

# *Preconference II: Professional Challenges in Super-Utilizer Work (Panel Discussion)*

Wednesday, March 13, 2013 9:30am-10:30am

Lancaster General Health





Lancaster General Health

**Innovative  
Solutions** Inc.

# Care Transformation Model: Care Connections



*Population Health Conference*  
March 13, 2013

**Jeffrey R. Martin, M.D., FAAFP**



Lancaster General Health

**Innovative  
Solutions** Inc.

## Acknowledgments

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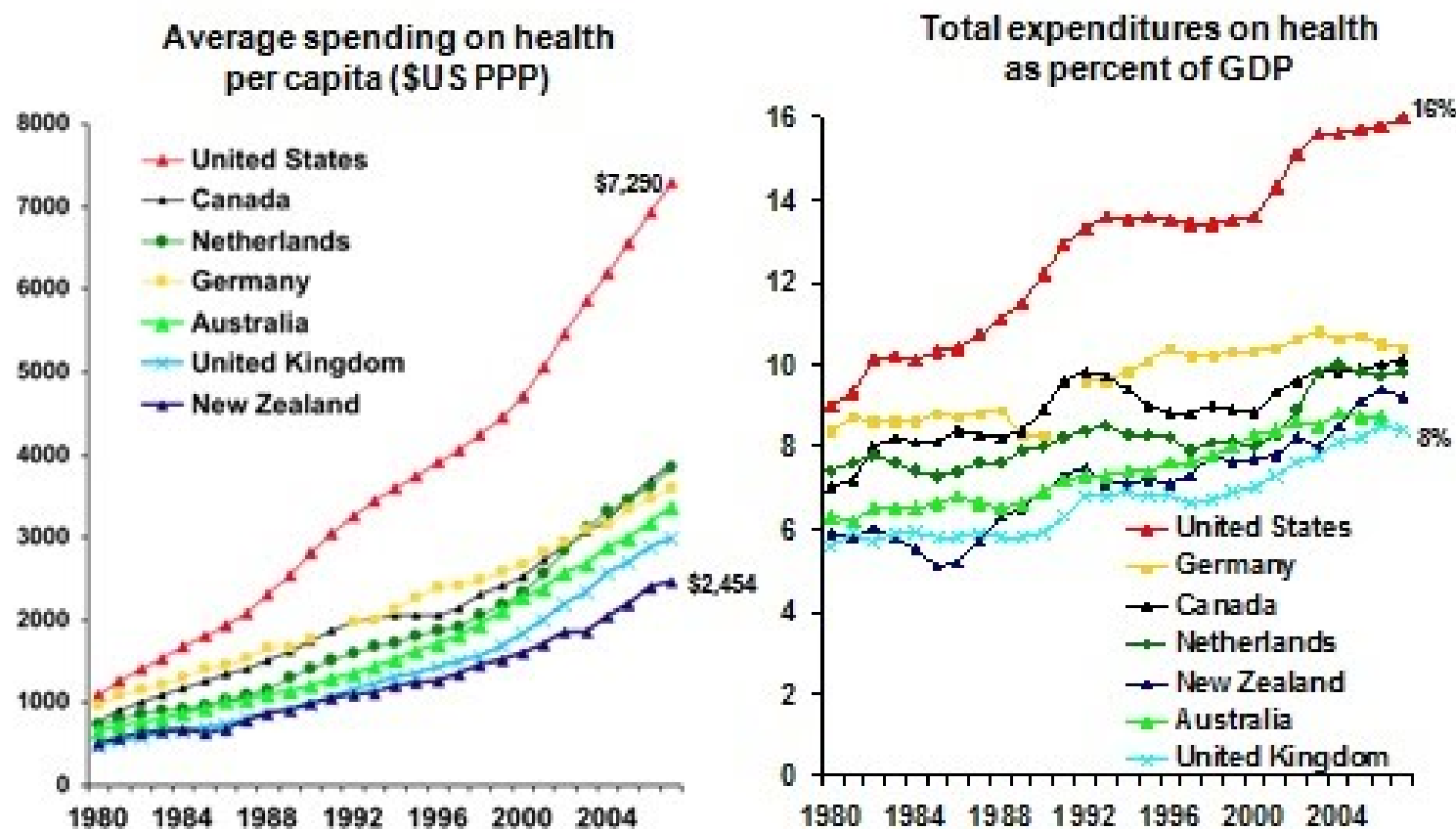
Norma Ferdinand MSN, RN

SVP for Enterprise Quality

# **Objectives**

- 1. Frame National Debate**
- 2. History of initial Superutilizer Pilot Project**
- 3. Project Expansion: Care Transformation Model**
- 4. What it Will Take to Move Forward Successfully**
- 5. Lessons Learned**

## Exhibit 1. International Comparison of Spending on Health, 1980–2007



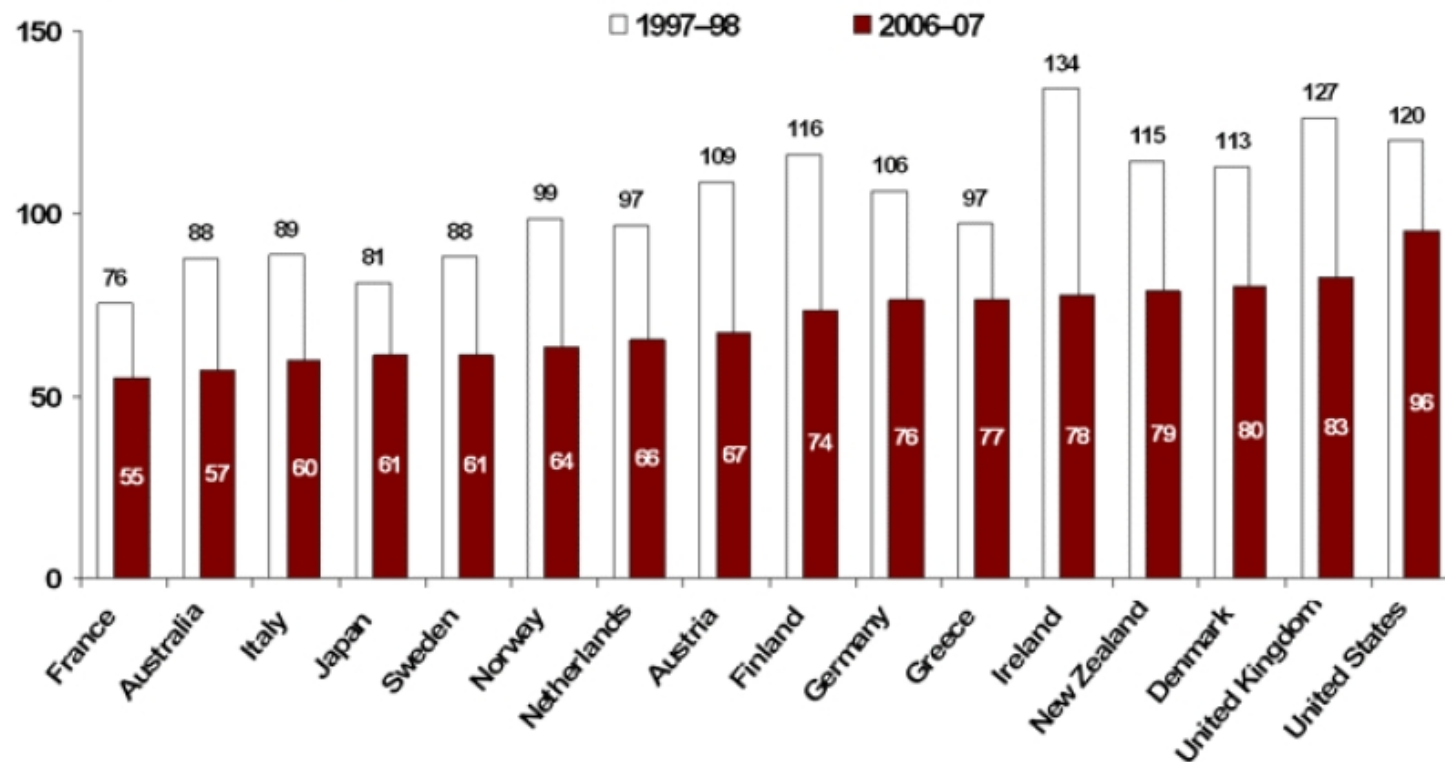
Note: \$US PPP = purchasing power parity.

Source: Organization for Economic Cooperation and Development, *OECD Health Data, 2009* (Paris: OECD, Nov. 2009).



## U.S. Lags Other Countries: Mortality Amenable to Health Care

Deaths per 100,000 population\*



\* Countries' age-standardized death rates before age 75; including ischemic heart disease, diabetes, stroke, and bacterial infections. Analysis of World Health Organization mortality files and CDC mortality data for U.S.

Source: Adapted from E. Nolte and M. McKee, "Variations in Amenable Mortality—Trends in 16 High-Income Nations," *Health Policy*, published online Sept. 12, 2011.



# Core Issue

- Approximately 80,000 Medicaid beneficiaries in Lancaster County
- Annual inflation and eligibility expansion

## Pennsylvania Medical Assistance Spending (State Funds) 2008-2014

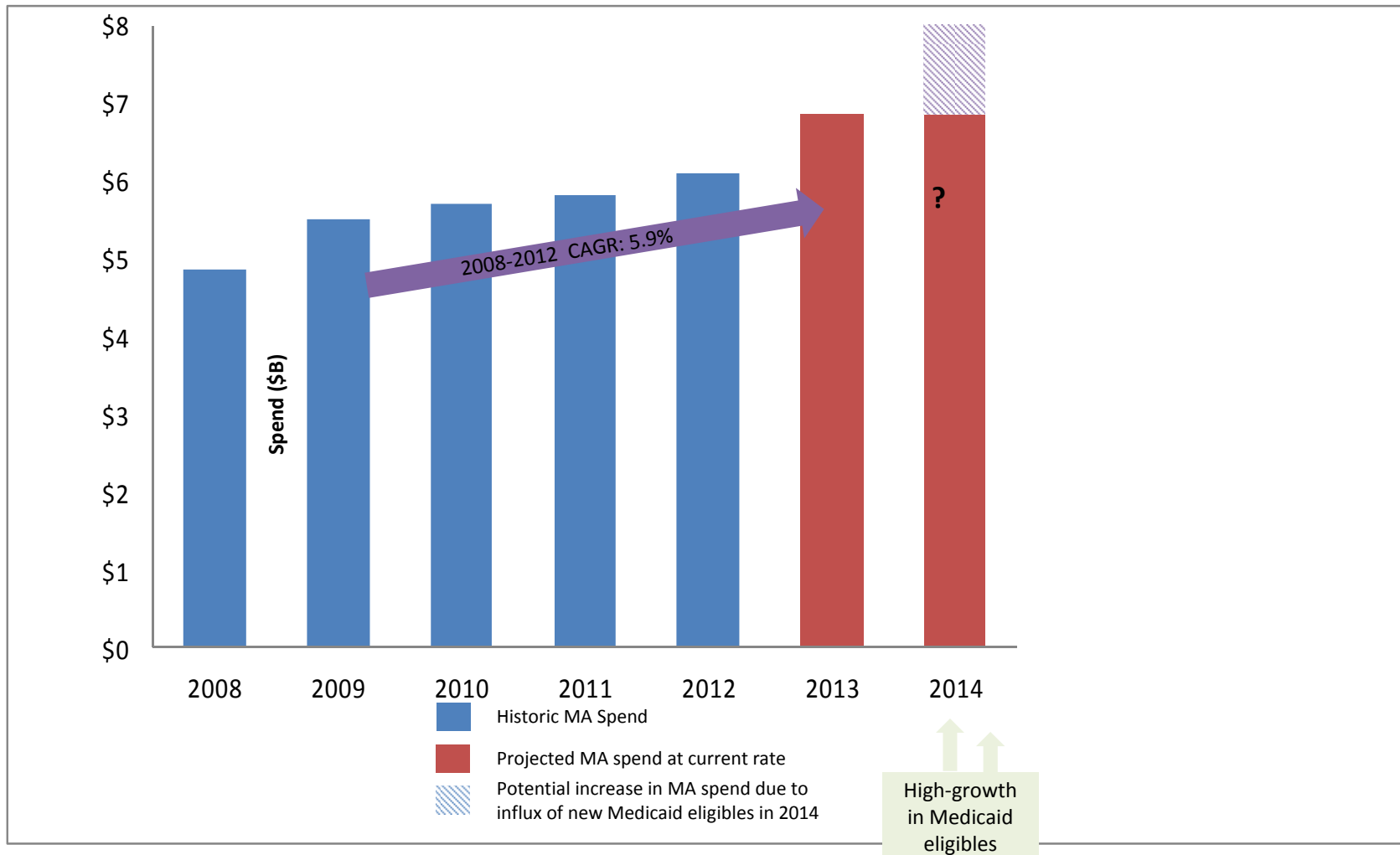
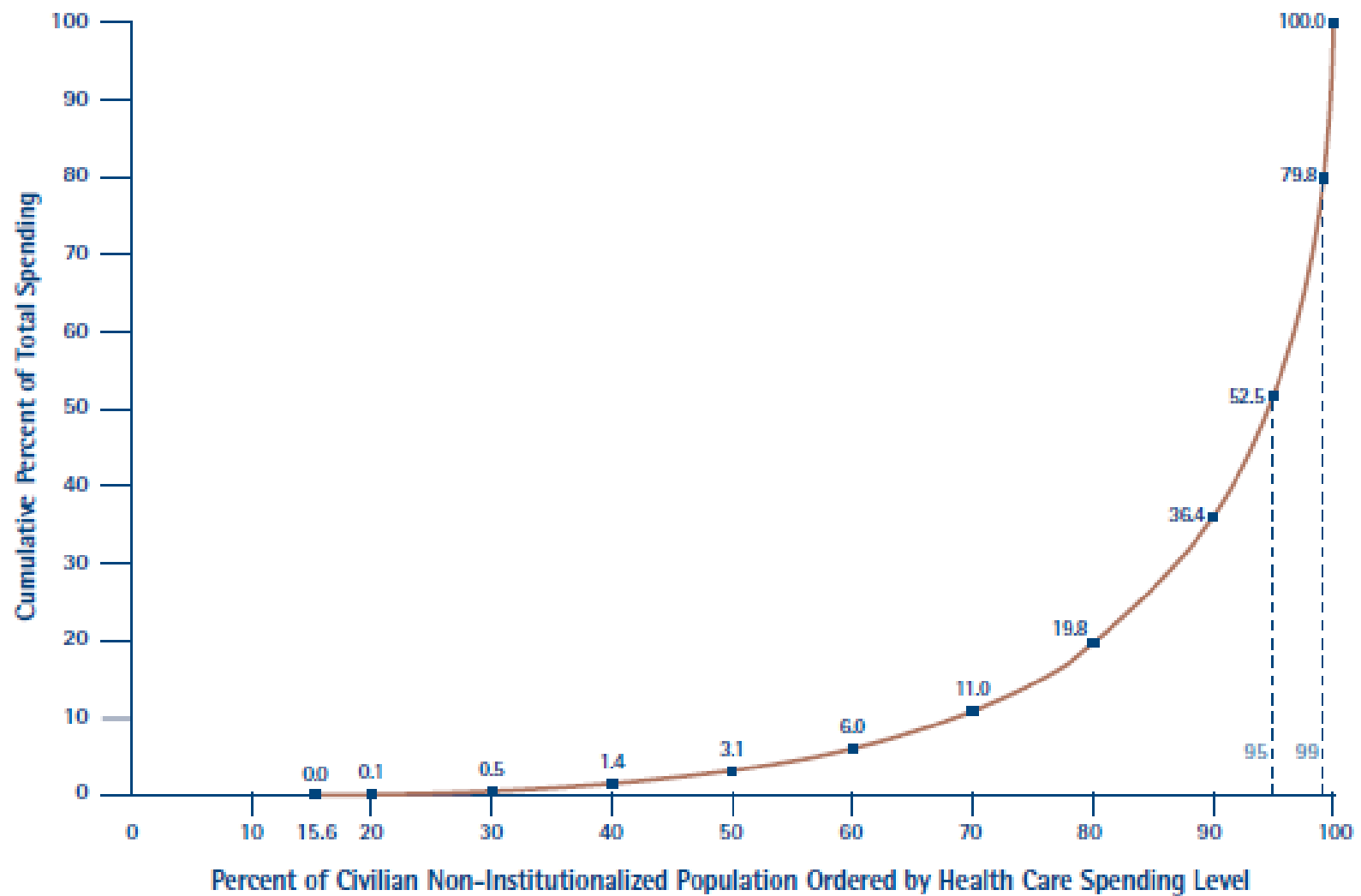


FIGURE 3. DISTRIBUTION OF HEALTH CARE SPENDING, 2008



Source: NIHCM Foundation analysis of data from the National Health Expenditure Accounts, available at <https://www.cms.gov/NationalHealthExpendData/>.





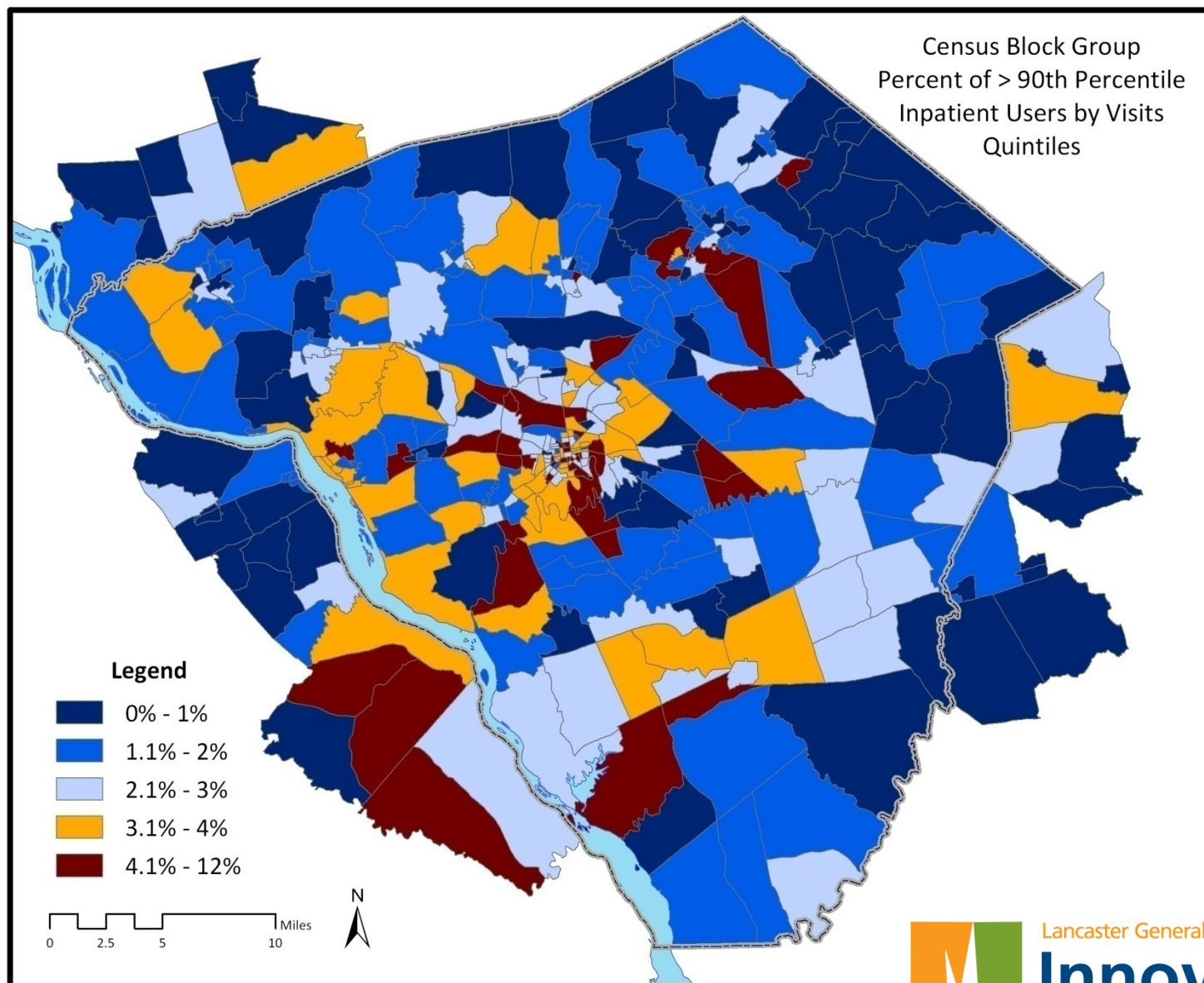
Medical Report

# The Hot Spotters

Can we lower medical costs by giving the neediest patients better care?

by [Atul Gawande](#)

January 24, 2011





# Project Team



# “Typical Superutilizer”

- Usually multiple chronic, co-morbidities, including CAD, CHF, COPD, DM, CKD.
- Often with a behavioral health component
- Sometimes with SMI (Schizophrenia, Bipolar)
- Sometimes with Intellectual disability
- Always with social isolation, or significant psychosocial barriers (DV, Housing, Financial, Transportation etc.)
- Any combination can put you at risk.

# Superutilizer Project Sept. 2011 to Sept. 2012

- Using available data, the top utilizers (ED and inpatient) enrolled in multi-disciplinary case management plan.
- Care Manager hired for one year. (Total \$71,000)
- Multidisciplinary team: Project Lead (MD), PCP, social work, pharmacologist, psychologist and Lawyer (MLP)
- Common issues: Mental health, transportation, housing, domestic violence, drug addiction.....social disruption.

# Superutilizer Project

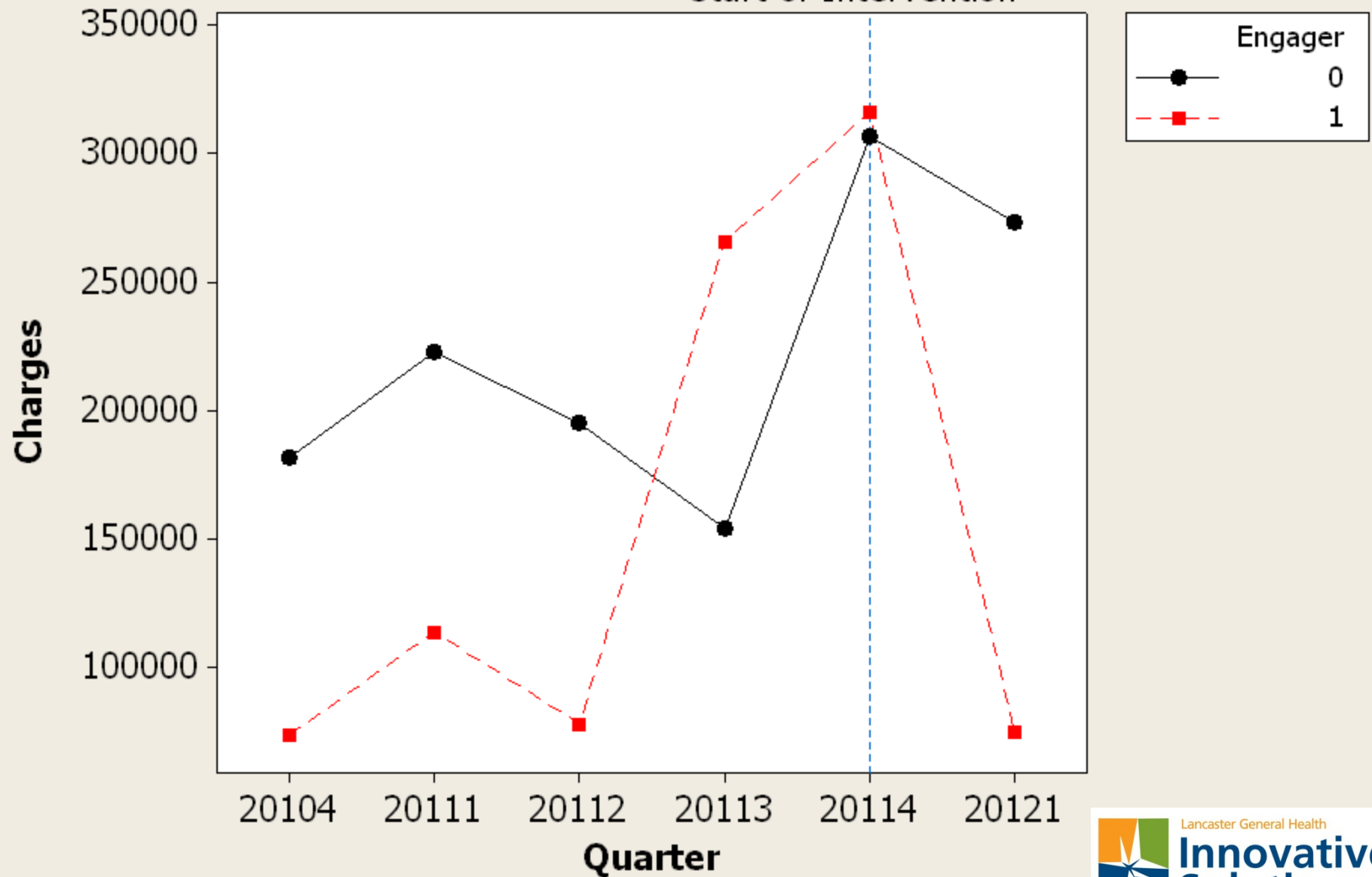
- Care Manager engages “other” care managers including ED, inpatient and dialysis.
- Care Manager makes frequent home visits, often with the patient’s PCP, referrals to community services (e.g. housing, County Assistance Office and domestic violence services) and triages problems to appropriate venue before they reach level of ED or inpatient visit.

# Initial Results

- For ½ of identified patients, 30-day and 7-day readmission rates dropped to 0.
- More importantly developed a “canon” of patient stories to engage system.
- Pushed system to address superutilizer phenomenon, how it relates to PCMH and ACO development.
- Proof of concept.

# Total Charges

Start of Intervention





2

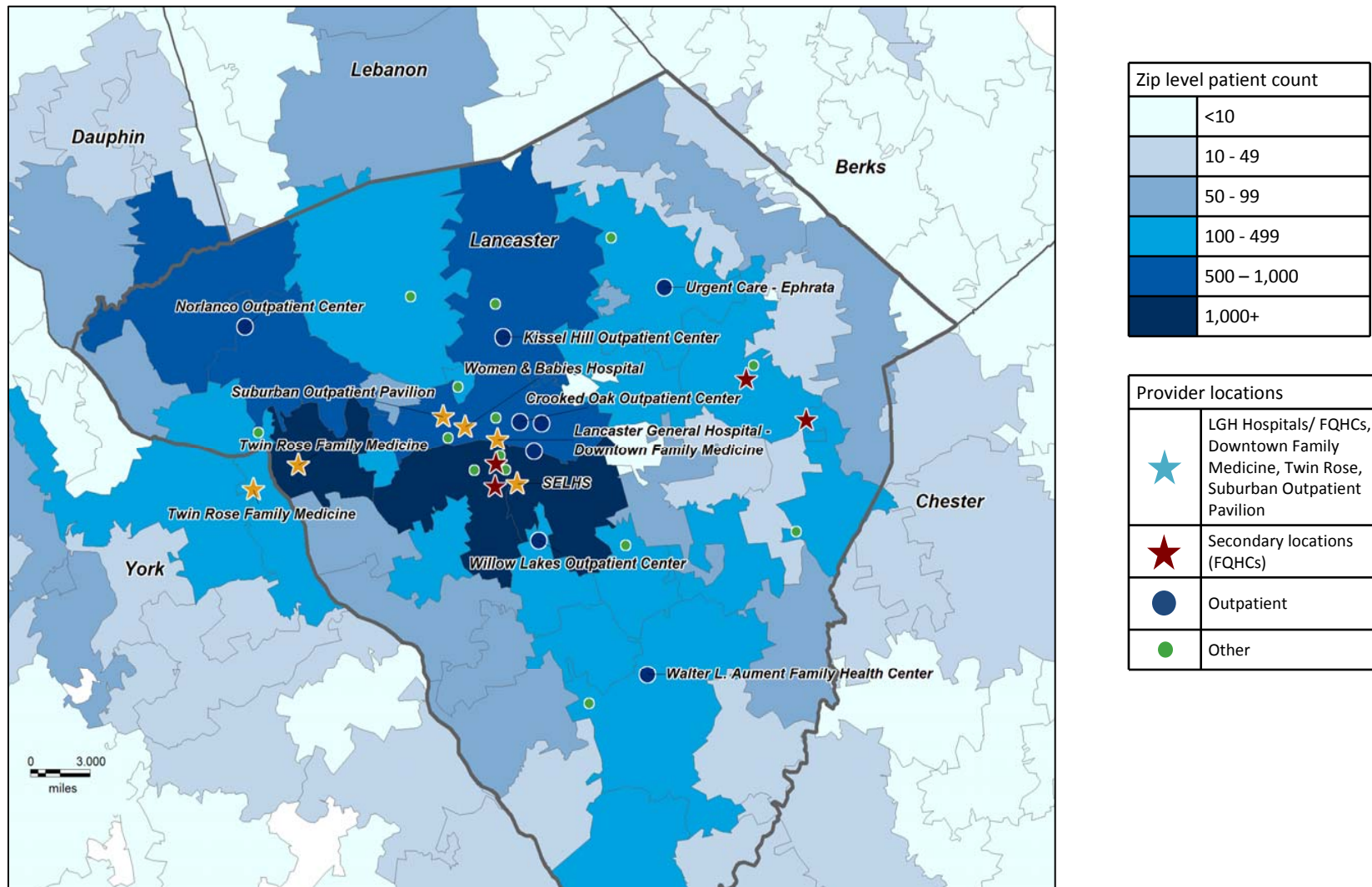
## Care Transformation Model (“CTM”) Overview

# Key Principles

**LG Health is committed to:**

- Promote **individual's engagement** in their health and emphasize **provider accountability**
- Develop a **value-based model** that aligns incentives and resources
- Use innovative solutions and best practices** (care design, decision support tools, advanced technologies)
- Develop **integrated partnerships** and **affiliations with local community agencies** and MCO(s)
- Align the **physician network in the advancement of new care delivery solutions**
- Focus on **continuous improvement and quality**

## Where Medicaid Recipients Reside\*



\* Note: heatmap shows density of Medicaid recipients that accessed care at LGH in 2011

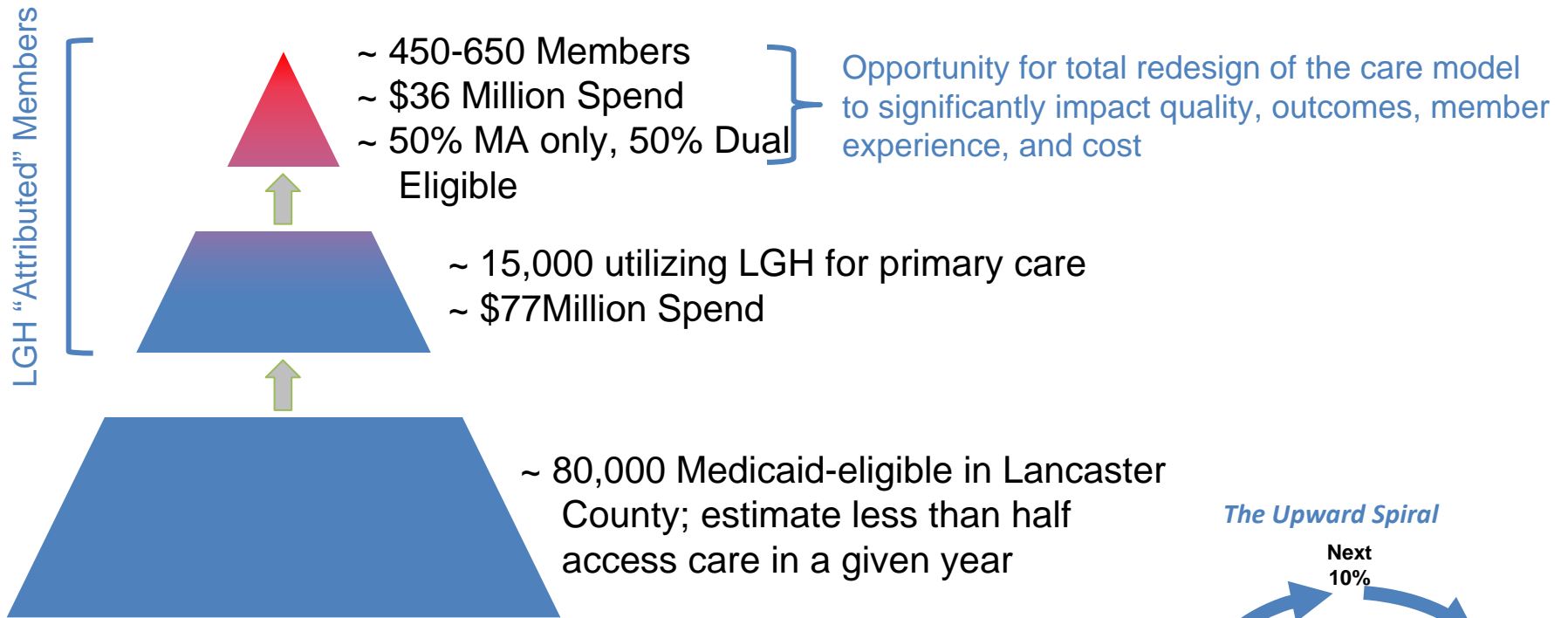
# Who Are the CTM Participants?

## **Pilot program geared to the sickest members in the Medicaid population**

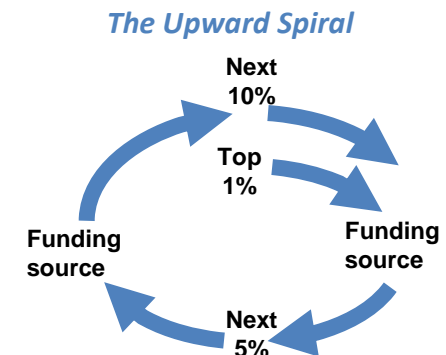
- Chronic conditions complicated by behavioral health and socio-economic factors
- Highly coordinated, team-based approach to care
- Enhanced access and member engagement
- Improved quality, outcomes, member and provider satisfaction with reduced costs
- Program incorporates
  - Care navigation
  - Hot –Spotting
  - Link to PCMH: repatriation

# CTM Participants – Target Population

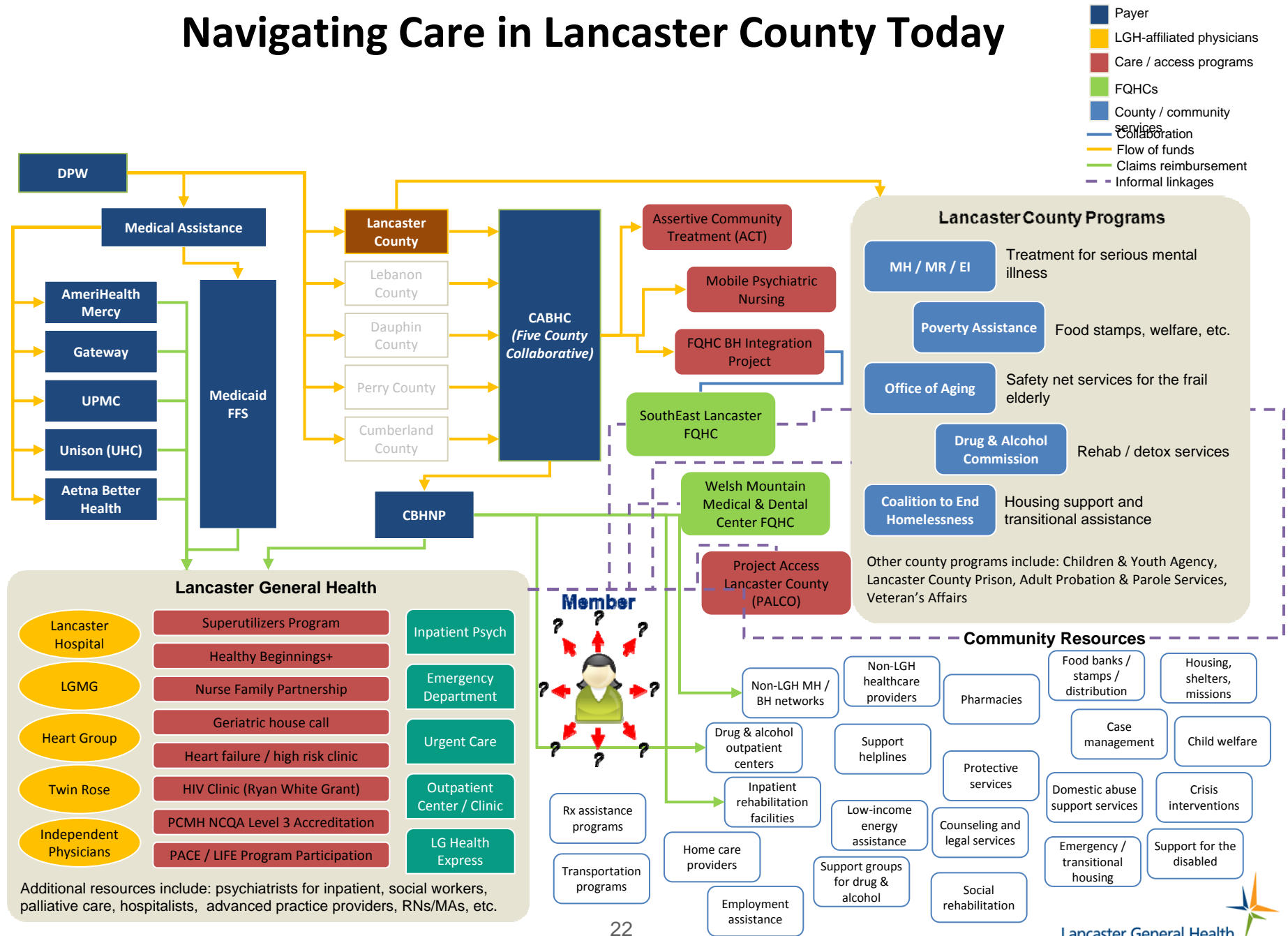
*About 3% of the Attributed Members account of 50% of the spend*



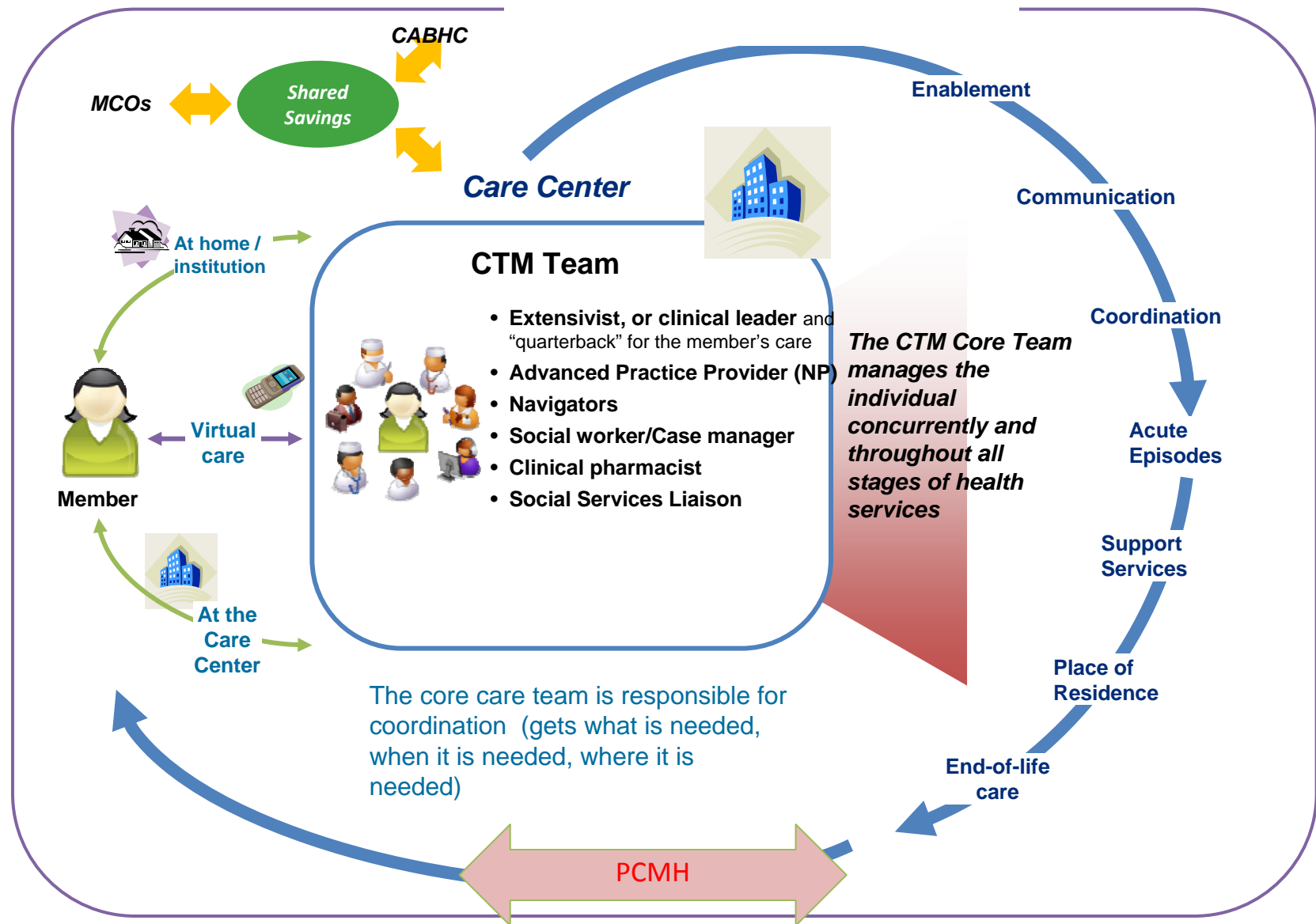
Source: DPW data; LGH internal data; Oliver Wyman analysis



# Navigating Care in Lancaster County Today



# The Care Transformation Model



# Savings

- Projected 15% yearly **conservatively** of 36 million total spend.
- Gains mostly from inpatient costs.
- Long Term Care, accounts for significant amount of spend but not factored now into savings, but may achieve in future.
- ? Savings for increasing capacity and efficiency.



# Success Criteria for CTM:

## 1 Coordination of care, appropriate access, and comprehensive services

- Accountability (i.e. “ownership” of the participants)
- A direct link between the care team, behavioral health services, and social support services
- Participants must have access to care both physical and virtual
- Regulatory and waiver support

## 2 Data sharing and infrastructure

- 360 degree view of the member bringing together a comprehensive picture of physical, behavioral, and social health needs
- Real-time data sharing
- Infrastructure to enable these capabilities

## 3 Alignment of financial incentives and arrangements

- Financial incentives must be aligned between and among all participants
  - Payers and LGH
  - LGH and its physicians
  - Physical and Behavioral Health Payers (e.g. Rx)
  - County and its funding sources
  - CMS and the State

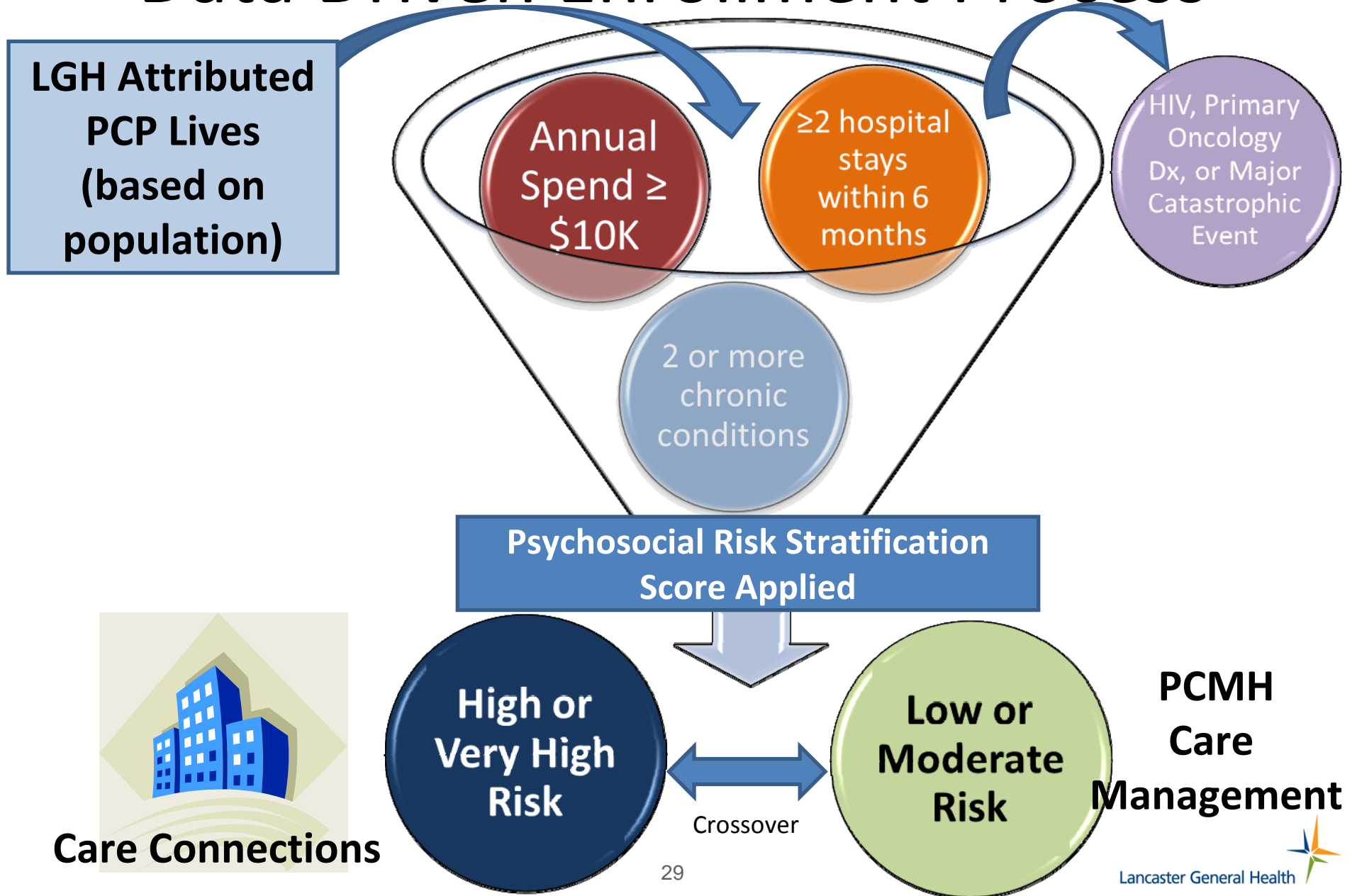
## 4 Leadership and cultural change

- Accountability and governance must exist to coordinate care
- Leadership must be able to drive the organization’s cultural change

# Lessons Learned

- Engage broadest group of stakeholders as possible. (FQHC, LTC, PHD, MCOs, State)
- Care cannot be done entirely by Hospital system, community will be vital.
- Micro vs. Macro engagement of health care system.
- How to interface with PCMH, and build in efficiency and capacity in system.

# Data Driven Enrollment Process



# Lessons Learned

- Begin to characterize population from a population health perspective.
- Think about prevention.
- Carving out a space to interact, help and learn from this important population.
- Educate the entire health care system on new models of care.

# Working within the transition



# Truly Patient-Centered Care

Chris Echterling, MD  
WellSpan Bridges to Health  
York, PA



**Bridges to Health** - an Ambulatory ICU - is part of WellSpan Medical Group's Accountable Care Innovation Project

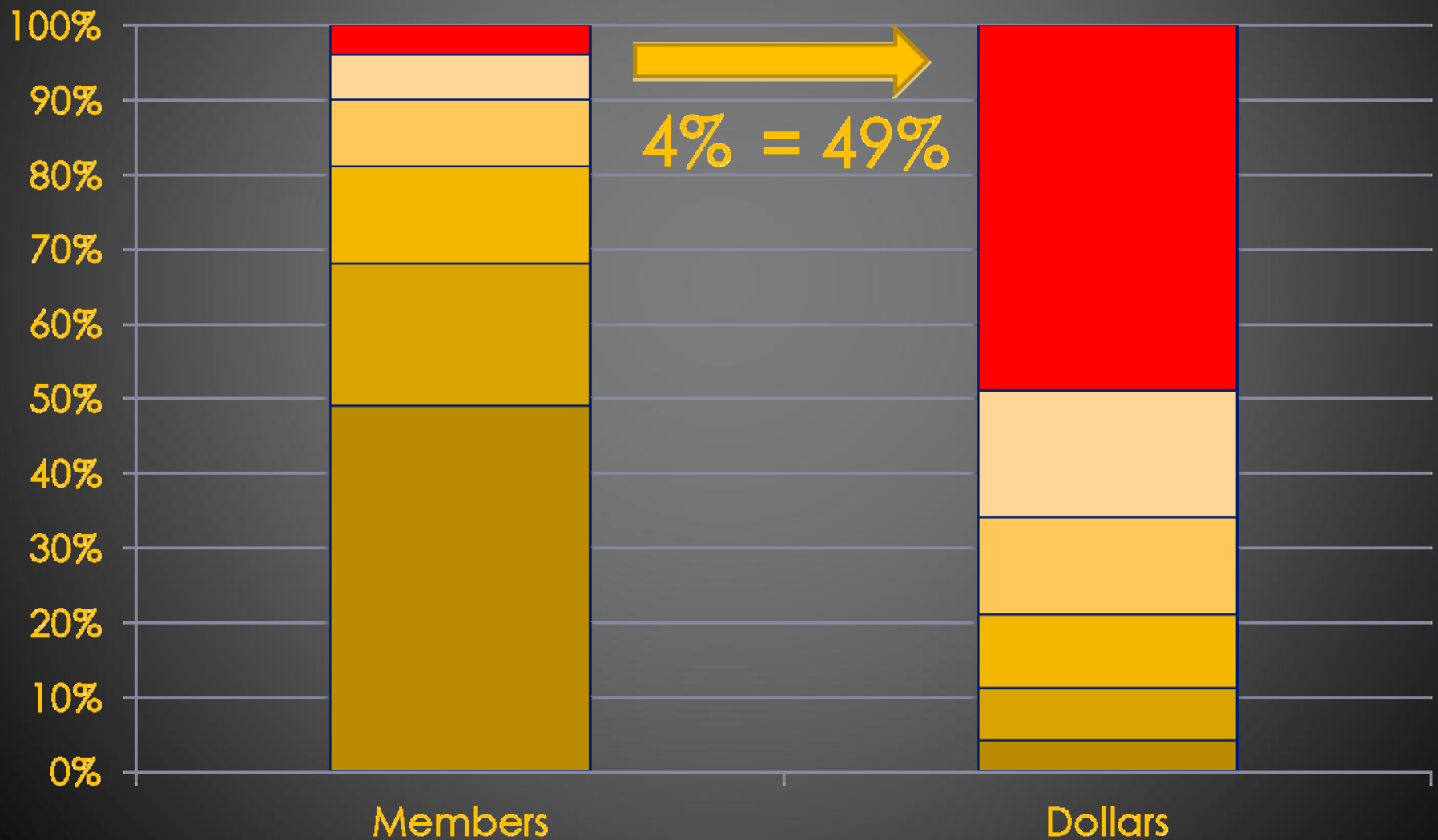
## Bridges to Health Team

Nadia Khan, MD  
Erin Shrader, RN, BSN, CHPN  
Maria Reyes, MSW, LCSW, ACHP-SW  
Lisa Emig, LPN  
Nina LeGrand, BS, MHA

# WellSpan Health Claims Paid

(1/1/10-12/31/10 by members and dollars)

## Our Data



# SuperUtilizer Timeline

- Fall 2010 - HYN Med and Exec Director participate in IHI Learning Network – “Managing Complex Populations” (Care Oregon, Cambridge Health Alliance...)
- Feb 2011 - Jeff Brenner, MD (“HotSpotters”) kicks off Pilot with Grand Rounds (2 visits to Camden, 1 to AtlantiCare)
- March – August 2011 – Monthly SU pilot
  - Monthly Community Meetings
  - Extra calls, social work input/contact, appointments, some home visits
  - Behavioral health consult and access, Trac Phones, fax machines, transportation, teleconferences, Area Agency on Aging, County Human Service, hospitalists
- June 2012 – WellSpan funds Strategic initiative “Working As One”
- September 2012 – WellSpan Bridges to Health opens



# SuperUtilizer Pilot March-August 2011 (12 patients)

	# of Pre-Pilot Visits	# of Annualized Pilot Visits	Change in # of Visits	% Change
ED	99	72	27	- 27%
IP	62	50.4	11.6	- 19%
OBS	25	16.8	8.2	- 33%
Total	186	139.2	46.8	- 25%

	Pre-Pilot Charges	Annualized Pilot Charges	Change in Charges	% Change
ED	\$125,368	\$119,906	\$5,462	- 4%
IP	\$1,209,273	\$881,201	\$328,072	- 27%
OBS	\$209,732	\$107,102	\$102,630	- 49%
Total	\$1,544,373	\$1,108,210	\$436,163	- 28%

# AICU Background



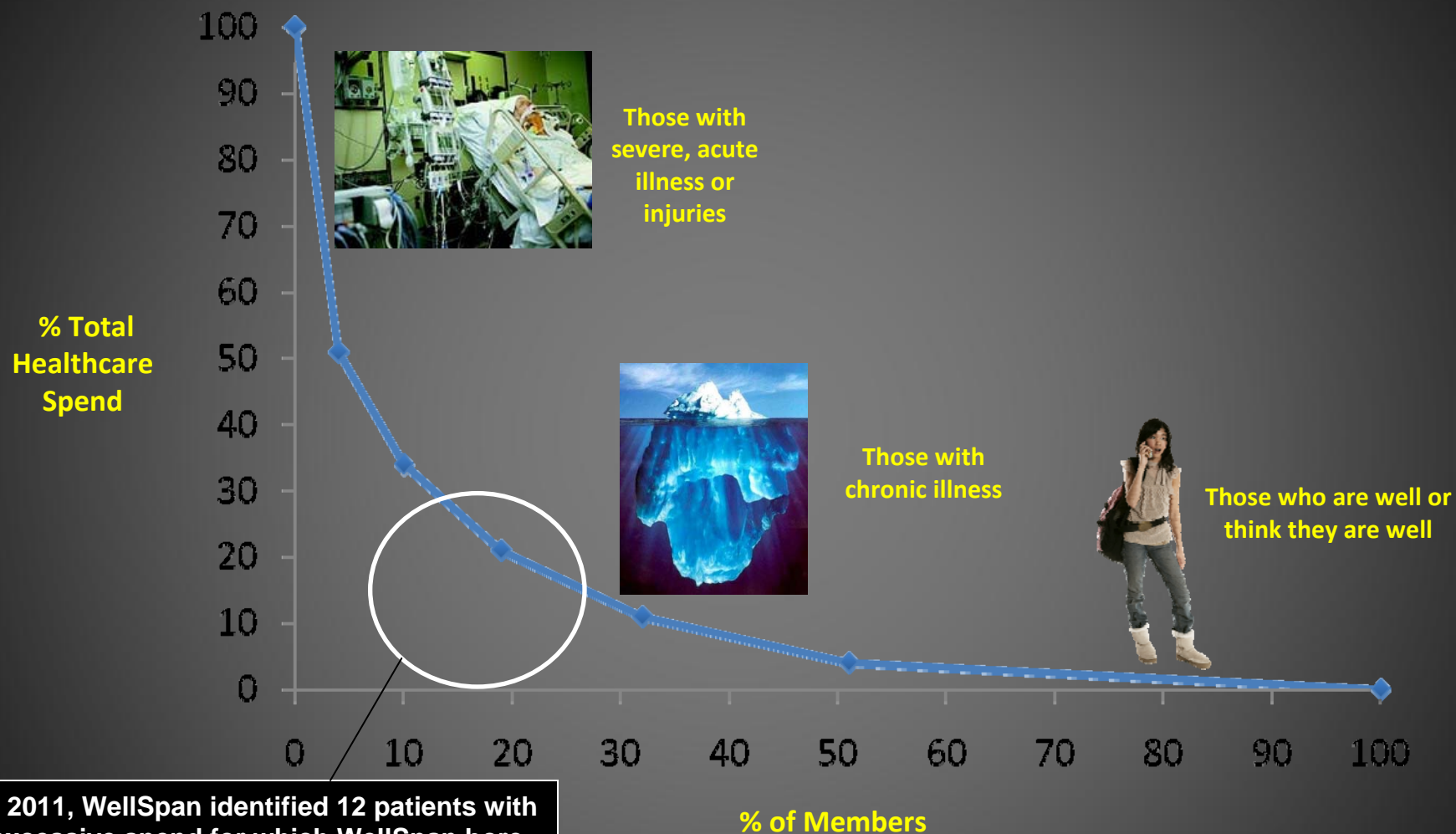
- Studies
  - Yale, Massachusetts General Hospital, British Health Service “Virtual Ward”
- Boeing “Intensive Outpatient Care Program”
- Hotel and Restaurant Employees International Union
- “Hotspotter” New York Times - AtlantiCare
- Now Las Vegas, Dartmouth-Hitchcock, Stanford

# ***Bridges to Health –*** **WellSpan's AICU**



- The *Triple Aim* – Experience, Quality, Cost
- PCMH “on steroids”
- A small constant learning unit/experiment
- Identify and try to resolve barriers to outstanding, safe, timely, effective, efficient, equitable, patient-centered care
- Not just for the identified patient (work-around) but for all – transform the system

# Analysis of Healthcare Costs Reflect a Disproportionate Spend



In 2011, WellSpan identified 12 patients with excessive spend for which WellSpan bore the brunt of the cost due to a lack of insurance. Named the "SuperUtilizers Project".

# Foundational Principles

- Hospital admissions and ED utilization are viewed as system failures by team until proven otherwise
- Work with patients to create a care plan, to be communicated to all care givers
- Care plans are built to emphasize patient strengths
- Constant feedback to improve care model
- Close coordination with community services and Hospitalists

# Bridges to Health

## Relationship with Patient's Current PCP (if there is one)

- Transfer primary care to Bridges
- From Day 1 goal:
  - Decrease Inpt and ED costs
  - Improve Health – by engaging patient in own care and designing and implementing Care Plan
  - Plan for hopeful transfer back to PCP (6 months?)
- Transfer primary care back to PCP or elsewhere for less intensive intervention



- Glenn is a 57 year old male. He lives alone and has no known family.
- His girlfriend died several years ago of a blood clot. (fact discovered only after our involvement)
- Glen has sores on his legs, which cause him discomfort. (But mostly, he fears getting a blood clot. – fact discovered only after our involvement)
- Asthma, Intellectual Disability, Chronic peripheral edema, h/o DVTs – on chronic warfarin, hypertension, hypothyroidism, ventral hernia – recurrent, sleep apnea

Complaints that bring Glenn to the ED:

- Leg pain
- Stomach ache
- Diarrhea
- Vomiting



In the year prior to enrollment with Bridges to Health, Glenn had been to the ED 56 times.

**Question: His health alone does not justify such frequency of ED utilization. So what might be some other contributing factors?**

The following factors surfaced during home visits and as we got to know Glenn better:

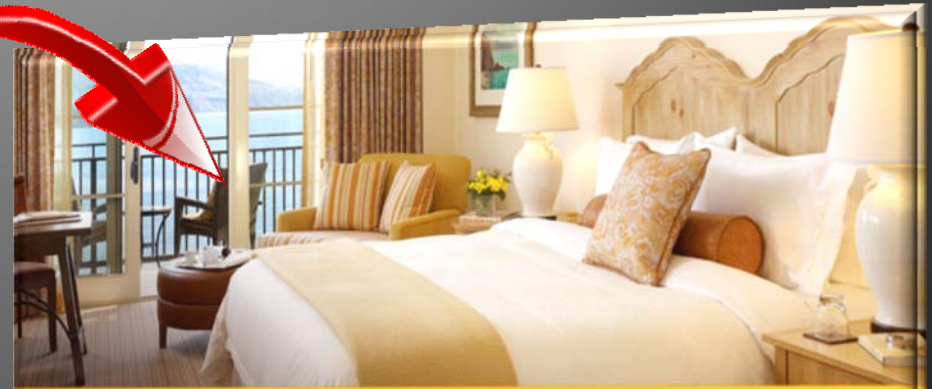
- Dirty 7'x12' room with roaches
- Soiled sheets and bedbugs
- Shared bathroom upstairs
- No kitchen
- Often no money for food
- Cell phone often out of minutes
- Unable to read medication labels
- Lonely and bored
- Excessive bather (fear body odor) thwarted dressing change





Glenn's living conditions make the hospital feel much like a hotel:

- Clean sheets
- His own bathroom
- Delicious warm meals brought to his room
- Cable TV
- Lots of company – caring medical staff checking on him frequently
- (Glenn grew up in institutional setting)



**Bridges to Health (BTH) brought together all WellSpan and community members caring for Glenn**



BTH Team, VNA nurse, nursing students, Mental Retardation case worker and ED nurse and social worker (in phone conference) discussing their care plan suggestions with Glenn

Surrounded by his care team, Glenn shows off his Halloween costume



## **Hurdles contributing to high utilization:**

1. Frequent visits to the ED resulted in the ED minimizing interventions (overall reasonable) but consequently resulted in lack of follow-through with abdominal pain (colonoscopy for heme + stool).
2. Patient labeled as non-adherent with dressing changes (Unna boot) without understanding the relationship to bathing and stigma of body odor.
3. Patient cannot read and write and efforts to date had not helped with confusion regarding his medications.
4. Nurses in the ED “helping patient out” with clothes and household items. (Making the ED even a more appealing place for him?)

## **Lessons learned:**

1. Home visits are extremely valuable to truly understanding patient needs
2. Understanding patient’s construct for what may be, from their perspective, causing symptoms (for Glenn – leg pain “might be another blood clot” – like the one that killed his girlfriend)
3. Communication with multiple care providers – social and medical – is key
4. Understanding non-medical needs of patient (fear, loneliness) that are being met medically – how can they be met in another way?



## Interventions (in addition to Glenn having 24/7 phone access to the Bridges to Health team):

- Coordinated visits between the Bridges to Health team, the visiting nurse and the nursing students – someone checking on Glenn most days to ensure proper wound care and socialization.
- Coordinate wound care and dressing changes with Glenn's bathing schedule.
- Convince Glenn's financial case worker to get him cable TV and a land line.
- Supply Glenn with a microwave for hot meals and a dresser to minimize the clutter.
- Provide Glenn with clearly labeled pill containers for as needed medications.



Within one month,  
Glenn's leg pain was  
diminished enough  
for him to ride his  
bike in the  
Halloween Parade.

He won an individual  
participant award –  
a source of pride



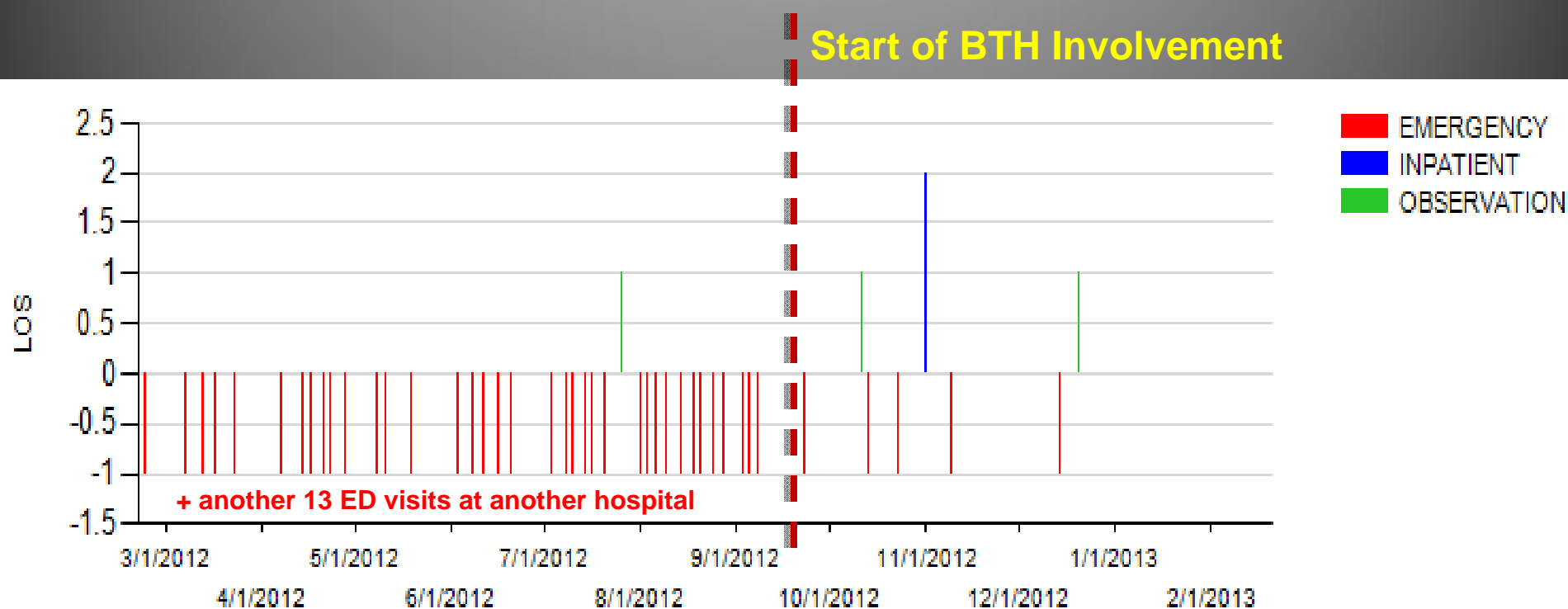


## Glenn's Progress to Date

5 months <b>BEFORE</b> Bridges to Health	5 months <b>AFTER</b> Bridges to Health
41 ER visits	5 ER visits
Non-adherent with VNA dressing changes	Adherent with VNA dressing changes
Vascular studies incomplete	Vascular studies completed
Undefined abdomen pain	Colon mass discovered and treated (biopsy = inflammatory)
Leg pain unmanaged	No more leg pain
Wound dimension 6 cm x 4 cm	Healing lesion 1.5 cm X 1.5 cm
	

## Glenn's Progress to Date – ED Utilization, Observation, In-Patient and Length of Stay

**WARNING:** How do you define "Success" – especially in short term?



\* Financial data for month 5 not yet available.

2 of 3 post involvement admissions were scheduled for colonoscopy with prep and biopsies

# Post Script

- Preparing for transition back to former PCP
- 3/9/13 Moves into new room down the hall with kitchen
- 11:40 PM Call – agitated, just moved to his new room and there are "bed bugs everywhere" crawling on walls and beds - biting him. "I am not going to put up with this." Says he is going to move to a nearby town because his church – where he volunteers nominally as a security guard – yelled at him and "I am not going back". I thought I calmed him on the phone.
- 3/10/13 3:00AM – brought to ED by Police. In town square calling 911 threatening to kill self by jumping in front of traffic. ED doc who knows him is able to calm him in ED but confirms 302 involuntary psychiatric commitment. Work-up (CT scan, tox screen, metabolic labs) normal
- If you "choose the right patients" to intervene – keep your guard up – they will get admitted, they will die.



**From: Sheryl Shearer – Applications [sshear01@goofy1.wellspan.org]**

**Sent: Friday, October 19, 2012 4:02 PM**

**To: LeGrand, Nina**

**BRIDGES TO HEALTH PT IN THE ER**

**Admit Date: 10/19/12 16:00**

**Patient Name: XXXXX XXXXXXXX**

**Medical Rec #: XXXXXXXX**

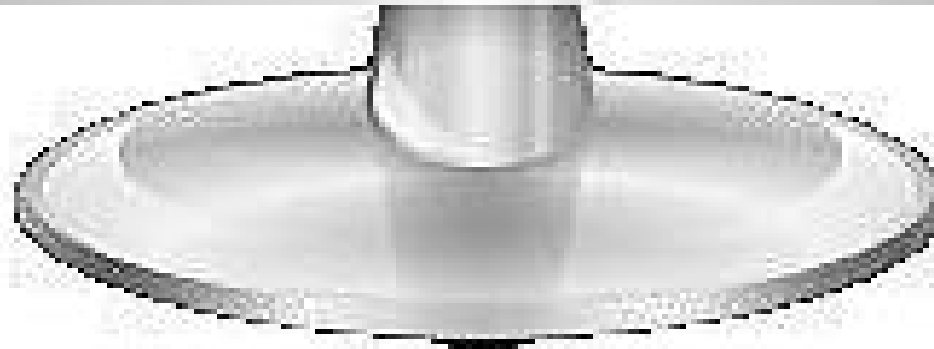
**Fin#: XXXXXX**

**PCP: KHAN, NADIA NAWAZ**

**Prim Ins: MEDICAID**

**Sec Ins: HEALTHY YORK NETWORK**

**This notification is being sent from Sunrise(Eclipsys)**



# WellSpan Bridges to Health

## Patient ID Card

*Providers encouraged to call PCP at any time to help coordinate care for this patient*



**Patient Name:** \_\_\_\_\_  
(First) (Last)

**Date of Birth:** \_\_\_\_\_ **Phone:** \_\_\_\_\_

**PCP:** Nadia Khan, MD **Valid:** \_\_\_\_\_ - \_\_\_\_\_  
(From) (Until)



**Alert:** \_\_\_\_\_  
\_\_\_\_\_

**PLEASE SHOW THIS CARD DURING ALL DOCTOR, HOSPITAL AND ED VISITS**

When you show this card at registration, you will not be charged a co-pay to see your *Bridges to Health* team.

# Bridges to Health Patient Care Team

605 S George Street, Suite 200  
York, PA 17401

Phone: 717-851-6661  
Fax: 717-851-6091



**Nadia Khan, MD**

*Internal Medicine Physician*



**Chris Echterling, MD**

*Medical Director*



**Nina LeGrand, MHA**

*Program Supervisor*

**Erin Shrader, RN, BSN**

*Nurse Case Manager*



**Maria Reyes, LCSW, ACHP-SW**

*Licensed Clinical Social Worker*



**Lisa Emig, LPN**

*Health Coach*



# “What You Need to Know About This Patient” (in PowerChart)

- This patient is a Wellspan Bridges to Health patient. We are available 24/7 to answer questions and assist in coordinating care for this patient. If you call the above number from 8:00am-5:00pm Monday-Friday you will be in touch with our office staff who can connect you with a nurse or physician. After hours you will reach the answering service which will connect you to Dr. Nadia Khan, MD or Dr. Chris Echterling, MD.
- **The primary historical causes for ED visits/hospital admissions for this patient are:**
  - **Shortness of breath/removal of tracheostomy.** Pt most recently removed tracheostomy after loosening trach collar and “coughing out” trach. Required reinsertion by ENT (Dr. Good) in ED 10/19/12. Tracheostomy is result of laryngeal cancer. Currently in hospice care.
  - **Mental status change:** Pt is chronically malnourished. Has PEG tube but does not always use as directed. Most recent hospitalization 10/10/12-10/15/12 for mental status change r/t pneumonia (possible aspiration). Pt continues to take nourishment PO versus using PEG feedings as directed. Chronic alcohol use also contributes to mental status changes from intoxication or withdrawal.
- **Agencies Involved:**
  - ENT-Dr. Shorb 843-9089
  - Hospice and Community Care-885-0347
- **Transportation: arranged through York Cancer Center**
- **We are committed to immediate follow up with our patients after a visit to the ED or hospitalization (same day or next day whenever possible). Please feel free to call us to coordinate follow up appointment for the patient.**

# Patient Selection Criteria Pamphlet



## Patients

Bridges to Health is a Patient Centered Medical Home built in the model of an Ambulatory Intensive Care Unit. Patients most appropriate for Bridges to Health in the program's initial phase are those who:

- Have needs that are not being fully met by traditional primary care
- Rely heavily on inpatient and Emergency Department (ED) services for care that is preventable or more appropriately provided in an alternative setting
- Have chronic medical conditions
- May have behavioral health, cognitive or substance abuse issues, but this is not their sole reason for excessive healthcare expenditures
- Are 18 years of age and older
- Do not reside in a skilled nursing facility

## Payers of Focus

Since Bridges to Health does not have the initial resources to assist all patients who could benefit from its services, the first patients will come from the following payer groups:

- WellSpan Plus
- Healthy York Network
- Medical Assistance
- Self Pay

## Location and Phone

Bridges to Health is located in the Loretta Claiborne Building at 605 South George Street, York, PA 17401

(717) 851-6661 (phone)

(717) 851-6091 (fax)

## Staff

**Nina LeGrand, MHA**  
PROGRAM SUPERVISOR

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**Chris Echterling, MD**  
MEDICAL DIRECTOR

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**Maria Reyes, LCSW, ACHP-SW**

LICENSED CLINICAL SOCIAL  
WORKER  
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**Erin Shrader, RN, BSN**  
NURSE CASE MANAGER  
(717) 851-5690  
eshrader@wellspan.org

# Direct and Non-Direct Staff



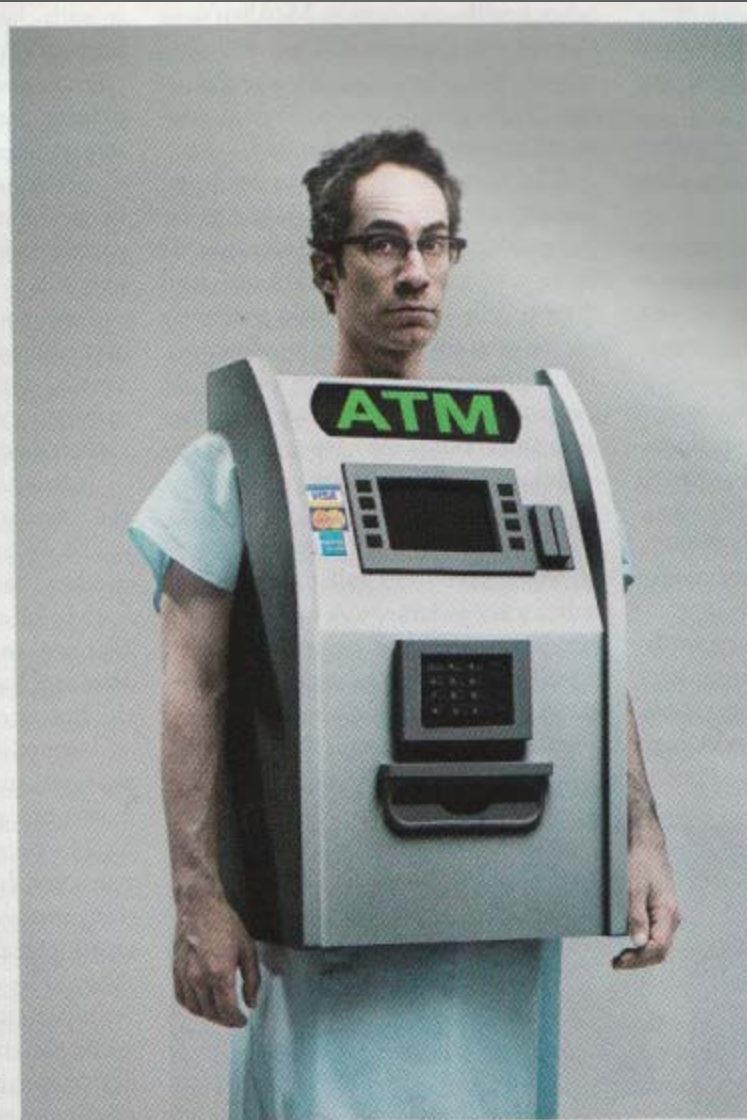
Year	Patients to Engage by 6/13	Direct Team
1	68	1 Program Supervisor 1 Physician 1 Social Worker 1 Nurse Case Manager 1 MA/Health Coach
Non Direct Staff	<ul style="list-style-type: none"><li>• Medical Director, Data Analyst</li><li>• Dietician, Translator, Pharmacist</li><li>• Behavioral Health Interns</li></ul>	

## One of Our Current Attempts to Determine Our Effectiveness

Inpatient and ED Charges for 8 Patients / September - December 2012 (Length of enrollment in the program varies per patient)									
		BTH +n	BTH -n	BTH -(~n)	n*		Aggregate pre-BTH \$ Charge Average	\$241,675	
	DM	\$38,224	\$15,391	\$38,527	3		Aggregate Total \$ Charges since enrollment w/BTH	\$122,623	
	GL	\$32,821	\$22,859	\$23,077	4		Estimated Charges Prevented	\$119,052	49%
	JG	\$12,920	\$16,121	\$6,276	1				
	OG	\$2,715	\$38,118	\$16,949	1				
	RB	\$22,048	\$32,715	\$76,833	4				
	WS	\$13,895	\$24,143	\$20,896	3				
	ROG	\$0	\$0	\$33,091	3				
	AO	\$0	\$17,449	\$26,027	3				
	Total	\$122,623	\$166,796	\$241,675					
*n = the number of months the patient has been with BTH.									
BTH+n represents the amount of healthcare \$ utilization after enrollment in the program									
BTH-n represents the amount of healthcare \$ utilization in an equivalent time frame <u>just prior</u> to enrollment in the program									
BTH-(~n) represents the <u>average</u> amount of healthcare \$ utilization for an equivalent time frame in the year prior to enrollment in the program. Since ED utilization tends to be variable in nature, BTH-(~n) is considered to be the more reliable baseline.									



# Weaning ourselves from revenue from unneeded care



*Costlier care is often worse care. Photograph by Phillip Toledano.*



# Learnings to Date



- Changing culture – “patient’s agenda is different than ours” (NOT “non-compliant”)
- Home visits & Navigating to specialist visit
- Agree upon outcomes and “success”
- Helping vs. fostering dependency
- Vitality of staff – sharing “big picture” vs. raising anxiety
- What intensity does system have appetite for at this time?
- Packaging interventions for spread – not just for those who need to “save the world”
- Choosing the right patients
  - For intensity you can input
  - For time frame you intend to engage
  - For outcome you have promised in time frame committed to



**“We build too many  
walls and not  
enough bridges”**

**~ Isaac Newton**



# Similarities



- Pilots to start – gain experience, advocates, STORIES
- Seen as Strategic Initiative
- Where are you already “at risk” (avoid ripple effect to other payers)
- Engage key partners as early as possible
  - Managed Care Medical Assistance and other potential funders
  - County Human Services
- Know Your home base
  - Who are Influence and thought leaders?
  - Political realities
- Characteristics of Staff - Creative, resilient, understand risk



# Similarities



- Goal is to leverage learning and collaboration to change the WHOLE HEALTH CARE SYSTEM (maybe the Community?)
- “Help Change Health Care CULTURE”
- “What will be different this time?” (Care management pilots have come and gone in past)
- TRULY Patient Centered Care – “The Pt changes the system instead of vice versa”
- Relationships, Relationships, Relationships
  - Patients
  - Family
  - Other Providers, Community Social Service Providers



# Differences

- Extensivist/Consultation vs. Transitional Primary Care Provider
- On Hospital campus vs. Off
- Residency Affiliated vs. Not – but “Teaching” is key



# Collaboratives/Learning Communities

- For learning – don't make all the mistakes yourself
- Bigger influence on payers
- Attractive to possible grants
- Family Medicine Educational Consortium  
<http://www.fmec.net/superutilizer.htm>

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