

State Innovation Models (SIM)

Local Health Improvement Coalition (LHIC) Stakeholder Group Meeting

May 17, 2013



State Innovation Models (SIM) Award: Community Integrated Medical Home

Laura Herrera, MD MPH
Deputy Secretary for Public Health
Maryland Department of Health & Mental Hygiene



State Innovation Models (SIM) Grant Solicitation

- Released by Center for Medicare & Medicaid Innovation (CMMI) at CMS
- Purpose: Develop, implement, and test new health care payment and service delivery models at the state-level
- Maryland received “Model Design” award
 - \$2.37 million
 - 6-month planning grant (April 1 – September 30, 2013) to develop “Community-Integrated Medical Home”
 - Opportunity to apply for “Model Testing” award for up to \$60 million to fund implementation over a 4 year period.

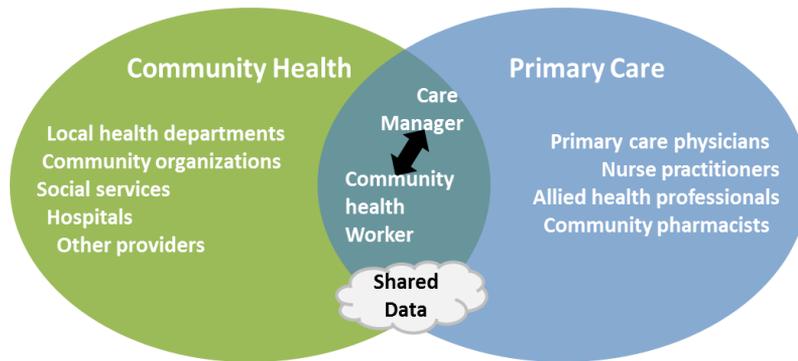


Community-Integrated Medical Home

- Integration of a multi-payer medical home model with community health resources
- 4 pillars:
 - 1) Primary care
 - 2) Community health
 - 3) Strategic use of new data
 - 4) Workforce development
- Goal is for CIMH to be an umbrella program with certain programmatic standards that allows for innovations across payers



Community-Integrated Medical Home



Planning Process

- Two parallel stakeholder engagement processes
 - 1) Payers and Providers
 - 2) Local Health Improvement Coalitions
- All-stakeholder summit near the end of 6-month period to review recommendations from both processes and make final recommendations
- Health Quality Partners will manage planning process and provide content expertise



Meeting Schedule

- **Payer/Provider Group** (*201 Preston Street*)
 - May 9, 12:30 - 5pm (L-1)
 - June 5, 12:30 - 5pm (L-3)
 - July 9, 12:30 - 5pm (L-1)
- **Local Health Improvement Coalition (LHIC) Group** (*201 Preston Street*)
 - May 17, 8:30am - 1pm (L-1)
 - June 18, 12:30 - 5pm (L-1)
 - July 16, 12:30 - 5pm (L-1)
- **Stakeholder Summit** (members of both groups): July 31, 8:30am - 5pm: *Location TBD*
- All meetings open to the public



Payer and Provider Engagement Process

- Develop a governance structure for CIMH program
- Establish a public utility to administer payment and quality analytics processes
- Set programmatic standards, such as
 - Criteria for practice inclusion
 - Quality metrics
 - Analytics
 - Shared savings methodology
- Hilltop Institute and Optumas will conduct actuarial modeling of health costs to demonstrate savings expected from CIMH



Local Health Improvement Coalition (LHIC) Engagement Process

- Complement medical care by linking high-need patients with wrap-around community-based health services
- Capacity of LHICs will be strengthened
 - Develop new models to carry out population health activities (e.g., 501(c)3, integration with LHD, etc.)
- More Definition Around Community Health Worker role
 - Define responsibilities and required skills/education for CHWs
 - Develop pathways through which they will be connected to practices
- Use new data and mapping resources to “hot-spot” high utilizers and bring them into CIMH
 - Review and provide feedback on prototypes

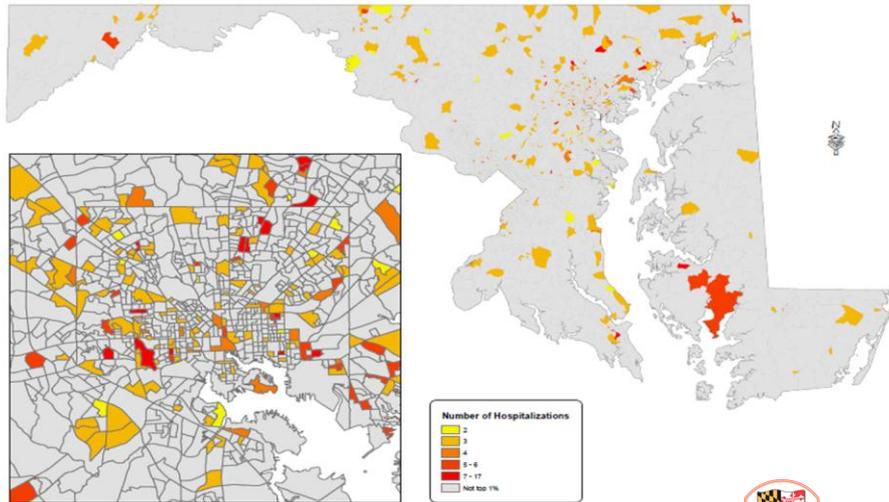


New Data Resources

- CRISP developing mapping tools for “hot-spotting”
 - Real-time hospital admissions data
 - CHWs and care managers would use to reach out to high utilizers in the community
 - LHICs and local health departments can use to monitor population health and develop targeted interventions
 - Monitor progress on community-based interventions
- DHMH will expand Virtual Data Unit
 - Warehouse of social and economic determinants, population health, outcomes, and other data
 - Will help LHICs with CIMH work as well as SHIP measures
- Maryland Health Care Commission to assess and plan expansion of All-Payer Claims Database
 - Envision APCD as supporting provider measurement on cost and quality and clinical decision-making.



Sample Hot-Spotting Map



Workforce Development and CIMH Readiness

- Conduct background research to inform Community Health Worker development
 - Inventory of training programs and CHW models
 - Identify best practices for integration of CHW into medical practices and broader health care system
 - Will present findings at LHIC stakeholder engagement process
- Technical assistance and CIMH readiness
 - Identify various ongoing TA and develop recommendation for streamlining
 - Convene TA providers and chart path forward
 - Identify and describe quality improvement efforts in local communities
 - Assist in scaling up of promising QI models



Major Deliverable

- “State Innovation Plan” that articulates the CIMH model in detail.
 - Must show how CIMH integrates with other state delivery and payment reforms
- Will form the basis for Model Testing application to CMMI



Health Quality Partners

- Ken Coburn, MD, MPH: CEO and Medical Director (Senior Consultant)
- Sherry Marcantonio: Senior Vice President (Program Manager)



Role of Stakeholder Input: State Innovation Model Planning

Ken Coburn, MD, MPH
Health Quality Partners

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Role of Stakeholders

- Stakeholder input key to informing design
- Major ways stakeholders can contribute
 - Creativity: Help us identify new and better approaches
 - What would it take to align and leverage DHMH initiatives with yours to achieve maximum signal strength and economies of scale?
 - Help us identify and troubleshoot potential areas of disjuncture
 - Teach us what you've learned that we should know

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Nature of Stakeholder Input

- Stakeholder input is advisory in nature
 - No group consensus is expected or required
 - All inputs will be considered and documented
 - May be iterative; we may need to outreach to you for more input and clarification
- Your input is highly valued and will be used to inform design
 - Crucial to creating a model that is widely supported, well utilized, effective and sustainable

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Key areas of input from this group

- Governance
- Public resource for data management and advanced analytics
- Program standards
- Evaluation measures
- Sustainability

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Means of Stakeholder Input

- Stakeholder meetings
 - 3 for each stakeholder group + 1 joint summit
- As project facilitator for Maryland, Health Quality Partners (HQP) encourages and accepts stakeholder input outside of meetings
 - Confidentially if preferred and clearly indicated
 - By email, phone
 - All input will be brought to the attention of the core project team at Maryland DHMH

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Conduct of Stakeholder Meetings

- Framing information for topics will be followed by open discussion, brainstorming, exchange of ideas
- Meetings will be recorded and transcribed
- Balanced participation across all attendees will be sought
- Respectful demeanor at all times

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Contacting HQP to Offer Additional Input

- Ms. Sherry Marcantonio, Senior Vice President, Chief Program Architect
- Office Phone: 267-880-1733 ext. 27
- Email: marcantonio@hqp.org

- Thank you – Questions? Suggestions?

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Guiding Principles and the Conceptual Approach to Operational Design

K Coburn, MD, MPH
Health Quality Partners

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Design Process

- Vision
- Aims
- Principles
- High-level design specifications
 - Mappings, schemas, visualizations
- Detailed design specifications
 - Further informed by measurable performance goals / times
- Testing, Measuring, Evaluating

- Good design is an iterative process requiring multiple revisions, discussions, inputs, new insights, and testing leading to increasing effectiveness

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CIMH Aims

Improve health and lower cost

- Create new or strengthen existing community interventions esp. for high-risk populations
- Extend capabilities of PCMH with greater access to and use of community interventions
- More effectively use information and analysis
- Create a framework for sustainability

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Advantages of Community Deployed Interventions

- Increased accessibility to and engagement with high-risk populations
- Greatly increases identification of and ability to intervene on non-medical (environmental, social, behavioral, cognitive, etc.) determinants of health
- Increased person-centeredness
- Resource allocation often more efficient than office practice or institutional deployment

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Evidence that Community-based services can lower health care costs and utilization

- Mixed
 - Some models shown to be effective
 - Quality of codification and evaluation varies greatly
- Maturing
- Promising area for R&D / new development
- Highlights need for disciplined design, implementation, and evaluation

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CIMH Guiding Principles

- Person-centeredness improves care
- The CIMH should be as “payer agnostic” as possible from the provider point of view
- Community interventions and medical care should be integrated
- New community capabilities need to be developed
- More effective transformation of data into information and advanced analytics is critical to the effectiveness of the CIMH
- Administrative efficiency and ease of use will increase adoption
- A “healthy balance” between standardization and flexibility will best enable broad implementation

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Thoughts, suggestions, additions,
deletions, changes to the guiding
principles of the CIMH?

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Future Discussion: Heading toward high-level design specifications

- Selecting target populations
- Goodness of fit between target populations' modifiable risks and proposed interventions
 - Largely determines estimated savings
- Who will we serve?
- How will we care for them differently?
- What evidence exists that doing so improves health or reduces cost?

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Beyond the Operational Design

- Success and sustainability of entire model is heavily dependent on the effectiveness of key infrastructure;
 - Governance
 - Quality standards
 - Program performance measurement
 - Information technology
 - Financing / business model

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Health Quality Partners' Experience Designing an Advanced Preventive Service

Overview – HQP Background & Work, Framework for Design, Program Description, Results, Lessons for the Maryland CIMH Model

Health Quality Partners (HQP) Who we are and what we do

- Dedicated to Research and Development
- Non-profit, 501c3, founded in 2000
- **Approach:** use disciplines of public health, systems design & analysis, and quality improvement
- **Mission:** design, test, and spread new models of care that improve the health of populations, and the quality and experience of health care

Ken's background and experience prior to HQP

- Team-based AIDS Care
 - Executive Director of Montefiore AIDS Center (Bronx, NY), a NYS Designated AIDS Center
- Quality Improvement in a Medicaid HMO
 - Medical Director for Quality Improvement; Health Partners
- Disease Management in an academic health system
 - Large primary care practice network of academic medical center (Associate Medical Director, University of Pennsylvania Health System)
- Population Health Care Management – commercial / Medicare
 - SVP, Exec Med Director, Chief Quality Officer of 11-hospital consortium with 120,000 lives under risk contract with Aetna

Current Work at HQP

- Medicare Coordinated Care Demonstration (CMS)
- Medicare Advantage (Aetna)
- Maryland State Innovation Model; facilitating design and planning
- Consultant\collaborators for urban Medicaid ACO (Camden Coalition of Healthcare Providers)
- Comprehensive Primary Care Initiative (Princeton Health Care Medical Associates)
- Health Systems Redesign
 - Improving Systems Initiative (Doylestown Hospital)
 - Cancer care coordination model (Clinical Cancer Center at Froedtert & the Medical College of Wisconsin)

HQP's Design Principles – Chronic Care Management

- Person-centered – always learn, understand, and begin wherever the person you are working with “is” in their life – physically, emotionally, culturally, socially, financially, religiously, etc. - honor and respect that starting point
- Invest in long-term relationship building and effective LONGITUDINAL engagement
- Listen - ask to learn, clarify, and verify; be available
- Involve the whole family / caregiver network to the degree possible
- Sense and Respond to dynamically changing participant needs and risks
- Provide as many effective preventive interventions as possible
- Establish minimum, regular protocols for “automatic” monitoring; risk, functional status, cognitive, emotional, educational, falls, etc. reassessments
- As a team, apply and continually reinforce the 5 principles of high reliability
 - Preoccupation with failure
 - Deference to expertise
 - Reluctance to oversimplify observations
 - Commitment to resilience
 - Sensitivity to operations
- Create robust, proactive performance monitoring and management systems
 - LEARN FROM VARIATION
- Collaborate in a clear and timely way on relevant issues with health care providers

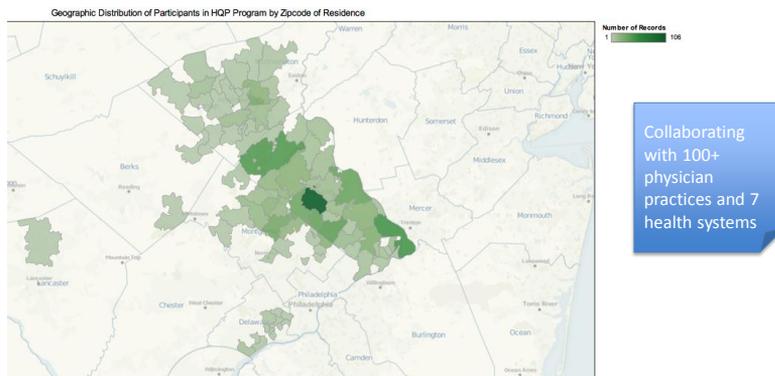
HQP's Framework for Program Design

- Define
 - Target population and *modifiable determinants of health*
- Design
 - Assemble several preventive interventions (selected based on evidence of effectiveness whenever possible) into a coherent comprehensive portfolio (n=30+) to address modifiable risks/health determinants
 - Make standards, protocols, procedures, and communication loops EXPLICIT
 - Team roles, work flows, staff training, mentoring and monitoring
- Deploy
 - Community-based nursing with extensive collaborations and data sharing
 - Frequent participant contacts (1:1, group, phone)
 - Very longitudinal (absent significant, durable shift in participant risk status)
 - Case finding, outreach, engagement, individualized (person-centered)
 - Service data capture and advanced program analytics
- Refine
 - Ongoing improvement guided by performance analytics (200 process measures), outcomes, staff, participant and collaborator feedback

High reliability

Population Served

- Traditional Medicare and Medicare Advantage
- Chronically ill with heart failure, coronary heart disease, diabetes, chronic lung disease
 - Other risks as well; prior admission or high risk score
 - Median age 81 years



Mode and frequency of contacts with patients

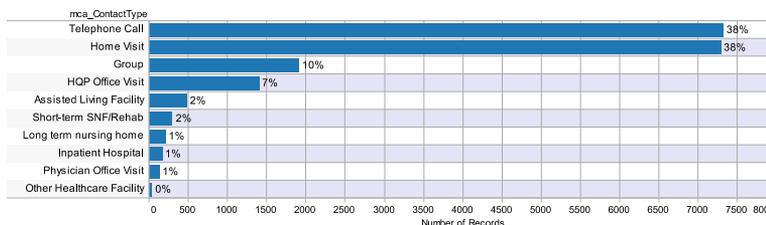
In one year (1/22/2012-1/23/2013):

With approx. 660 active patients

Contacts = 19,240 contacts, avg 29/person/yr

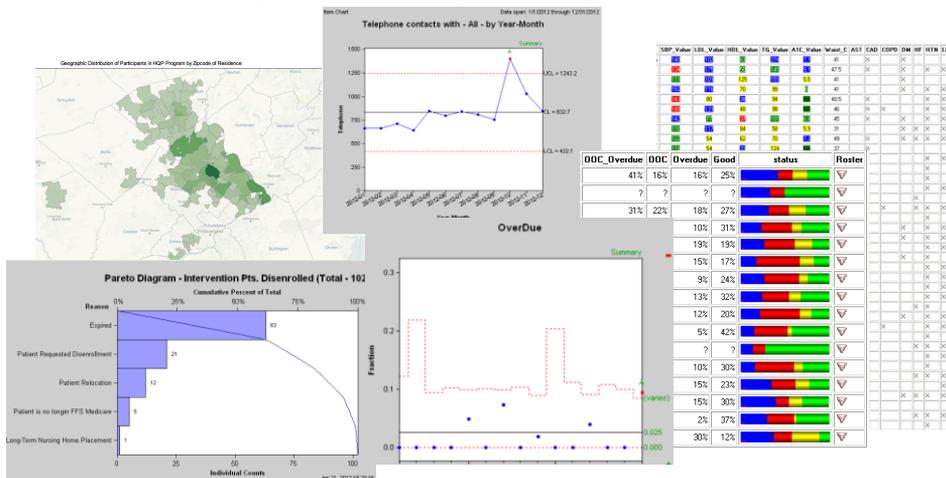
In-person = 11,926 (62%)

At-home = 7,289 (38%)



Advanced Analytics are KEY

- Separating the Signal from the Noise
 - Prioritize individuals with dynamically changing risk profiles
 - Identify variation in service delivery performance to direct root cause analysis, organizational learning, and management corrective actions



HQP Advanced Preventive Service Outcomes

Population	N	Control PPPM	Deaths	Hospital admissions	ER visits	Part A expenditures, excl prgm fees	Part A expenditures, incl prgm fees	SNF cost
Medicare Coordinated Care Demonstration (randomized, controlled trial versus usual care)								
All risk levels (low, mod & high)	1,464			-14%		-14%	Neutral	
Higher-risk	1,721	\$731	-25%	-7%		-4%	+9%	
Higher-risk	502	\$900	-30%	-29%		-20%		
Higher-risk	248	\$1,441	-18%	-39%	-37%	-36%	-28%	-64%
Higher-risk	695	\$1,108		-25%		-20%	-10%	
Higher-risk	273	\$1,363		-33%		-30%	-22%	
Aetna Medicare Advantage (difference-in-differences analysis trended over time against like comparison group, multiple eval. cycles)								
Higher-risk	N			Hospital adms			Hospital cost	
Higher-risk	1,200			-20%, 17%			-18%, 16%	

** 05, 05, 05, 05
 * Statistics not reported

■ Third Report to Congress, Deborah Peikes, et al., Jan 2008, Mathematica Policy Research, Inc. (MPR)
■ Fourth Report to Congress, Jennifer Schore, et al., March 2011, MPR
■ PLoS Medicine, Ken Coburn, et al., July 2012, (7):e1001265, doi:10.1371/journal.pmed.1001265
■ JAMA, Deborah Peikes, et al., Feb 2009; 301(6):603-618, doi:10.1001/jama.2009.126
■ MPR report shared with HQP with CMS permission, 2011 (unpublished)
■ Health Affairs, Randall Brown, et al., June 2012, 31, no. 6:1156-1166
■ Aetna Medical Economics Team Reports 2011, 2012 (press releases)

Higher-risk, based on geriatric HRA
 Higher-risk, HF, CAD, COPD AND 1 hospitalization in prior year
 Higher-risk, HF, CAD, COPD
 Higher-risk, HF, CAD, COPD AND 1 hospitalization in prior year
 OR (diabetes, cancer (not skin), stroke, depression, dementia, atrial fibrillation, osteoporosis, rheumatoid arthritis/osteoarthritis, chronic kidney disease) AND 2 hospitalizations in the prior 2 years
 Higher-risk, HF, CAD, COPD, Asthma, Diabetes AND minimum out-point on Aetna proprietary risk score
 Abbreviations: PPPM = per person per month, ER = emergency room, SNF = skilled nursing facility, HRA = health risk assessment, HF = heart failure, CAD = coronary artery disease, COPD = chronic obstructive pulmonary disease

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Publications



Online article and related content current as of February 10, 2009.

Effects of Care Coordination on Hospitalization, Quality of Care, and Health Care Expenditures Among Medicare Beneficiaries: 15 Randomized Trials

Deborah Peikes; Arnold Chen; Jennifer Schore; et al.

JAMA. 2009;301(6):603-618 (doi:10.1001/jama.2009.126)

<http://jama.ama-assn.org/cgi/content/full/301/6/603>

"... HQP, also showed promise, ... for this subgroup [highest severity cases] both differences were large (-29% for hospitalizations and -20% for expenditures) and statistically significant (P=.009 and P=.07, respectively)."

HEALTH AFFAIRS JUNE 2012 31:6

AVOIDABLE ADMISSIONS

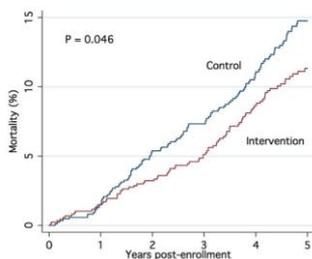
By Randall S. Brown, Deborah Peikes, Greg Peterson, Jennifer Schore, and Carol M. Razafindrakoto

doi:10.1377/hlthaff.2012.0393
 HEALTH AFFAIRS
 VOL. 31, NO. 6
 JUNE 2012, PP 603-618
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Six Features Of Medicare Coordinated Care Demonstration Programs That Cut Hospital Admissions Of High-Risk Patients

"... Health Quality Partners, reduced hospitalizations by 30 per 100 beneficiaries (33 percent; p=0.02)"

"... The demonstration program with the largest effects, at Health Quality Partners, was very data-driven, tracking care coordinators' performance and continually assessing the effectiveness of newly introduced interventions component and refinements to existing ones ..."



OPEN ACCESS Freely available online

PLOS MEDICINE

Effect of a Community-Based Nursing Intervention on Mortality in Chronically Ill Older Adults: A Randomized Controlled Trial

Kenneth D. Coburn*, Sherry Marcantonio, Robert Lazansky, Maryellen Keller, Nancy Davis

Health Quality Partners, Doylestown, Pennsylvania, United States of America

"... Overall, a 25% lower relative risk of death (hazard ratio [HR] 0.75 ... the adjusted HR was 0.73 (95% CI 0.55-0.98, p=0.033)."

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Aetna, Health Quality Partners See Fewer Admissions, Lower Costs from Care Management Program

Monday, January 14, 2013 4:06 pm EST

BLUE BELL, Pa. – (BUSINESS WIRE) – For the second year in a row, Aetna (NYSE: AET) Medicare Advantage members in Pennsylvania who enrolled in a Health Quality Partners (HQP) care management program continued to have fewer hospital admissions and lower medical costs than members with similar conditions who did not participate.

"By addressing cost and quality issues at their roots, HQP has improved the lives of Medicare beneficiaries for

Aetna has renewed & expanded HQP contract through 2015

Washington Post
April 28, 2013

The nurse's house call:
**If this were a pill,
you'd do anything to get it**



DELIVERING CARE: Patty Graeff, a nurse with Health Quality Partners, makes her weekly visit to Paul and Betty Bradford at their home near Doylestown, Pa. PHOTO COURTESY OF THE WASHINGTON POST

BY EZRA KLEIN

When Ken Coburn has visitors to the cramped office of Health Quality Partners in Doylestown, Pa., he likes to show them a graph. It's not his graph, he's quick to say. Coburn is not the sort to take credit for other's work. But it's a graph that explains why he's doing what he's doing. It's a graph he particularly wishes the folks who run Medicare would see, because if they did, then there's no way they'd be threatening to shut down his program.

The graph shows the U.S. death rate for infectious diseases between 1900 and 1960. The line starts all the way at the top. In 1900, 800 of every 100,000

**So why is Medicare
shutting down one of
the most revolutionary
health-care experiments
in the country?**

Americans died from infectious diseases. The top killers were pneumonia, tuberculosis and diarrhea. But the line quickly begins falling. By 1920, fewer than 400 of every 100,000 Americans died from infectious diseases. By 1940, it was less than 200. By 1960, it's below 100. When's the last time you heard of an American dying from diarrhea?

"For all the millennia before this in human history," Coburn says, "it was all about tuberculosis and diarrheal diseases and all the other infectious disease. The idea that anybody lived long enough to be confronting chronic diseases is a new invention."

[COBURN CONTINUED ON G6](#)

2 Flavors of Innovation; Unintended Variation impedes both

- Innovation
 - Flavor 1: Dissemination of established interventions – into new settings, usually requires judicious local adaptation (intentional controlled variation)
 - Flavor 2: Experimentation – trying a new, promising, but relatively untested/unproven intervention
 - Both thrive on disciplined design/codification, reliable implementation, and rigorous evaluation
- Variation
 - Significant unintended, uncontrolled sources of variation undercut both types of innovation
 - Often due to lack of process specifications, lax implementation

Standardization / Flexibility

- Philosophy guiding this work: to the degree possible, key processes should be “standardized” (thoughtfully defined with explicit specifications and reliably executed)
 - Dissemination of established interventions
 - Experimentation of new interventions
- Flexibility in the form of nimble intentional modifications that are explicitly specified and consistently and reliably implemented can be great
- ‘Flexibility’ due to lack of defined process specifications or implementation standards leads to uncontrolled variation

Relevance to Maryland SIM / CIMH

- We hope that the lessons and experience derived from HQP’s other engagements can help the CIMH successfully implement community interventions that improve health and lower cost

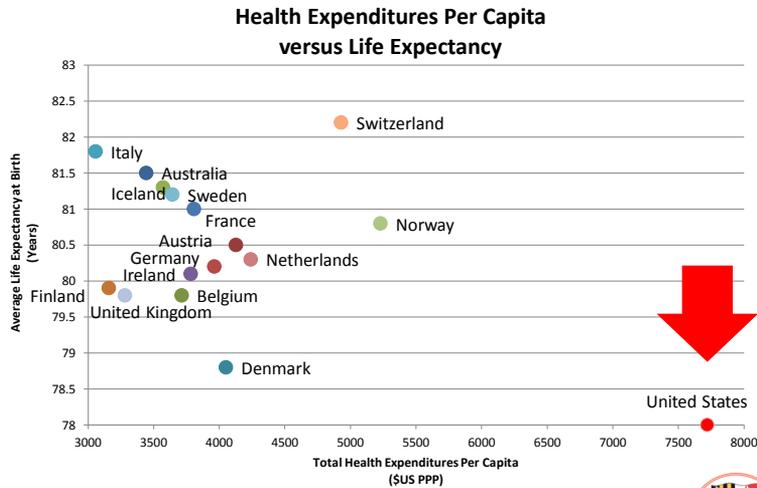
MD's State Health Improvement Process (SHIP)

Accountability Framework & Local Health Action

Karen Matsuoka, PhD
 Director, Health Systems and Infrastructure Administration



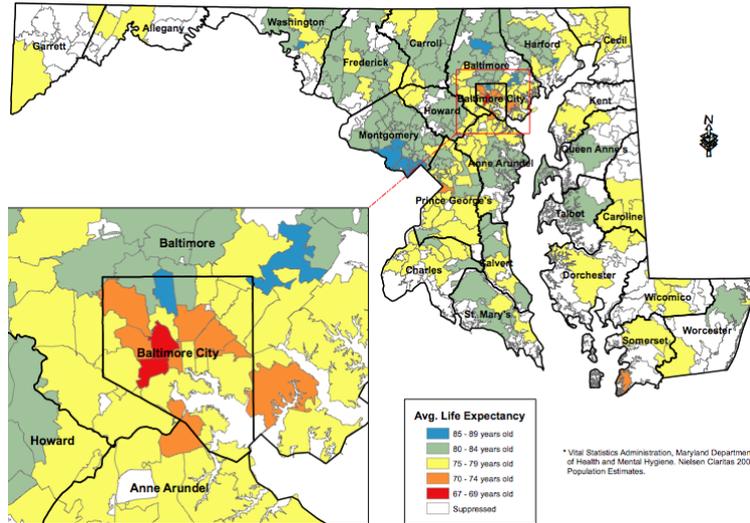
Relationship between Spending and Longevity



Source: OECD Health Data 2011

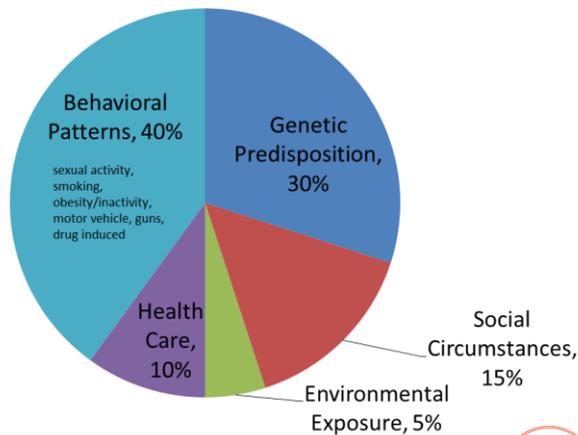


Maryland Average Life Expectancy



MARYLAND
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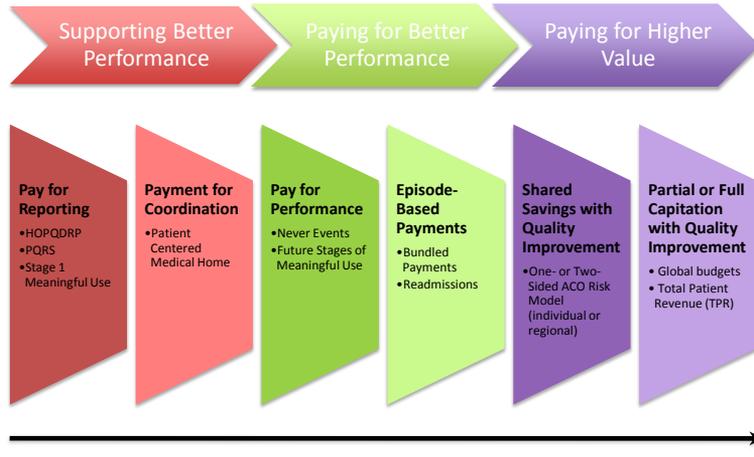
Proportional Contribution to Premature Death



Source: Steven A. Schroeder, New England Journal of Medicine, Sept 20, 2007

MARYLAND
DEPARTMENT OF HEALTH
& MENTAL HYGIENE

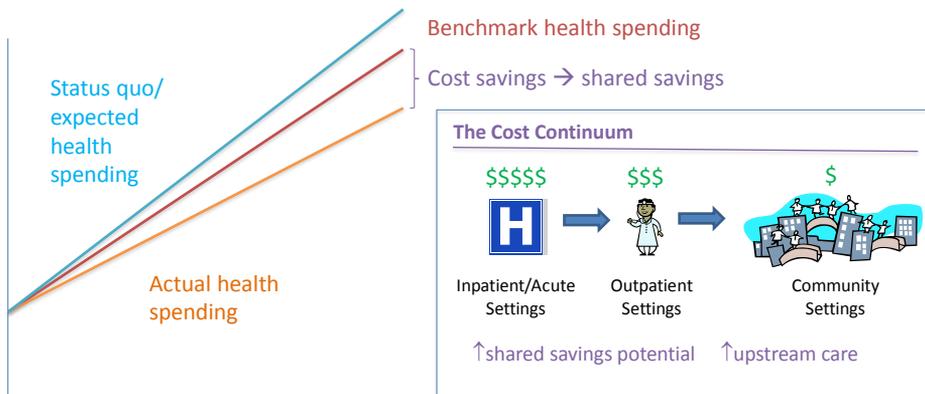
Payment for Value Instead of Volume



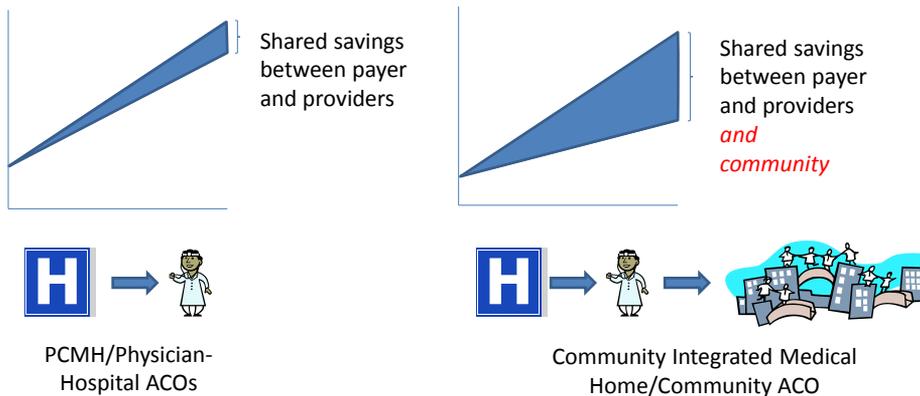
Payment Reforms Progressively Move Away from FFS & Support Sustainable Health Care Reform
 Progressively Requires Greater Risk Management, Data, Analytics



Community-Clinical Linkages to Advance Delivery and Payment Reform



Community-Clinical Linkages to Advance Delivery and Payment Reform



State Health Improvement Process (SHIP)

- Established in September 2011
- Goal
 - To provide a Framework for shared accountability
 - And resources (financial and data)
 - To Catalyze Local Action at the community-level
 - And integrate Efforts of
 - Public Health
 - Hospitals and Health Care Providers
 - Community Groups
 - Health Benefits Exchange
 - To Improve Population Health and Reduce Health Disparities



Aligned Action in 6 Focus Areas to Increase Life Expectancy



Governance/Structure

- State and Local Accountability
 - 39 measures: health outcomes and determinants
 - State and county baselines and 2014 targets
 - Racial/ethnic disparity information
- 18 Local Health Improvement Coalitions covering the state
 - Typically Co-Chaired by Hospital and Public Health leaders and include cross-section of community leaders
 - Community members
 - BH leaders
 - Schools, veterans, aging and social services providers
 - Businesses and faith leaders
 - Safety and built environment planners
 - Maximum flexibility with regard to community interventions; standardization around core metrics and population definition



DEPARTMENT OF HEALTH AND MENTAL HYGIENE

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SHIP HOME > LHICMAP

State Health Improvement Process (SHIP)

Local Health Improvement Coalition (LHIC) Information

(*Additional local health planning information can be found by clicking on a jurisdiction below*)

Maryland State Health Improvement Process Regions

- Lower Shore
- Mid Shore
- NA

Maryland MAPS MD iMap

HEALTHIER MARYLAND

The Role of LHICs in Community Health Improvement Today

- Convening/facilitating/coordinating
- Planning and priority-setting
- Performance monitoring

What **could/should** the role of LHICs be in community health improvement moving forward?

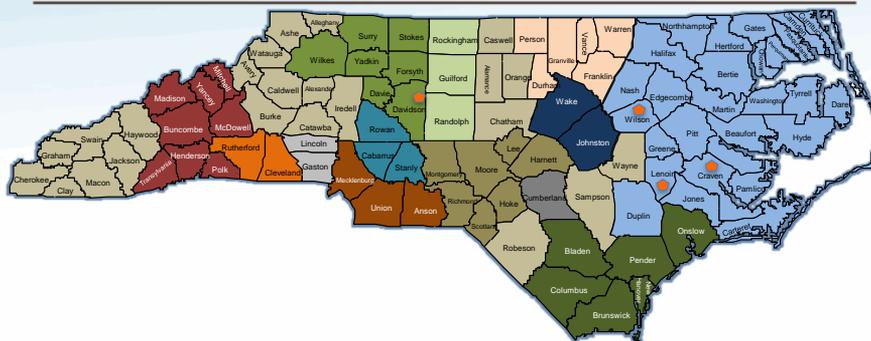
What resources/capacity would it take to get there?

Roles of Community Health Systems in Other States

- Convening/facilitating/coordinating
- Planning and priority-setting
- Performance monitoring
- Continuous quality improvement to hit cost and quality targets
- Setting (and managing to) community global budgets
- Data analytics and aggregation
- Taking in payments and distributing shared savings



Community Care Networks



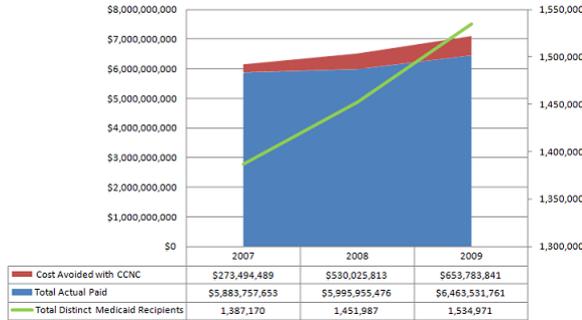
- | | |
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| <ul style="list-style-type: none"> ● AccessCare Network Sites ■ AccessCare Network Counties ■ Community Care of Western North Carolina ■ Community Care of the Lower Cape Fear ■ Carolina Collaborative Community Care ■ Community Care of Wake and Johnston Counties ■ Community Care Partners of Greater Mecklenburg ■ Carolina Community Health Partnership | <ul style="list-style-type: none"> ■ Community Care Plan of Eastern Carolina ■ Community Health Partners ■ Northern Piedmont Community Care ■ Northwest Community Care ■ Partnership for Health Management ■ Community Care of the Sandhills ■ Community Care of Southern Piedmont |
|--|---|

Source: CCNC 2012

Cost savings estimate: Treo Solutions

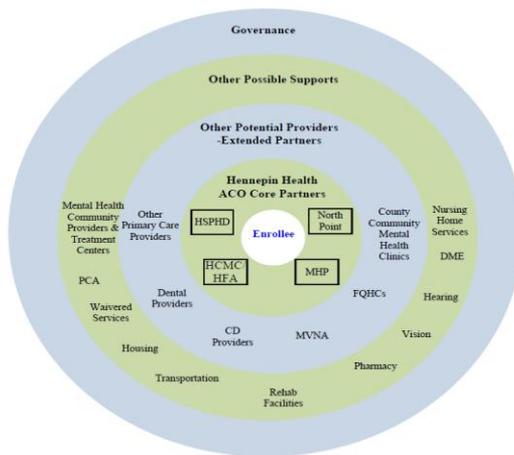


\$1.5 Billion Savings Attributable to CCNC 2007-2009



Using the unenrolled fee-for-service population, risk adjustments were made by creating a total cost of care (PMPM) set of weights by Clinical Risk Group (CRG), with age and gender adjustments. This weight set was then applied to the entire NC Medicaid Population. Using the FFS weight set and base PMPM, expected costs were calculated. This FFS expected amount was compared to the actual Medicaid spend for 2007, 2008, 2009. The difference between actual and expected spend was considered savings attributable to CCNC. Treo Solutions, Inc., June 2011.

Hennepin Health (Hennepin County, MN)



Safety-Net ACO

- County medical center (level 1 trauma center + network of primary and specialty care clinics)
- FQHC
- Health Dept
- publicly-owned county HMO

Care Team

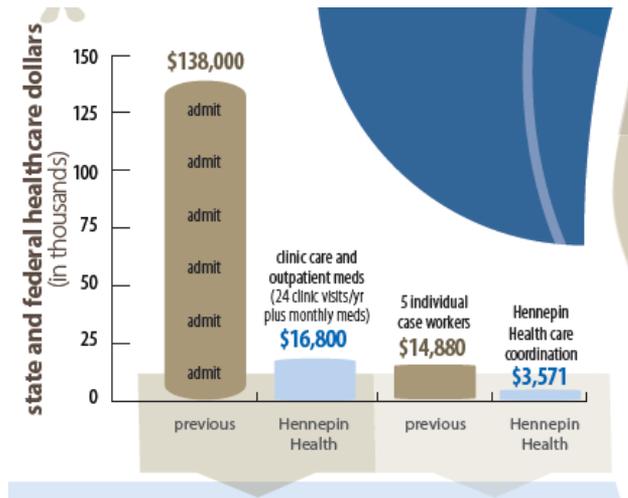
- MD or NP
- Care coordinators (nursing, BH, human services specialists)
- Pharmacist
- Community Health Worker

Manage Total Cost to County

including prison, medical, human services



Hennepin Health: Case Studies



Vermont ACO Pilot: Community Health System Roles

- Service Integration
 - Community health team
 - Community health assessment and plan
 - ACO clinical care coordination
- Financial Integration
 - ACO shared savings incentive
 - Setting and managing global medical budget
- Governance
 - Physician and executive champions
 - ACO governance and legal structure to take in payments and disburse shared savings
- Data/Analytics
 - Practice-level performance reports
 - ACO financial reports & quality reports
 - Population health assessment
- Process Improvement
 - Practice-level quality improvement teams
 - Achieving ACO financial and quality improvement targets



SHIP Data and Analytics

- For planning: to assist in priority-setting around identified community health needs
- For performance monitoring:
 - To assist in continuous quality improvement
 - To identify best practices through comparative analysis



SHIP 1.0: SHIP County Profiles

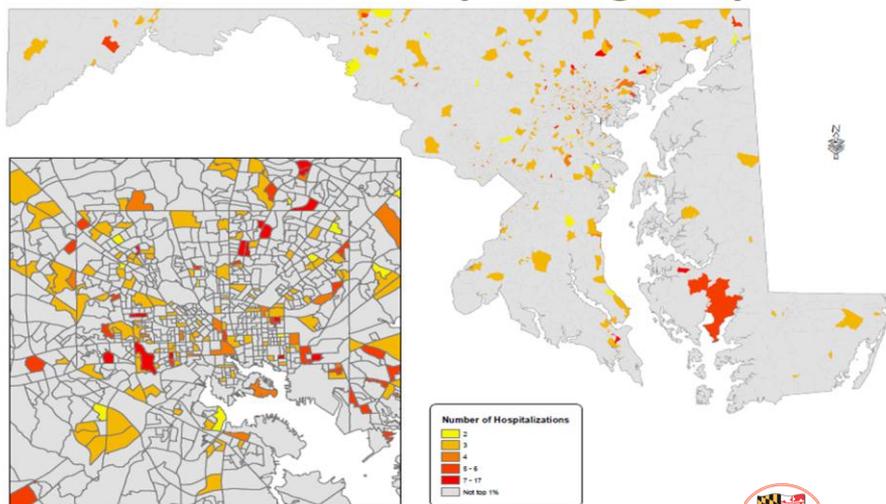
High Impact Objectives

Figures in RED/GREEN represent when the county baseline is WORSE/BETTER than the state baseline.

Obj #	SHIP Measure (County Baseline Source)	County Baseline	Maryland Baseline	Maryland 2014 Target
High Morbidity Impact				
17	Rate of ED visits for asthma per 100,000 population (HSCRC 2010)	535.3	850.0	671.0
27	Rate of ED visits for diabetes per 100,000 population (HSCRC 2010)	258.1	347.2	330.0
28	Rate of ED visits for hypertension per 100,000 population (HSCRC 2010)	183.7	237.9	225.0
34	Rate of ED visits for a behavioral health condition per 100,000 population (HSCRC 2010)	1,085.2	1,206.3	1,146.0
High Mortality Impact				
25	Rate of heart disease deaths per 100,000 population (age adjusted) (VSA 2007-2009)	227.6	194.0	173.4
26	Rate of cancer deaths per 100,000 population (age adjusted) (VSA 2007-2009)	189.3	177.7	169.2
Multiple Impact Objectives (those objectives with a high rate of return on investment)				
3	Percentage of births that are LBW (VSA 2007-2009)	7.0%	9.2%	8.5%
6	Percentage of births where mother received first trimester prenatal care (VSA 2007-2009)	86.0%	80.2%	84.2%
11	Percentage of students who graduate high school four years after entering 9th grade (MSDE 2010)	91.1%	80.7%	84.7%
30	Percentage of adults who are at a healthy weight (not overweight or obese) (BRFSS 2008-2010)	30.5%	34.0%	35.7%
31	Percentage of youth (ages 12-19) who are obese (MYTS 2008)	9.4%	11.9%	11.3%
32	Percentage of adults who currently smoke (BRFSS 2008-2010)	18.6%	15.2%	13.5%
33	Percentage of high school students (9-12 grade) that have used any tobacco product in the past 30 days (MYTS 2010)	25.8%	24.8%	22.3%



SHIP 2.0: Hot-Spotting Maps



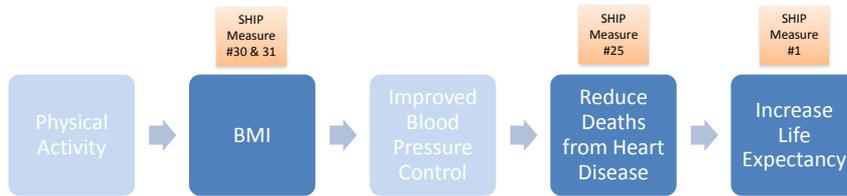
SHIP 1.0: Annual Updates

Vision Area	SHIP Objectives	2012 Update
Chronic Disease	25. Reduce deaths from heart disease	●
	26. Reduce the overall cancer death rate	●
	27. Reduce diabetes-related emergency department visits	●
	28. Reduce hypertension-related emergency department visits	●
	29. Reduce drug-induced deaths	●
	30. Increase the proportion of adults who are at a healthy weight	⌘
	31. Reduce the proportion of children who are considered obese	●
	32. Reduce the proportion of adults who are current smokers	⌘
	33. Reduce the % of youths who use any kind of tobacco product	⌘
	34. Reduce emergency visits related to behavioral health conditions	●
	35. Reduce % of hospitalizations related to Alzheimer's disease	●

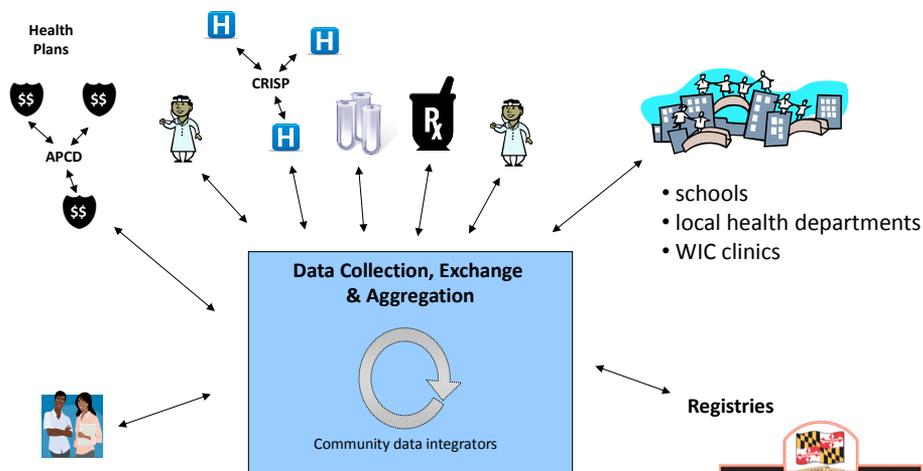
SHIP Progress Summary Key	
●	The updated measure on track to meet/ met the Maryland 2014 Target
●	The updated measure is moving toward the Maryland 2014 Target
●	Updated measure is not moving toward the Maryland 2014 Target
⌘	Data for update is pending



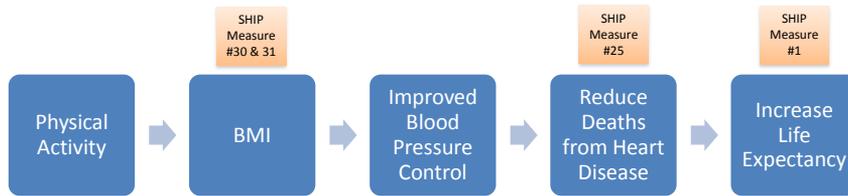
Improving Heart Disease Outcomes



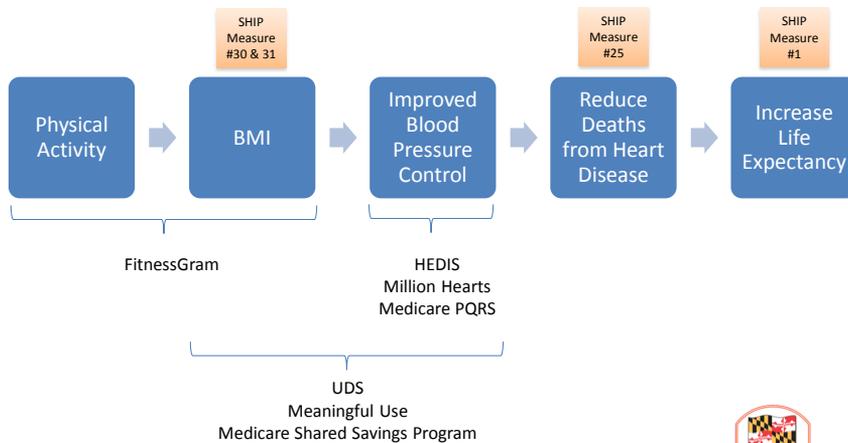
SHIP 2.0: “Intermediate” Measures & Data Integration Across Data Sources



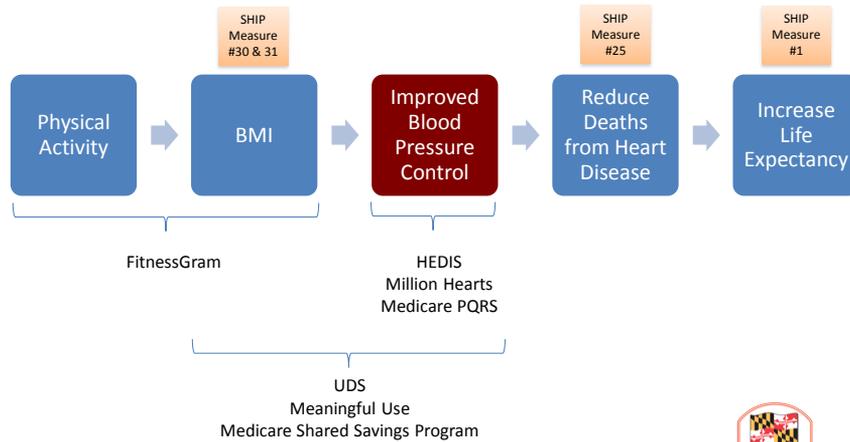
Improving Heart Disease Outcomes



Improving Heart Disease Outcomes



Improving Heart Disease Outcomes



Performance Measurement at Varying Levels of Aggregation

NQF #18 Blood Pressure Control	denominator	numerator				
	HTN patients	BP <140/90				
	40	20	50%	Practice/ PCMH 50%	HEZ 75%	LHIC 50%
	40	30	75%			
	60	20	33%			
	140	70				SHIP 20%
Zip Code	20,000	15,000				
County	100,000	50,000				
State	500,000	100,000				



The Role of LHICs in Community Health Improvement Today

- Convening/facilitating/coordinating
- Planning and priority-setting
- Performance monitoring

What ***could/should*** the role of LHICs be in community health improvement moving forward?

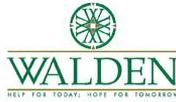
What resources/capacity would it take to get there?



Community Integrated Reform Initiatives in Maryland

- Examples
 - St. Mary's Health Enterprise Zone
 - HealthCare Access Maryland's Operation Care
 - Worcester County Health Department's Collaboration with Atlantic General Hospital
- What has been the role of the LHIC in these efforts?
- With additional resources and supports, would could the role of the LHIC be?





Greater Lexington Park Health Enterprise Zone (HEZ) Project



MedStar St. Mary's Hospital



HEZ Partners

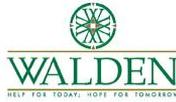
- MedStar St. Mary's Hospital
- Minority Outreach Coalition
- Walden Sierra Inc.
- Greater Baden Medical Services
- MedStar Health Research Institute
- SOMD Center for Independent Living
- St. Mary's County Housing Authority
- Community Development Corporation

- St. Mary's County Government:
 - Community Health Advisory Council/LHIC
 - Human Services Council
 - Health Department
 - Department of Social Services
 - Department of Aging and Human Services



MedStar St. Mary's Hospital

St. Mary's County
Department of
Social Services



SMC*IL*
Southern MD Center for Independent Living



GREATER
Baden Medical Services
Taking care of our community

HASMC

Vision

Establish accessible, integrated, culturally competent healthcare in the HEZ supported by clinical care coordination, prevention services, community outreach and education

Core Disease States

Diabetes, Asthma, Hypertension, Congestive Heart Failure, Chronic Obstructive Pulmonary Disease, Behavioral/Mental Health Diseases



MedStar St. Mary's
Hospital

Greater Lexington Park HEZ Project

Main Activities/Goals

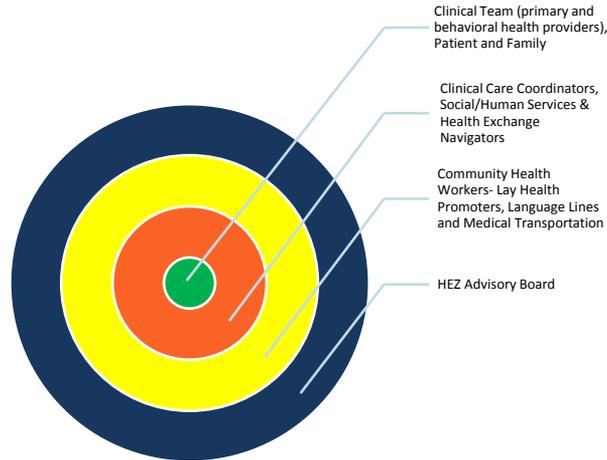
- Integrated Care Team Model in the HEZ
- HEZ Medical Transportation Route
- Community based Clinical Care Coordinators
- Evidence-based **Community Health Worker** Program
- Mobile Dental Clinic
- Culturally Competent HEZ Healthcare Environment
- Lexington Park Community Health Center



MedStar St. Mary's
Hospital

Greater Lexington Park HEZ Project

Integrated Care Team Model



Knowledge and Compassion **Focused on You**



Greater Lexington Park HEZ Project

HEZ Medical Transportation Route

- Designated Route in HEZ
 - Handicapped Accessible Van
 - 10 Passenger/2 Wheel Chair
 - Healthy Outlets: Physician Offices, Gyms, Grocery Stores, Farmers Market, Dentists, Parks



Knowledge and Compassion **Focused on You**



Greater Lexington Park HEZ Project

Community Health Worker Program

- Develop Standardized Training Program and Materials
- Implement Discreet Evidence-based Programs
 - Body and Soul Faith-based Nutrition Education (American Cancer Society)
 - Living Well with Chronic Conditions (Stanford University)
 - Hair, Heart and Health Hypertension Education and Screenings (MedStar Health)
 - Mental Health First Aid (SAMHSA)
 - Home Health Assessments (American Lung Association)
- Implement Home Visits

Knowledge and Compassion **Focused on You**



Greater Lexington Park HEZ Project

- Clinical Care Coordinators
 - Liaison between inpatient/ER care providers and primary care providers to improve outcomes
 - Develop care plans with primary care
 - Case Management as appropriate
 - Reduce unnecessary readmissions
 - Facilitate Self Management program participation

Knowledge and Compassion **Focused on You**



Greater Lexington Park HEZ Project

Mobile Dental Clinic

- Outfit MSMH Mobile Outreach Center
- Dental Hygienist Training Program
 - Fortis College
- Incentivize Local Dentists and Hygienists for Participation



Knowledge and Compassion **Focused on You**



Greater Lexington Park HEZ Project

Culturally Competent Healthcare Environment

- Language Lines and Interpreter Services
- Culturally Competency Training
 - Healthcare Providers and Professionals
 - Social/Human Services Providers
- Annual Community Focus Groups
- Supported by the Minority Outreach Coalition and Minority Outreach Technical Assistance



Knowledge and Compassion **Focused on You**



Greater Lexington Park HEZ Project

Lexington Park Community Health Center

- Primary Care, Behavioral/Mental Health, Social Services, Aging and Human Services, Housing Authority and much more
- Integrated Care Team approach
- Considered Patient-Centered Medical Home Model and now excited about possible CIMH!!!!!! 😊



Knowledge and Compassion **Focused on You**

MedStar St. Mary's Hospital

St. Mary's County
Department of
Social Services



SMC*i*L
Southern MD Center for Independent Living



Minority
outreach
coalition

GREATER
Baden Medical Services
TAKING CARE OF OUR COMMUNITY

HASMC

QUESTIONS?



MedStar St. Mary's
Hospital

OPERATION CARE



www.hcamaryland.org

Operation Care

Background



- EMS is overwhelmed with calls from 911 for non-emergency related issues and/or poorly managed medical conditions.
- This is problematic in that it diverts the EMS away from handling true emergencies and can compromise response times.
- These calls are costly and taxing to a variety of systems (i.e. BCFD, ED, etc.).

Issue



- Many calls come from individuals who have non-emergent health needs of a re-occurring nature.

They do not know how to gain access to the care, treatment or services that they need.

Proposed Solution

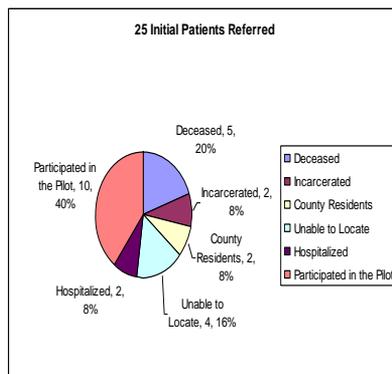


In May 2008, BCHD, HCAM, and the BCFD began a pilot project called Operation Care to provide case management services to frequent 911 callers.

Goals of the project were to:

- Ensure that patients were adequately linked to health care and other community services.
- Decrease the number of non-emergent calls to 911.

Intervention



- HCAM assigned dedicated case managers to work with the top 25 patients during the pilot period from May 12, 2008 – August 1, 2008 (3 months). 10 patients participated in the pilot.
- The majority of participants received 8 to 11 weeks of intervention.
- The case manager conducted an assessment of needs and coordinated care/services to address those needs.

Data: May 12, 2007 – May 12, 2008

Patient	Non-Transport Responses	Patient	Transport Responses
1	103	1	6
3	5	2	54
7	0	3	63
Total	108	4	55
		5	7
		6	11
		7	23
		8	30
		9	130
		10	33
		TOTAL	412

Age, Insurance Status, and Diagnosis of Patients

	Age	Insurance	Diagnosis
• 1	65	Private	Diabetes, depression
• 2	65	Medicare	Cardiac, depression
• 3	61	Medicaid	Hypertension, osteoporosis
• 4	88	Medicare	Diabetes, asthma, dementia
• 5	39	Uninsured	Drug/alcohol, psychiatric
• 6	89	Medicare	Cardiac, depression
• 7	52	Medicare	Cancer, paralysis
• 8	53	Medicare	Congestive heart failure
• 9	47	Medicaid	Drug/alcohol abuse
• 10	52	Medicaid/ PAC	Drug/alcohol, seizure disorder

Interventions Provided

- Health Insurance Enrollment
- Medical Coordination to:
 - Community Health Clinics
 - Primary Care Providers
 - Specialty Providers
 - Disease Management Programs
 - Mental Health Providers
 - Substance Abuse Programs
- Social coordination to:
 - Food Pantries
 - Adult Daycare Services
 - Transportation
 - Assistance with Activities of daily living
 - Housing Resources
 - Homeless Shelters
 - Employment Resources

Referrals Made for the Pilot Participants

Patient	Programs and services to which patient was referred
1	Psychiatric evaluation, nutritional consultation, diabetes management, adult protective services, domestic violence program
2	Adult evaluation services, specialty care (ophthalmology), adult day services, Food Stamps
3	CARE (Adult Day Care), Meals on Wheels, durable medical equipment (wheelchair)
4	Adult and geriatric services, specialty care (ophthalmology), medicine compliance
5	Health insurance, drug treatment
6	Baltimore City Health Department's Personal Care Program, specialty services (ophthalmology/podiatry), energy assistance
7	Substance abuse treatment, assistance with photo ID/birth certificate
8	Kidney disease program, transportation, Adult Protective Services, Meals on Wheels, assisted living
9	Long-term drug treatment, psychiatric evaluation
10	Food Stamps, Medicaid

Outcome



- Call Reduction
7 out of 10 participants showed at least a 80% decline in calls.
- Financial savings were substantial.
The predicted cost of services would have been \$37,186.61. The actual cost was \$5,525.14 over the pilot period.
A savings of \$31,661.47.

Benefits

- This was a triumph for all parties involved.
- EMS was able to respond to more emergency calls.
- HCAM was able to continue its mission to provide care coordination services to the most difficult populations in Maryland.
- Most importantly, the participants were able to get the help they truly needed, and their overall quality of life improved.

The Evolution of Operation Care

- At the conclusion of the pilot, HCAM continued to serve Operation Care's initial clients and received additional referrals from BCFD.
- July 1, 2010, Operation Care was fully funded by BCFD, and two fulltime case managers, paraprofessional and registered nurse, were hired.
- October 1, 2010, Operation Care moved to the Homeless Services Division.

Referral Process

- BCFD provides HCAM with a list of persons calling 5+ in the preceding 30 days.
- Maximum number of participants 45.
- BCFD provides information about the persons call volume the month prior to the referral and bi-weekly after the person has been referred.

Information Provided

- Name
- Date of Birth
- Social Security Number
- Date and Time of Call
- Reason for Call
- Address Where Picked Up

Where to Now?

- Continue to Grow Operation Care and Create a Multi-Disciplinary Team.
- Continue to evaluate the Program to Further Demonstrate Benefits.
- Mobilize Additional Support from the Various Systems (EDs, hospitals, outpatient clinics, government agencies, private sector, etc.) that Benefit from the Successful Outcomes.

Questions?



Contact Information

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- Kyle Fields, MS, MHC
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KFields@HCAMaryland.org
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APfeifer@HCAMaryland.org
- Alexander Mustafa
(410)-649-0521
AMustafa@HCAMaryland.org

Worcester County Health Department Positioning for Health Care Reform



**PRESENTED TO LHIC STAKEHOLDER GROUP
STATE INNOVATION PLANNING GRANT
DEBORAH GOELLER, RN, MSN
HEALTH OFFICER
MAY 17, 2013**



1

Health Services at WCHD



- Public Health Core Functions
- Population Health Planning and Data Management
- Care Coordination/Case Management
- Direct Services
 - Integrated Behavioral Health & Addictions
 - Integrated Primary Care for BH
 - Reproductive Health/Family Planning
 - Dental

2

Innovative Activities

- Health Department clinical data sharing
 - CRISP and EHR Meaningful Use
- Health Department as Care Management Contractor to PCMH providers
- Health Department as Connector to Health Insurance coverage
- Health Department as facilitator of community health data (Network of Care)

3

Participation in CRISP

- **Delivers JC Certified BH services**
 - BH, Addictions: high risk, high utilizing populations
 - **PULL** : CRISP data for Medication Reconciliation, continuity
 - **PUSH**: Submit data for use in other clinical settings (ER)
- **Chronic Disease Care Management services**
 - CMS Innovations Grant – PCMH Partnership with AGH
 - HIV CM, TB
 - Diabetes – proposed
- **Traditional Public Health Services**
 - Immunizations

4

Meaningful Use Data set Continuity of Care Document (CCD)

- Data transfer- support continuity of care
- Could be pushed/pulled to & from HIE to support Med Reconciliation

Required elements	Optional Elements
<u>Allergies</u> <u>Medications</u> <u>Problem List</u> <u>Procedures</u> <u>Results</u> Required only for inpatient settings	<u>Advance Directives</u> <u>Encounters</u> <u>Family History</u> <u>Functional Status</u> <u>Immunizations</u> <u>Medical Equipment</u> <u>Payers</u> <u>Plan of Care</u> <u>Social History</u> <u>Vital Signs</u>

5

CRISP Data Receiving Process

Phase I

- Setting up user ID's & training
 - 6 clinical users: Psychiatrists, Nurse Practitioners
 - 10 support staff users: RN's, Clinical Office Asst.
- Client notification & Opt Out

6

Submission to CRISP process



Initial Data Interchange test projects:

“Proof of concept” exchanges :

- Medication list from Cerner - Anasazi Software (Behavioral Health EMR) to CRISP
- Immunization records input to CRISP from PatTrac.

7

CMS Innovations - Care Management



- Atlantic General Hospital (AGH) received CMS Health Care Innovation Challenge grant July 2012
- GOALS: Expand AGH Patient Centered Medical Home pilot services
 - Reduce hospital admission rates by 20%
 - Reduce emergency department visits by 20%
 - Achieve a 15.5 percent reduction in total cost of care
- Population: Medicare Enrollees with CHF, COPD or Diabetes

8

AGH/WCHD Care Management Team



- WCHD proposed community-based Care Management Model based on Guided Care Model(modified).
- AGH contract with WCHD & includes clinical teams
- Clinical Teams (includes 2 WCHD employees)
 - AGH: (3) FT RN's and (1) FT LPN
 - WCHD: (1) FT RN and 0.5 FT LCSW
 - Home visits by WCHD team members
 - Chronic disease education, ER use prevention
 - Team management with Primary Care Provider

9

Lower Shore Connector Entity



- Improve access to care by connecting people to health care coverage.
- WCHD awarded grant to administer regional program.
 - Outreach, education, enrollment and eligibility services for Somerset, Wicomico and Worcester County residents seeking assistance with health plans offered through Maryland Health Connection.
- Open enrollment October 1, 2013 – March 31, 2014.

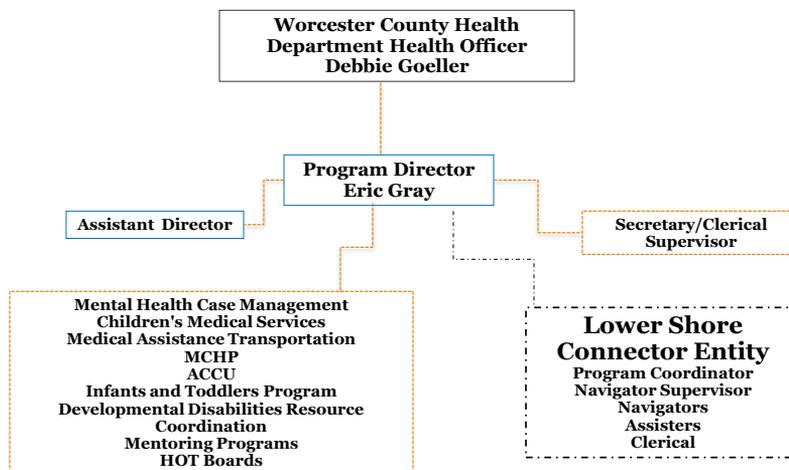
10

LSCE Operations

- Target groups with low insurance participation rates + uninsured.
- Enroll: 5,304 people in Year 1
- Navigators hired locally, deployed regionally.
- Positioned at LHDs, LDSSs, Hospitals, FQHCs, etc.
- Community/mobile locations for outreach and enrollment.

11

Eligibility and Case Management Unit Organizational Chart



12

Network of Care



- Innovative Web portal to enhance health decision-making by providing community stakeholders, families and individuals with key local health data and resources in an easy-to-read format.
- Trilogy Integrated Resources LLC

13

Network of Care: Healthy Communities



- **A resource for individuals and the community:**
 - Population health indicators
 - Directory of services
 - Library
 - Social networking
 - Legislation
 - Nationwide news
 - “My folder”

14

Network of Care

- Easy to read access to local health data and resources (50 Languages)
- Community dashboards with health indicators
- Promising practices
- <http://WorcesterHealth.networkofcare.org>

15

cs CDC links Public Health Social Media Emergency Prepar... Communicable Dis... Events HAN PIO H1N1 Fitness

Network of Care Home Health Indicators Model Practices Service Directory Library Links Legislate My PHR

Type your keywords here Visit Our Other Sites »

 Worcester County Health Department

Public Health Assessment and Wellness



Share  

Change Language

Large Print

Disaster Preparedness

Message Boards

Social Networking

eNews Signup
Enter Email

Community Health Indicators

See how your area compares to the state and the national target.

View 

Filter by Priority: 

LEARNING CENTER

 Depression  Alcohol & Drugs  PTSD  Grief / Grieving  Stress

County Health Rankings
Mobilizing Action Toward Community Health

MARYLAND MEDICAID DATA LHP

[ADHD/ADD](#)

[Asthma](#)

[Chronic Obstructive Pulmonary Disease](#)

[Congestive Heart Failure](#)

[Dental Visits](#)

[Depression](#)

[Diabetes](#)

[Episodic Mood Disorder](#)

[Flu Shots](#)

[Hemoglobin](#)

Questions?



Deborah.Goeller@maryland.gov

17

Factors in Selecting or Designing Community-based Interventions to Improve Health and Lower Cost

Ken Coburn, MD, MPH
Health Quality Partners

Overview

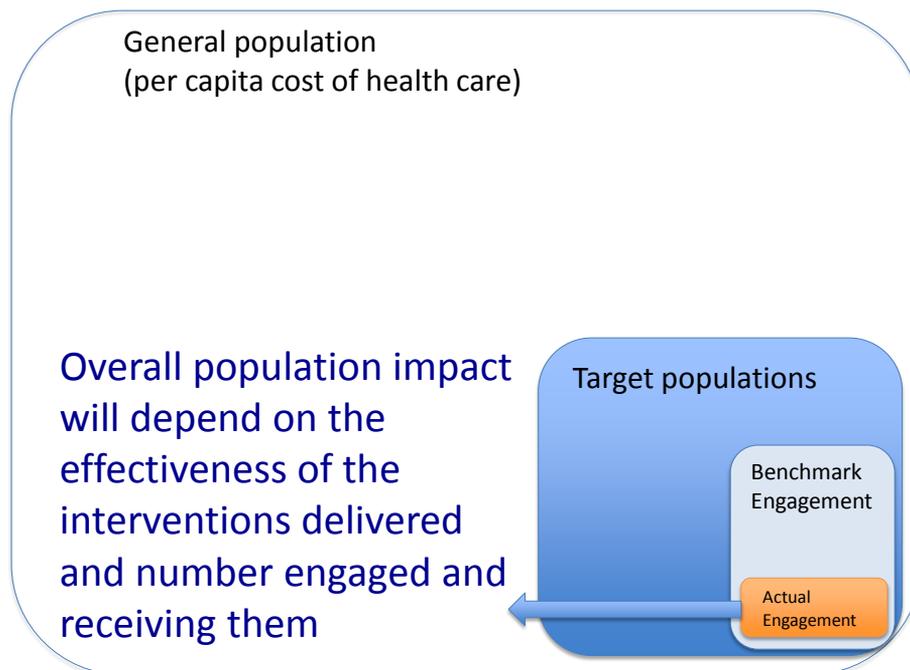
- The exciting possibility
- Key requirements and success factors (high-level)
- Thinking about target populations
 - Chronically ill; growing in size and cost
 - Super-utilizers; those with immediate, currently high acute health care utilization
 - Others
- Your experience, thoughts and preferences for next steps in model development

Hugely exciting possibility

- There is a great void in our current health care system related to next-generation preventive services
- Who will / can best move into that void?
- Public health can become an even more integral and important asset to the health care system
 - Improving the length and quality of life while keeping costs of the system under better control
- Another level of preventive services for the chronically ill
 - More intensive and moving into secondary, tertiary, and quaternary prevention – will require new skills & capabilities

Key Requirements

- **Identification** of vulnerable (higher-risk) populations having significant modifiable risks (medical, social, behavioral, environmental, cognitive, etc.)
- **Engagement** of those populations
- **Effectiveness** of interventions used to reduce risks in those populations
- **Cost-saving** – net health costs are reduced by lowering near-term need for acute health care service utilization to more than offset program costs
 - Net ROI = (Savings – Cost)/Cost



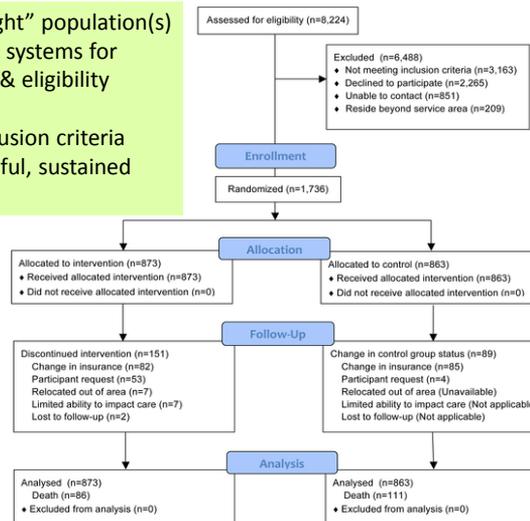
Success Factors

- Reliability and degree of effectiveness at each step; identify, engage, intervene
- Population impact is like “rolled throughput yield” (six sigma)
- Example: if, *compared to best possible levels of performance for each step*, you ID 50% of the target population, then engage 50% of those using an intervention that is 50% as effective you’ll have a population impact of $0.5 \times 0.5 \times 0.5 = .125$
 - ONLY 12.5% of the population impact possible if best achievable performance was realized at each step
 - In many cases, “best levels of performance” are still being defined with relatively few having robust evidence of success at lowering costs

For Chronic Illnesses Especially: **Figure 1. CONSORT flow diagram.**

- Target the “right” population(s)
- Leverage data systems for identification & eligibility checking
- Minimize exclusion criteria
- Seek meaningful, sustained engagement

Dropped out or lost to follow up over 4.2 yrs; 55 / 873 = 6%



8,224 assessed
- 3,372 ‘exclusions’ = 4,852
- 851 not reached = 4,001
- 2,265 declined = 1,736 enrolled

43% of those contacted AND eligible enrolled; (but only 21% of those assessed for eligibility)

Coburn KD, Marcantonio S, Lazansky R, Keller M, et al. (2012) Effect of a Community-Based Nursing Intervention on Mortality in Chronically Ill Older Adults: A Randomized Controlled Trial. *PLoS Med* 9(7): e1001265. doi:10.1371/journal.pmed.1001265
<http://www.plosmedicine.org/article/info:doi/10.1371/journal.pmed.1001265>

Target Populations

- Moderate or low risk populations though still able to benefit from better prevention are not viable target groups when near-term cost impact is required
- Super-utilizers / high-cost cases
 - Eliminate unavoidable catastrophic cases
 - Focus on patterns suggesting potential interventions
- Chronically ill with utilization in recent past
- Complex pediatric and high-risk pregnancies are other potential target populations
- Super-utilizers are not mutually exclusive and definitely overlap the chronically ill, but generally have different profiles, opportunities, and interventions

Thoughts, experiences, feedback, ideas...

- How do you see your LHIC moving into new areas of advanced prevention with ...
 - Super-utilizers
 - Chronically ill
 - Other special populations
- What are your experiences, so far, in trying to demonstrate a population impact on health care resource use and costs?
- What do you think you might need most to support your LHIC on this journey?
- Any initial preferences re: innovating your own 'home-grown' interventions versus adopting previously tested ones?