Green & Healthy Homes Initiative®

A Case Study in Making Good-Health Good-Business

LeBonheur's CHAMP Program

How to transition a grant-funded community-based intervention into a sustainably funded social enterprise

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DISCLAIMER:
The slides for this presentation are designed as a reading deck for you to have as a future resource.

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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.

GHHI has grown from a service provider to a national healthy housing leader.

1986 Founded, 2008 Becomes GHHI: The Coalition to End Childhood Lead Poisoning becomes the Green & Healthy Homes initiative, expanding scope and scale after reducing lead-poisoning in Maryland by 98 percent.

2014 Johns Hopkins PFS: CMMI proposal leads to exploration of Pay for Success with Johns Hopkins' MCO, Priority Partners, with a focus on the business of health.

2015 1st Social Innovation Fund (SIF) Award: GHHI awards Buffalo feasibility study grant as part of a 6-site national expansion funded by SIF (CNCS division).

2016 Robert Wood Johnson Foundation: A major grant expands GHHI's portfolio to 11 asthma projects including state governments and national insurance carriers.

2017 Multi-Agency Models & EPA Award: State governments hire GHHI to explore state-wide funding models and the U.S. Environmental Protection Agency funds GHHI's expansion by up to 24 asthma projects.

Source(s): GHHI

Along the way, we've learned that the economics and business of funding health determine what works and what does not.

What we did
We tackled the problem of funding health as a business problem – how can we make it more profitable to improve health than to milk poor health.

What won't work
Any approach that expects businesses to act against their own financial interest is not sustainable and not scalable (economics of competition and role of 'Return on New Invested Capital').

What will work
Any approach that makes it financially more profitable for all required parties to participate. They earn more dollars and can spend more dollars on your programs.

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Today we focus on the case study of the Le Bonheur CHAMP program making good-health good-business for health and financial sustainability.

Situation	Insurance plans fund the majority of healthcare services and Medicaid is the larges U.S. insurer of low-income persons, with the highest need.
Complication	Insurance plans are adversely impacted by improving health: • Medical-Loss ratios have unintended consequences, • The Medicaid rate-setting process penalizes improving health, and • Return on New Invested Capital (RoNIC) dictates competition.
Resolution	We needed to build a program that made investments in health more profitable than the status quo: • Monetizing the impact of investments in health, • Working within the existing regulatory structure, and • Building mechanisms that align economics with health.

Asthma is deadly and expensive, but can be mitigated by comprehensive home-based interventions that address its causes and triggers.

Asthma by the numbers

Per annum in the United States of America

6.8 million children

18.7 million adults

1.58 million hospital days

$50 billion medical expenses

Asthma is:

- A potentially lethal chronic condition inhibiting breathing;
- The single most prevalent chronic juvenile condition;
- A major contributor to medical costs; and
- Caused or triggered by environmental factors.

An unhealthy home:

- Is a primary environmental factor in health;
- Can have substantial hidden costs to families; and
- Home-based triggers cause 40% of asthma episodes.

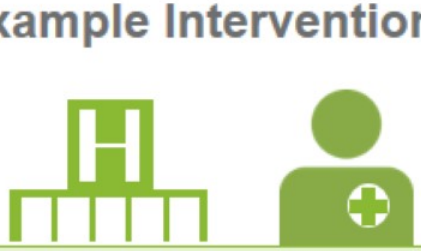
Evidenced home-based interventions:

- Remove environmental causes and triggers of asthma;
- Provide home-based education on asthma control, mitigation, as well as effective medical adherence; and
- Result in better health outcomes for patients, their families, and the next inhabitant of the home.

Sources: GHHI, 2015, Sustainable Funding and Business Case for GHHI Home Interventions for Asthma Patients
World Health Organization, 2013, http://www.who.int/mediacentre/factsheets/fs307/en/
RWJF Commission to Build a Healthier America

Comprehensive interventions leverage existing clinical service integration, with new layers of education and environmental remediation.

Example Intervention Program



Clinical care
Reinforce existing standard of care including medications, assessment & monitoring, and integration with primary care providers.

Education
Provide clinical and home-based education on how to self-manage their specific environmental triggers in context.

Environment
Drive remediation of the causes and triggers of asthma through comprehensive home assessments and referrals into wrap-around programs.

Existing Services | **New Setting** | **New Services**

Comprehensive Interventions Deliver Results

Source: National Asthma Education, Prevention Program (National Heart, and Blood Institute). Expert Panel Report 3: guidelines for the diagnosis and management of asthma. National Instituted of Health, 2007.

Milliman, our actuarial partner, projects that CHAMP will reduce key medical utilization and costs by 40 percent, based on careful study and research.

40%

Actuarial Projection of reductions in:
- **Inpatient Admissions,**
- **Emergency Utilization, and**
- **Associated Costs**

Note(s): * CHAMP was the recent focus of a random-control trial (RCT) showing similar reductions in total costs and utilization.

So why isn't the CHAMP preventive care model at Le Bonheur funded yet?

When you say

I can prevent hospitalizations if you pay me!

They hear

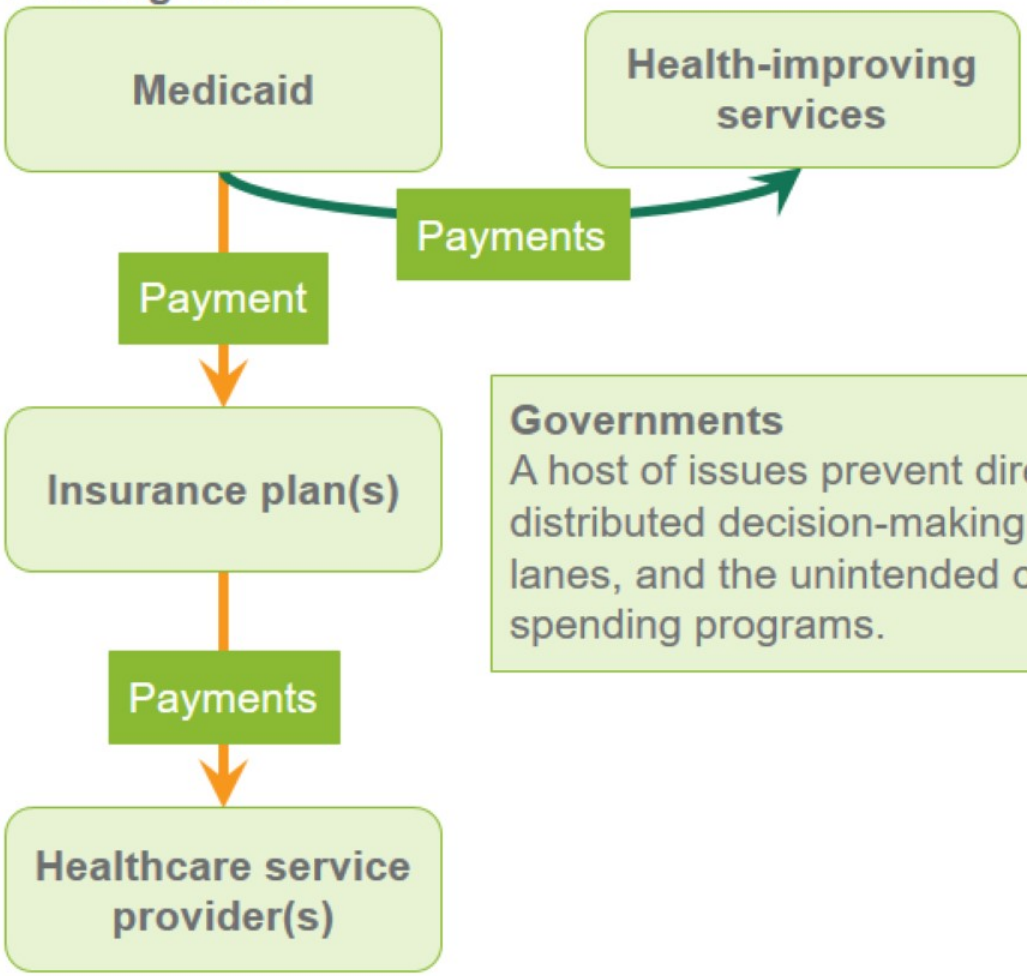
You should pay me to make you less profitable, reduce long-term revenue, and complicate your life.

So they say

Gee that's a really great idea, but I'm very busy right now, next time?

Medicaid cannot be a sustainable source of funding because of complexities even when interventions are cost-effective.

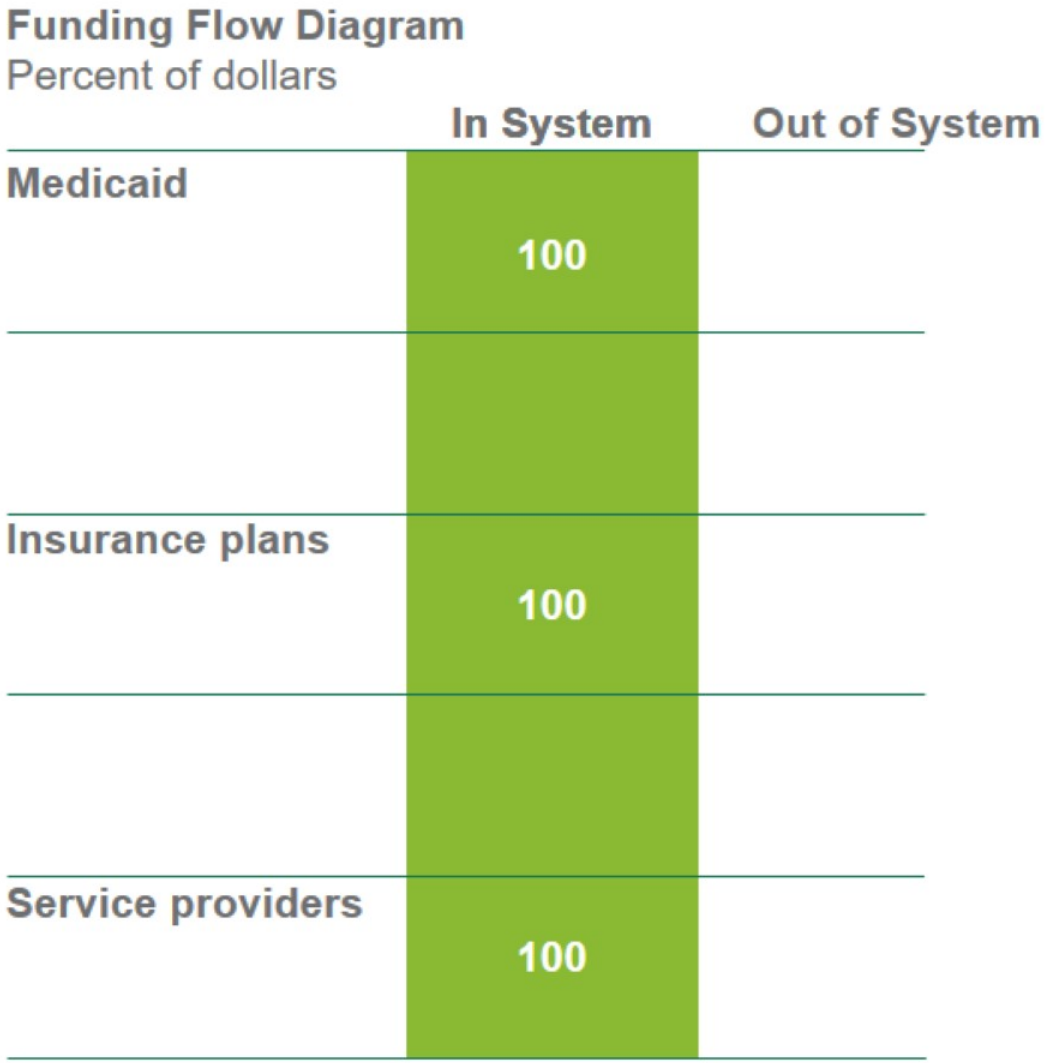
Funding flows



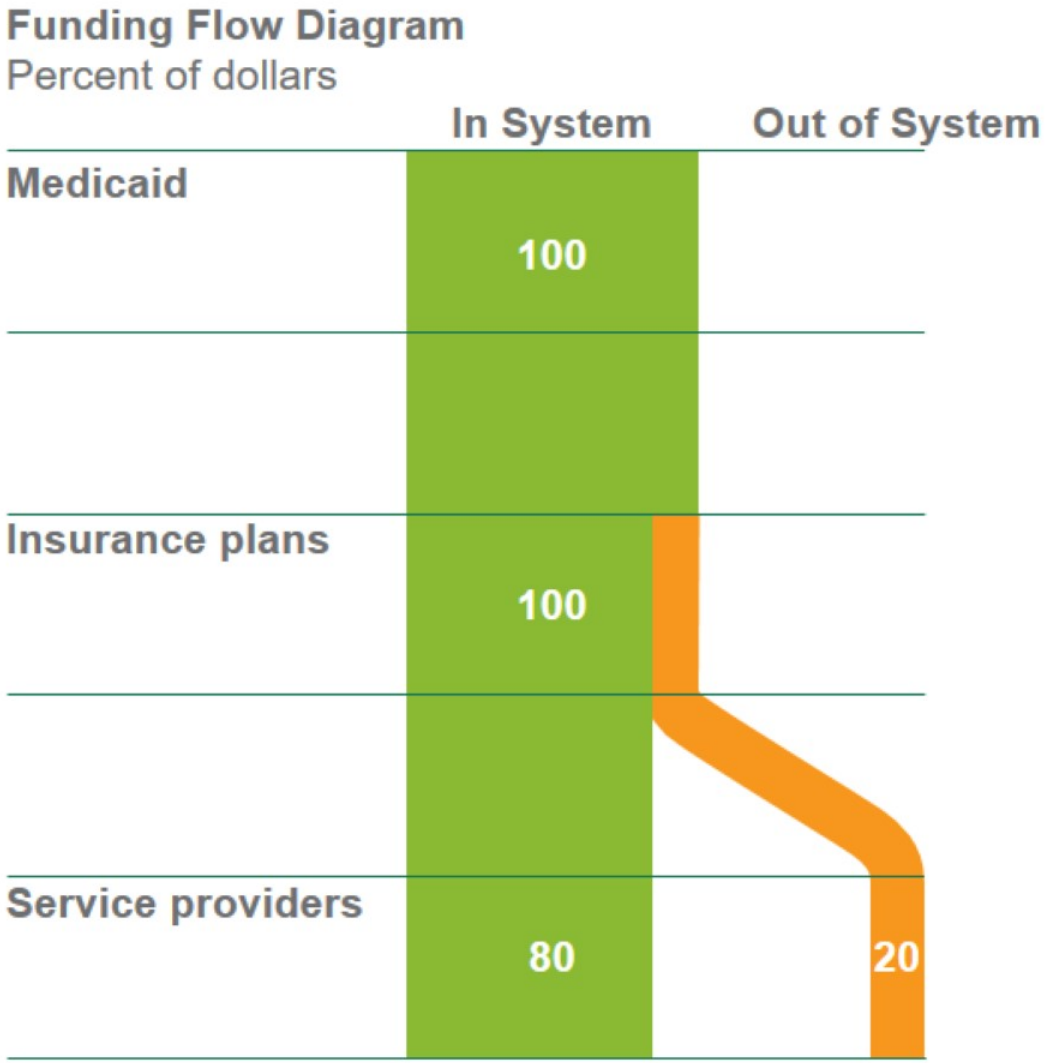
Governments
A host of issues prevent direct government investments including distributed decision-making authority, financial silos, operating swim-lanes, and the unintended consequences of highly-specific mandatory spending programs.

Source(s): GHHI analysis of publicly available information

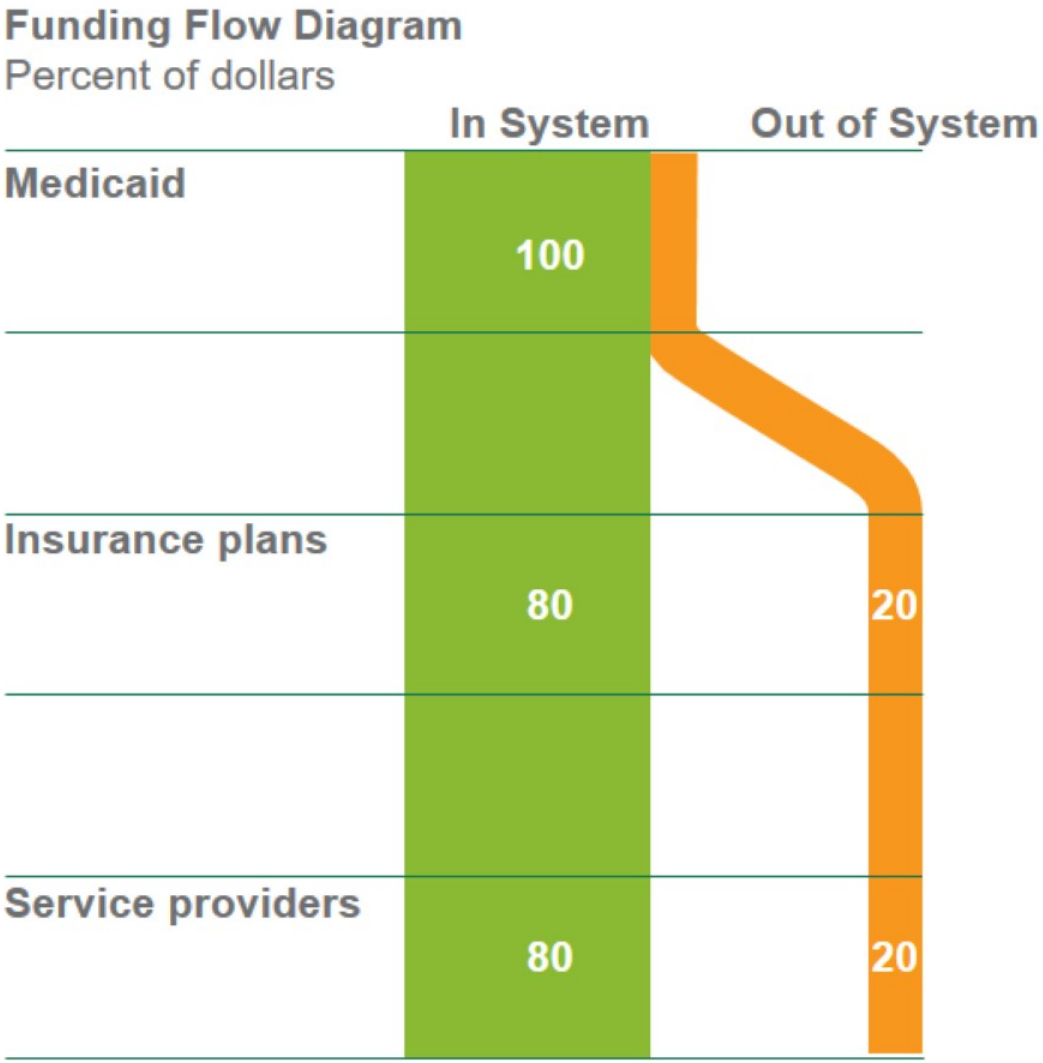
Mandatory spending from TN Medicaid flows through plans to the existing service providers based on medical needs.



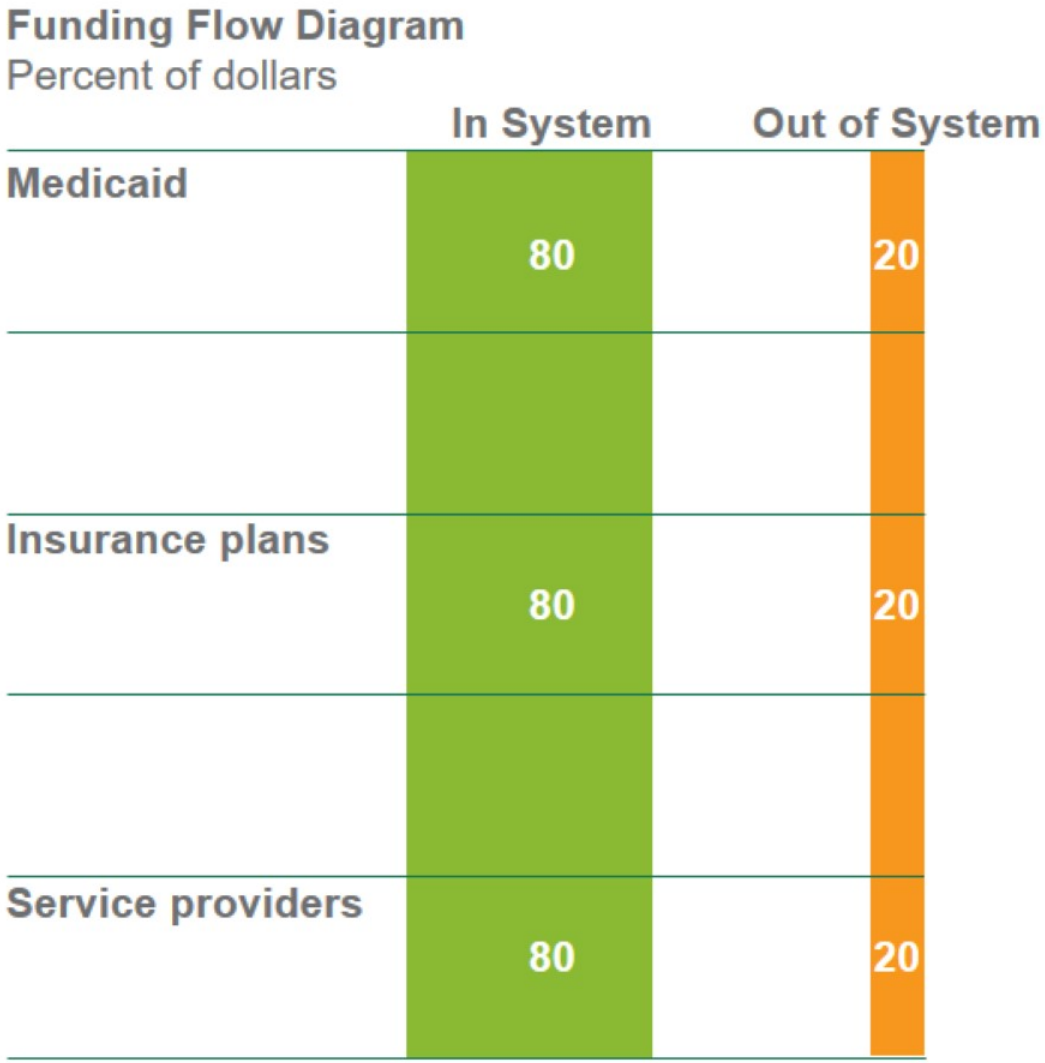
Preventing medical needs and associated spending has upstream implications for insurance plans.



… through rate-setting practices, insurance dollars leave the system in the next cycle, impacting the upstream mandatory funding…

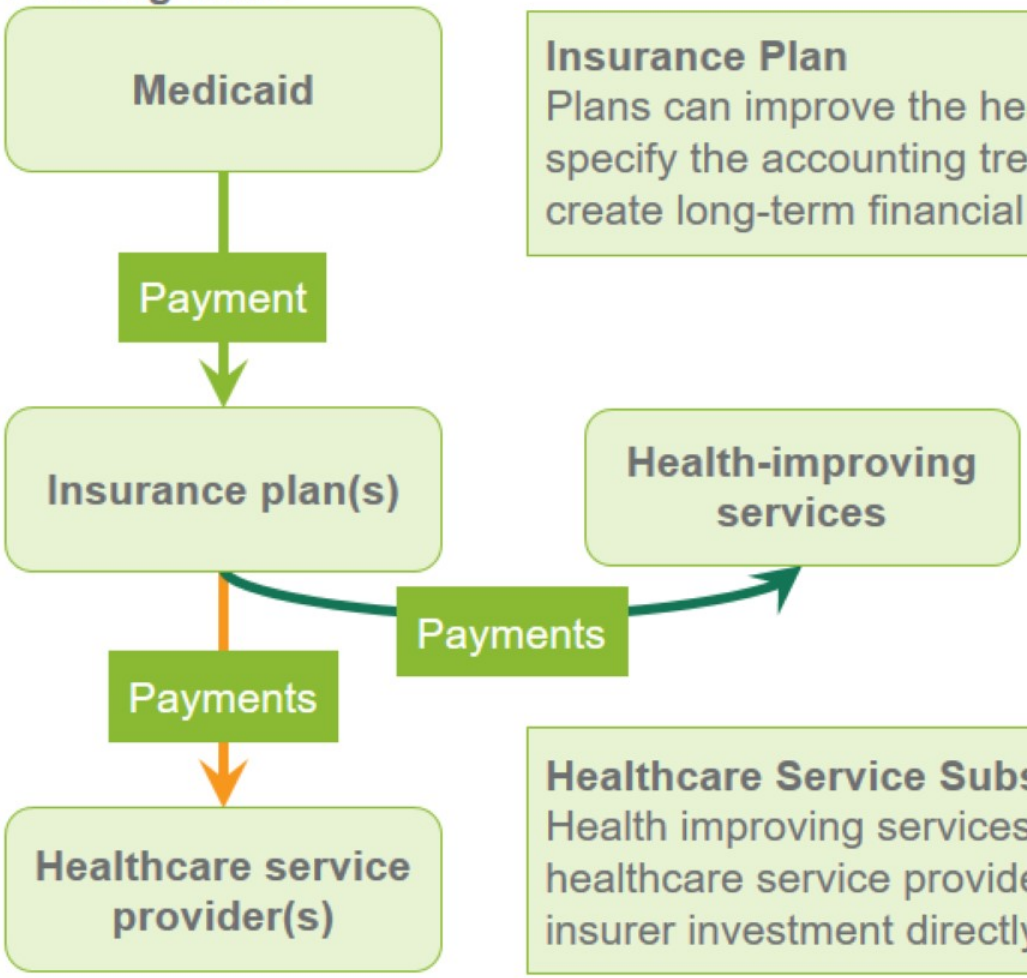


… the Medicaid program loses the federally-mandated and matched dollars, meaning there is no money to pay plans, providers, CHAMP, or you.



Insurance investments in health that improve health and reduce costs create negative financial incentives through accounting practices.

Funding flows



Insurance Plan
Plans can improve the health of their members but regulations specify the accounting treatment of those payments in ways that can create long-term financial problems for plans.

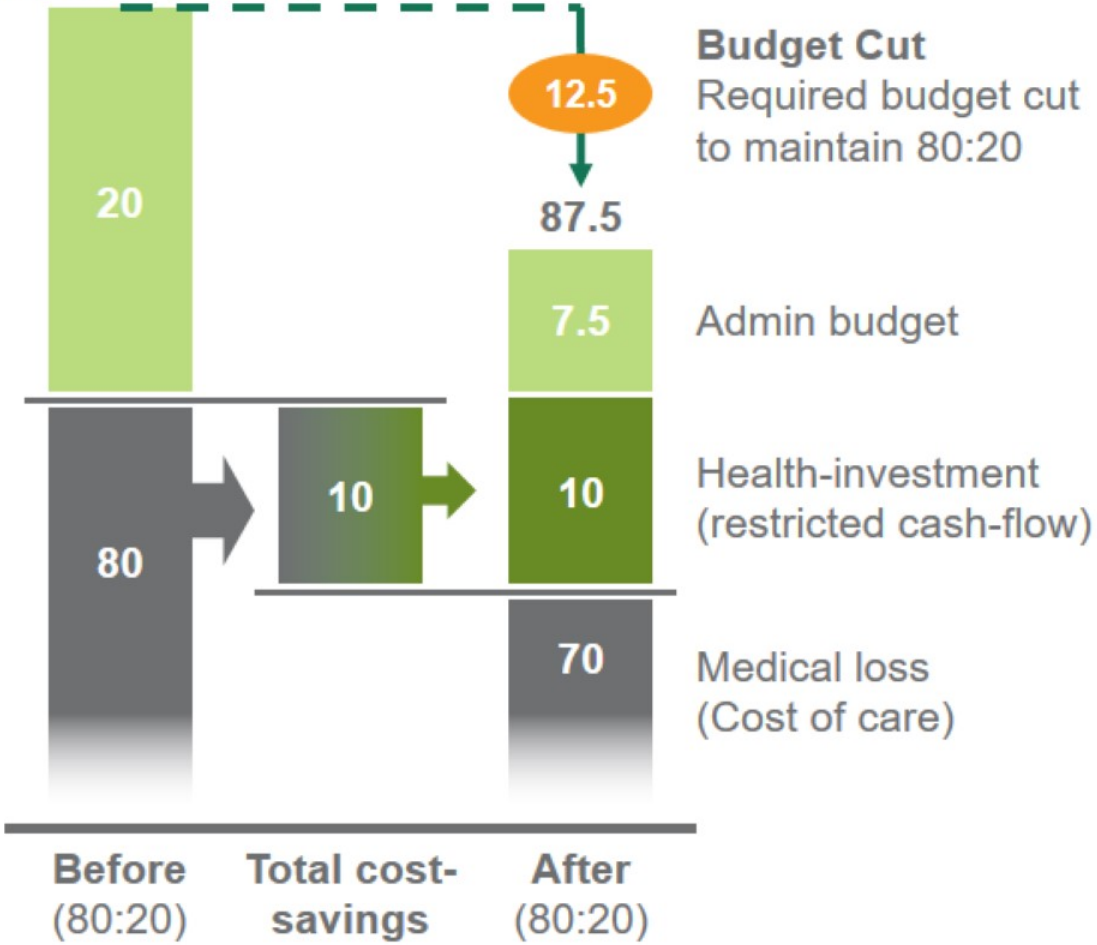
Healthcare Service Substitution
Health improving services challenge the existing business model of healthcare service providers. They have a financial reason to resist insurer investment directly in health-improving services.

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

Insurance investments in health swap administrative spending for medical costs and reduce profitability, even if net benefit accrues.

Medical Loss Ratio (MLR) Impact on Improving Health

$ millions & (percent)



Results of $10 million project

- **12.5 percent** (100 to 87.5) reduction in total budget; and
- **62.5 percent** (20 to 7.5) reduction in non-medical budget shared savings (VBP) payment as a restricted cash-flow.

Key insight

Each **$1.00** of shared-savings is:

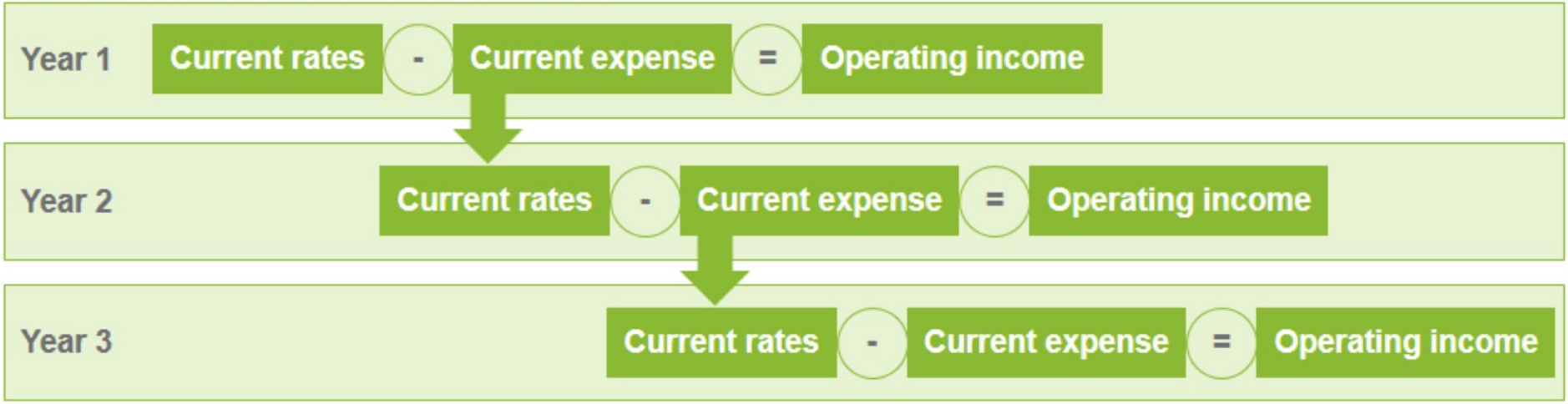
- **$1.25** reduction in current and future premiums retained; and
- **$1.25** reduction in admin budget.

Note(s) Profitability is a subcomponent of the administrative budget as are staffing and all other costs of running their organization.

Source(s): GHHI analysis of publicly available information

Investments in health drive down medical expenses and long-term profitability through a complex rate-setting process.

Simplified rate-calculating diagram



Healthcare Service Expenditures
Limiting allowable expenses to narrowly defined healthcare expenses reduces long-term profitability for insurers and removes the economic value of improving health.

Health Expenditures
Including investments in health as allowable medical expenses through value-based purchasing, rates can be set based on the net-total cost of caring for an enrollee.

Baseline costs, historical trending, and the risk-adjustment factors all drive down future earning potential for rate-cells in Medicaid.

Components of Capitation Rates

Base data	**Historical data**	**Baseline data** States start with aggregate historical utilization.
Trend	**Historical data**	**Baseline data** Adjustments for historical trends in service utilization, service mix, and other market forces.
Managed care adjustments		
Acuity	**Historical data**	**Risk Adjustment Factors** Both the region and plan-specific risk-adjustments rely on medical utilization to project forward costs.
Program changes		
Non-risk payments		
Nonmedical expenses		

Note(s): The process varies depending on states, but generally there are multiple ways in which historical utilization and payments play into future rates. Identifying those items is the key to planning the right strategy.

Source(s): GHHI

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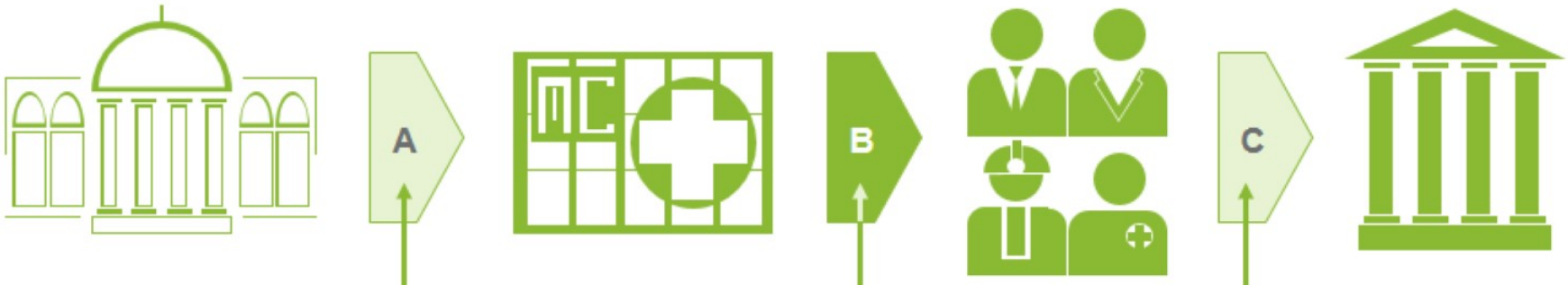
How do we make fix the funding?

Making good-health good-business starts with paying service providers based on the value of the care they provide not for the cost of services.



State contracts inclusive of value-based purchasing secure federal match dollars

Value-Based Care allows buying health-outcomes at value not services at cost.

Providers can pay for up-front costs themselves, financing through traditional means, or innovate with partners

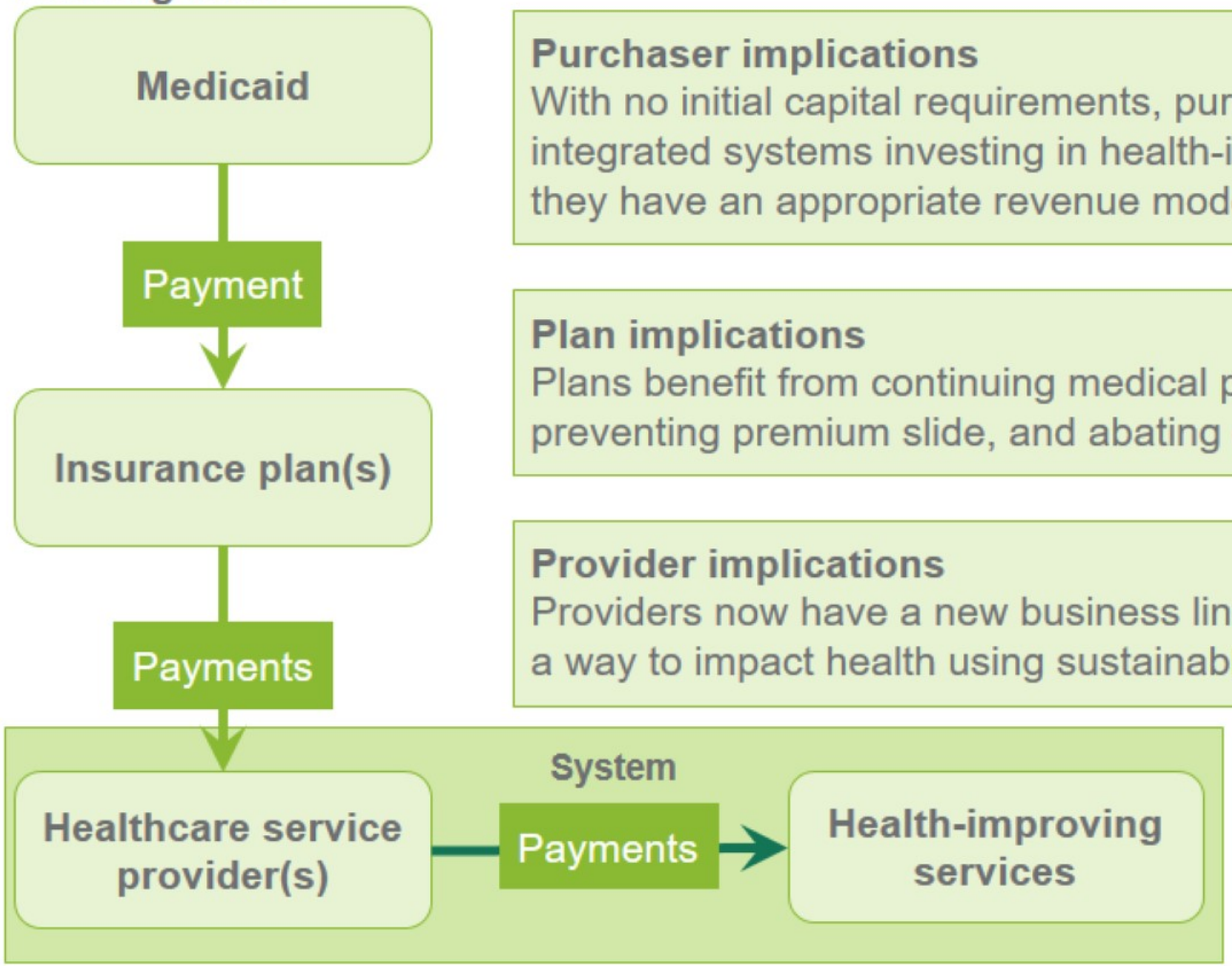
Value-Based Care Funding Innovations

- Value-based purchasing allows you to pay for services up to the "actuarially sound" determination of cost-effectiveness and secure reimbursement.
- The details matter, setting up the contracts can make the system a win-win or yet another failed attempt.

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

Integrated systems can manage the cost-effectiveness of health-improving services by blending revenue structures from traditional and new care.

Funding flows



Purchaser implications
With no initial capital requirements, purchasers can benefit from integrated systems investing in health-improving services, so long as they have an appropriate revenue model in place.

Plan implications
Plans benefit from continuing medical payments to providers, preventing premium slide, and abating operational costs.

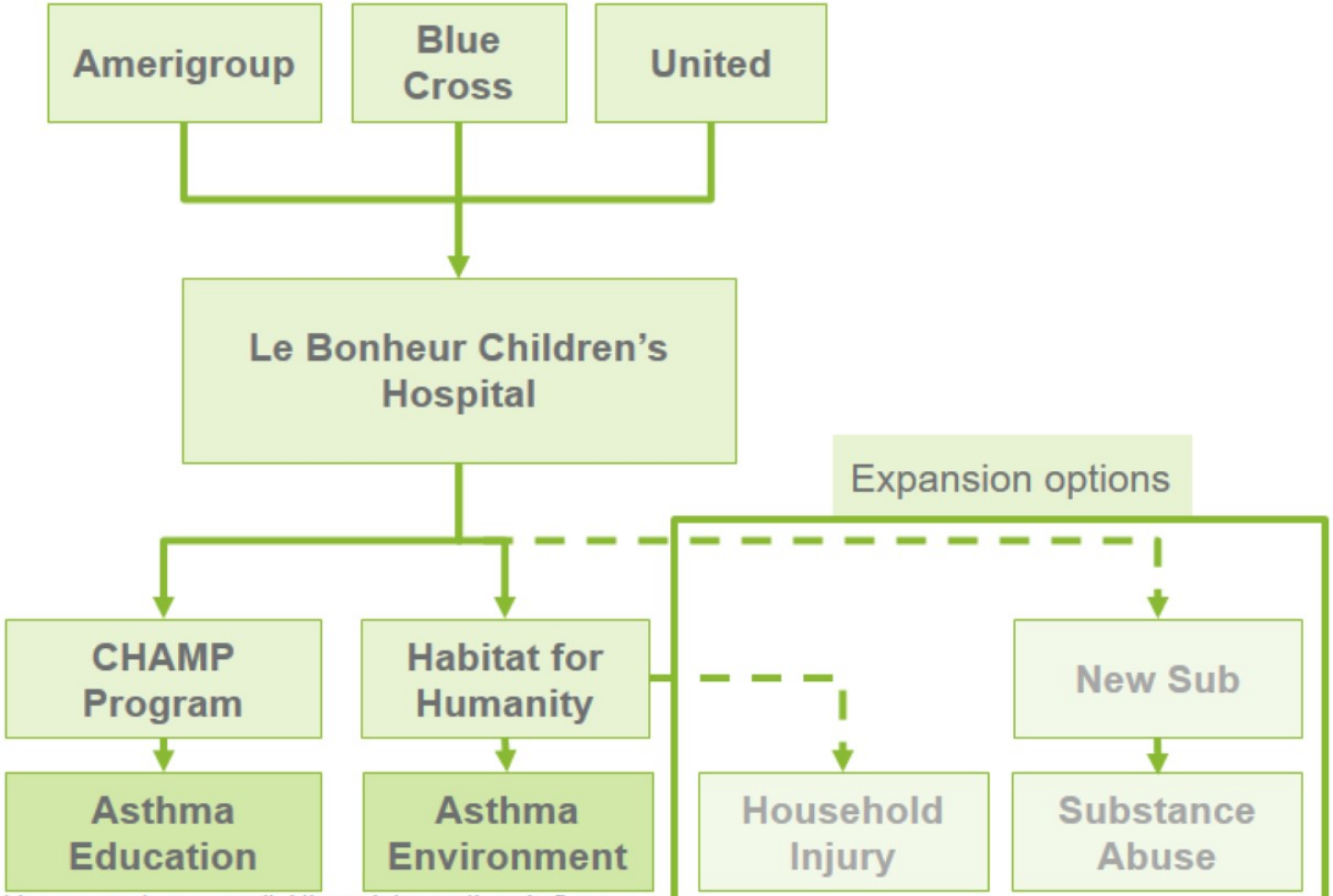
Provider implications
Providers now have a new business line, a new way to compete, and a way to impact health using sustainable dollars.

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

The contracting model allows the hospital to build a framework for addressing the social determinants of health using an asthma pilot.

Payment Model Structure

Legal Agreements

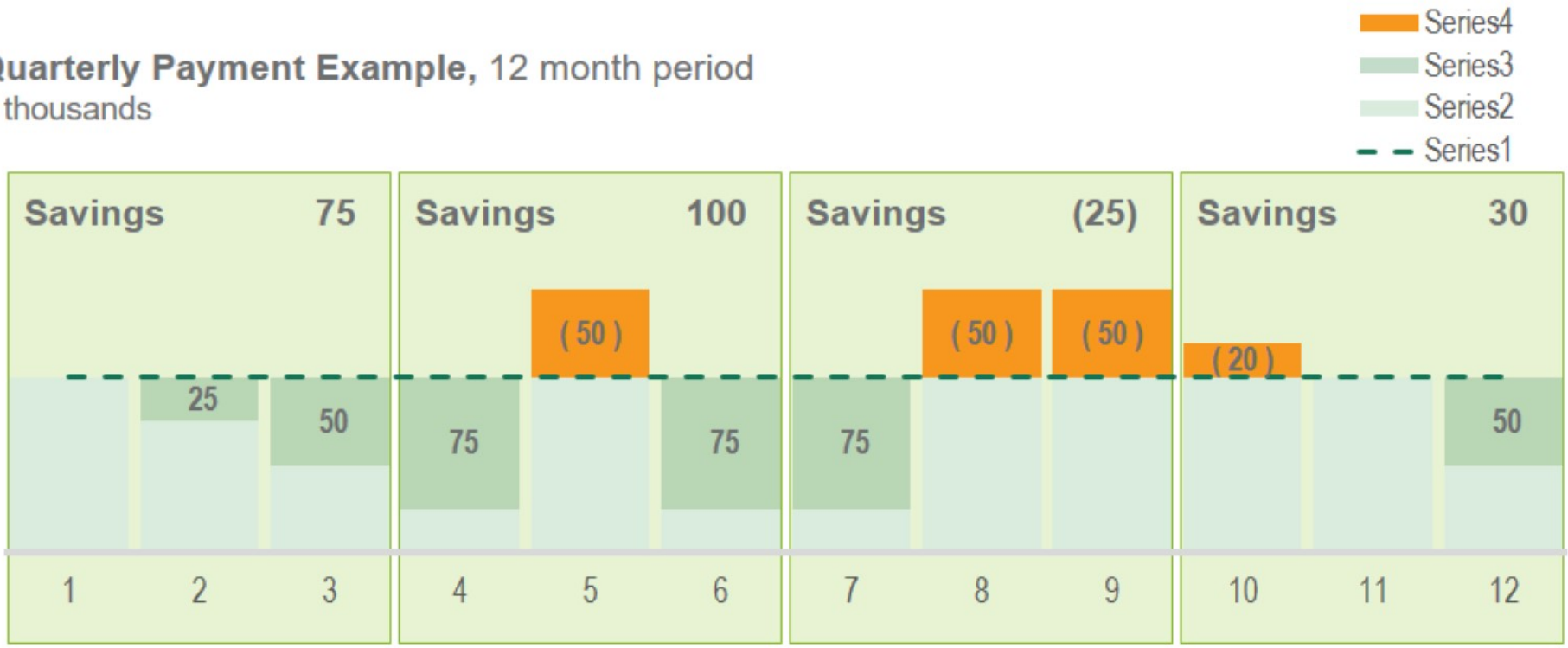


Note(s): The model also provides access to new capital through innovations in finance.

Source(s):

The hospital's value-based care program is only paid if they improve health and only up to the amount they reduce the total cost of care.

Quarterly Payment Example, 12 month period
$ thousands



Why this can work: Actuarially sound methods to determine payment based on the "value of care" provided by a program. Payments are made under value-based purchasing requirements included in state's existing 1115 waivers enabling such arrangement.

Net Payment:
USD 180 thousand

Note(s): * 42 CFR 438.6(c) enables payment models based on the "value of services", 42 CFR 438.4(b)(7) allows rate-setting based on 438.6, each state's 1115 waiver enabling managed care and value-based purchasing (where implemented) waive in appropriately designed value-based care programs making them an actuarially sound cost of care covered in the state plan and (often) required of plans.

The payments are then recorded in the encounter record as: (1) an enrollment date, and (2) the payment at end of measurement period.

Claims example (select data fields)

MemID	Claim	FromDate	ToDate	ICD	HCPCS	Modifier	Paid
1	120	2012-01-01	2012-12-31	Asthma	VBP Enrollment	2017A.12-E	0
1	127	2012-01-01	2012-12-31	Asthma	VBP Payment	2017A.12-P	926

Data availability
Once the claims are in the system, they can be used to implement value-based purchasing adjustments on the same level with traditional medical expenses.

Key issue: The Encounter Record
- It already exists (no cost), it's familiar, and provides required documentation; and
- It's where rate-setting data is pulled from – so it's essential in ensuring against premium slide.

So what does this model get us?

You've managed to fund a health improving program...

Model Benefits

- Politically palatable 'across the isle'.
- Sustainable long-term funding for cost-effective programs.
- Fits existing regulatory environment for Managed care (Medicare & Medicaid).
- Additional flexibility with mandatory funds.

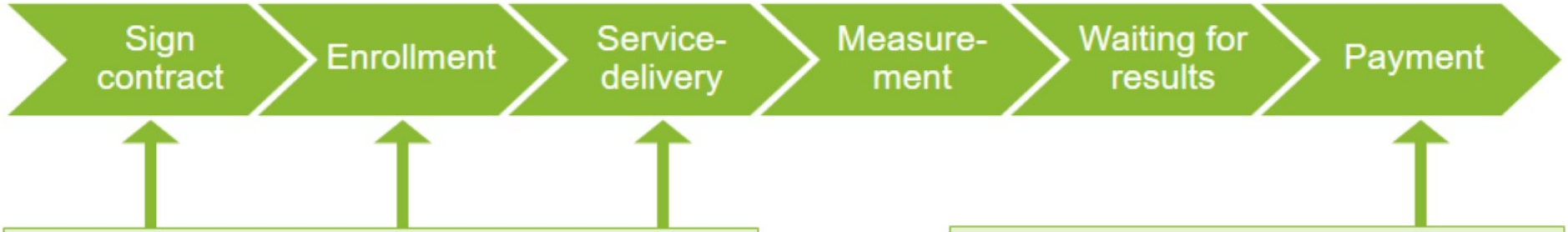
Model Limits

- Not new dollars: Diverts existing spending dollars (transform not create).
- Only funds services up to the point of cost-effectiveness, limiting usefulness to:
  - Cost-effective interventions, and
  - Capturing partial funding.
- Creates a **Cash Gap** to solve for.

... if you can find a financing partner.

A cash-gap is a financing need for a service provider who will receive money later for goods and services they need to invest in providing now.

Service Provider Timeline



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.

Cash Gap

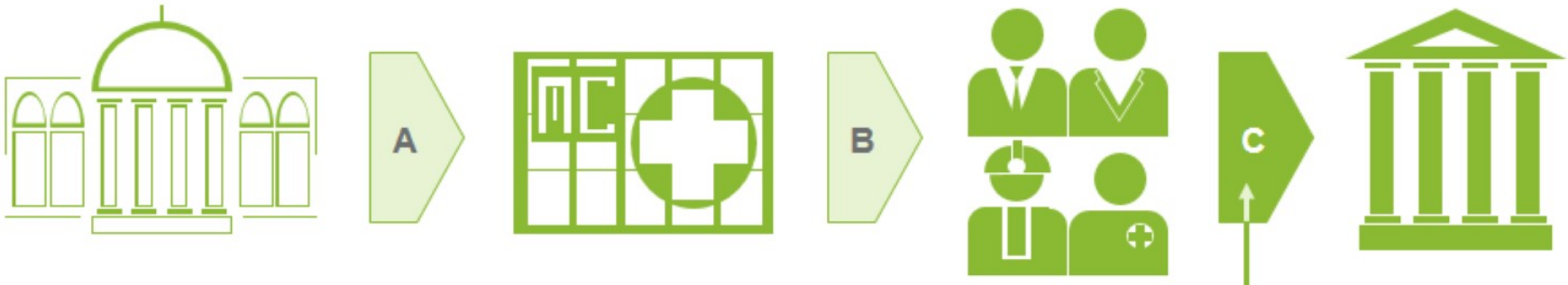
Service providers compensation

- 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?

Source(s): GHHI

Financing partners are interested in the economics as well but are also interested in what their capital is accomplishing in the world.



Financing innovations

- **Evergreen Funds** and **Wellness Trusts** create institutions to channel funding dollars to provide working capital and capital investments that create sustainable health-improving businesses.
- **Pay for Success** financing brings together philanthropy and investors to take risks on new public-goods.
- **Venture Philanthropy** will invest in promising social enterprises to scale effective services.

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