Managing Population Health - Pediatric Asthma -

Pediatric Asthma Coaching Program

Office of Population Health

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Background

Evidence is now abundant that asthma self-management education is effective in improving outcomes of chronic asthma.

National Heart Lung Blood Institute
Asthma Expert Panel Report 2007

January 2014 Asthma Registry = 2,052 Patients

Clinic	Pediatrics	Have Asthma	%
Mount Zion	13,224	1,627	12.3
Lakeshore	1,444	156	10.8
Adolescent	1,134	168	14.8
UC PC	1,054	101	9.6

Asthma Utilization for Jan 2013 – Jan 2014

ED Visits	Patients
0	1921
1	101
2	18
3	9
4	3

Admits	Patients
0	2014
1	28
2	7
3	2
5	1

PROBLEM STATEMENT

Poor health literacy surrounding the asthma disease process and management contributes to poor asthma control in the pediatric population resulting in increased health system utilization.

Project Goals

Goal :: Reduce pediatric emergency department visits and admissions for asthma through self-management education and coaching.

Current State :: In the Outpatient setting, Physicians provide asthma education during office visits for primary care or acute care.

Target State :: Pediatric patients with asthma utilization (or risk) receive standardized self-management coaching and follow up by trained staff to review technique and action plan.

Gap ::
- No dedicated staff available to train
- No standardized curriculum for training
- No standardized patient coaching workflows

Process Metrics ::
- Number of pediatric patients seen
- Number of Primary Care Clinics referring
- Number of education materials created

Outcome Metrics :: Asthma-related utilization, comparing 1 year prior to 1 year post coaching
- ED visits
- Admissions
- Acute Care visits
- Episodes of Oral Steroids

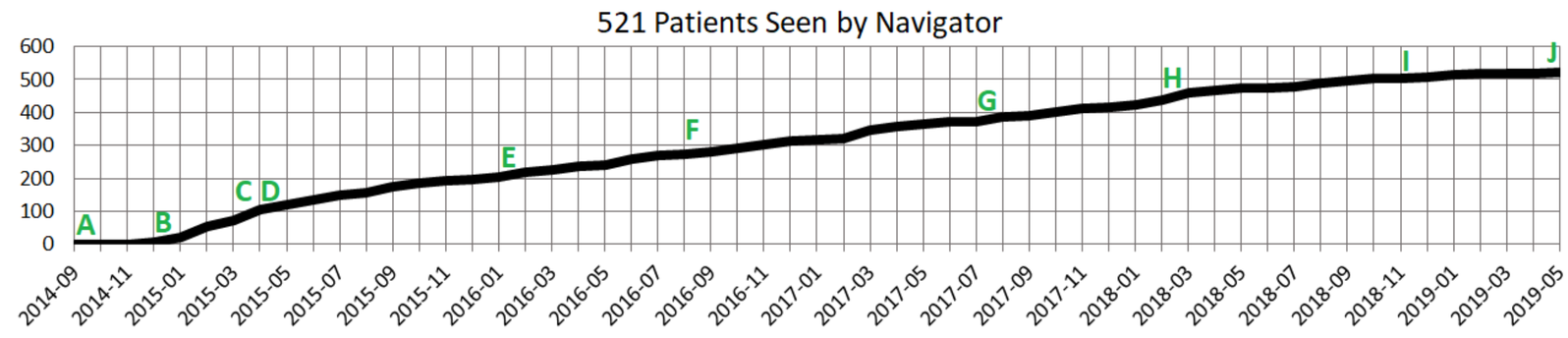
Project Plan and Interventions

Actions and Interventions (timeline below)

- **A** Population Health hired Health Care Navigator (HCN)
- **B** HCN embedded at Pediatric Primary Care
- **C** HCN documentation and workflows standardized
- **D** Established referral process to SF DPH for asthma home visits
- **E** Asthma Clinic established at Pediatric Primary Care
- **F** HCN became a Certified Asthma Educator
- **G** Expanded to all UCSF Practices that see pediatrics
- **H** Created monthly ED asthma discharge tracker
- **I** Clinical outcomes measurement
- **J** One Medical Group piloting this program

Barriers and Challenges
- Pediatric asthma reporting was based on primary care reports; when those changed, pediatric asthma reports had to evolve
- Some patients prefer using the ED because it is closer to home than an Acute Care office
- Language barriers can hide gaps in patient understanding
- Building rapport with providers and patients at different clinics across the City requires much transportation time

Project Evaluation & Impact

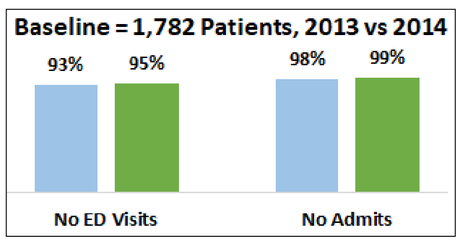


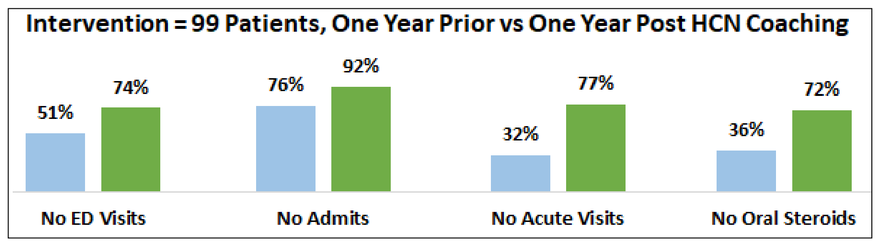
Clinical Outcomes

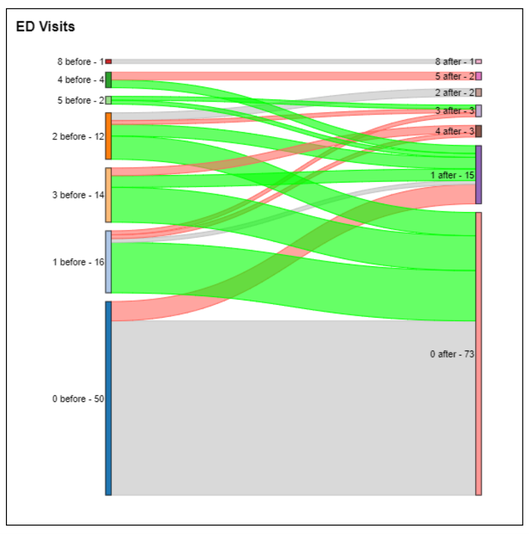
Comparing the Percentage of Patients with Zero Utilization in the Category

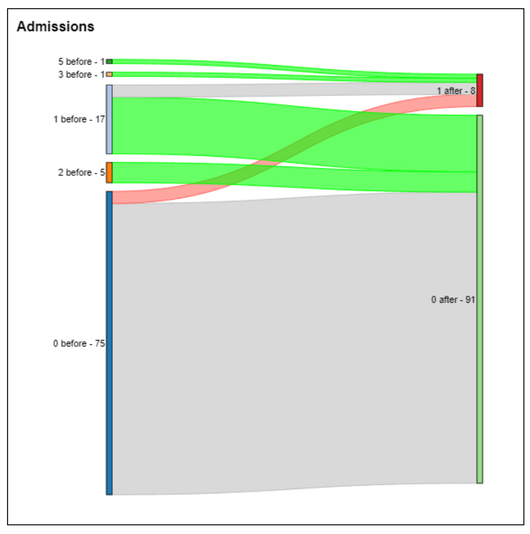
Baseline = compared utilization per asthma registry: 2013 to 2014 (where data available for both)

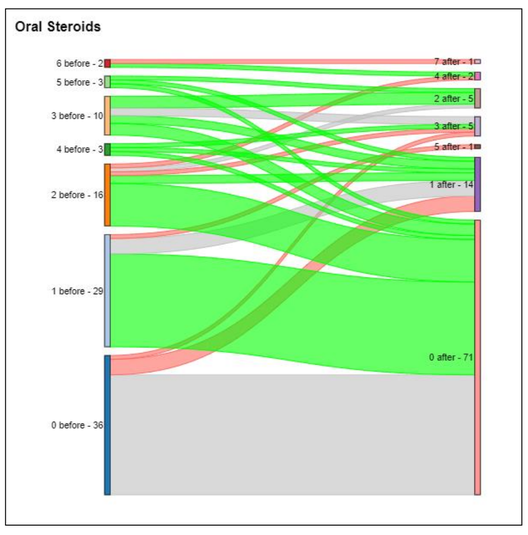
Intervention = 1 year prior to HCN first contact compared to 1 year post HCN last contact











Next Steps, Dissemination & Lessons Learned

Next Steps ::
- Consider further analysis of intervention vs. control groups, control for: age, zip code, treatment step
- Consider identifying patients based on receiving albuterol treatments: Inpatient, ED, Acute Care, or PCP

Dissemination ::
- Clinically Integrated Network (One Medical Group) is working to pilot this model with their patients
- Consider developing a similar process for other chronic conditions (COPD, Diabetes, Hypertension)

Lessons Learned ::
- Patients can be difficult to engage → offer them something before asking for something from them
  - Example: Helping a patient get an extra spacer before asking them a series of intake questions
- Providers are busy → do the work (ie: identifying patients and processes) before ask for their input
  - Example: Identify patients with ED visits and ask providers if there is a reason to not engage
- Data requests change as the process develops → keep reporting and analysis close to those doing the work

UCSF Health Improvement Symposium 2019