PEDIATRIC ASTHMA CASE MANAGEMENT & HOME EVALUATION

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Jersey City Medical Center | RWJBarnabas HEALTH

Overview

The JCMC Population Health Program is an innovative self-management program which provides the opportunity of rewards to patients of the Hudson County who have been diagnosed with one or more chronic disease that are most sensitive to coordinated outpatient and acute care.

Program Objectives:

- Uncontrolled/poorly managed conditions
- Multiple chronic conditions
- Non-compliance with medications or medical appointments
- Challenging social and economic barriers to health
- Stated barriers to care
- Frequent inpatient hospitalization/ER visits
- High risk/complex needs
- Individuals in need of care coordination and caregivers

Program Expansion:

- Employers
- Unions
- Insurers
- Community health events
- Supermarkets
- Barbershops
- Physician offices
- Pharmacies
- Churches/Mosque
- Partner FQHCs
- Health departments
- Schools and program website

Methods and Interventions

Home Evaluation: An in home review of hazards including CO levels, fire and fall hazards, lead paint, mold/mildew, etc. especially for asthmatic members in the community. An action plan with recommendations is generated for the member following each visit. Essential supplies, such as mattress/pillow covers and anti-allergen spray, are delivered to the member at no cost to them

Caregiver Support: An at home program for caretakers of family members with multiple chronic diseases. Includes survey tools to identify caregiver strain as well as barriers to good outcomes (e.g. fall potential, hearing and vision problems, cognitive and toileting concerns) and attaches next steps/solutions to identified barriers. Lets caretakers earn reward points for their Participation

Shared Decision Support: The informed-patient program that uses videos (EmmiSolutions®) and targeted efforts to provide education and to generate questions to clinicians prior to procedures and care plans. Works on the principle that fully informed patients often choose the more conservative option

Rapid Cycle Performance Improvement Methodology is comprehensively utilized. This process ensures continuous opportunity for improvement and identifying weakness whiles program threats are mitigated. The use of 200+ PDSA cycles facilitates multiple initiatives to be process mapped and ongoing workflow efficiencies to be sustained

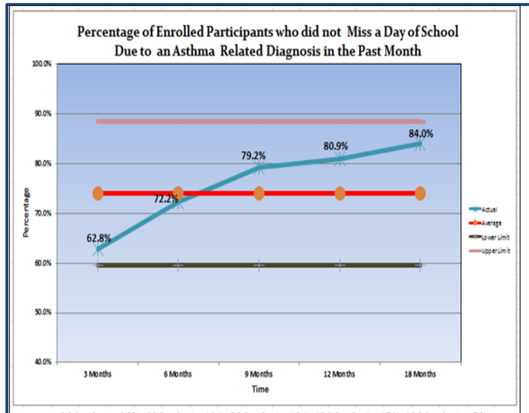
A **Risk Stratification Tool** that scores social determinants to help focus resources. Common determinants such as health literacy, insurance status, financial assets, transportation needs, and language barriers, examining cultural backgrounds as they pertain to health and disease, belief in one's ability to affect change, family support, access to and desire for fruits and vegetables, etc. are reviewed

Community Health Trust Partnership, an innovative idea to engage key community organizations across several industries, whether it is a school, bank, or hospital to allocate resources to effectively and efficiently manage the care of community members

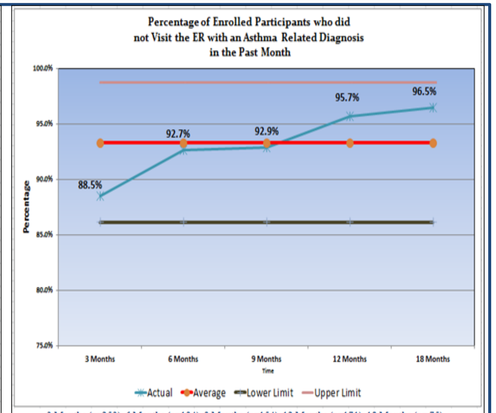
Fifteen different **Monthly Patient & Family Support groups** (behavioral health, oncology, asthma, caregiver, job training, etc. for the patients to interact with others who may be in the same situation

- Strong FQHC Partnerships
- 15+ Monthly Patient/Family Support Groups
- Healthcare Leadership & Innovation Institute
- 70+ Local Vendor Discount Pool
- Social Media/ Co-branding Events
- Chronic Disease Management
- 80+ Inpatient/Outpatient Care Redesign Programs
- Community Resource Inventory
- Primary Practices Transformation
- Monthly Patient Calendar
- Community Health Trust -150+
- Lunch & Learn Sessions

Results



3 Months (n=253), 6 Months (n=194), 9 Months (n=154), 12 Months (n=171), 18 Months (n= 75)
this is rolling data HIGHER IS BETTER.



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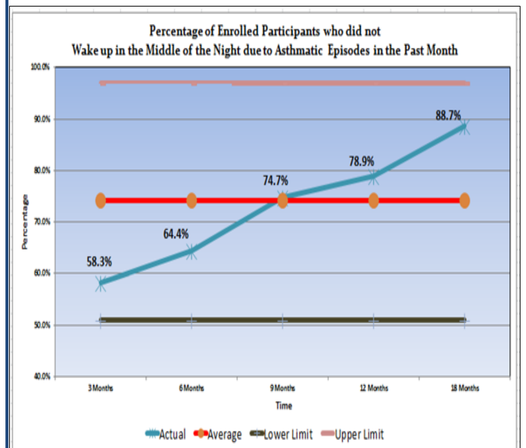

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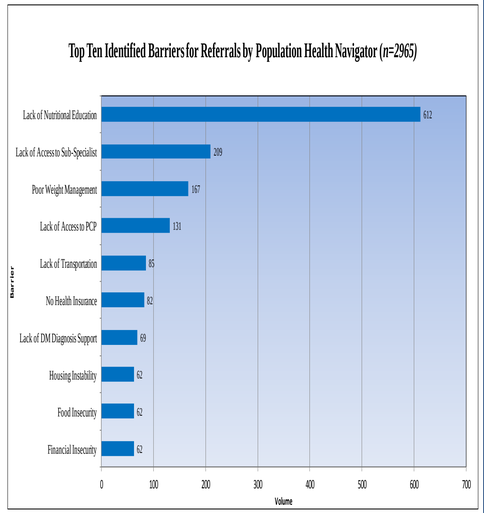
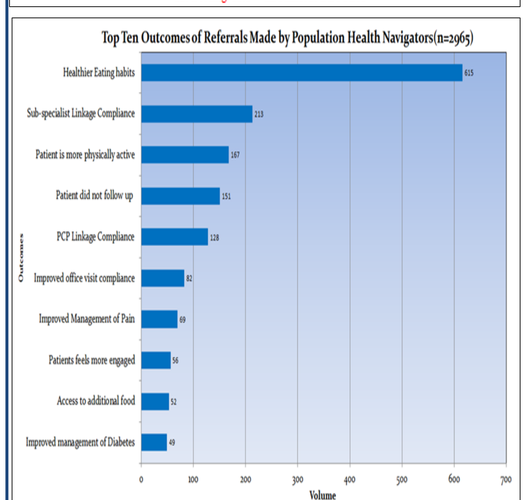




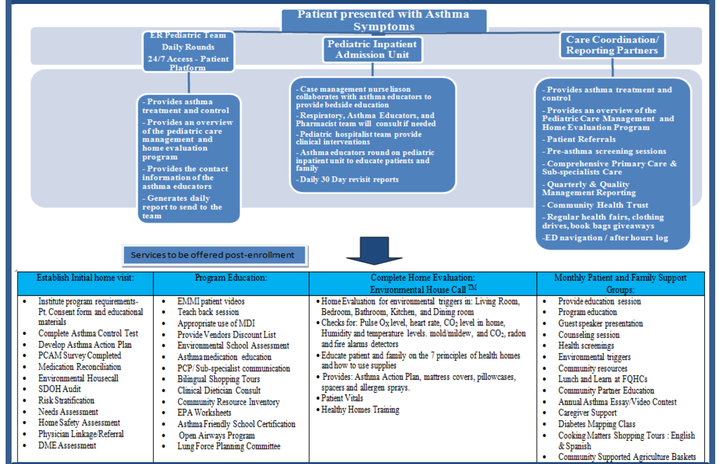
Environmental Housecall Assessment

Asthma Trigger	Percentage of those who answered yes
Is this a smoke free home?	59.6%
Does the patient's asthma worsen when around pets?	71.2%
Are chemicals or products with strong odors (such as cleaners, paints, air fresheners) present?	30.8%
Are there filters present in the heating and cooling systems?	13.5%
Does the heating system use a fuel burning appliance (such as an oil or gas furnace)?	1.9%
Are supplemental heat sources such as space heaters utilized?	3.8%
conditioners?	36.5%
Are stuffed toys present?	44.2%
Is there evidence of water damage, moisture, or leaks (such as damp carpet or leaky plumbing)?	28.8%
Is mold or mildew present (in the bathroom or tub, shower, wall, or windows)?	65.4%
Is standing water present (such as refrigerator drip pans, air conditioner drip pans, or house plants?)	11.5%
Are humidifiers utilized in the home?	19.2%
Do mattress and pillows have allergen-proof covering?	7.7%
Are rooms properly ventilated?	34.6%
Is there evidence of cockroaches and/or rodents?	30.8%
Are there food crumbs or open unsealed food around the house?	17.3%
Are there holes or gaps between construction materials and pipes that could allow pests to enter the house?	9.6%
Can the flooring be improved?	28.8%
Odors	34.6%
Temperature or humidity problems	42.3%
Headache, lethargy, nausea, drowsiness, and dizziness	3.8%
Swelling, itching, or irritated eyes, nose, or throat; congestion	5.8%
Cough, congestion, chest tightness, shortness of breath, fever, chills, or fatigue	28.8%
Diagnosed infection or clusters of serious health problems	11.5%

Improvement

- Identifying patients at high risk or with complex health problems
- Utilizing nurses and non-clinical navigators to support, advocate for, and motivate chronically ill patients using an innovative points-driven financial rewards system
- Deploying a risk stratification tool that incorporates social determinants of health, cultural beliefs and disease burden
- Establishing a Community Health Trust of local businesses, local DOH, schools, banks, gyms, and advocacy groups
- Risk stratification is conducted upon initial enrollment and every six months thereafter as a basis for navigation, resource prioritization and graduation status

Sustainability



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