



High Risk Patient Program

Larry McReynolds

SVP Community Health

Executive Director, Family Health Center at NYU Langone

Associate Professor, Department of Population Health

Discussion Points

- **FHC at NYU**
- **Social Screening for SDOH in Brooklyn**
- **Recommendations**

Social Factors and Health



FIGURE 1

*A house in Shelby, Bolivar County, Mississippi, 1966.
(Much better than most, it has brick—not wood—construction and electricity).*

Family Health Centers at NYU Langone

- Federally Qualified Health Center Network (Est. 1967)
 - Services & Programs Include
 - 8 Full time Primary Care Sites (Level 3 NCQA)
 - Dental clinics co-located at 5 sites
 - 48 School- Based Health/Dental Programs
 - 10 Primary Care, Mental Health, and Dental
 - 12 Primary Care, Mental Health
 - 25 Dental Only Clinics
 - 10-site Community Medicine Program serving 7,000 homeless New Yorkers
 - Community Programming Locations (i.e. Multiple Day Cares, Family Support Center, PRY)
 - Behavioral Health
 - Rehabilitation/ Physical Therapy
 - HIV Services
 - 340 B Drug Assistance Program
 - Teaching Health Center
 - Post-Doctoral Dental Residency Program



FHC Community Based Programs

SNAP

ESL

Domestic Violence Programs

High School Equivalency/ GED

Medication Assistance Program

WIC

Housing Assistance

Career Counseling & Job Training

Nutritional Support

Immigration & Legal Support

Project SAFE

Neighborhood Centers

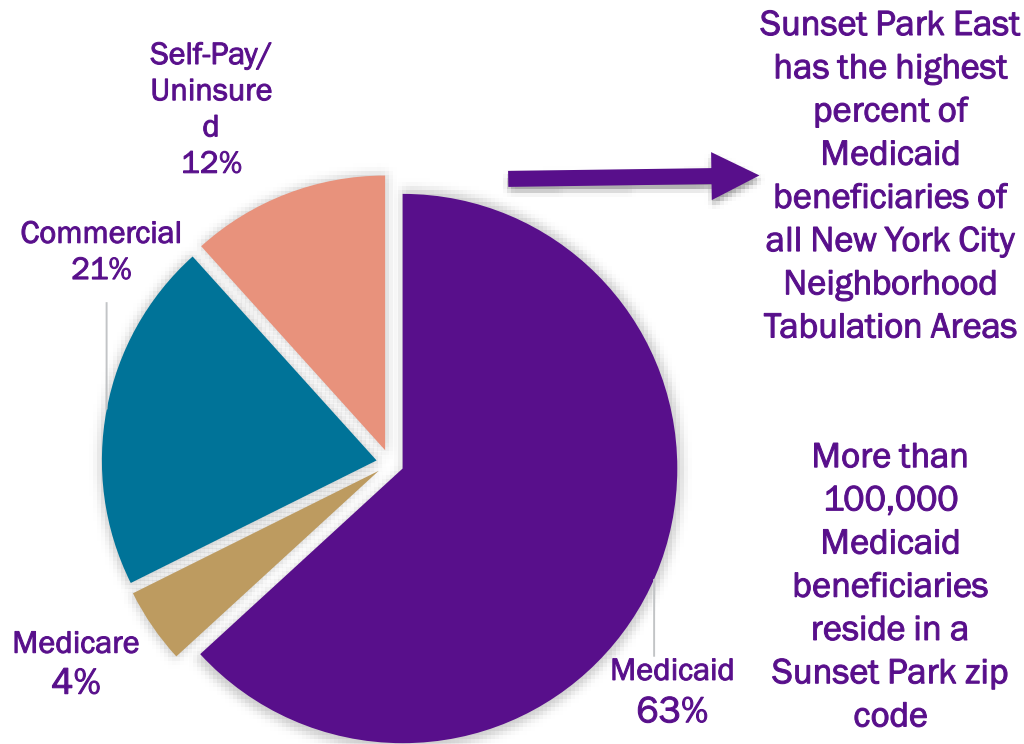
Early Childhood Centers

Reach Out & Read

Faith Health Partnership

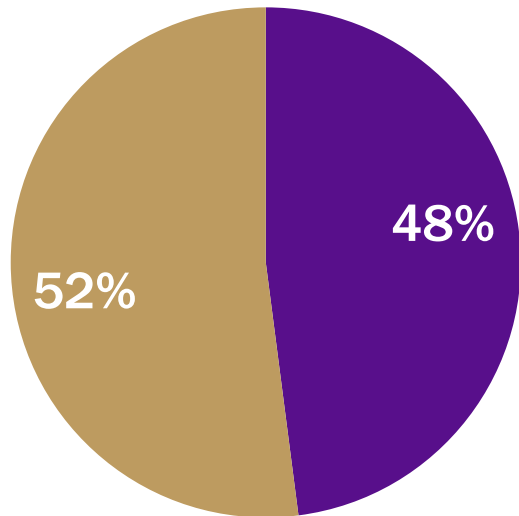


Medicaid is our payor

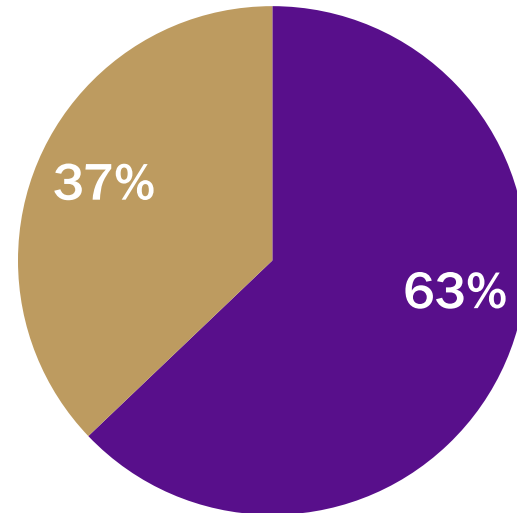


Sunset Park: A Community of Immigrants

Sunset Park (N~129,000)

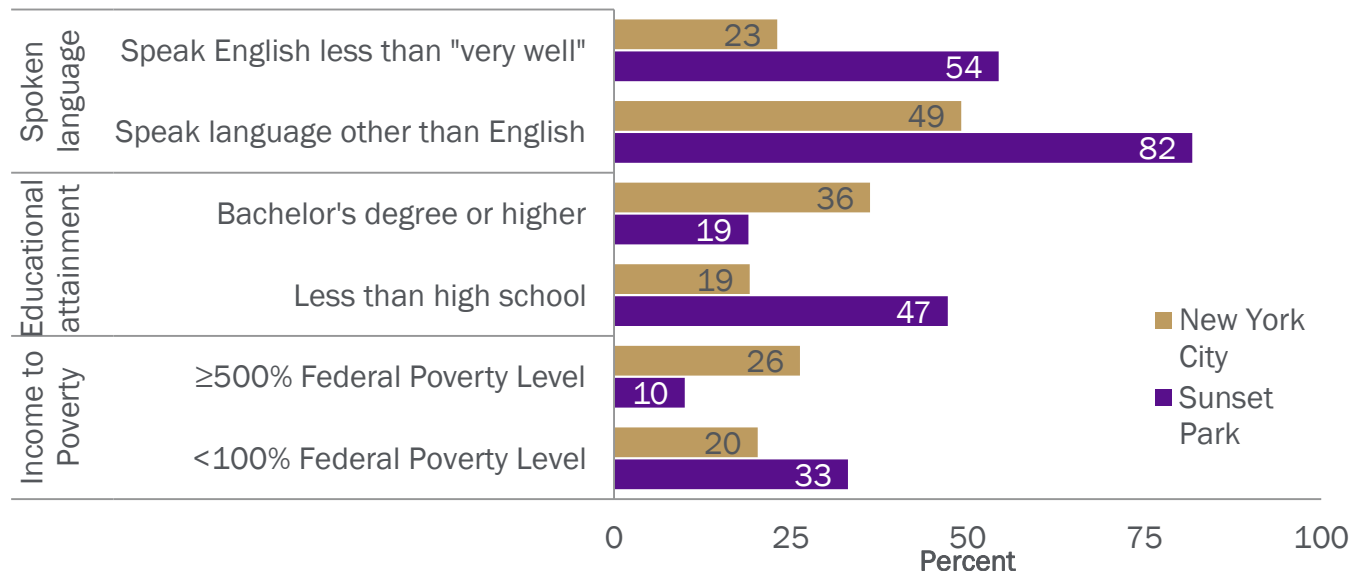


New York City (N~8,462,000)



■ US Born
■ Foreign-born

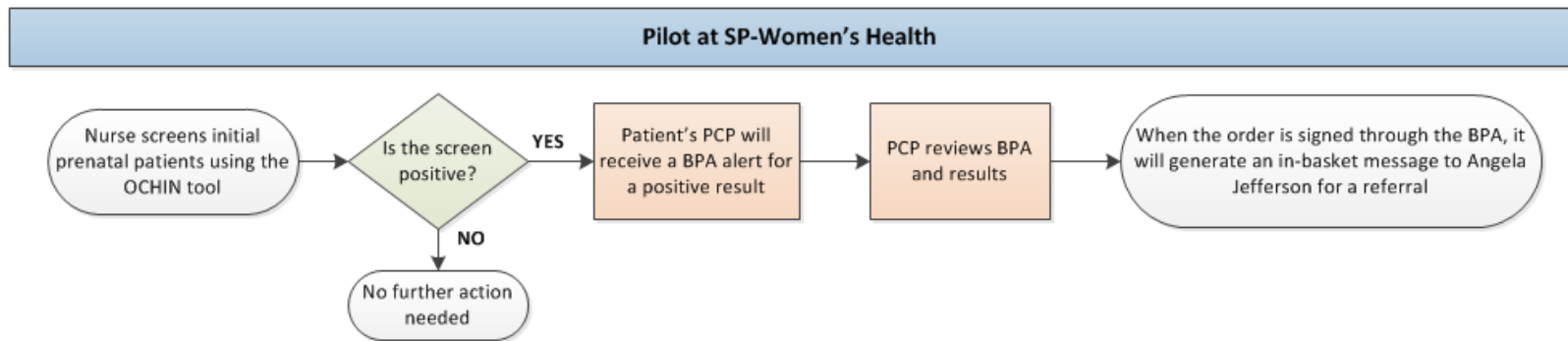
English proficiency is limited, educational attainment is low, and poverty is very high in Sunset Park.



Goals of SDOH Screening

- Create Structured Data SDOH
- Increase use of ICD-10 codes
- Directly connect patients with Community Based Resources

Workflow: Nurse Led Screen



Screening Tool and workflow

A 10 question SDH (OCHIN) tool and Best Practice Advisory Alert was created in the presence of positive responses

OCHIN tool embedded in EPIC

OCHIN Social Determinants of Health - OCHIN Social Determinants of Health Screening

Time taken: 1440 10/12/2017 Show: ☐ Row Info ☐ Last Filed ☐ Details ☐ All Choices

+ Add Row + Add Group + Add LDA Values By: + Create Note

Education and Learning

How do you learn best? ☐ Reading ☐ Listening ☐ Pictures ☐ Declined

What is the highest level of school that you have finished? ☐ Less than a high school diploma ☐ High school diploma / GED ☐ More than high school ☐ Declined

Financial Resource Strain

How hard is it for you to pay for the very basics like food, housing, heating, medical care, and medications? ☐ Not hard at all ☐ Somewhat hard ☐ Very hard ☐ Declined

Hard to pay for: Other ☐ Yes ☐ No ☐ Declined

Housing

In the last month, have you slept outside, in a shelter, or in a place not meant for sleeping? ☐ 1=Yes ☐ 0=No ☐ Declined

In the last month, have you had concerns about the conditions and quality of your housing? ☐ 1=Yes ☐ 0=No ☐ Declined

In the last 12 months, how many times have you moved from one home to another?

Number of positive responses to housing questions

Food Security

(I/We) worried whether (my/our) food would run out before (I/we) got money to buy more in the last 12 months? ☐ 2=Often true ☐ 1=Sometimes true ☐ 0=Never true ☐ Declined

Best Practice Alert trigger SmartSet

BestPractice Advisories

This patient has screened positive on the Social Determinants of Health Assessment. Open SmartSet to refer patient to Social Work and add suggested Z code diagnosis.

Acknowledge Reason

Order Set with ICD 10 Capture and Referral

Social Determinants of Health Suggested Diagnosis and Referral

Social Work Referral

Social Work Referral

☒ AMB REFERRAL TO SOCIAL WORK ☐ External Referral, Routine

Diagnoses

UNDERACHIEVEMENT IN SCHOOL

☒ Underachievement in school [Z55.3]

INADEQUATE FOOD SUPPLY

☒ Lack of adequate food [Z59.4]

INADEQUATE HOUSING

☒ Inadequate housing [Z59.1]

LACK OF ACCESS TO HEALTH CARE

☒ Unavailability and inaccessibility of health-care facilities [Z75.3]

INSUFFICIENT SOCIAL INSURANCE

☒ Insufficient social insurance or welfare support [Z59.7]

HISTORY OF PHYSICAL AND SEXUAL ABUSE

☒ History of adult physical and sexual abuse [Z91.410]

LACK OF PHYSICAL EXERCISE

☒ Lack of physical exercise [Z72.3]

LACK OF FAMILY SUPPORT

☒ Lack of family support [Z63.8]

Additional SmartSet Orders

In Basket Referral

In Basket New Msg Patient Msg Refresh Edit Pools Manage Pools Settings Search Manage QuickActions Attach

My Messages

- My Incomplete Notes (1)
- My Open Charts (31)
- My Open Encounters (22)
- Pt Questionnaire
- My Unsigned Orders (3)
- Social Determinants of Health**
- WPR (Un)Merge Summary

> Social Determinants of Health Referrals 0 unread, 4 total Sort & Filter

Patient	Subject	Age	Date Receiv.	Visit
? MyChart, Ben	Positive Social Determinants of Hea...	32 y.o.	10/11/17	10/11/17
? Mychart, Diabetes	Positive Social Determinants of Hea...	51 y.o.	10/11/17	10/11/17
? HMT, AdultA	Positive Social Determinants of Hea...	22 y.o.	10/06/17	10/06/17
? Sedona, Arizona	Positive Social Determinants of Hea...	89 y.o.	10/11/17	10/11/17

Out Properties

X Done New Enc Review

Patient Demographics

Patient Name	MRN	Sex	DOB	Address	Phone
MyChart, Ben.	52049976	Male	1/13/1985	ne secOne Park Avenue South, PH8 NEW YORK NY 10010	646-754-0689 (Home)

Sent By

Provider01 Epiccare, MD
212-555-5555
360 Park Ave
New York NY 10022

Ben MyChart has screened positive to at least one question on the OCHIN Social Determinants of Health Screening.

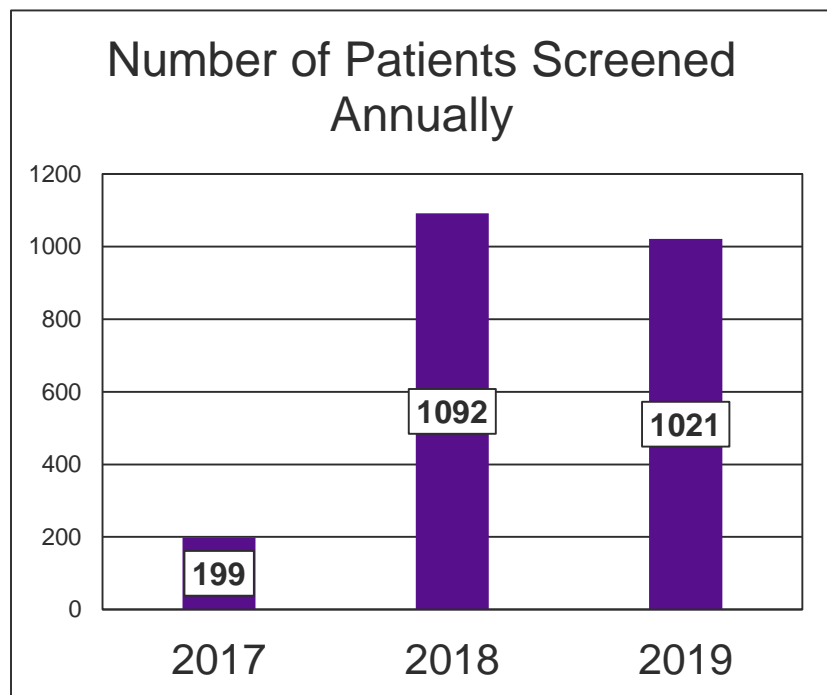
For review of assessment, please click on hyperlink below to navigate to the flowsheet information.

Additional Documentation

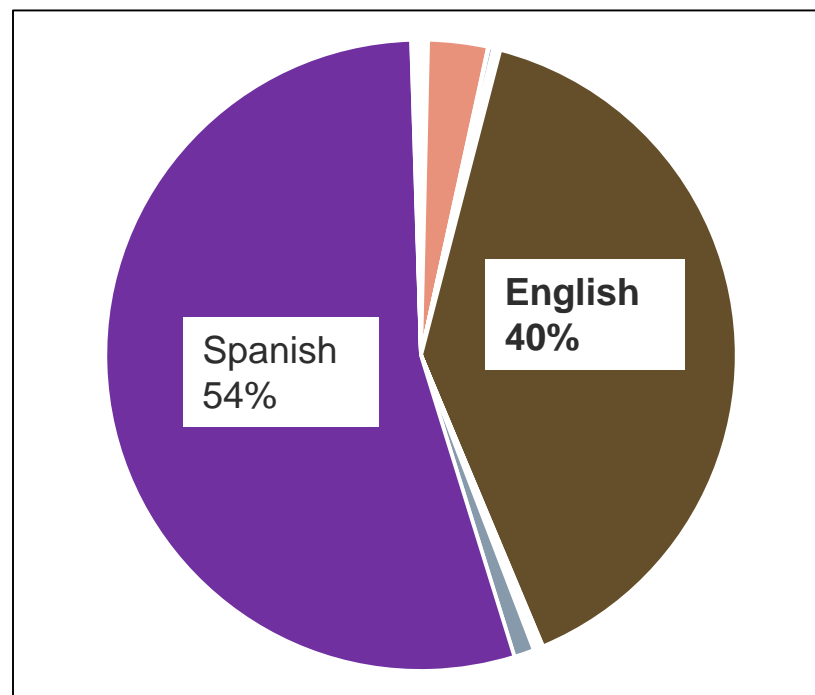
Flowsheets: [OCHIN Social Determinants of Health Screening](#)

Screening: As of June 2019

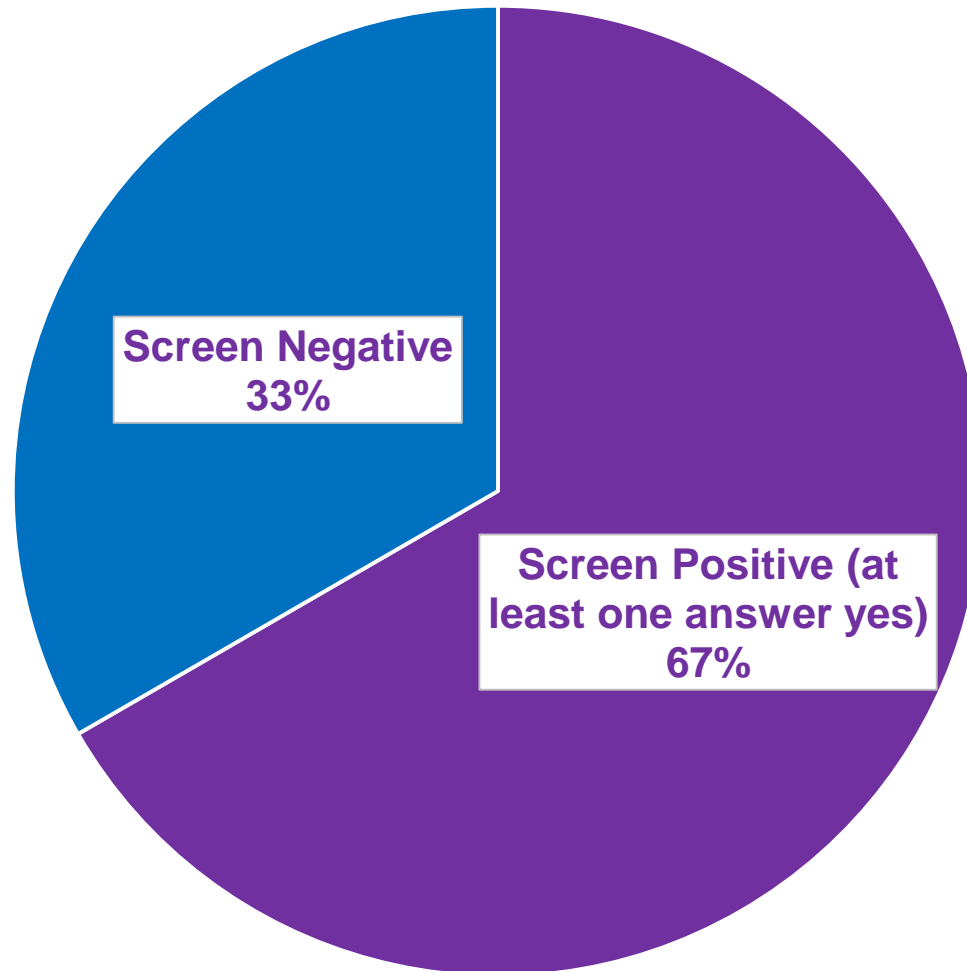
2312 patients screened



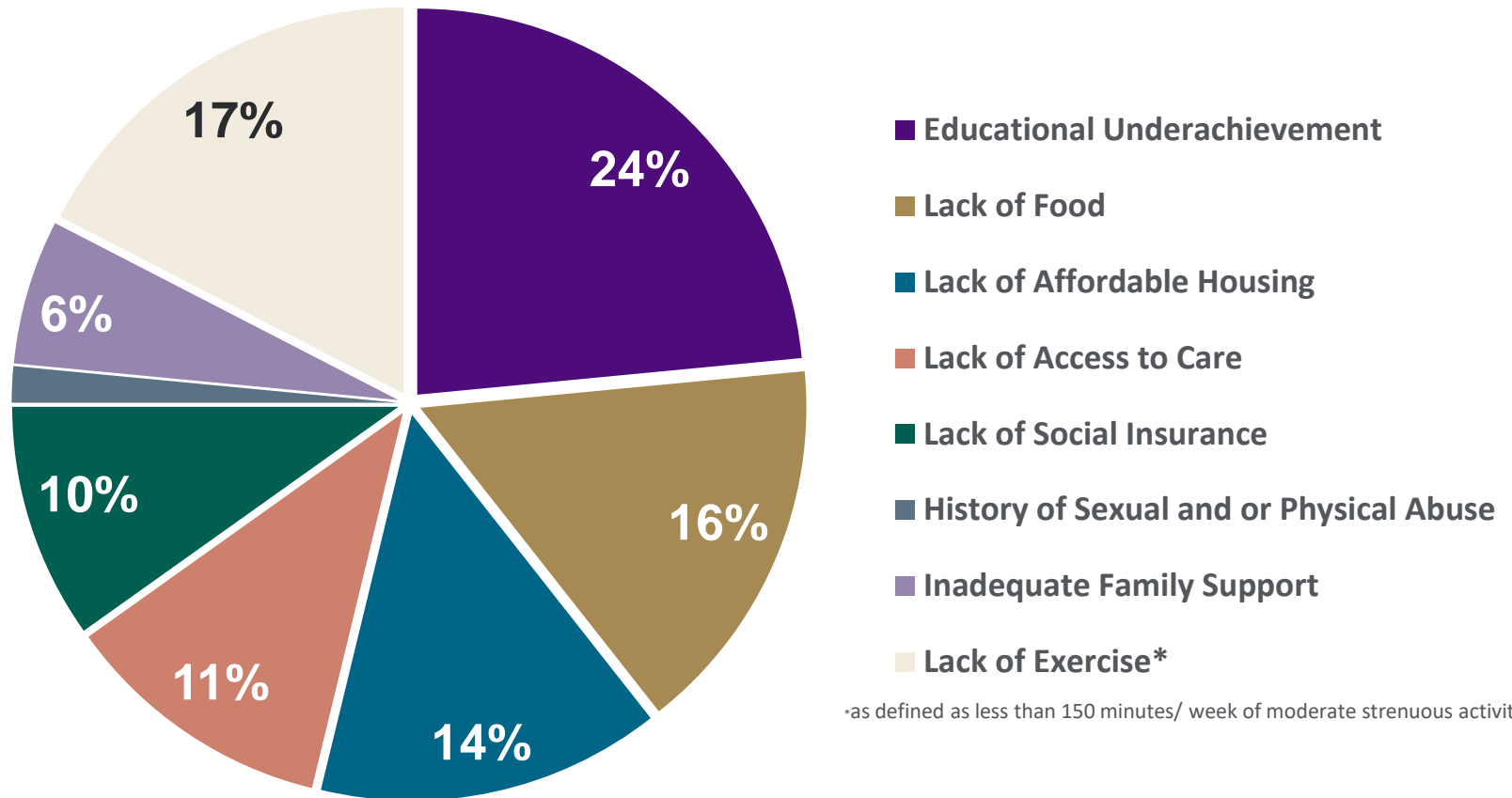
Most are Spanish-speaking



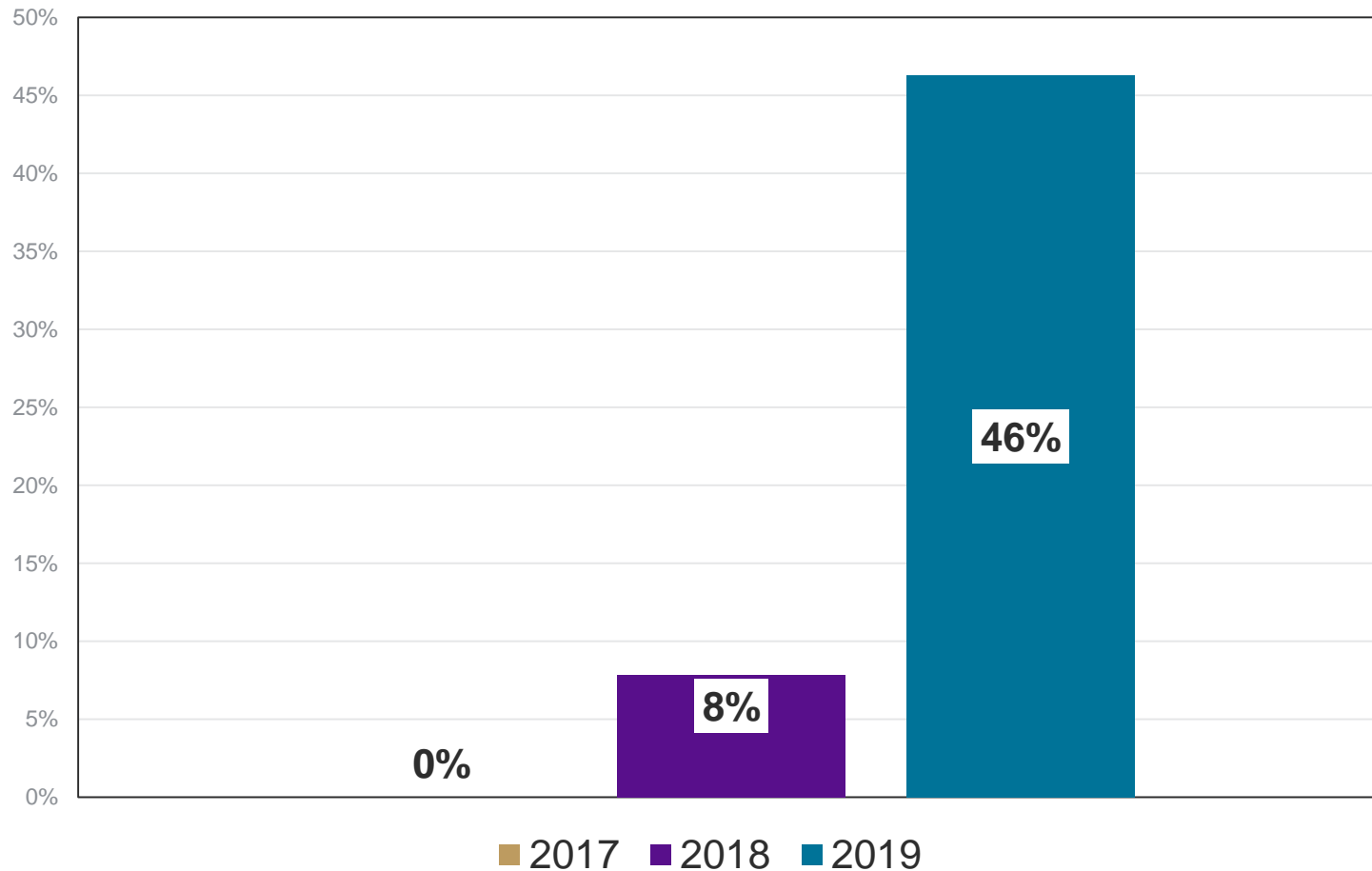
SDOH Screening Positive Rate



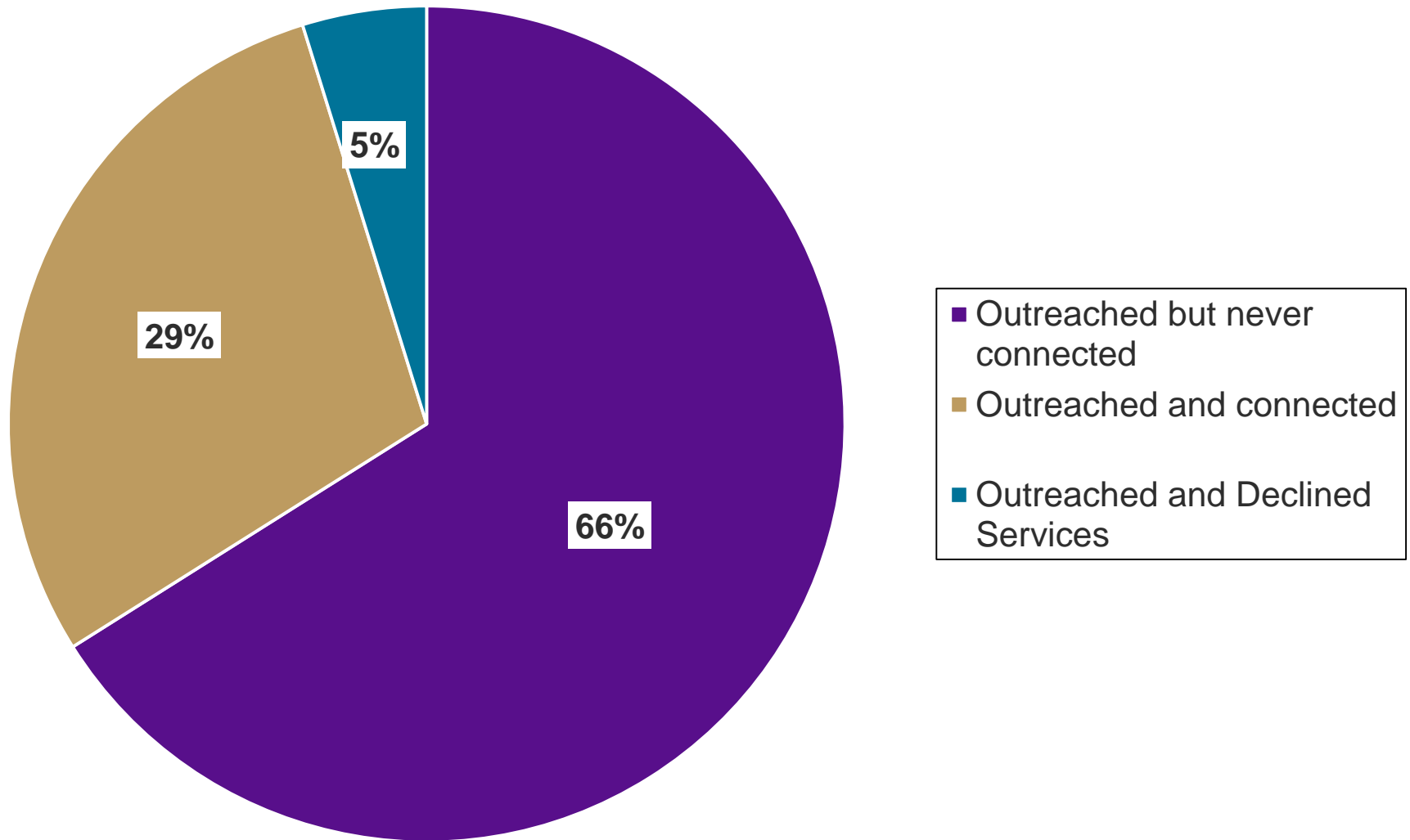
Screen Positive Distribution for SDH



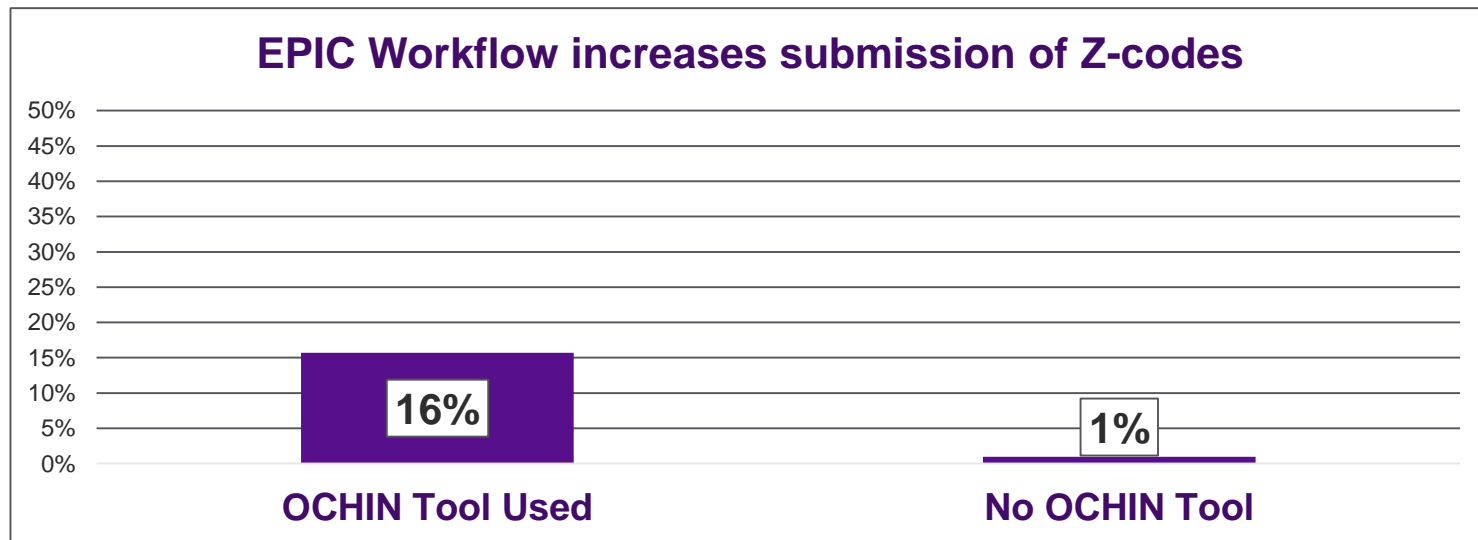
Closed Loop Documentation in EPIC (Positive Screens Only)



Closed Loop Patient Level Outcomes



ICD-10 coding: Subgroup analysis



	OCHIN Tool Used	No OCHIN Tool Used
Z-code Submitted	141	2609
No Z-code Submitted	756	261480
Total	897	264089
P <.001		

Current Opportunities for Shared Savings

FHC

FGP

IPA Partners

DSRIP



Analysis of 500 HF Patients with Highest ED/IP Costs

Patients

4579

Total ED/IP encounters

Cost

\$33.8M

Total ED/IP cost

Breakdown

42%

Had at least one BH related encounter

77%

Of BH related ED/IP cost is non-domestic

\$17.2M

Total ED/IP cost for patients with at least one BH related encounter

58%

Had no BH related encounters

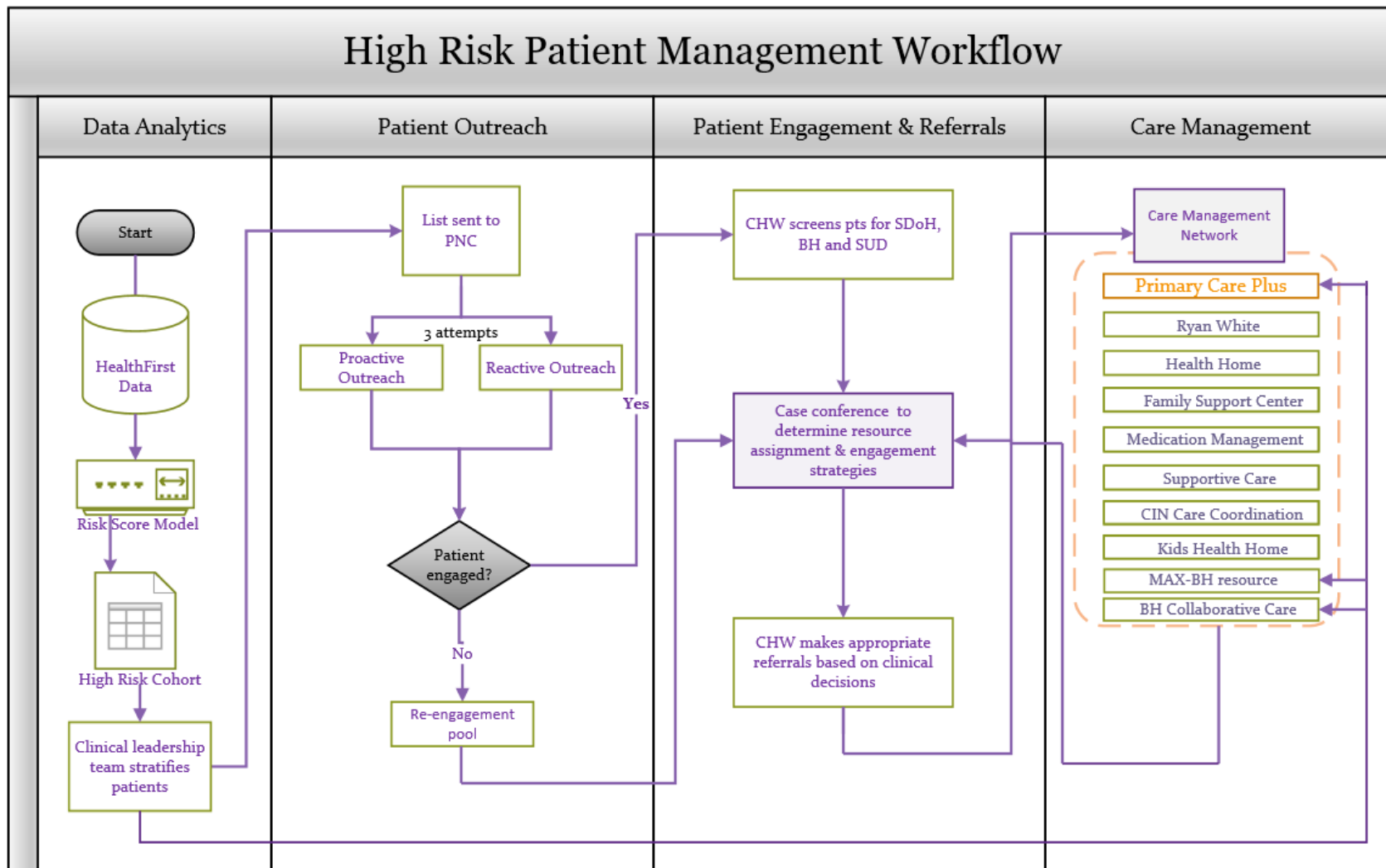
68%

Of Non-BH related ED/IP cost is non-domestic

\$16.5M

Total IP/ED cost for patients with Non- BH related encounters

Workflow



Primary Care PLUS



TEAM



Physician
Hired



Nurse Practitioner
Hired



Administrator
Hiring in progress



Community Health Worker
x 2

1 hired
Other hire in progress



REFERRAL CRITERIA



PATIENT OF FAMILY HEALTH CENTER

PCPs must be
known to FHC



AT RISK FOR A PREVENTABLE READMISSION

Ambulatory sensitive conditions
including, but not limited to: COPD,
Diabetes, CHF, Asthma, or other
advanced end stage diseases



PAYOR BLIND

All insurances, as long as they are
considered high risk

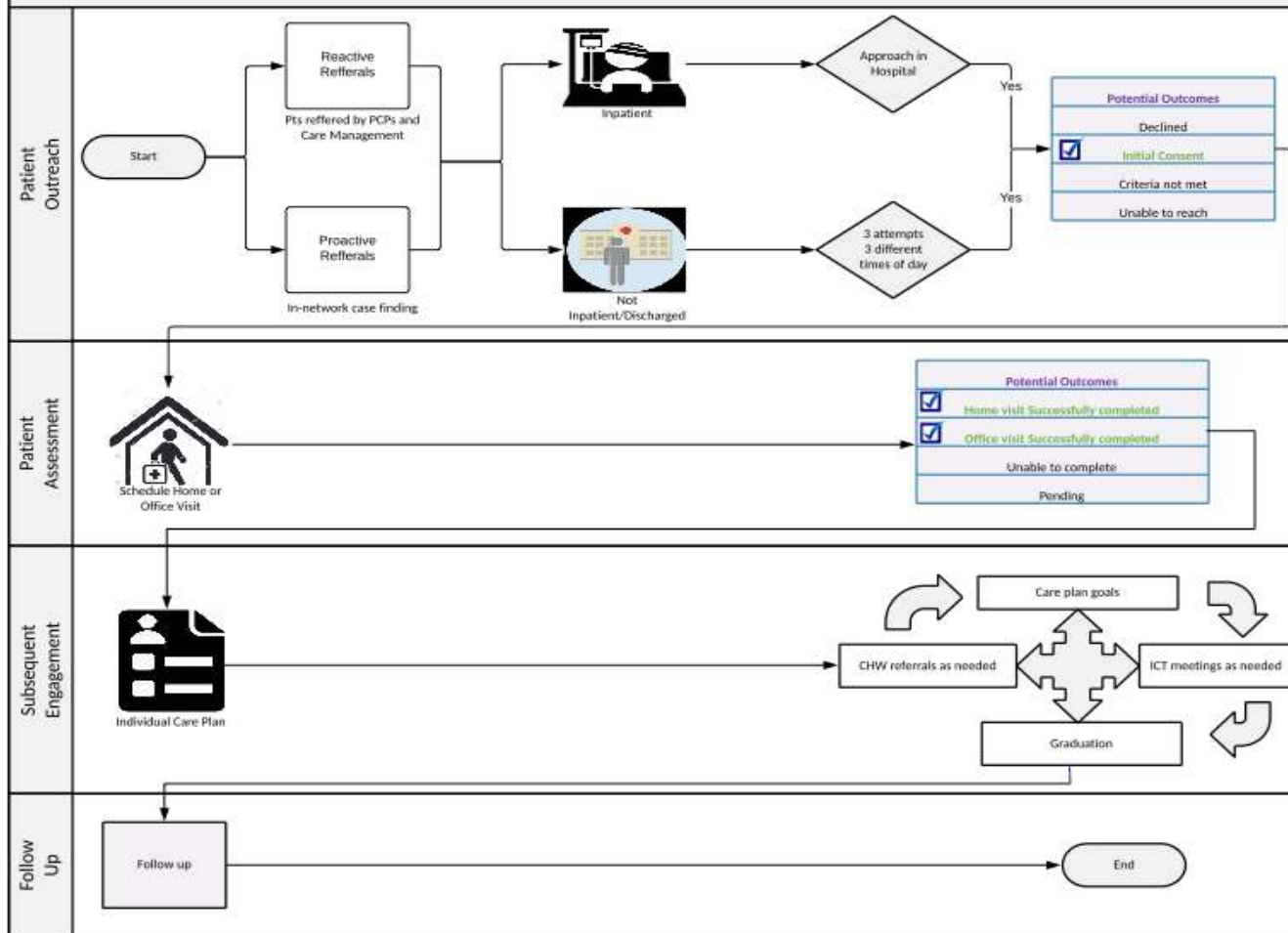


SOCIAL DETERMINANTS

Patient will benefit from intense
engagement as suggested by:

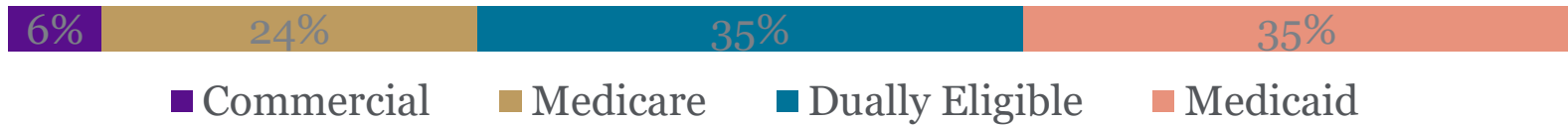
- Complex care needs
otherwise not met by current
care setting
- Poor PCP follow up
- Non adherence

PRIMARY CARE PLUS PROCESS OVERVIEW

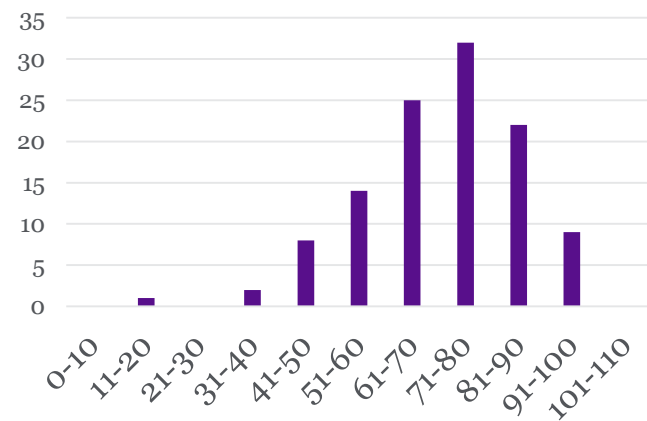


PCP+ treats complex patient population...

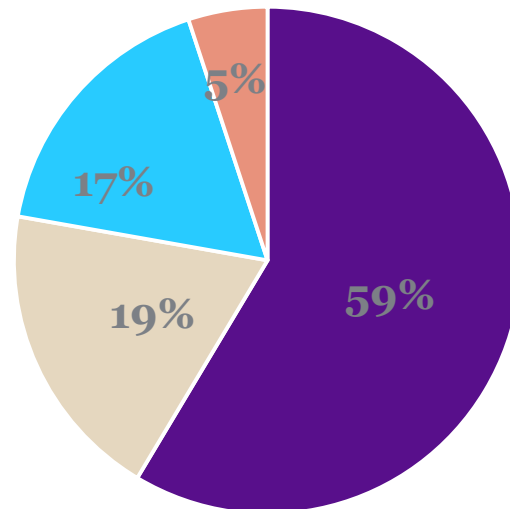
Payer Mix



Age Range

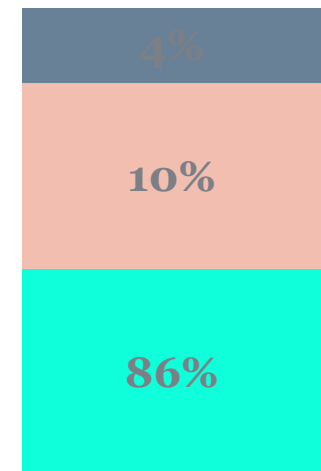


High Risk Comorbidities



- 3 or more chronic diseases
- 2 or more chronic diseases
- 1 or more chronic diseases
- None

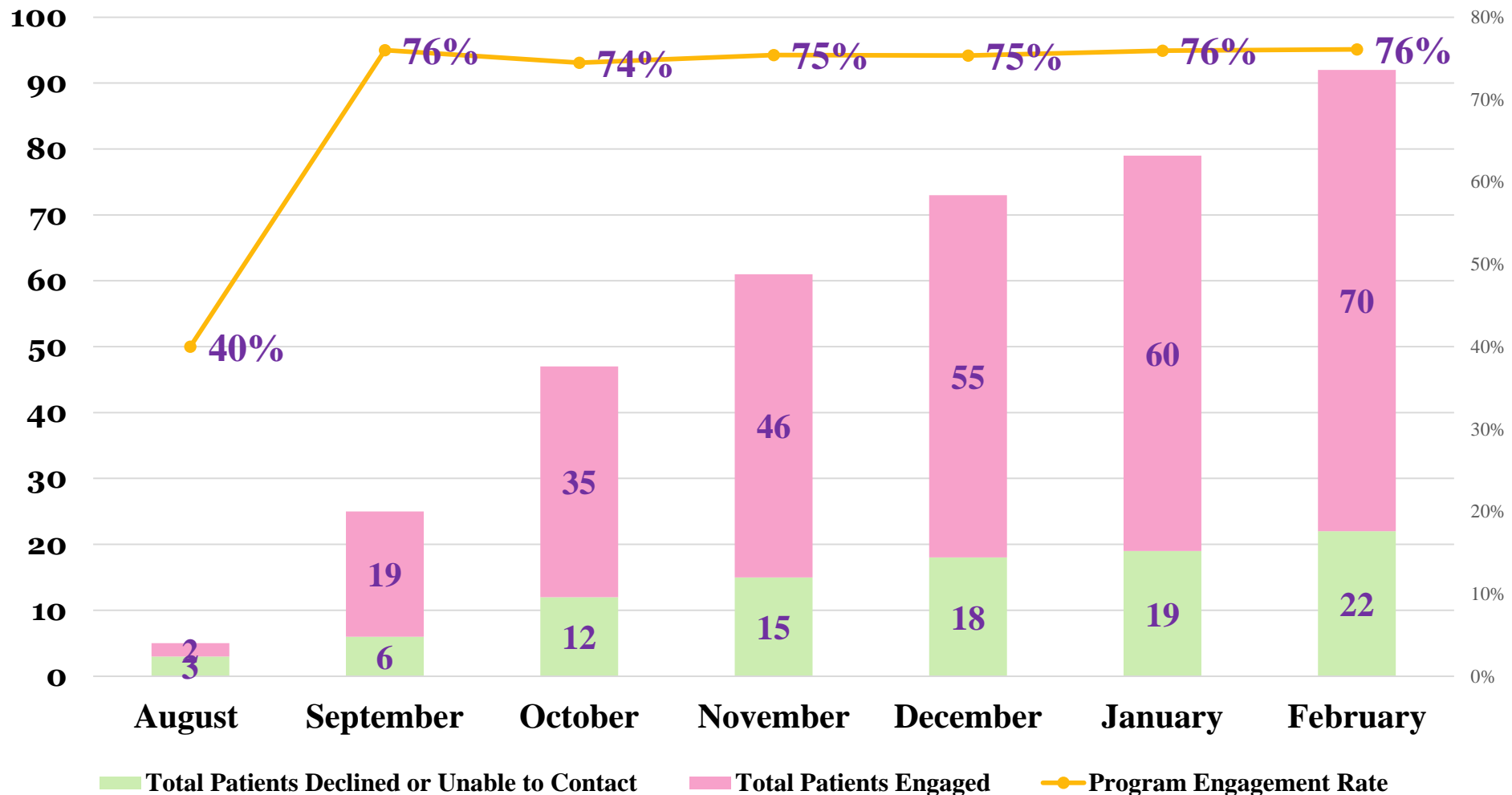
Poly Pharmacy



- No Medications
- More than 6 medications
- More than 10 medications

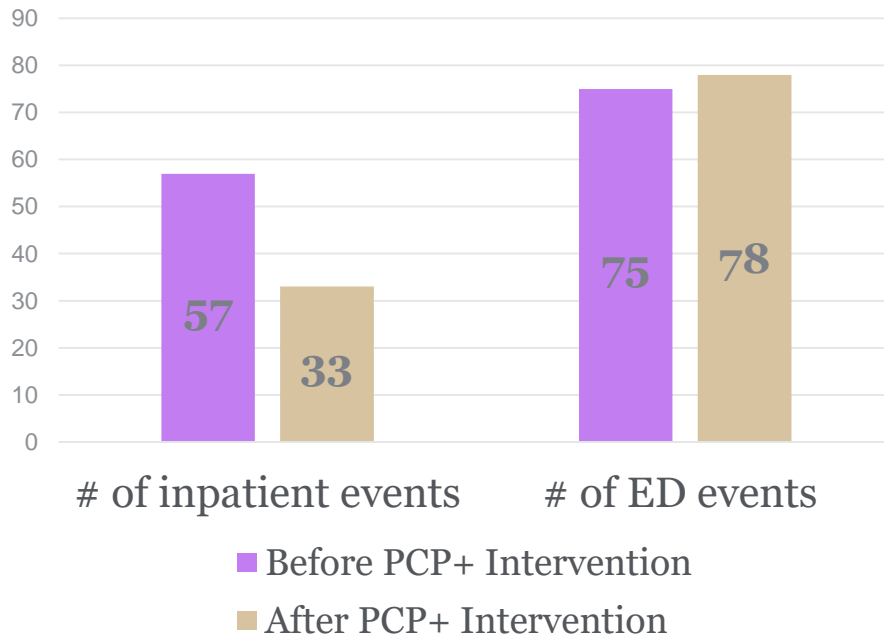


PCP+ patients have higher engagement rate...

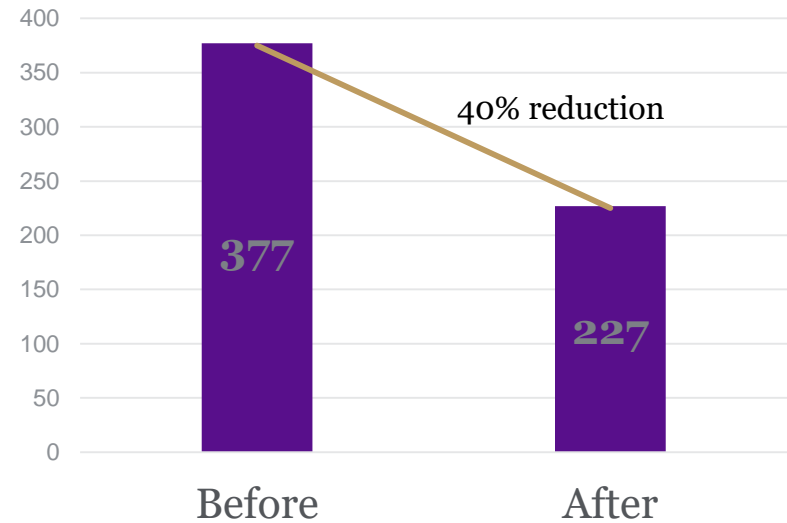


PCP+ has a significant impact on hospital utilization...

Hospital Utilization



Total #Hospital Days



A Success Story...

- Patient History: ST is a 60 year old male with history of uncontrolled hypertension, coronary artery disease, heart failure, substance use disorder with a history of **10 avoidable admissions and 12 ED visits** related to uncontrolled heart failure, hypertension, and COPD in the 2 years prior to enrollment
- Multi dimensional care plan includes:
 1. Regular CHW visits to reinforce: self management and monitoring of blood pressure and medication adherence
 2. Referral to food pantry
 3. Increased frequency of behavioral health visits
 4. Home based primary care every 4-6 weeks in addition to usual primary care to ensure adequate disease control
- Impact: in 9 months since engagement, the patient has had **0 hospitalizations, and only 3 ED visits**



Number of Engaged Patients

Primary Care Plus Month Engagement	Month	Actual New	Actual Engaged
Month 1 August 18, 2018.	August	2	2
Month 2 September 18, 2018	September	17	19
Month 3 October 18, 2018	October	16	35
Month 4 November 18, 2018	November	11	46
Month 5 December 18, 2019	December	9	55
Month 6 January 18, 2019	January	5	60
Month 7 February 18, 2019	February	10	70
Month 8 March 18, 2019	March	4	74

- Engaged: Refers to receiving in home services
- NP Start date March 2019
- Goal 200 patients (>%80 risk pool attributed)
- Primary target – Engagement
- Secondary targets – Utilization, Member months

Budget Breakdown and FFS Breakeven

Budget for Primary Care PLUS

Revenue	
Encounter revenue for clinical visits (see Fee for Service tab)	\$747,420
EMR improvement for attributed patients (10% decrease in preventable admissions- see shared savings tab)	\$500,000
total revenue	\$1,247,420
Expenses	
Medical Director	\$210,000.00
Nurse Practitioner	\$120,000.00
Care coordinator/LCSW	\$75,000.00
Community Health Worker #1	\$49,000.00
Community Health Worker #2	\$49,000.00
Total salary	\$503,000.00
Fringe	\$241,440.00
Total	\$744,440.00
Other than personel sevices	
Transportation estimates (see transportation tab)	\$19,488
computer, cell phones and office supplies	\$15,000
other total	\$34,488
Revenue - expenses	\$468,492

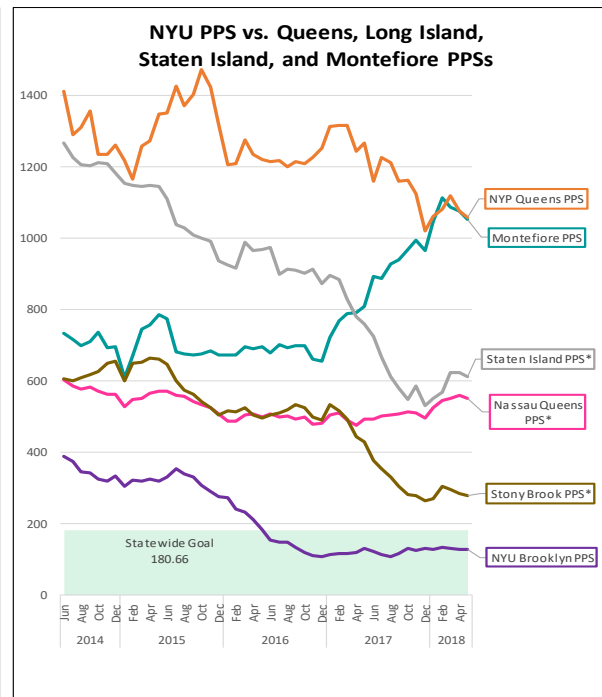
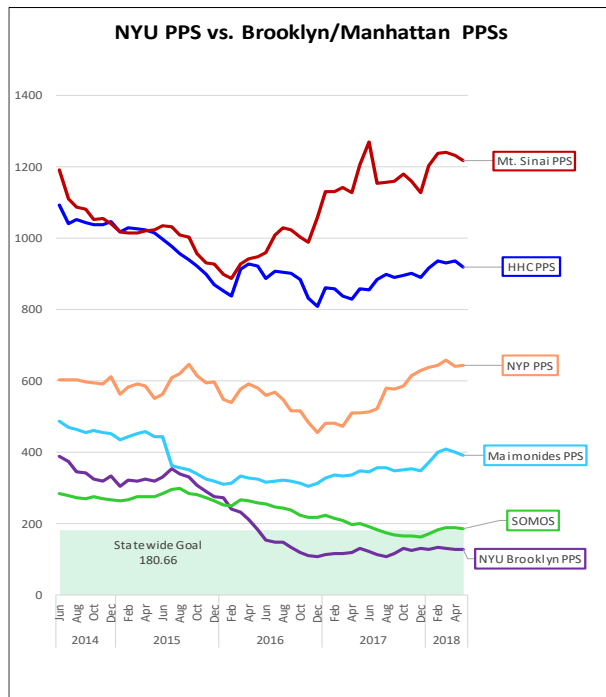
Fee For Service Breakeven Point

Revenue Source	Encounters/ month	Revenue/ Encounter	Dollar
Health home	40	\$295	\$11,800
Telehealth	165	\$84	\$13,860
CCM	87	\$95	\$8,265
In-Person	197	\$146	\$28,680
			\$62,605

Potentially Preventable Readmissions (PPR)

June 2014 through May 2018

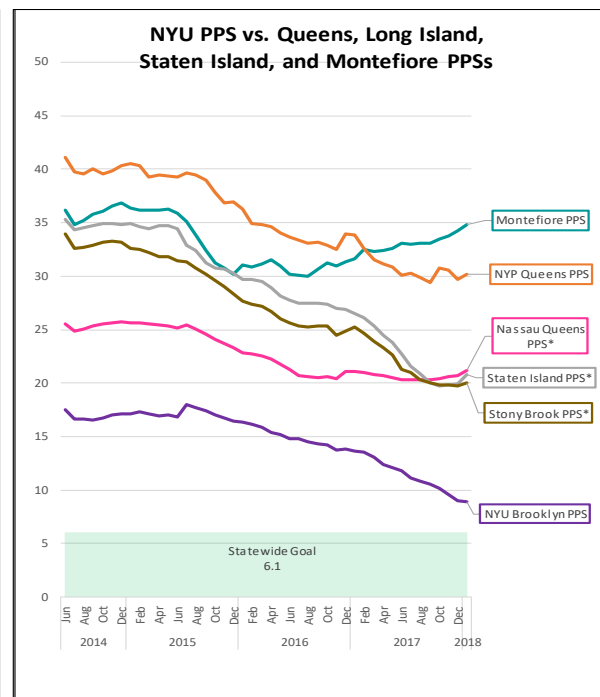
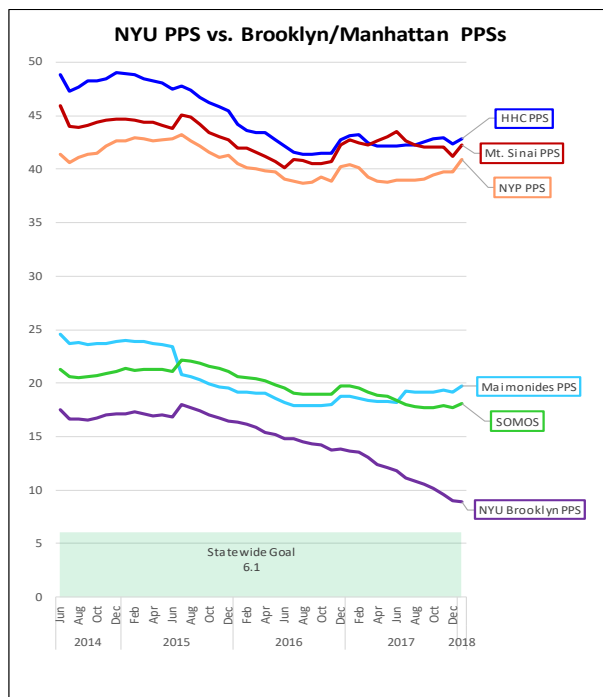
Potentially
Preventable
Measure



NYU Langone Brooklyn PPS achieving Statewide goal in PPR measure since May 2016
DSRIP Impact: Observation Unit implemented in 2015

Potentially Preventable ED Visits (PPV) June 2014 through January 2018

Potentially
Preventable
Measure

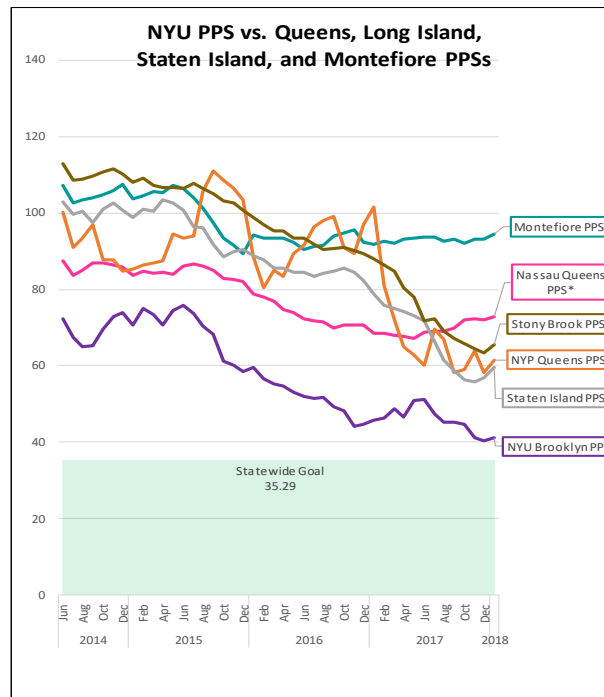
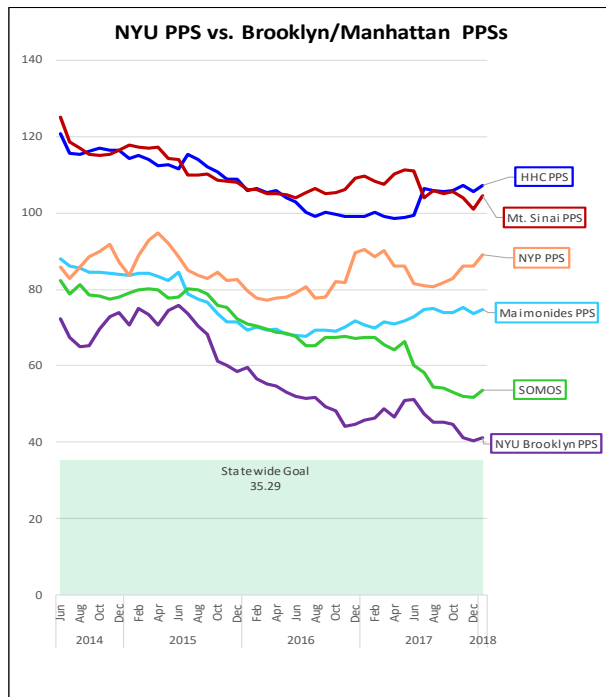


NYU Langone Brooklyn PPS achieving Statewide goal in PPR measure since May 2016
DSRIP Impact: Observation Unit implemented in 2015

PPV – Behavioral Health (PPVBH)

June 2014 through January 2018

BH
Measure



DSRIP Impacts: Behavioral Health Workgroup ramped up in 2016, MAX Series (ED and Inpatient High Utilizers) from 2016 to current, Observation Unit implementation

Key themes

- **SDH Screening is a new workflow**
- **EPIC Referral Requires Provider Education**
 - Is the tool being used the same way across providers and patients?
 - How to assess consistency with screening and referral process?
- **Successful Screening Program Requires Patient trust**
 - Do patients want help/want a referral?
 - How to best document this?
 - Do patients know FSS will be contacting them?
- **Connecting patients with services is challenging**
 - Many participants do not connect with resources
 - Telephonic followup has low success rate
- **Workflow increases ICD-10 coding rate**

Thank You!

isaac.dapkins@nyulangone.org
718-630-7906

Appendices

Appendix A:

PRAPARE Tool in EPIC

Responses that are both “Positive” and “Abnormal”

Topic	Question	Positive Response	Abnormal Response	Referral Path
Education and Learning	What is the highest level of school that you have finished?	< High School	< High School	FSS
Financial Resource Strain	What is it hard to pay for? Food	Yes	Yes	FSS
Financial Resource Strain	What is it hard to pay for? Utilities	Yes	Yes	FSS
Financial Resource Strain	What is it hard to pay for? Medicine or medical care	Yes	Yes	FSS
Financial Resource Strain	What is it hard to pay for? Health insurance	Yes	Yes	FSS
Financial Resource Strain	What is it hard to pay for? Child care	Yes	Yes	FSS
Housing	In the last month, Have you slept outside, in a shelter, or in a place not meant for sleeping?	Yes	Yes	FSS
Housing	In the last month, Have you had concerns about the conditions and quality of your housing?	Yes	Yes	FSS
Exposure to violence	Have you ever been physically or emotionally hurt or threatened by a spouse/partner or someone else you know?	Yes	Yes	On-site SW
Physical Activity	Weekly physical activity (minutes per week)	<140	<140	Discuss with provider
Social Connections and Social Isolation	How often do you feel lonely or isolated from those around you?	Often or always	Often or always	FSS
Social Connections and Social Isolation	Do you have someone you could call if you needed help?	No	No	FSS

Responses that are “Positive” but NOT “Abnormal”

Topic	Question	Positive Response	Abnormal Response	Referral Path
Financial Resource Strain	How hard is it for you to pay for the very basics like food, housing, heating, medical care, and medications?	Somewhat hard or Very hard	NA	NA
Financial Resource Strain	What is it hard to pay for? Transportation	Yes	NA	NA
Financial Resource Strain	What is it hard to pay for? Clothing	Yes	NA	NA
Financial Resource Strain	What is it hard to pay for? Rent/mortgage	Yes	NA	NA
Financial Resource Strain	What is it hard to pay for? Phone	Yes	NA	NA
Financial Resource Strain	What is it hard to pay for? Other	Yes	NA	NA
Housing	In the last 12 months, how many times have you moved from one home to another?	2 or more	NA	NA
Stress	During the past month, how much stress would you say you experienced?	A lot or moderate	NA	NA

Responses that are defined differently for “Positive” and “Abnormal”

Topic	Question	Positive Response	Abnormal Response	Referral Path (ABNORMAL)
Food security	I/we worried whether my/our food would run out before I/we got money to buy more in the last 12 months?	Often true or sometimes true	Often true	FSS
Food security	The food that I/we bought just didn't last and I/we didn't have the money to get more in the last 12 months?	Often true or sometimes true	Often true	FSS
Food security	I/we couldn't afford to eat balanced meals in the last 12 months?	Often true or sometimes true	Often true	FSS
Social Connections and Social Isolation	Are you married or living together with someone in a partnership?	Used to compute SNI	NA	NA
Social Connections and Social Isolation	In a typical week, how often do you talk with family, friends or neighbors by phone, or video chat (ie, Skype, Facetime)?	Used to compute SNI	Never	FSS
Social Connections and Social Isolation	In a typical week, how often do you get together with family, friends or neighbors	Used to compute SNI	Never	FSS
Social Connections and Social Isolation	In a typical week, how often do you use email, text messaging, or internet (eg Facebook) to communicate with family, friends, or neighbors?	Used to compute SNI	Never	FSS
Social Connections and Social Isolation	How often do you attend church or religious services?	Used to compute SNI	NA	NA
Social Connections and Social Isolation	How often do you attend meetings of the clubs or organizations you belong to?	Used to compute SNI	NA	NA
Social Connections and Social Isolation	Social isolation score (SNI)	0-2	NA	NA

Appendix B: Narrative Review of Screening (based on 64 participants)

What did you like about this screening process? Think about the form you filled out at the doctor's office, the process you went through to find a helpful resource, and your connection with the community resource itself.

- The people are so kind
- Everyone at the clinic was nice to me. I had no problem filling out the form.
- I like how nice they were at the clinic
- I like how they are people out there trying to help others
- I like how they offer to help people like me
- I liked that it was very helpful, they were very kind. I also liked the bunch of things they offered to help, it was very informative.
- I like that they helped me
- I like the idea behind the program
- I liked that they have contacted me
- I liked the attitude of the people and the help options they recommend
- I liked the idea and how they spoke to me on the first call
- I liked the interest that all of you are trying to help me
- I liked the questions they asked and the idea how you all want to help people
- I liked their good attitude and their patience in explaining things
- Like the questions the doctor asked, not every doctor asks about social needs
- Everything was good but wasn't called
- I can't say because I didn't receive a call
- I cannot answer because they did not call me
- I do not know because they did not call me
- I don't know how to respond
- I don't know how to respond since I was not called
- Nothing because they did not call me a second time and when they called the first time, I could not respond to the call
- The service did not call me, I do not know what to say

What did you NOT like about this screening process? What could we do better? Think about the form you filled out at the doctor's office, the process you went through to find a helpful resource, and your connection with the community resource itself.

- I did not like how the nurses were asking personal questions in a public area, I preferred if these questions were asked in a private room.
- I would like them to continue insisting on helping, because they only called once and that's it. Also more Spanish speaking people to call because they called me in English
- I do not like that they did not call me, you need to call more
- Missed the appointment and they never followed-up
- The only problem I had was the day I filled out the form, I remember my appointment was late and I wanted it earlier
- They did not contact me
- They did not help me with my problem and to help people more
- Well they did not call me and I'd like them to help me better
- Everything, there was no way to get in touch with them
- I did not like how I was not called, I think the calls should not be as far apart because I barely remember the first survey
- I did not like how they couldn't help me so much because I am [not eligible]
- I did not like that they did not call me
- I did not receive a call from them, possibly work on that
- I didn't like that the service did not call me, the service should start calling their patients
- I do not like that they did not call me to help me find English classes
- I did not like how long it took
- I liked everything about the services they provide
- Everything is good
- Everything was good
- Everything was good and nothing
- I liked everything about the program
- I liked it all
- I was fine, I liked everything