

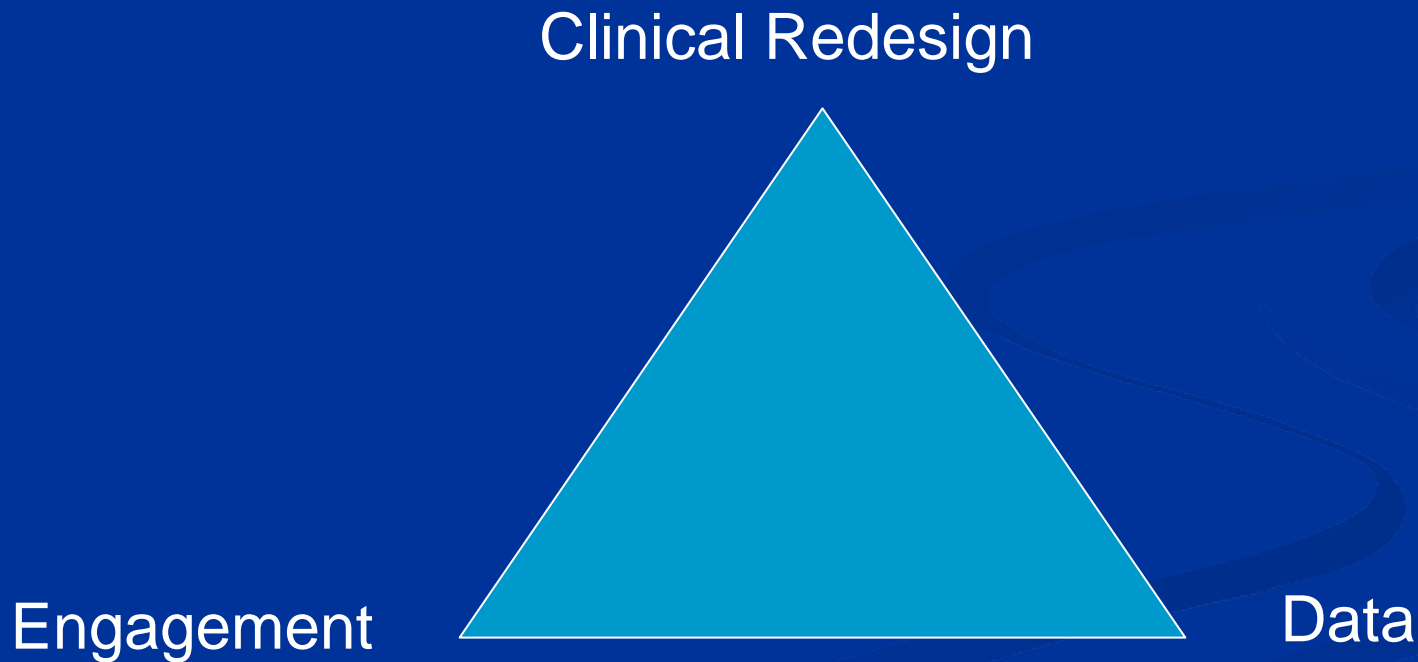
Innovation in the Public Sector Managing High Risk Patients in a Multi-Payer ACO Model

Jeffrey Brenner, MD
Executive Director/Medical Director



Overview of the Coalition

- 20 member board, incorporated non-profit
- Foundation and hospital support



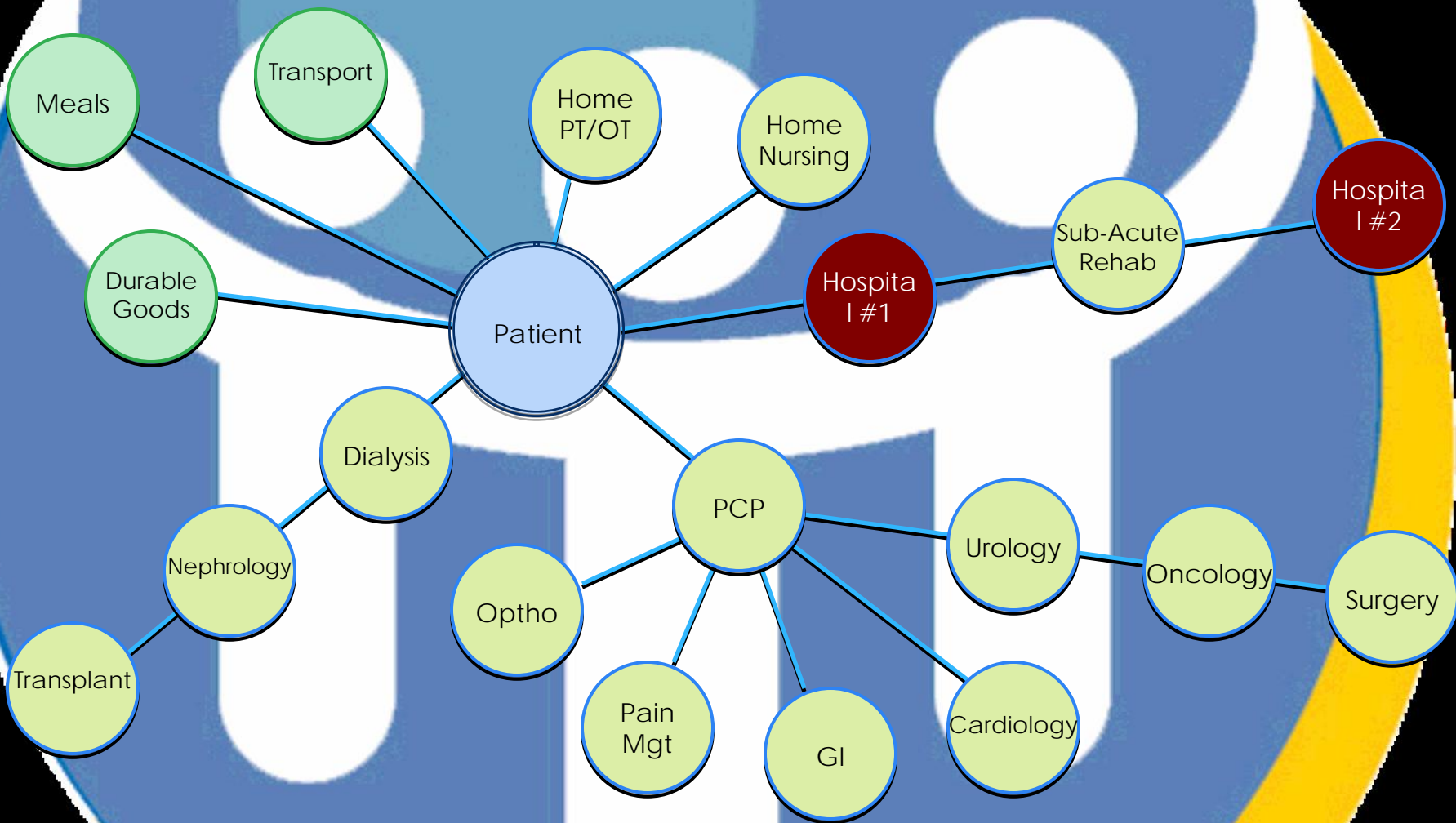
Patient Case Presentation #1

- 55-yo Male, admitted for GI bleed and SOB (November 2011)
- Dual coverage, Lives alone in high-rise apartment
- 6 months- 9 ED visits, 6 Inpt visits
- 12 Medications daily

ESRD
Renal Carcinoma
Hepatitis B
Hypertension
Hyperlipidemia
Peripheral vascular dx

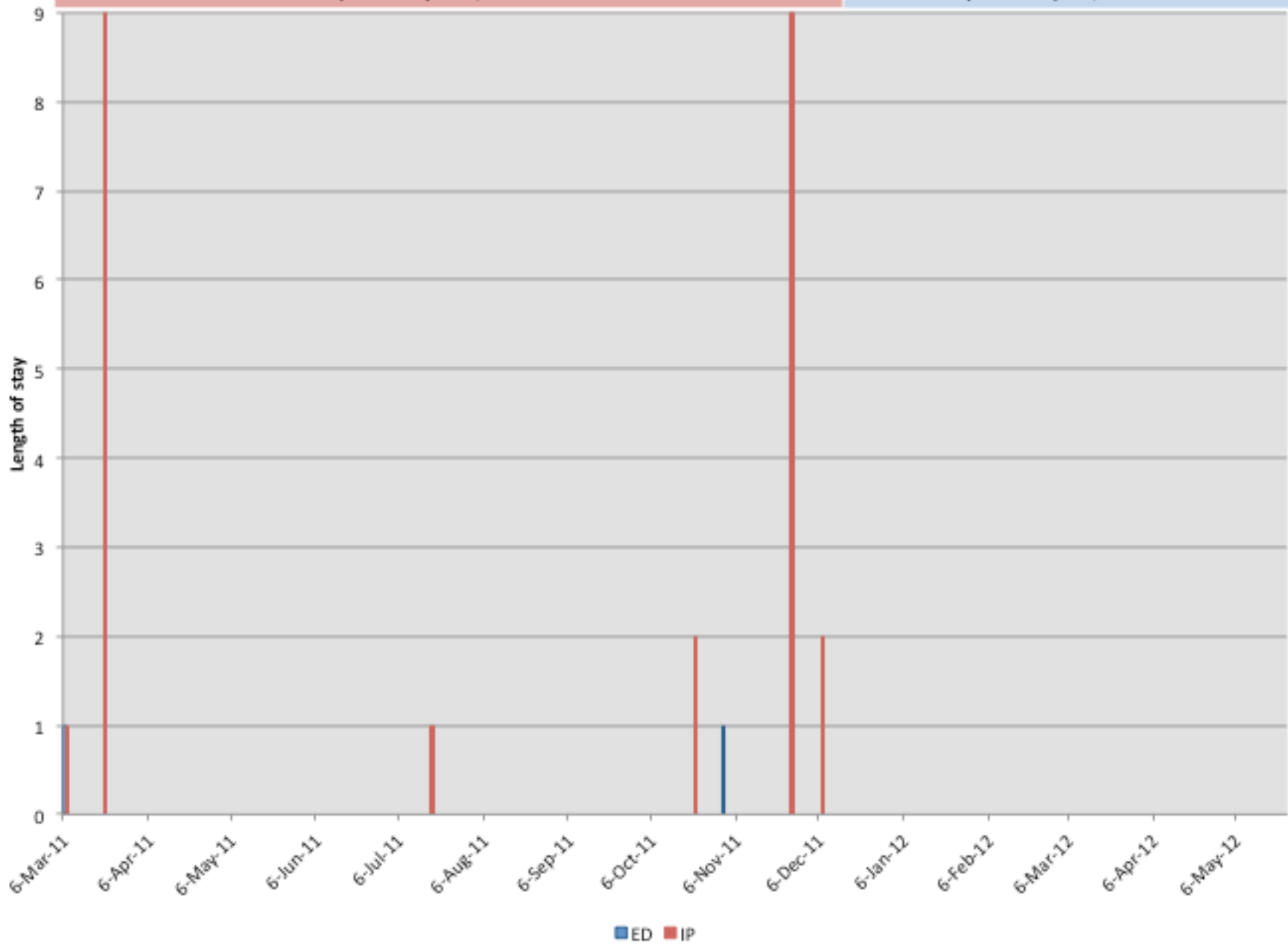
Asthma
Glaucoma (blind in one eye)
Sleep Apnea
Severe Back Pain

Patient Centered Care Coordination



1 year pre-enrollment
Charges = \$312,525; Receipts: \$59,133
Inpatient days: 24; ED visits: 2

Post-enrollment
Charges = \$0; Receipts= \$0
Inpatient days: 0; ED visit=0





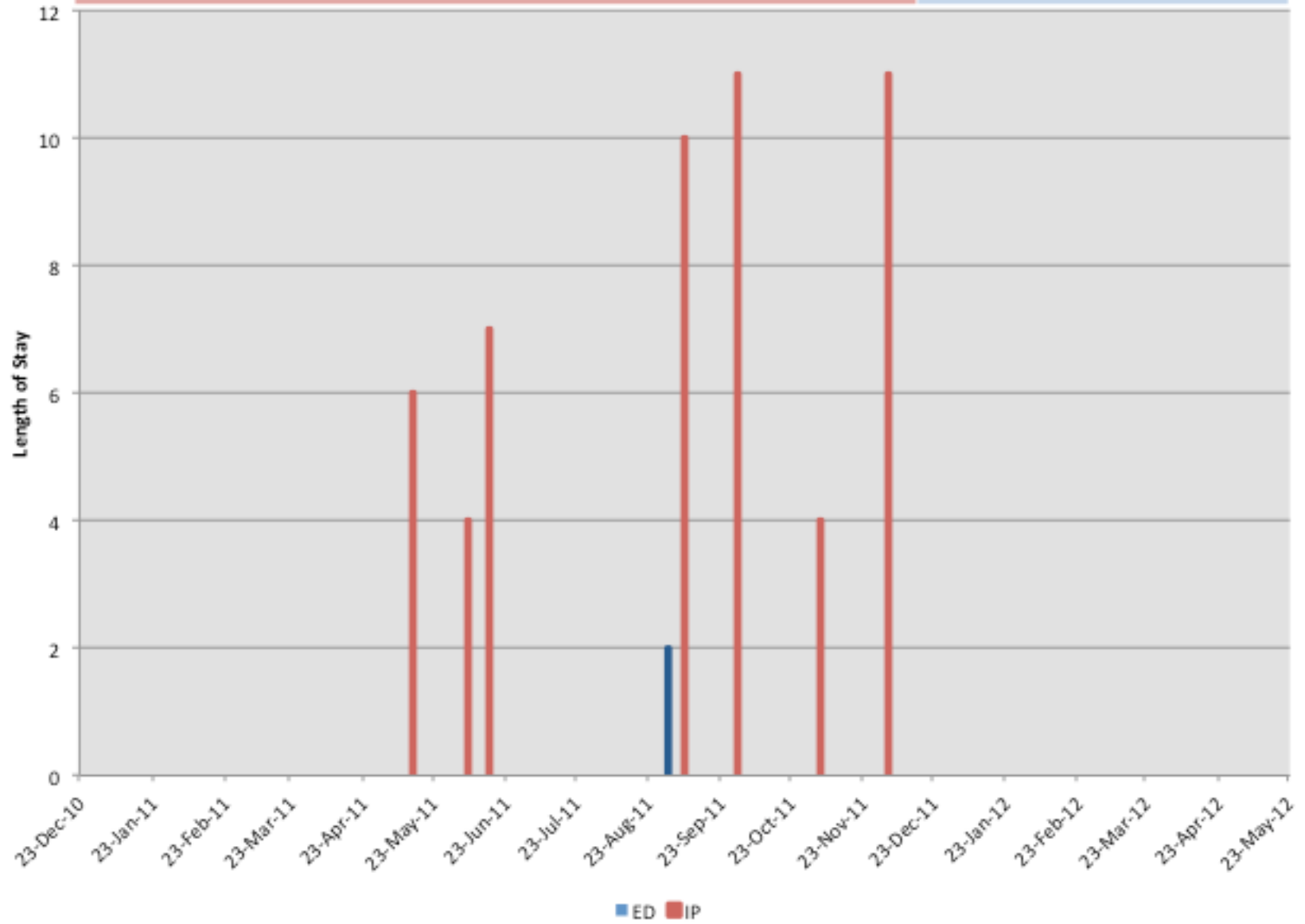


Patient Case Presentation #2

- 52-yo Female, Spanish-speaking, admitted for SOB
- Lives with family
- 6 months- 6 inpatient visits
- Ventilator dependent and has tracheostomy
- Severe COPD

1 year pre-enrollment
Charges = \$745,018; Receipts: \$95,358;
Inpatient days: 55; ED visits: 1

Post-enrollment
Charges = \$0; Receipts= \$0
Inpatient days: 0; ED visit=0





Camden Health Data

- 2002 – 2013 with Lourdes, Cooper, Virtua data
 - 500,000+ records with 98,000 patients
 - 50 % population use ER/hospital in one year
- Leading ED/hospital utilizers citywide
 - 324 visits in 5 years
 - 113 visits in 1 year
- Total revenue to hospitals for Camden residents \$100 million per year
 - Most expensive patient \$3.5 million
 - 30% costs = 1% patients
 - 80% costs = 13% patients
 - 90% costs = 20% patients

Top 10 ER Diagnosis 2002-2007 (317,791 visits)

465.9	ACUTE UPPER RESPIRATORY INFECTION (head cold)	12,549
382.9	OTITIS MEDIA NOS (ear infx)	7,638
079.99	VIRAL INFECTION NOS	7,577
462	ACUTE PHARYNGITIS (sore throat)	6,195
493.92	ASTHMA NOS W/ EXACER	5,393
558.9	NONINF GASTROENTERI (stomach virus)	5,037
789.09	ABDOMINAL PAIN-SITE NEC	4,773
780.6	FEVER	4,219
786.59	CHEST PAIN NEC	3,711
784.0	HEADACHE	3,248

Healthcare Cost Hotspots in Camden, NJ (Jan 2002-June 2008)



Map includes only blocks with at least 1 visit

High Cost Buildings...



Northgate II
3,901 visits, 615 patients
\$83 million in charges
(\$21,000 per visit)
\$12 million in receipts
15% collection rate



Abigail House
1,414 visits, 332 patients
\$92 million in charges
(\$65,000 per visit)
\$15 million in receipts
16% collection rate

Overview of High Cost Hotspots...

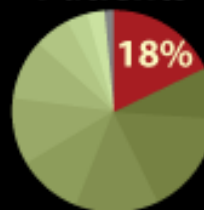
Receipts



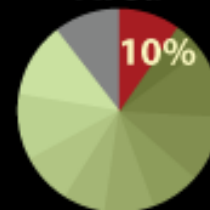
Visits



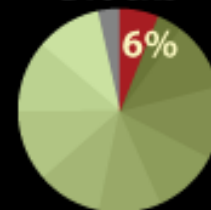
Patients



Area



Blocks



CamConnect.org



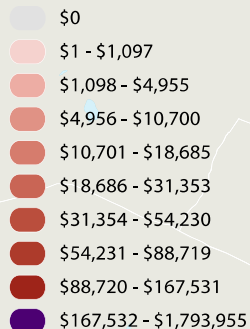
Camden Coalition of Healthcare Providers

www.camdenhealth.org

Source: Cooper, Lourdes, and Virtua Hospital and ER billing data
Jan 2002-June 2008

Newark Beth Israel Hotspot Analysis (2010)

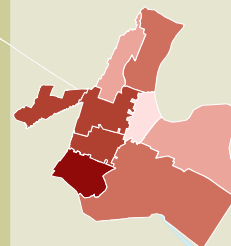
Total Costs per Census Block (deciles)



★ Hotspot
(>\$200k in receipts and >50 patients)

Total Receipts by Zip Code

07112	\$24,079,842
07108	\$16,553,538
07103	\$14,181,330
07106	\$11,788,444
07104	\$7,022,274
07114	\$6,440,656
07107	\$5,594,552
07105	\$5,498,100
07102	\$4,206,927



1060 Broad St
(1 Building)
87 Patients
198 ER & Inpatient Visits
\$993 thousand in receipts



Mt Vernon and Manor Dr High Rises (4 Buildings)
272 Patients
379 ER & Inpatient Visits
\$1.11 million in receipts



Elizabeth Ave High Rises (6 Buildings)
774 Patients
1,390 ER & Inpatient Visits
\$2.0 million in receipts

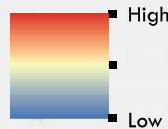
SAINT BARNABAS
HEALTH CARE SYSTEM
Newark Beth Israel Medical Center

Camden Coalition of
Healthcare Providers
www.camdenhealth.org

MaineCare Hotspot Analysis: Penobscot County

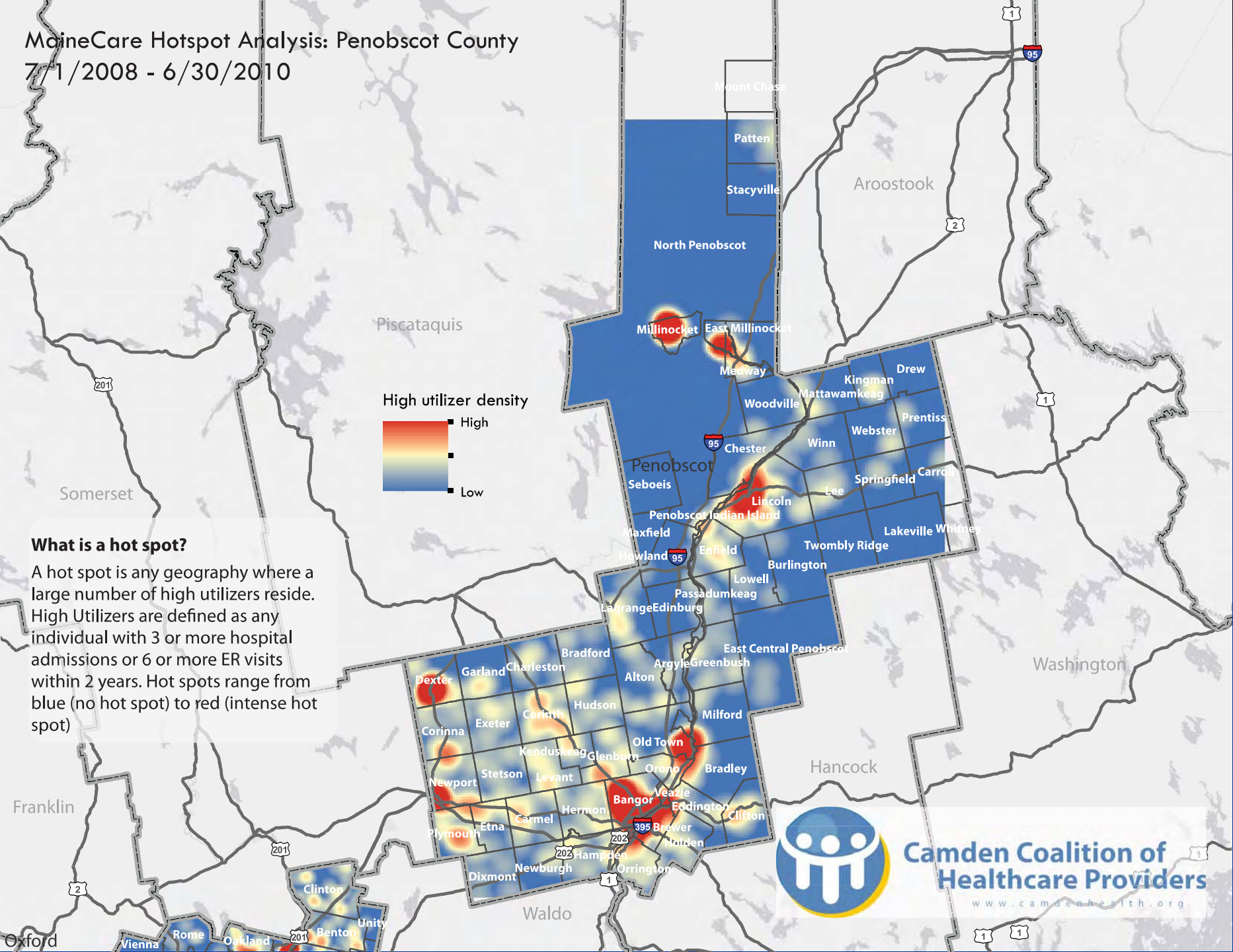
7/1/2008 - 6/30/2010

High utilizer density



What is a hot spot?

A hot spot is any geography where a large number of high utilizers reside. High Utilizers are defined as any individual with 3 or more hospital admissions or 6 or more ER visits within 2 years. Hot spots range from blue (no hot spot) to red (intense hot spot)



Camden Coalition of Healthcare Providers

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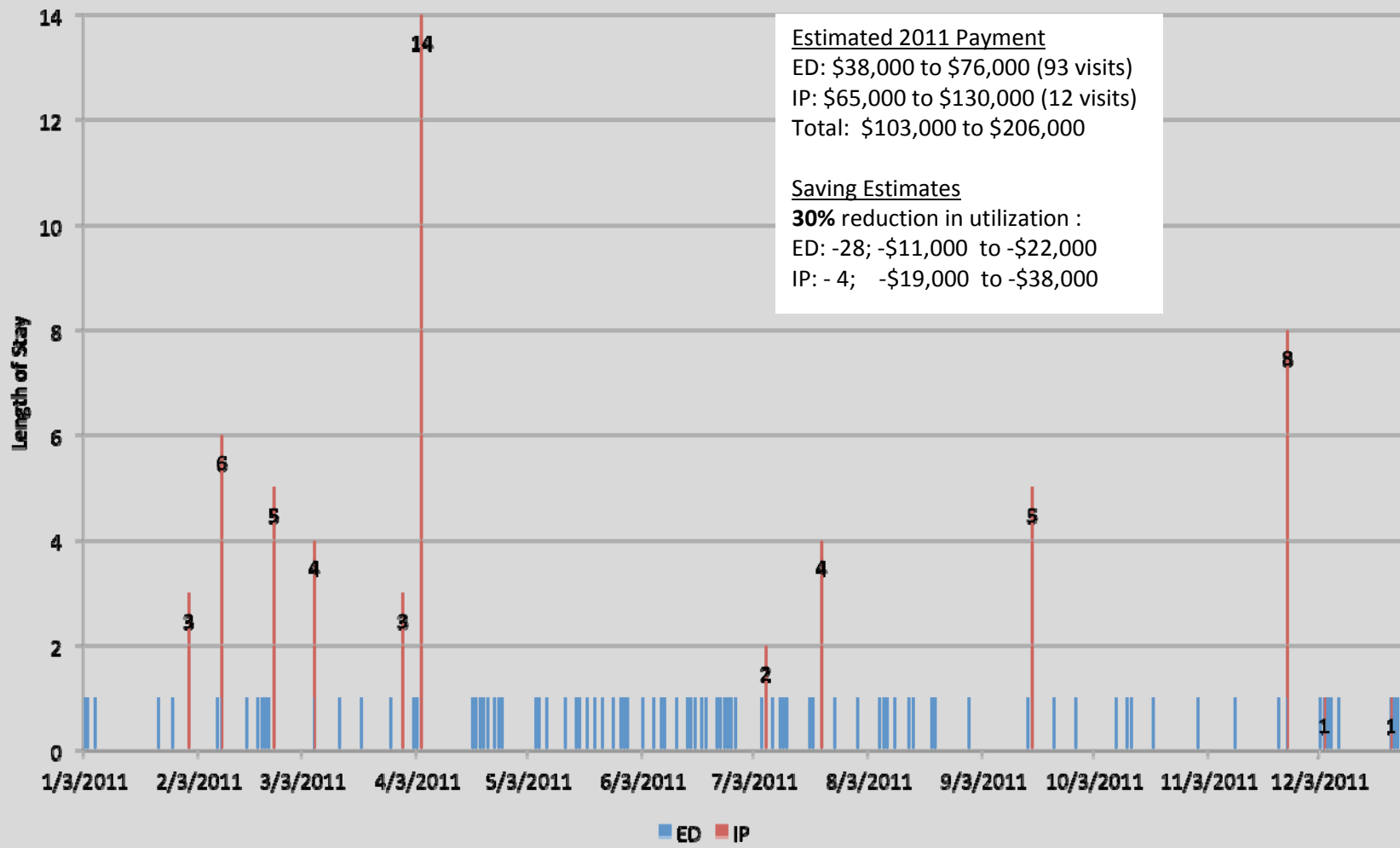
Utilization typology

ED visits, 2011	Inpatient visits, 2011				
	0	1	2	3 to 4	5+
0	0	1,293	57	4	1
1	26,128	2,075	117	7	0
2 to 3	13,390	1,842	373	68	3
4 to 5	3,216	666	223	118	15
6 to 7	1,020	251	106	84	24
8 to 9	386	112	39	41	11
10 +	339	96	70	65	62

Utilization matrix

ED visits, 2011	Inpatient visits, 2011				
	0	1	2	3 to 4	5+
0	44,728 (85%) patients 5,210 Inpatient visits 63,489 ED visits \$28,000,000 (50%) IP payment \$25,800,000 (59%) ED payment		985 (2%) patients 1,856 IP visits 4,129 ED visits \$10,000,000 (17%) IP payment \$1,700,000 (4%) ED payments	503 (1%) patients 2,026 Inpatient Visits 4,144 ED Visits \$10,900,000 (20%) in IP payment \$1,700,000 (4%) in ED payment	
1					
2 to 3					
4 to 5	4,961 (9%) patients 28,447 ED visits \$11,500,000 (27%) in ED payment	1,563 (3%) patients 1,239 IP visits 6,962 ED visits \$6,700,000 (18%) in IP payment \$2,800,000 (6%) in ED payment			
6 to 7					
8 to 9					
10 +					

Patient A



Daily Admissions Feed

Admitted past month, 6 month summary

Admit	Facility	Days 6 mo episodes			Name	dob	age	sex	PCP	PracticeName	Insurance
		Inp	ED								
<i>06/13/12</i>											
Cooper		40	7	3	XXXXXXXXXXXXXXXX	xx/xx/xxxx	55	M	JACK GOLDSTEIN	CMC Dept of	
Cooper		44	3	2		xx/xx/xxxx	73	F	MARILYN GORDON	CAMcare Health	
Cooper		79	3			xx/xx/xxxx	57	M	JOHN KIRBY	Cooper Physician	HORIZON NJ PPO
Cooper		35	2	3		xx/xx/xxxx	21	M	NO PHYSICIAN		
LOLO		1	2	1		xx/xx/xxxx	56	M			SELF PAY -
Cooper		5	2	1		xx/xx/xxxx	61	M			
LOLO		4	2	1		xx/xx/xxxx	54	M			SELF PAY
Cooper		27	2			xx/xx/xxxx	47	M	MARILYN GORDON	CAMcare Health	
<i>06/12/12</i>											
Cooper		15	13	1		xx/xx/xxxx	22	F	MIGUEL MARTINEZ	Cooper Physician	
Cooper		18	3	2		xx/xx/xxxx	55	M	NO PHYSICIAN		AMERHLTH/KEYST
Cooper		99	3	1		xx/xx/xxxx	64	M	DANIEL HYMAN	Cooper Physician	
<i>06/11/12</i>											
Cooper		9	9	5		xx/xx/xxxx	48	M	LYNDA BASCELLI	Project Hope	
LOLO		43	9	1		xx/xx/xxxx	71	F			INTERNAL BILLING
LOLO		17	5	5		xx/xx/xxxx	66	F			HORIZON NJ
Cooper		27	5	3		xx/xx/xxxx	52	M	LYNDA BASCELLI	Project Hope	
LOLO		35	5	1		xx/xx/xxxx	70	F			BRAVO HEALTH
LOLO		46	4	5		xx/xx/xxxx	73	F			HORIZON NJ
LOLO		31	3	2		xx/xx/xxxx	52	F			SELF PAY
Cooper		2	3	1		xx/xx/xxxx	68	F	MINH HUYNH		
LOLO		1	3	1		xx/xx/xxxx	73	F			HORIZON NJ
Cooper		34	3			xx/xx/xxxx	62	F	ANNA HEADLY	Cooper Physician	
Cooper		131	2	10		xx/xx/xxxx	35	M	NO PHYSICIAN		
LOLO		54	2	6		xx/xx/xxxx	49	F			SELF PAY -
LOLO		177	2	4		xx/xx/xxxx	91	F			HORIZON NJ
Cooper		3	2	2		xx/xx/xxxx	51	M	NO PHYSICIAN		MEDICAID
LOLO		139	2	2		xx/xx/xxxx	87	F			HORIZON NJ

SENATE, No. 2443

STATE OF NEW JERSEY

214th LEGISLATURE

INTRODUCED DECEMBER 6, 2010

Sponsored by:

Senator JOSEPH F. VITALE

District 19 (Middlesex)

SYNOPSIS

Establishes Medicaid Accountable Care Organization Demonstration Project in DHS.

CURRENT VERSION OF TEXT

As introduced.

What Does Good Care Look Like?

- Accessible
- Responsive
- Personalized
- Community-based
- Integrated
- Holistic

Examples

PACE Program

ACT Team

Nurse Family
Partnership

Ryan White Clinic

Health Quality Partners

Early Lessons Learned

■ Collaboration and Leadership

- Smaller communities have an easier time
- Easy to get stuck in planning
- Need to move through iterative loop of problem solving and adaptation
- Need project management-clinical dyad throughout

■ Staffing

- Hiring the right staff is challenging
- Delegation, delegation, delegation
- Flat project team structures move quicker and are more innovative

Early Lessons Learned

■ Clinical model

- Biggest obstacle is the delivery system itself, not the patients
- Need to be in the community and accompany patients to appointments
- Early life trauma is a key variable
- Many sub-type of patients within the outlier patients which require micro-targeting strategies
- Need primary care that can pivot to the unique needs of the patients
- Need data driven screening and targeting







Fountain of Youth Discovered in Doylestown, PA

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

- 1,700 adults over 65 over 10 years
- Randomized study run by Mathematica begun in 2002
- Part of a Medicare Coordinated Care Demonstration Project
- 25% lower relative risk of death (9.9% vs 12.9%)
- Highest risk patients 48% reduction in death rates
- 33% reduction in hospitalization
- 22% reduction in total cost to Medicare