

Saint Barnabas Medical
Center
Hospital Based
Educators Teach
Optimal Asthma Care

DSRIP Learning Collaborative
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Saint Barnabas Medical Center



New Jersey's oldest nonprofit, nonsectarian hospital.

Major teaching affiliate

University of Medicine and Dentistry

New Jersey Medical School

Drexel University

Saint George's University SOM

Clinical Campus

New York College of Osteopathic
Medicine.

1,500 physicians and dentists

100 specialties

597-beds

35,000 inpatients

>90,000 adult and pediatric E.D.

300,000 outpatients SBMC & BHACC

DSRIP—Impact on Barnabas Health

- \$29,038,415 is the HSRF subsidy received by Barnabas Health which will be affected with a pay for performance DSRIP program
- Funding will be based on a weighted factor methodology after the hospitals have met the required performance metrics
- Each hospital's project will be evaluated and given a Percentage Achievement Value (PAV) score
- Approximately \$450,000 at risk for SBMC

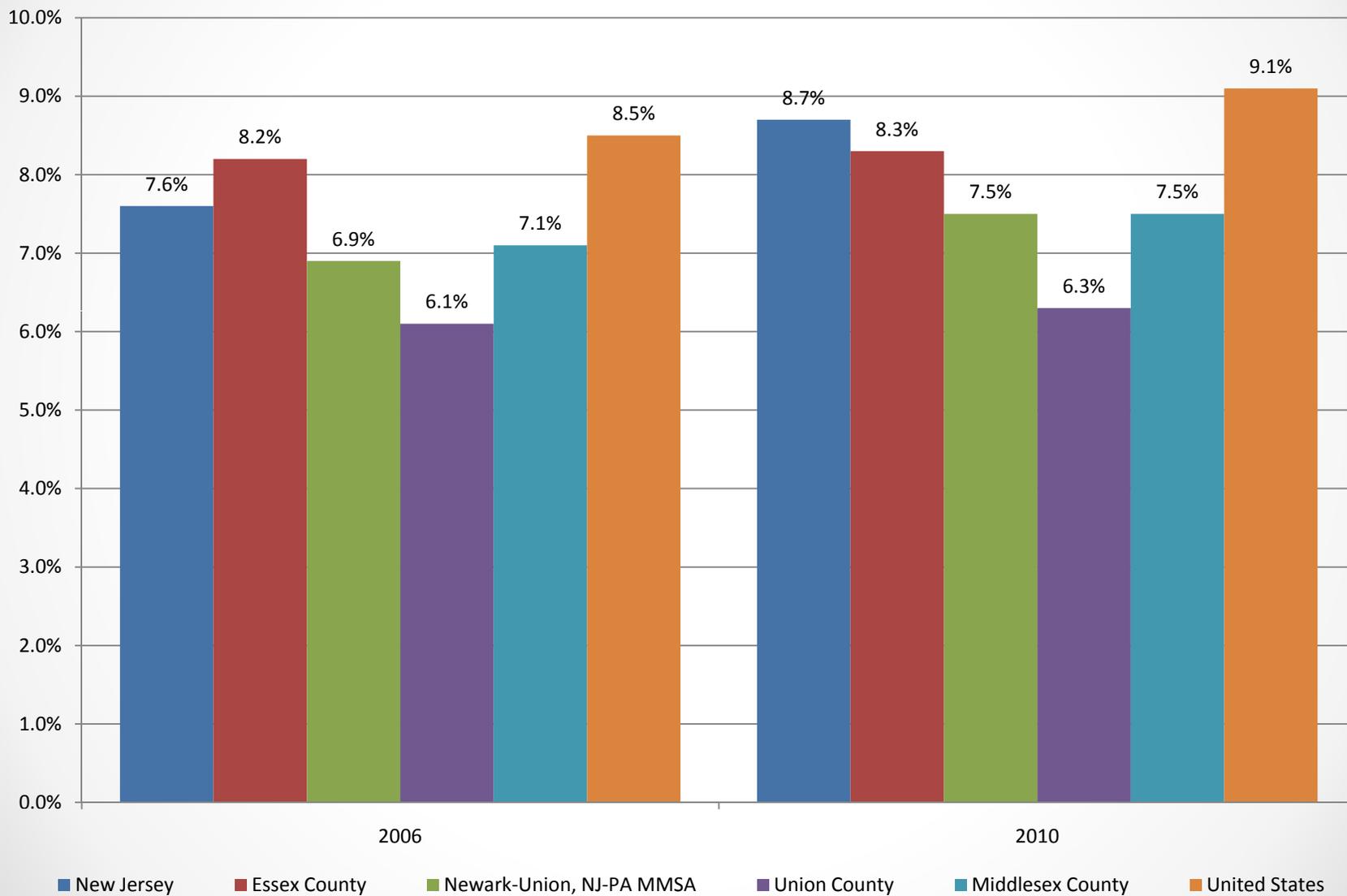


Community Needs Assessment

- Based on SBMC's Community Health Needs Assessment (CHNA) Asthma was identified as an appropriate project
- The CHNA highlights the impact of asthma on Essex County residents:
- 8.3% of Essex County residents reported having asthma in 2010, up slightly from 2004 (8.2%). The prevalence of asthma in Newark, the County's largest city, was 16%.



Asthma



Asthma

Asthma, an ambulatory sensitive condition, ranks second overall as a reason for ED visits among residents in Saint Barnabas' service area. For children, ranks 2nd in the hospital's primary and secondary service areas; for adults, asthma ranks 5th in its primary service area and 2nd in its secondary service area.

TOP 5 ED ACSCs WITHIN SBMC SERVICE AREA (2010) – PEDIATRIC (Age 0-17)

ACSC Condition	ED PSA	ACSC Condition	ED SSA
ENT	1,929	ENT	12,302
Asthma	566	Asthma	3,276
GI Obstruction	535	GI Obstruction	2,548
Bacterial Pneumonia	222	Cellulitis	1,104
Cellulitis	181	Bacterial Pneumonia	875

TOP 5 ED ACSCs WITHIN SBMC SERVICE AREA (2010) – ADULTS (Age 18+)

ACSC Condition	ED PSA	ACSC Condition	ED SSA
ENT	1,229	ENT	7,976
Cellulitis	1,173	Asthma	6,029
Kidney/Urinary Inf.	1,088	Cellulitis	5,936
GI Obstruction	827	Kidney/Urinary Inf.	5,925
Asthma	747	Dental Conditions	5,021

Asthma

- The inpatient use rate for asthma in the hospital's primary service area was 23.1 per 1,000 population, higher than the State rate (22.7/1,000). Asthma was one of the top 5 ambulatory care sensitive conditions for inpatient utilization

TOP 5 IP ACSCs WITHIN SBMC SERVICE AREA (2010)

ACSC Condition	ED PSA	ACSC Condition	ED SSA
CHF	1,074	CHF	3,780
Bacterial Pneumonia	812	Diabetes	2,673
Cellulitis	620	Bacterial Pneumonia	2,371
Kidney/Urinary Inf.	578	Asthma	2,277
Diabetes	576	Cellulitis	2,146

Asthma Costs

Financial Class Name	Asthma Cases -18+	Asthma - Direct Cost 18+	Asthma - Indirect Cost 18+	Asthma - Total Cost	Asthma 18+ Total Cost / Case	Asthma Cases - 0-17	Asthma - Direct Cost 0-17	Asthma - Indirect Cost 0-17	Asthma Total Cost 0-17	Asthma 0-17 Total Cost / Case
Charity Care	20	55,458	54,976	110,435	5,522	2	4,816	7,175	11,992	5,996
Managed Care Mcaid - Americhoice	4	10,379	10,051	20,430	5,107	25	90,760	133,253	224,013	8,961
Managed Care Mcaid - Horizon Mercy	2	8,510	8,058	16,568	8,284	48	173,915	254,827	428,742	8,932
Managed Care Mcaid - Other	0	0	0	0	0	6	26,737	32,224	58,961	9,827
Medicaid	1	14,358	11,324	25,682	25,682	4	11,532	16,413	27,946	6,986
Mcare Primary w Mcaid / Charity Secondary	9	35,540	34,319	69,859	7,762	0	0	0	0	0
Total	36	124,245	118,729	242,974	6,749	85	307,760	443,893	751,653	8,843

Project Population

- The target population for the project are males and females ages 5 to 64 years residing in Essex County, New Jersey with a primary diagnosis of asthma (using AHRQ definition) and who are low-income (i.e., Medicaid, CHIP, or charity care).
- The target population is estimated at **7,973** based on the following assumptions:
- Asthma prevalence data from the Behavioral Risk Factor Surveillance System for Essex County – 8.3% for adults; 9.1% for children
- The percentage of New Jersey residents who receive medical assistance – 14.7%. Source: New Jersey Division of Medical Assistance and Health Services



SBMC DSRIP Team

- Rick Davis, CFO Executive Sponsor
- Maria Dimi, RRT, MBA Director of Respiratory Therapy
- Tara Morella, RRT, BS Respiratory Therapy Clinical Coordinator
- Sean Cox, RN, MSN, MAS, CPHQ. Director of Quality & Standards
- Vincent Silvestri, RN, MSN, CPHQ Director of Performance Improvement and TQM
- Jeanne Kraft, MD, FACP Physician Champion
- Margie Heller, Administrative Director, Community Health and Outreach



Goals/Outcomes

The expected patient outcomes are:

- Reduced Emergency Department visits for Asthma
- Reduced hospital admissions for Asthma
- Reduced hospital readmissions for Asthma

Certified Asthma Educators

- Eight staff were selected to complete a test preparation course and sit for the National Asthma Educator Certification Board (NAECB) examination.
- All were qualified to be admitted to the examination based on holding the RRT or CRT credential.
- Six successfully passed the exam on the first attempt

Patient Education

.Asthma Education – The asthma educators will be available, upon request of the patient, family member/caregiver, social worker, or staff nurse, to provide additional training to asthma patients prior to discharge, in addition to a 45-minute bedside session that will be provided earlier during the patient's stay. The patient's action plan will be reviewed again with the patient, recommendations will be reinforced, and any new questions addressed.

- Asthma Action Plan – The patient's asthma action plan, developed by the asthma educators after their bedside asthma training session, will be reviewed by the staff nurse with the patient and family/caregiver in the final discharge planning meeting on the unit prior to discharge. At that time, the staff nurse will confirm the post-discharge medications and call or send the prescription to the patient's pharmacy. Copies of patient self-management tools, such as the peak flow tracking sheet, will also be provided to facilitate compliance with Asthma Action Plan.

- Follow-Up Visit – Staff nurses or social workers will schedule the patient's follow-up appointment with either their primary care physician or pulmonologist prior to discharge and confirm details with patient and their family/caregiver at the final discharge planning meeting. The goal is for the patient to be seen within 7 days of their hospital discharge. Patients will be asked if they have transportation needs or other obstacles that would prevent them from attending their follow-up appointment and referred to a hospital social worker to resolve.

- Home Care Support – For patients who have home care support in their Asthma Action Plan, the asthma educators (who are also respiratory therapists) will participate in the final discharge planning meeting.

Case management care coordination processed documented



Patient Education Tools

- *Ask About Asthma* – A 13-page patient booklet on asthma explaining the disease, taking medications, lifestyle issues, provider visits, and obtaining asthma support.
- *Using a Peak Flow Meter* – Written and graphic instructions for using a peak flow meter and recording your reading.
- *Peak Flow Tracking Sheet* – Provides a weekly record of patient's daily peak flow readings for the week. Patients will be encouraged to bring this record with them to their follow-up appointments.
- *Your Personal Best Peak Flow Number* – Interprets peak flow readings to help the patient determine how well they are managing their asthma and identifies their asthma "danger" zones.
- *Peak Flow Diary* – Maintains a record of peak flow readings to evaluate patient progress and help determine triggers.
- *Asthma Action Plan* – Identifies patient's asthma triggers, necessary medications, and asthma danger zones (based on peak flow readings), and provides instructions for obtaining help during emergencies.



Partners

- SBMC initially targeted schools and Day Care centers for delivering Asthma education
- Sessions delivered at these sites were very well received
- Realized we would need to secure partners who could share clinical data with SBMC
- Due to SBMC's payer mix it is a challenge to find DSRIP target partners



Payer Mix

V. Payor Mix % (Patient Days)	Actual	Budget	Prior Yr
Medicare	32.9%	34.0%	33.2%
Medicaid	3.2%	2.5%	3.4%
Managed care - Medicare	6.4%	6.0%	6.1%
Managed care - Medicaid	7.9%	6.7%	6.7%
Total Managed care - Other	20.0%	21.3%	21.8%
Total NJ Blue Cross	22.1%	21.3%	21.7%
Commercial insurers	0.8%	0.7%	0.6%
Self-pay/Charity	3.3%	4.3%	3.4%
All Others	3.2%	3.1%	3.0%
Total	100.0%	100.0%	100.0%

Zufall Health Center

- Zufall Health Center the first FQHC in SBMC's primary service area
- Initial meetings occurred Summer 2014
- MD's will receive appointment to SBMC Medical Staff (Community Staff)
- Concerns about Data Sharing



Moving Forward

- Secure Data Sharing Agreement with Zufall
- Secure additional reporting partners
- Explore alternative patient satisfaction survey methods
- Continue to provide community Asthma Education

