

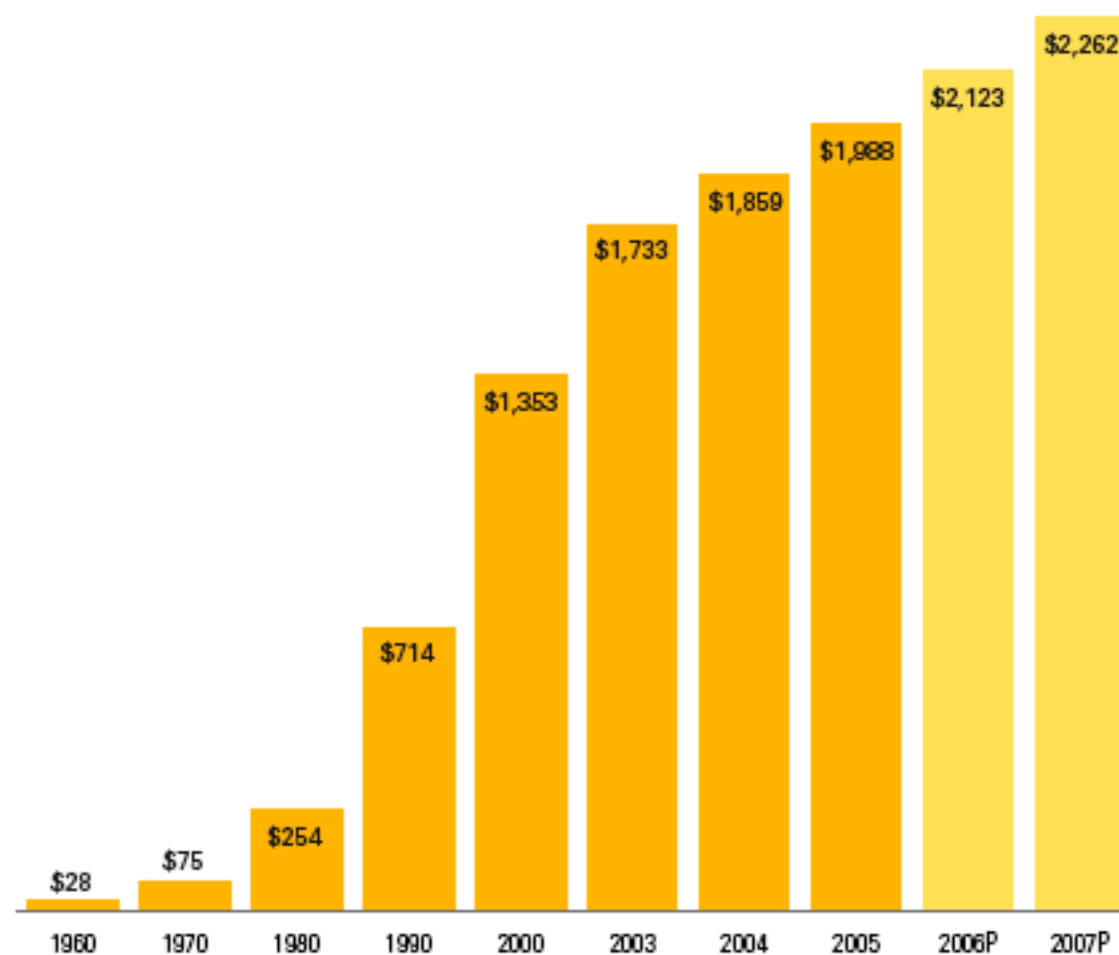
Reducing Readmissions & Improving Care for Highest Needs, Highest Cost Populations: Lessons from Camden, NJ

Sue Liu, MA/MPP
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Camden Coalition of Healthcare Providers
www.camdenhealth.org

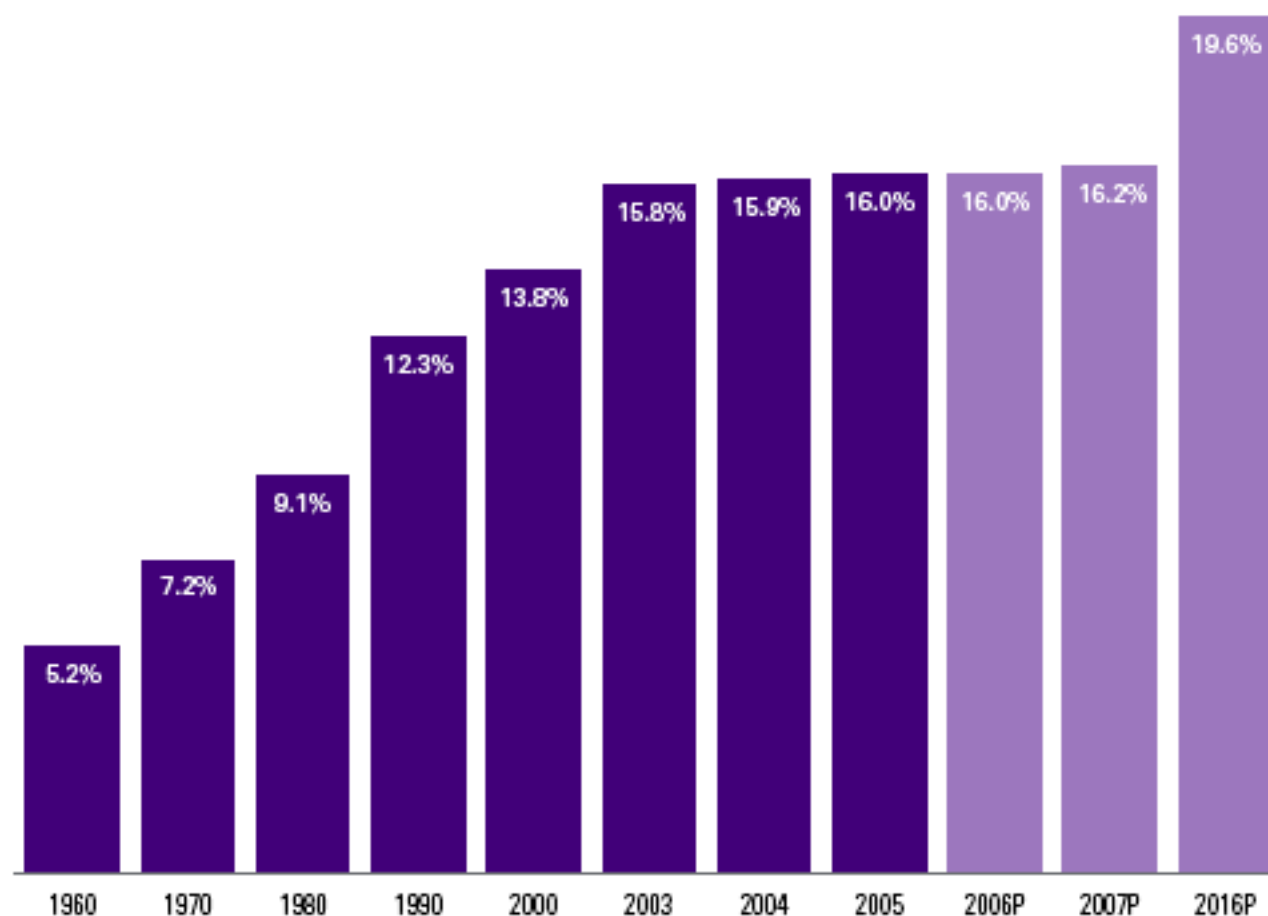
National Health Spending in Billions



Note: Selected rather than continuous years of data are shown prior to 2003. Years 2006 forward are CMS projections.

Source: Centers for Medicare and Medicaid Services (CMS), Office of the Actuary.

National Health Spending as a Share of Gross Domestic Product



Note: Selected rather than continuous years of data are shown prior to 2003. Years 2006 forward are CMS projections.

Source: Centers for Medicare and Medicaid Services (CMS), Office of the Actuary.

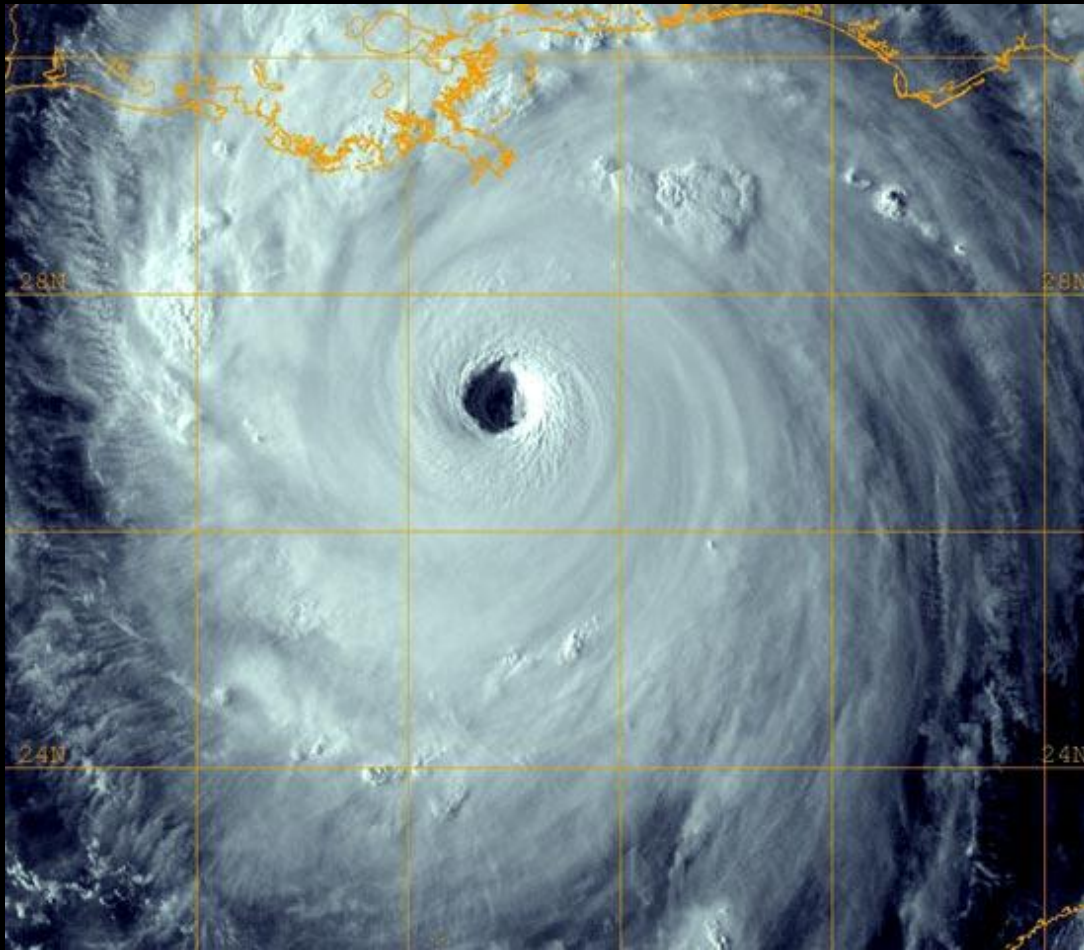
Dartmouth Atlas

AL	25,344	IL	31,197	MT	25,056	RI	29,028
AK	31,957	IN	23,874	NE	25,838	SC	27,095
AZ	27,843	IA	23,746	NV	27,950	SD	24,072
AR	25,724	KS	25,740	NH	25,706	TN	26,464
CA	38,573	KY	25,012	NJ	39,810	TX	28,466
CO	25,888	LA	26,830	NM	24,616	UT	23,936
CT	32,636	ME	25,196	NY	38,369	VT	27,050
DE	28,450	MD	36,337	NC	25,829	VA	25,435
DC	39,637	MA	31,985	ND	23,855	WA	27,698
FL	29,604	MI	28,427	OH	25,005	WV	23,789
GA	26,267	MN	27,411	OK	25,227	WI	25,343
HI	33,518	MS	25,705	OR	25,509	WY	25,173
ID	23,697	MO	25,681	PA	28,487	US	29,199

Inpatient and Part B spending per decedent during last 2 years of life

Source: Dartmouth Atlas of Healthcare. 2006.

A Perfect Storm



New Jersey:
High Cost
Low Quality
Overspecialized

Camden
Poverty
Low Reimbursements

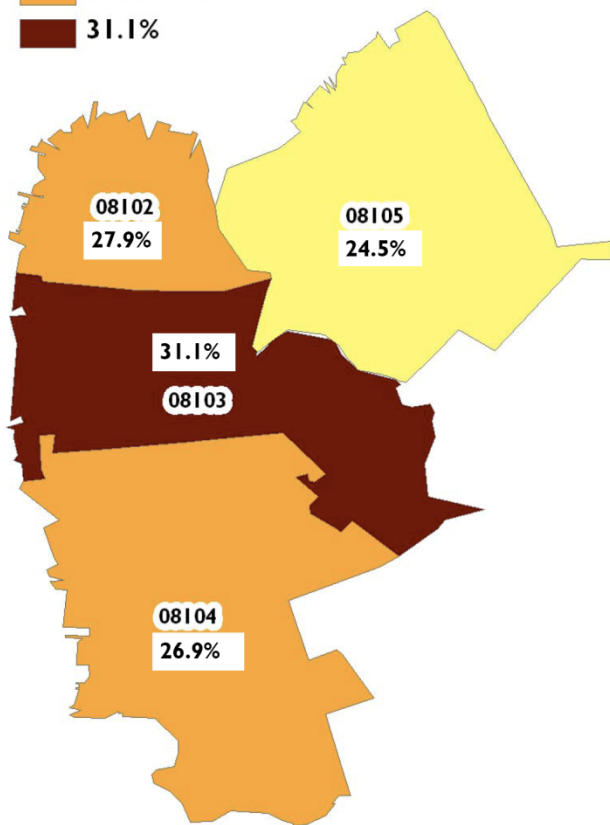
Camden Health Data

- New Data Set 2002 – 2008 with Lourdes, Cooper, Virtua data
- 480,000 records with 98,000 patients
- 50 % population use ER/hospital in one year
- Leading utilizer came 324 visits/5yrs another pt was 113 visits in 1 year
- Most expensive patient \$3.5 million
- Total revenue to hospitals for Camden residents \$460,000,000 + charity care
- 80% costs = 13% patients
- 90% costs = 20% patients

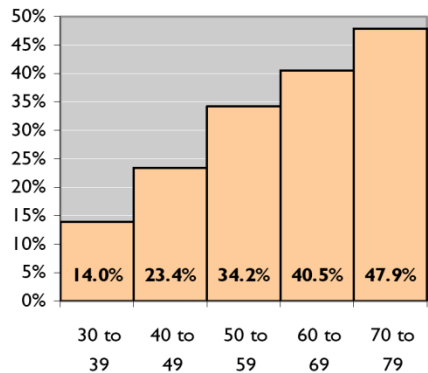
Top 10 ED Diagnosis 2002-2007 (317,791 visits)

465.9	ACUTE URI NOS	12,549
382.9	OTITIS MEDIA NOS	7,638
079.99	VIRAL INFECTION NOS	7,577
462	ACUTE PHARYNGITIS	6,195
493.92	ASTHMA NOS W/ EXACER	5,393
558.9	NONINF GASTROENTERIT NEC	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

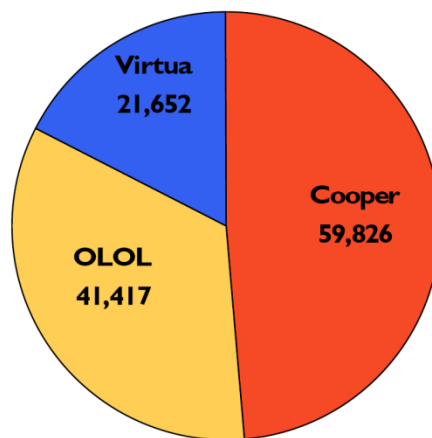
Percent of Population 30+ with Chronic Disease



Prevalence of Chronic Disease by Age



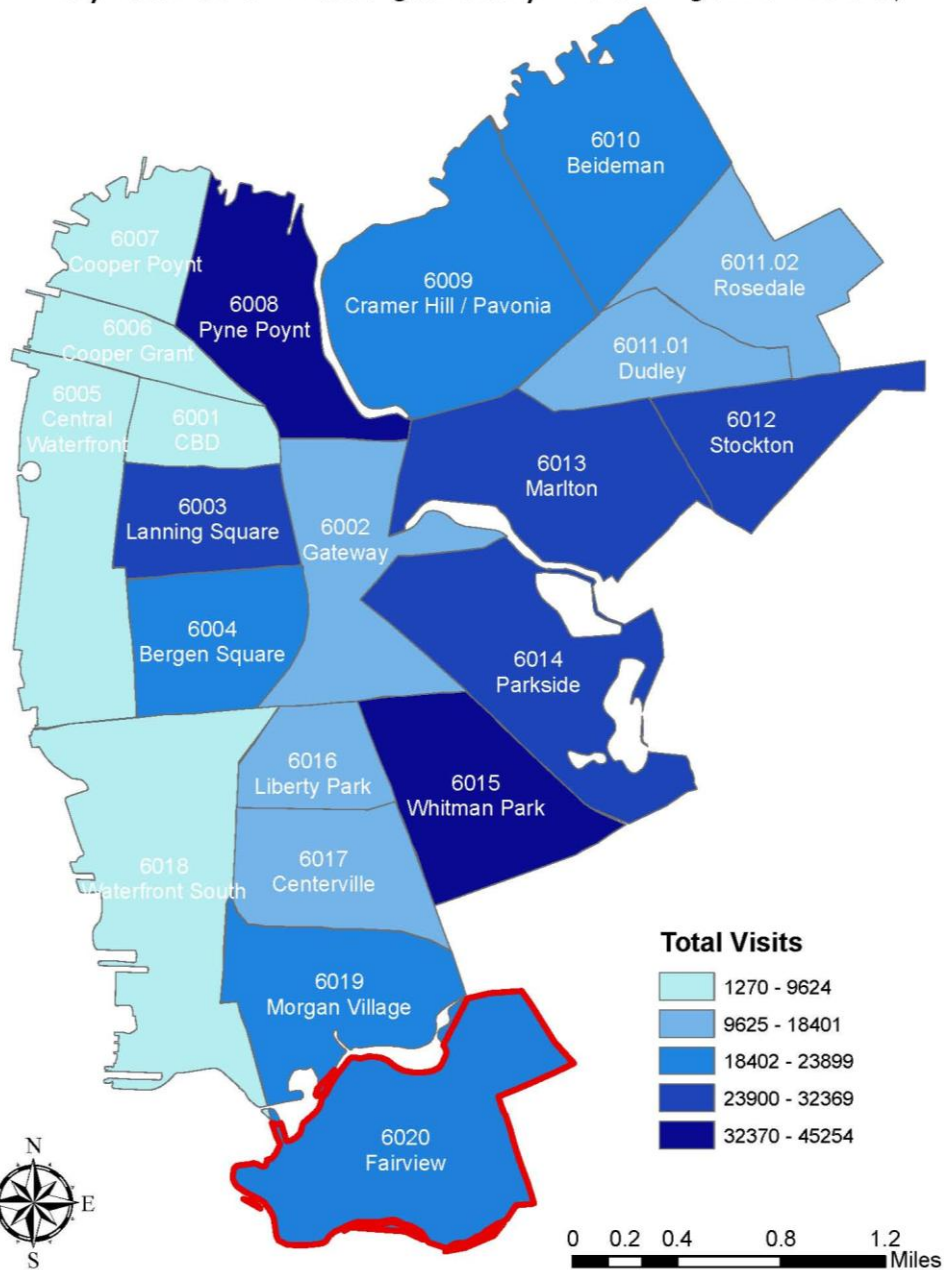
Chronic Disease Visits by Hospital



Chronic Illness In Camden 2002 - 2007

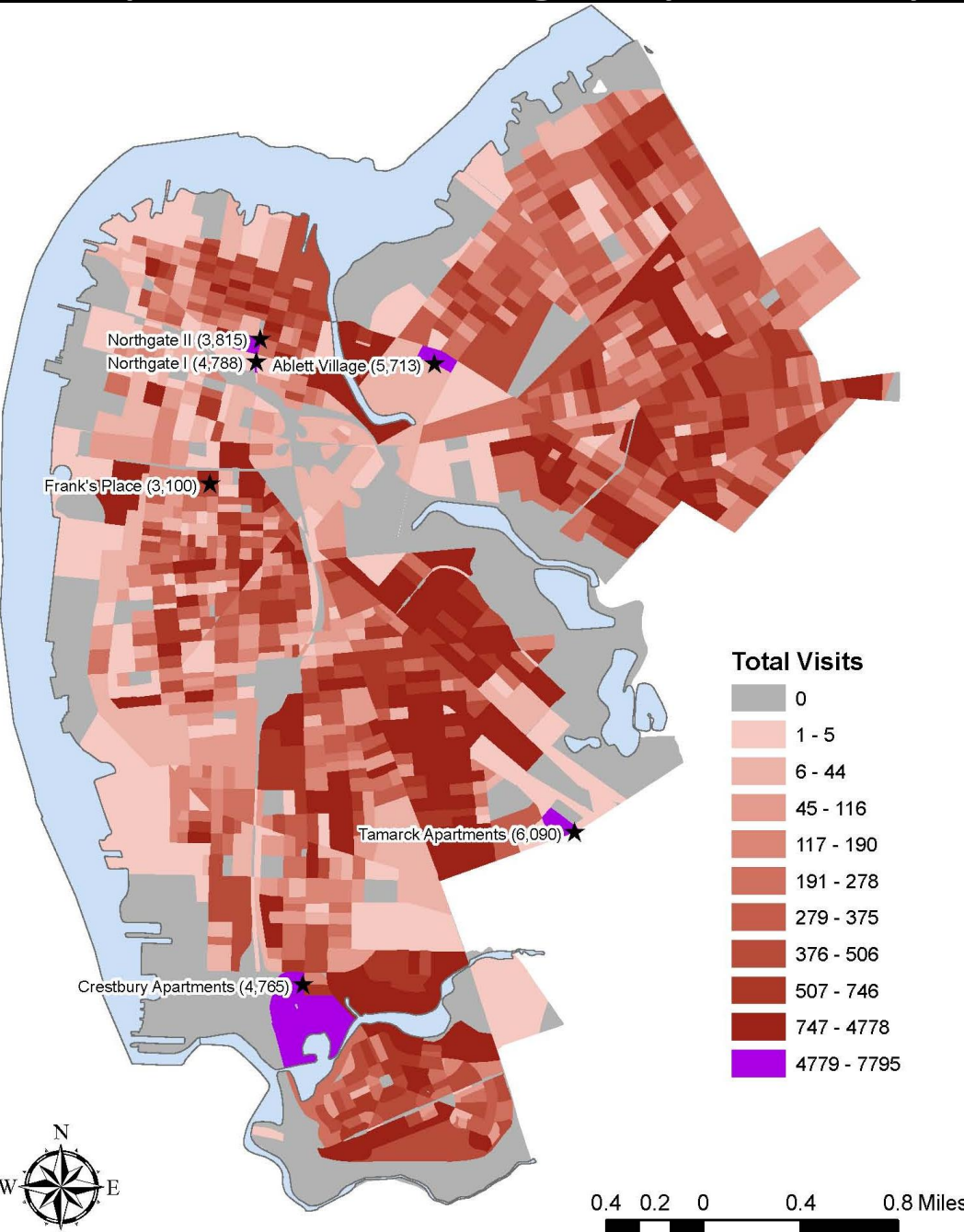
Number of Visits	Total Visits	Total Patients	Charges	Receipts
I to 10	54,207	12,612	\$1,042,444,520	\$145,106,010
11 to 20	35,958	2,521	\$528,530,965	\$71,784,792
Over 20	32,730	960	\$407,663,357	\$51,105,098
TOTAL	122,895	16,093	\$1,978,638,841	\$267,995,901

Hospital and Emergency Visits by Census Tract (January 2002 - June 2008)



Tract	Neighborhood	Census 2000 Population	Visits	Average Visits per Person
6005	Central Waterfront	962	8,181	8.5
6003	Lanning Square	3,989	32,369	8.1
6002	Gateway	2,439	18,401	7.5
6015	Whitman Park	6,424	45,254	7.0
6008	Pyne Poynt	5,756	37,091	6.4
6019	Morgan Village	3,443	22,028	6.4
6016	Liberty Park	2,378	14,738	6.2
6004	Bergen Square	3,880	23,829	6.1
6013	Marlton	5,049	29,805	5.9
6014	Parkside	4,790	26,749	5.6
6009	Cramer Hill / Pavonia	4,358	23,899	5.5
6020	Fairview	5,947	31,813	5.3
6017	Centerville	2,874	14,662	5.1
6018	Waterfront South	1,700	8,071	4.7
6011.01	Dudley	3,730	17,631	4.7
6012	Stockton	6,102	27,354	4.5
6010	Beideman	5,677	23,446	4.1
6007	Cooper Poynt	2,880	9,624	3.3
6011.02	Rosedale	4,954	14,898	3.0
6001	CBD	1,734	4,616	2.7
6006	Cooper Grant	838	1,270	1.5

Hospital and Emergency Visits by Block (Jan 2002 – Jun 2008)



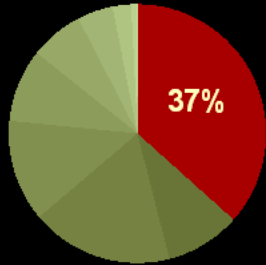
	Visits	Patients	Charges	Receipts	Collected
Cooper	3,172	749	\$42,144,097	\$4,994,658	12%
Lourdes	811	337	\$7,848,809	\$1,028,611	13%
Virtua	805	331	\$1,742,467	\$345,092	20%
2005	838	370	\$10,834,420	\$1,269,373	12%
2006	738	355	\$6,867,995	\$881,549	13%
2007	790	369	\$7,979,262	\$901,181	11%
ED	3882	978	\$6,150,592	\$864,019	14%
Inpatient	906	408	\$45,584,781	\$5,504,342	12%
Total	4,788	1,070	\$51,735,374	\$6,368,361	12%

Primary Diagnosis

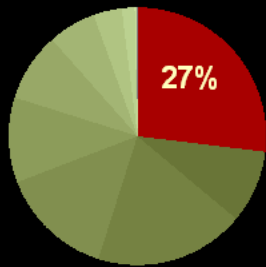
Rank	ED	Inpatient
1	abdominal pain (789.0)	live birth (V3X.0)
2	acute URI NOS (465.9)	chest pain (786.5)
3	chest pain (786.5)	congestive heart failure NOS (428.0)

High Cost Hot Spots in Camden

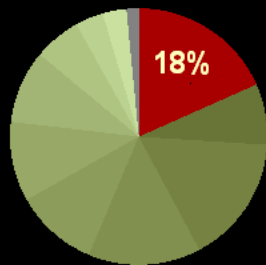
Receipts (in dollars)



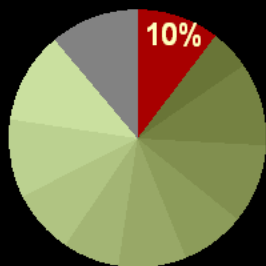
Visits



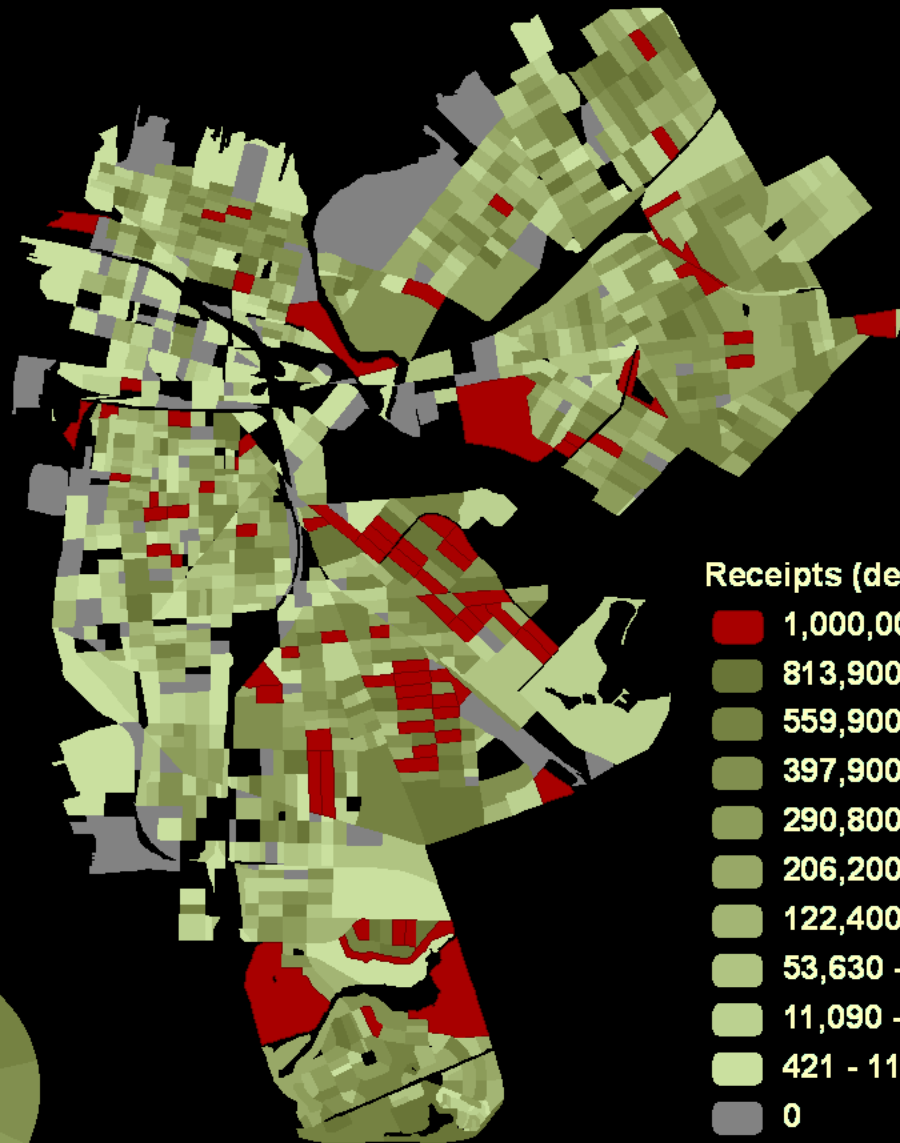
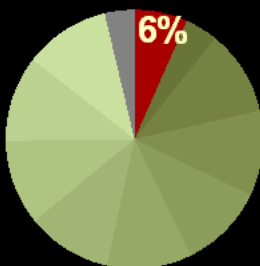
Population (estimated)



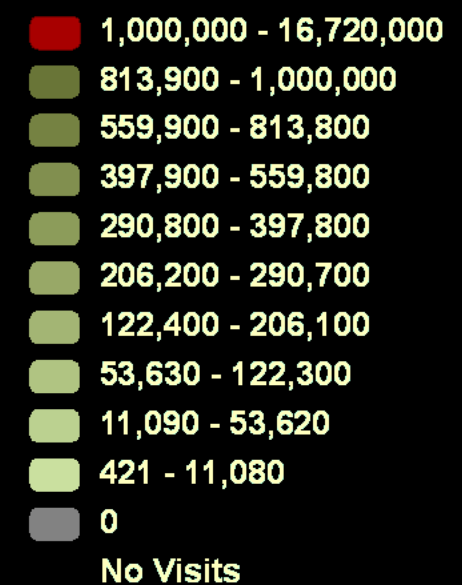
Area



Blocks



Receipts (deciles in dollars)



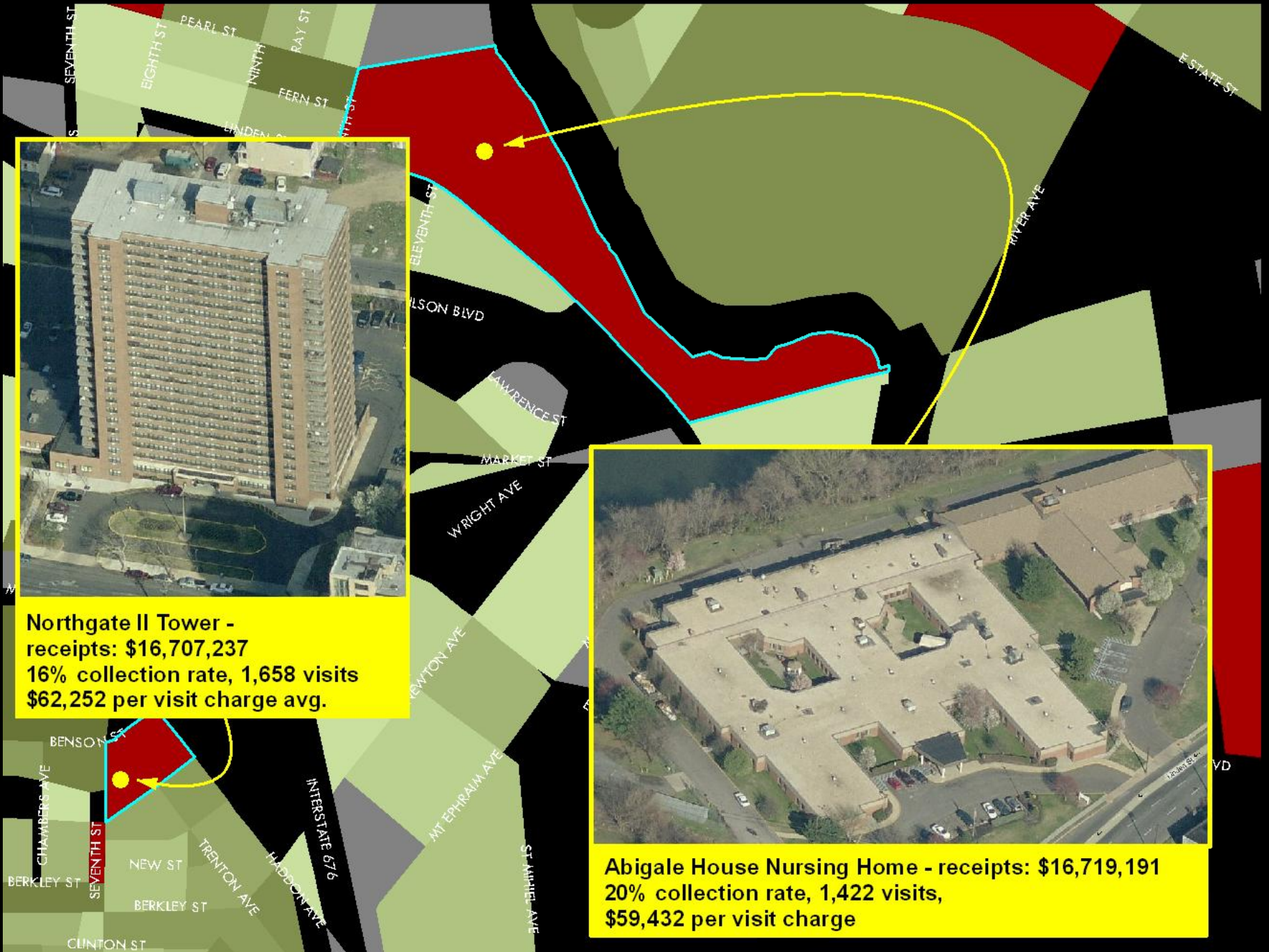
Graphs include only blocks with at least 1 visit and charges > \$0



Northgate II Tower -
receipts: \$16,707,237
16% collection rate, 1,658 visits
\$62,252 per visit charge avg.



Abigale House Nursing Home - receipts: \$16,719,191
20% collection rate, 1,422 visits,
\$59,432 per visit charge



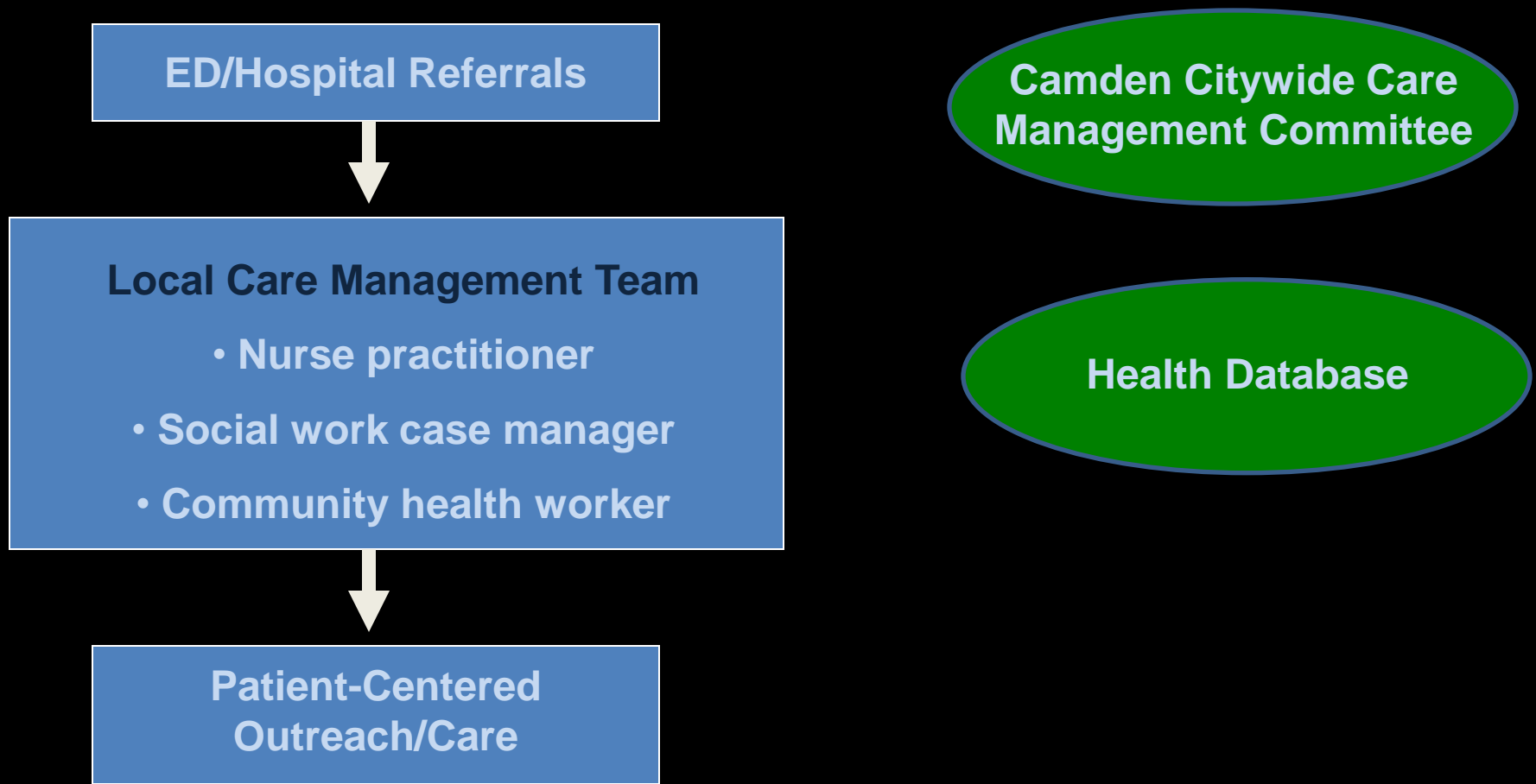
Top 1% of Utilizers (2002-2007)

- 1,035 patients with 39,056 visits
- Between 24 and 324 visits
- Total charges \$375 million
- Total receipts \$46 million + charity care
- Enough \$\$ to fund 50 family physicians or 100 nurse practitioners

Overview of the Coalition

- 20 member board, incorporated non-profit
- Foundation and hospital support
- \$3.5 million in grant funding
- \$1.5 million in hospital funding
- Projects:
 - Camden Health Database
 - Citywide Care Management Project
 - Camden Diabetes Collaborative
 - Camden Health Information Exchange
 - Citywide Violence Intervention

Citywide Care Management System



Case Management: Experience To Date

Over 5 year period:

- Most expensive patient
 - \$4,973,811 charges
 - \$661,155 receipts
- Visits 1,663 with average 38.67 visits/patient
- 37% visits are inpatient
- Total 43 patients
 - \$25,598,615 charges
 - \$2,995,080 receipts

Citywide Care Management System

Case #1:

- 46 y/o AA male with CAD, morbid obesity, DM, severe CHF (EF 15%)
- 2 previous admission to 2 different hospitals
- Semi-homeless, lives in welfare motel with girlfriend, evicted from apartment recently
- Hx of substance abuse and no consistent primary care

Citywide Care Management System

- Admitted to Cooper with dyspnea and abdominal pain, stayed 2 months
- Cholelithiasis, sepsis, intubation, PEG tube, C Diff infection, staph infection from PIC line
- Subacute rehabilitation discharge x 10 days
- Discharged to welfare motel

Preliminary Results

Charges per month

<u>n</u>	<u>Ratio of Before to After</u>	<u>Before</u>	<u>After</u>	<u>Absolute Change</u>	<u>Percent Change</u>
36	1:1	\$1,218,009.69	\$531,202.91	-\$686,806.78	-56.39%

Receipts per month

<u>n</u>	<u>Ratio of Before to After</u>	<u>Before</u>	<u>After</u>	<u>Absolute Change</u>	<u>Percent Change</u>
36	1:1	\$83,992.29	\$55,641.94	-\$28,350.35	-33.75%

Visits per month

<u>n</u>	<u>Ratio of Before to After</u>	<u>Before</u>	<u>After</u>	<u>Absolute Change</u>	<u>Percent Change</u>
36	1:1	61.595	37.212	-24.383	-39.59%

Percent Reimbursement per month

<u>n</u>	<u>Ratio of Before to After</u>	<u>Before</u>	<u>After</u>	<u>Absolute Change</u>	<u>Percent Change</u>
36	1:1	6.90%	10.47%	3.58%	51.90%

Camden Health Information Exchange

- Phase 1: Ability to view labs, radiology, discharge summaries for Cooper, Lourdes, Virtua, Quest, and Labcorp
- 1st phase funded by hospitals and grant funds
- Projected Launch: June 2010
- Potential impact on management of high utilizers

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