrative budgets or medical loss ratio yet.
- Investments in preventative care can either have a one year or lifetime impact.

Note(s): We understand that this is not always the case but it functions as a simplifying assumption that can be worked into negotiations.
Setting the steady-state

The baseline scenario is caring for a population will cost $4 million, care is provided, no investments are made, and everything stays steady.

Budgetary implications of investments

$ thousands

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<th>Year</th>
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<th>$ thousands</th>
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<td>Expense</td>
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<tr>
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<td>Gain (loss)</td>
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</tbody>
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Key insight
A steady state program neither costs nor benefits the managed care provider, but carries with it little risk.

Source(s): GHHI analysis of publicly available information
If an MCO invests in prevention that reduces the cost of care, it will be penalized in later revenue losses due to the redetermination process.

### Short term investment impact

$\text{thousands}$

<table>
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### Table: Baseline vs Scenario

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<tr>
<td>Gain (loss)</td>
<td>0</td>
<td>(2,000)</td>
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</table>

**Key insight**

Even an investment that offsets its own value causes a net loss because it is not considered in the cost of care.

Source(s): GHHI analysis of publicly available information
If continuous investments in preventative care are required, it would result in losses for the MCO as investments are included in redetermination.

### Budgetary implications of investments

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<thead>
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<td>Year 3</td>
<td>Gain (loss)</td>
<td>0</td>
</tr>
<tr>
<td>Year 4</td>
<td>Gain (loss)</td>
<td>0</td>
</tr>
<tr>
<td>Year 5</td>
<td>Gain (loss)</td>
<td>0</td>
</tr>
</tbody>
</table>

**Key insight**

One-time investments that reduce the cost-of-care by the amount of the investment have no benefit for a managed care provider. Being risk-averse, they have no incentive to proceed.

Source(s): GHHI analysis of publicly available information
Continuous investments in preventative care result in net-losses for MCOs due to revenue losses because investments are not considered.

**Short term investment impact**

$ thousands

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue</th>
<th>Expense</th>
<th>Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4,000</td>
<td>(2,000)</td>
<td>(2,000)</td>
</tr>
<tr>
<td>2</td>
<td>4,000</td>
<td>(2,000)</td>
<td>(2,000)</td>
</tr>
<tr>
<td>3</td>
<td>2,000</td>
<td>(2,000)</td>
<td>(2,000)</td>
</tr>
<tr>
<td>4</td>
<td>2,000</td>
<td>(2,000)</td>
<td>(2,000)</td>
</tr>
<tr>
<td>5</td>
<td>2,000</td>
<td>(2,000)</td>
<td>(2,000)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>$ thousands</th>
<th>Baseline</th>
<th>Scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>20,000</td>
<td>14,000</td>
</tr>
<tr>
<td>Expense</td>
<td>(20,000)</td>
<td>(12,000)</td>
</tr>
<tr>
<td>Investments</td>
<td>(0,000)</td>
<td>(10,000)</td>
</tr>
<tr>
<td>Gain (loss)</td>
<td>0</td>
<td>(8,000)</td>
</tr>
</tbody>
</table>

**Key insight**

Because preventative care investments are not considered medical expenses, any program that requires regular upkeep will cause a managed care provider losses on a continuous basis.

Source(s): GHHI analysis of publicly available information
Demonstration of a major but lasting investment

So even highly-beneficial investments cause losses when investments are not considered in reimbursement because of the rate of revenue adjustment.

Long-term investment impact

$ thousands

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue</th>
<th>Expense</th>
<th>Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>(4,000)</td>
<td>(1,000)</td>
<td>(5,000)</td>
</tr>
<tr>
<td>Year 2</td>
<td>4,000</td>
<td>1,000</td>
<td></td>
</tr>
<tr>
<td>Year 3</td>
<td>1,000</td>
<td>1,000</td>
<td></td>
</tr>
<tr>
<td>Year 4</td>
<td>1,000</td>
<td>1,000</td>
<td></td>
</tr>
<tr>
<td>Year 5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$ thousands | Baseline | Scenario |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>20,000</td>
<td>11,000</td>
</tr>
<tr>
<td>Expense</td>
<td>(20,000)</td>
<td>(8,000)</td>
</tr>
<tr>
<td>Investments</td>
<td>(0,000)</td>
<td>(5,000)</td>
</tr>
<tr>
<td>Gain (loss)</td>
<td>0</td>
<td>(2,000)</td>
</tr>
</tbody>
</table>

Key question

How does $9 million in savings cause $2 million in losses?

Source(s): GHHI analysis of publicly available information
Demonstration of a major but lasting investment

Ideally the system would reimburse parties for investments that reduce future costs, generating a win-win situation where savings are shared.

Long-term investment impact
$ thousands

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue</th>
<th>Expense</th>
<th>Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>$4,000</td>
<td>$(4,000)</td>
<td>$(5,000)</td>
</tr>
<tr>
<td>Year 2</td>
<td>9,000</td>
<td>(1,000)</td>
<td>(1,000)</td>
</tr>
<tr>
<td>Year 3</td>
<td>1,000</td>
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<td>(1,000)</td>
</tr>
<tr>
<td>Year 4</td>
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<td>(1,000)</td>
<td>(1,000)</td>
</tr>
<tr>
<td>Year 5</td>
<td>1,000</td>
<td>(1,000)</td>
<td>(1,000)</td>
</tr>
</tbody>
</table>

$ thousands  Baseline  Scenario
Revenue  20,000  16,000
Expense  (20,000)  (8,000)
Investments  (0,000)  (5,000)
Gain (loss)  0  3,000

Key insight
A substantial one-time long-term investment of $5 million in preventative care can result in:
- $4 million in CMS and state savings; and
- $3 million in MCO net gains; but
- $5 million in initial investment required.

Source(s):  GHHI analysis of publicly available information

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Demonstration of Pay for Success project

Value-based purchasing can offset the initial need for investment instead using outcomes-based payments to limit risk for MCOs and public payers.

Long-term investment impact

$ thousands

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>Expense</td>
<td>Investment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$4,000</td>
<td>$(3,000)</td>
<td>$(2,000)</td>
<td>$(1,000)</td>
<td>$1,000</td>
</tr>
<tr>
<td>$(4,000)</td>
<td>$(1,000)</td>
<td>$(1,000)</td>
<td>$(1,000)</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>$ thousands</th>
<th>Baseline</th>
<th>Scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>20,000</td>
<td>16,000</td>
</tr>
<tr>
<td>Expense</td>
<td>(20,000)</td>
<td>(8,000)</td>
</tr>
<tr>
<td>VBPs</td>
<td>(0,000)</td>
<td>(5,000)</td>
</tr>
</tbody>
</table>

Gain (loss)  
0 3,000

Key insight
By using savings to make payments, the project can generate savings for all:¹
- $4 million in CMS and state savings,
- $3 million in MCO net gains, and
- $5 million in outcomes-based payments.

Note(s):
Some component of savings would be needed to provide investors a return to compensate them for the risk taken funding the program.

Source(s):
GHHI analysis of publicly available information
Issue #2: Spending classification

How investing in prevention of medical expenses reduces revenue, forces budget cuts, and penalizes managed care providers.
The problem with calculating compensation

Current policy does not treat preventative care measures not listed on the state plan as medical expenses.

Organizational spending classification

<table>
<thead>
<tr>
<th>$ millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
</tr>
<tr>
<td>20</td>
</tr>
<tr>
<td>80</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>70</td>
</tr>
</tbody>
</table>

Non-medical loss

Net cost savings

Investor repayment (restricted cash-flow)

Medical loss (Cost of care)

Before (80-20)

Total cost-savings

After (70-30)

Medical loss ratio

Scenario

A MCO with a $100 million budget and existing 80-20 medical loss ratio undertakes a Pay for Success project that:

- Reduces cost of care by $10 million per annum, and
- Repays investors $5 million per annum.

Result

- Subsequent compensation will be based on 7/8ths the real cost of care due to investor funding and repayment.
- Penalties for dropping below the MLR set at 80:20.

Note(s): Investor repayments for investments would be amortized initial investments, which can be aligned to outcomes-based payments.

Source(s): GHHI analysis of publicly available information
The problem with calculating compensation

The compensation policies result in unintended consequences for innovative programs, including decreased compensation and forced budget cuts.

Organizational spending classification

$ millions

<table>
<thead>
<tr>
<th>Before (80-20)</th>
<th>Total cost-savings</th>
<th>After (80-20)</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>10</td>
<td>70</td>
</tr>
<tr>
<td>12.5% Required budget cut to maintain 80-20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.5% reduction in total budget; and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37.5 percent* (20 to 12.5) reduction in non-medical budget (excluding investor repayment as a restricted cash-flow).</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key insight
Each dollar of Pay for Success savings will result in:

- $1.25 reduction in overall budget; and

- Between $0.25 and $1.25 reduction in admin budget ($0.75 shown).*

Note(s):
* If all savings are repaid to an investor in a given year, the unrestricted admin budget would be just $7.5 million or 62.5 percent less.

Source(s): GHHI analysis of publicly available information

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Our project starts with a strong evidence base.

Patients who have asthma at any level of severity should:
- Reduce, if possible, exposure to allergens to which the patient is sensitized and exposed.
- Know that effective allergen avoidance requires a multifaceted, comprehensive approach; individual steps alone are generally ineffective.

Surgeon General’s Call to Action to Promote Healthy Homes
- Describes the steps to protect themselves from disease, disability and injury that may result from home health hazards
- Know that effective allergen avoidance requires a multifaceted, comprehensive approach; individual steps alone are generally ineffective.

…the Task Force recommends the use of home-based, multi-trigger, multicomponent interventions with an environmental focus for children and adolescents with asthma, on the basis of strong evidence of effectiveness in reducing symptom-days, improving quality of life scores or symptom scores, and reducing the number of school days missed.

Source(s):
- CDC, Community Guide for Asthma (https://www.thecommunityguide.org/asthma/index.html)