



# Reducing the Days Children Spend in the Hospital: A Focus on Chronic Disease

December 2018  
Learning Session



# Inpatient Bed Day Disparity Reduction Key Driver Diagram



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## Global Aim

Cincinnati's children the healthiest in the nation through strong community partnerships

## FY19 SMART Aim

To sustain the inpatient bed day rate at 6.9 bed-days per 1,000 children\* per month through 6/30/2019

## 2020 SMART Aim

To reduce the inpatient bed day rate by 10%, from 99.9 to 90 per 1,000 children\* by 6/30/2020

## Population

\*Children aged 0-17 years in the Avondale, Lower Price Hill, and East Price Hill neighborhoods

## Key Drivers

Chronic diseases are well controlled (i.e., preventable morbidity is prevented)

Easy for families to receive the right care in the right place at the right time

Patients/families trust that they are receiving the right care for them and they adhere to recommendations

Proactive supports assist families remove barriers to health (i.e., social determinants of health)

Standardized approach to clinical decision making that can be adapted to patient and family needs

Entire health system is able and willing to address disparities in their own settings

Families and community are activated and equipped to support equity

## Areas of Focus

**Standardization of asthma care**

- Controller refills, medication delivery
- Integration of care coordination, CHWs, ancillary services (e.g., Legal Aid)
- Pre-visit planning

**Work across divisions/conditions**

- Focus on high risk T1DM patients through DHD Award
- Democratized, transparent data for other divisions/conditions + education (?)

**Optimized transitions of care**

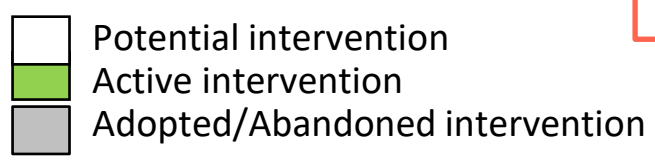
- Daily huddles/transition bundles
- Expand to other clinical settings (Complex Care, Teen Health Center, CHD clinic)

**Integration with other teams**

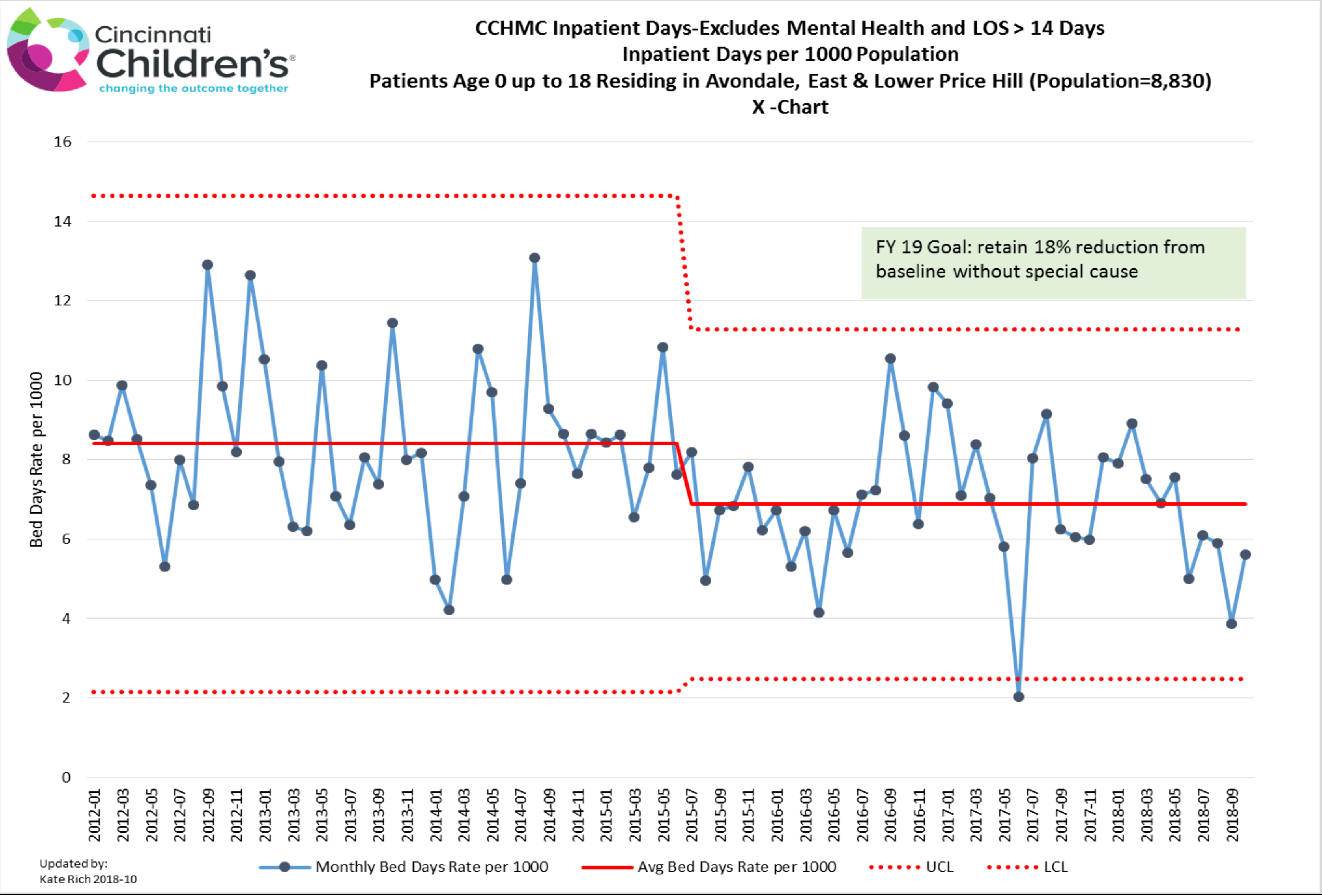
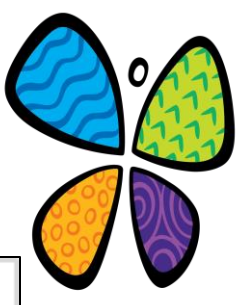
- Thrive & care gaps
- Place-based and housing (eviction)

**Prototypes to develop for FY19**

- Chronic care bundle (developed and tested in asthma, T1DM)
- RISEUP rapid response model (with place-based, housing group?)
- Education for subspecialties



# Measures and Results



# Strategy and questions...

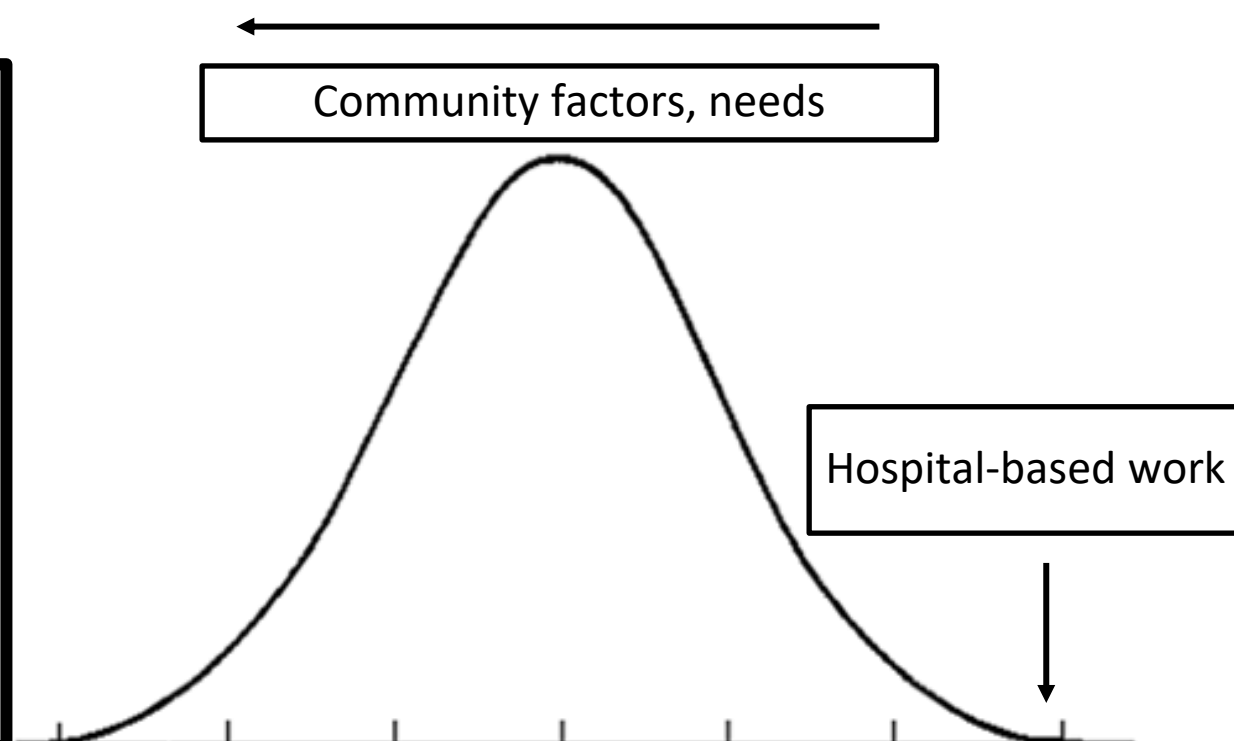


## Our Mission...

The Inpatient Bed Day Disparity Reduction Team is working to understand the root causes of disparities that may be common across conditions (e.g., asthma, diabetes).

## Our Approach...

**Balanced focus** between chronic conditions managed at least in part by the hospital/clinics & the influence of community factors (like housing, access)\*

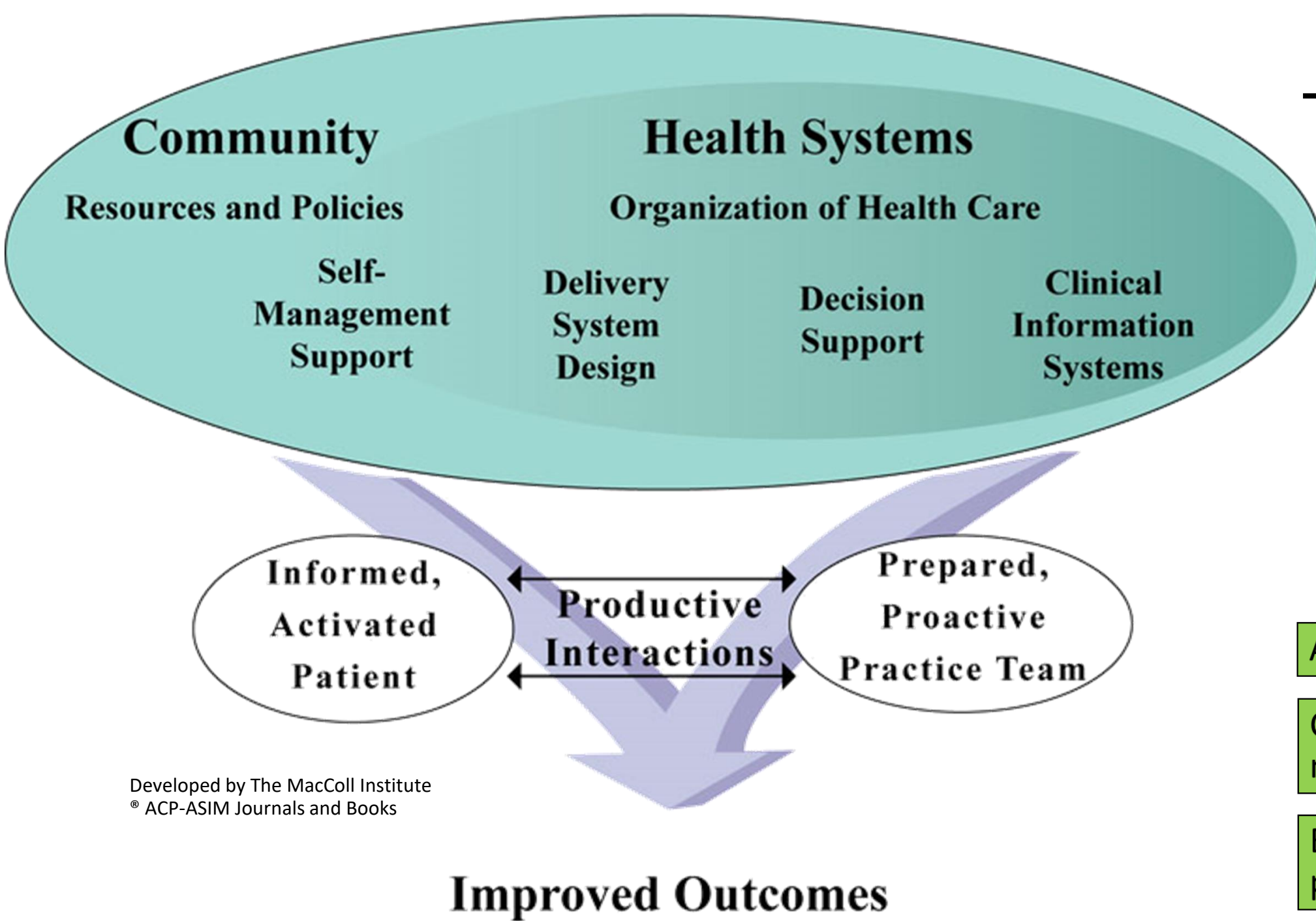


\*How can we best treat the sickest patients (far right) while helping everyone to be healthier (move whole curve)?

## One Model...

The Chronic Care Model & Adapted chronic disease key drivers

# The Chronic Care Model



Developed by The MacColl Institute  
© ACP-ASIM Journals and Books

## Adapted chronic disease key drivers

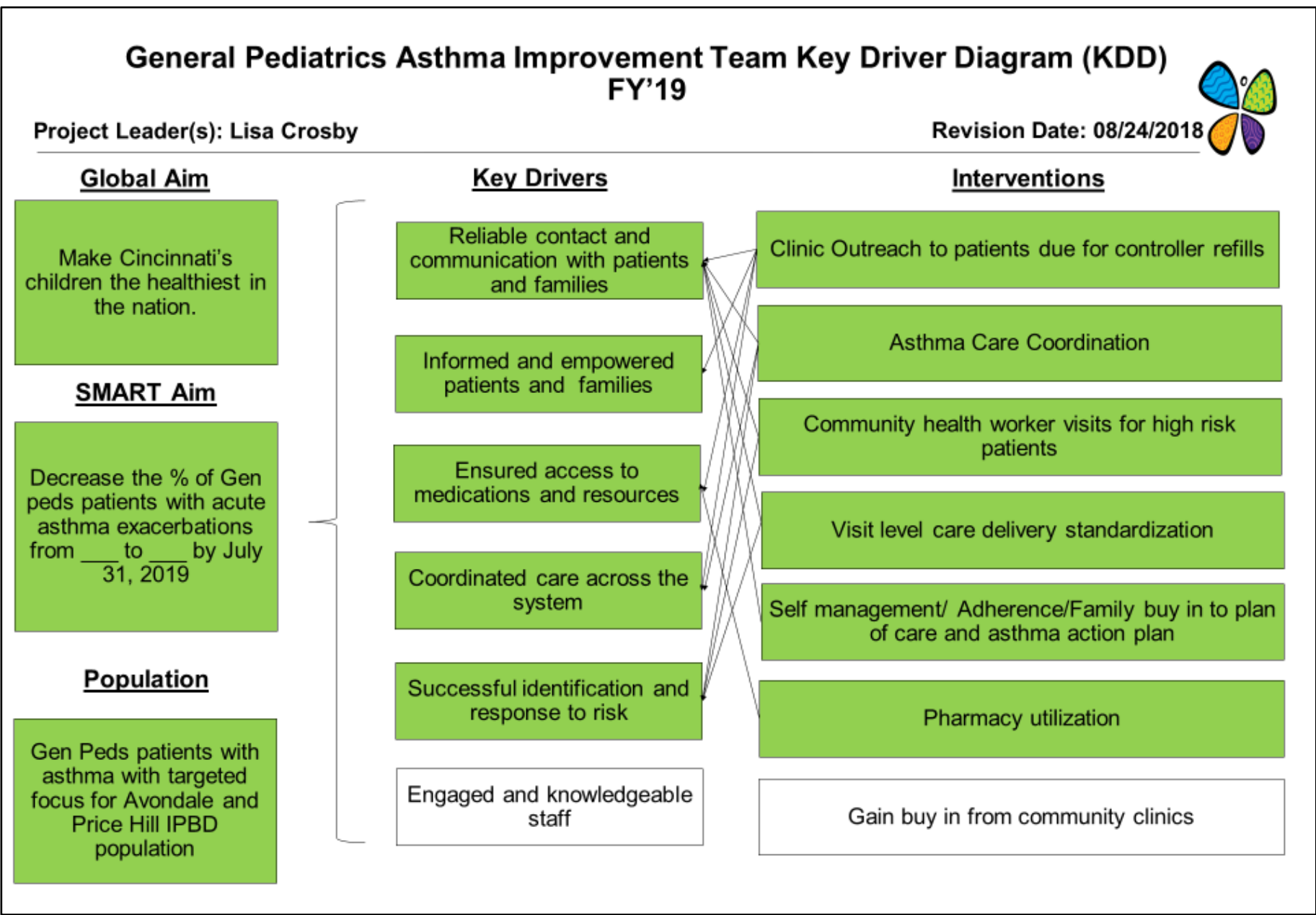
- Appropriate diagnosis made and communicated to family
- Clear, simple clinical care guidelines that can be adapted to meet the needs of the family (decision support, information systems)
- Easy for families to receive the right care and treatments in the right place at the right time (organization of health care)
- Informed, activated patients, families, and communities are true, trusted partners in care (co-production)
- Barriers to treatment adherence are identified and addressed (SDoH)
- Triggers of morbidity are identified and addressed (SDoH)
- Proactive population management with supports present for registry development and consistent surveillance (prepared, proactive team)
- Entire health system is resourced, activated, and expected to address disparities in their own settings
- Patients/families trust that they are receiving the right care for them and they adhere to recommendations (self-management)
- Learning health equity system in place

- ✓ How do these models/diagrams work for us?
- ✓ What's missing?
- ✓ What doesn't work?

# Updates on Asthma work



## Our theory...



## One strategy: deep dive CARAT data

Expanded    View All

(Child Asthma Risk Assessment Tool)

Office Visit from... 9/28/18 1423

**Identifying Information**

Does your child need medication at school or daycare?

Does your child have any problems taking medication at school or daycare?

Does your child need asthma medication(s) at a second location or home?

**Section A: Medical Care**

A1) Is your child responsible for taking his/her asthma medication on their own?

A2) Please describe your child's daily routine for taking his/her medication?

A3) If your child is on a daily asthma medication, do you have any problems

A4) Have you ever run out of medication during an asthma attack?

A5) When do you think your child has trouble with their asthma?

A6) Have you ever been given an AAP?

A7) When you are worried about your child's asthma where does he/she usually go

**Section B: Environment**

B1) Do you currently own or rent your property?

B2) Does your child have a humidifier/vaporizer in his/her bedroom?

B3) Do you have carpet or rugs in the TV/family areas?

B4) Do you have any gas appliances or a fire place in the home?

B5) Have you seen any mold or water leaks in your home or basement?

B6) Have you ever seen cockroaches in your home or basement?

B7) Have you ever seen evidence of mice or rats in your home or basement?

B8) Do you or anyone else who provides care for your child smoke?

## Learnings and Next steps...

### Consideration of & implementation of system-wide improvements: in-clinic standardization; medication home delivery

- HIGHLIGHT: Pursuing seasonal outreach with those patients in need of controller medication

### Testing on specified cohorts (e.g., high risk asthma patients within Avondale/Price Hill)

- HIGHLIGHT: Small-scale connections to CHWs who are themselves connected to others – e.g., Legal Aid

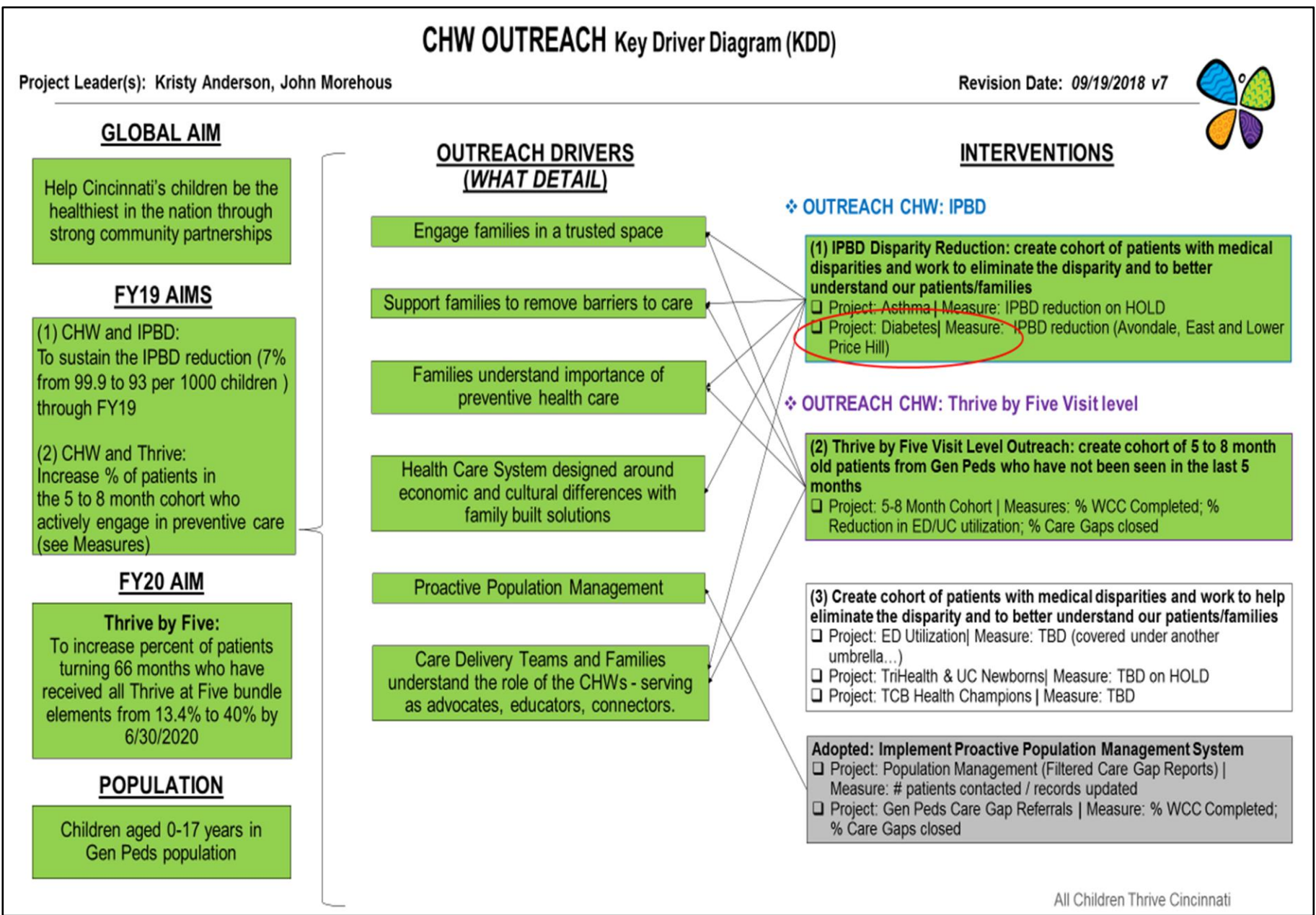
### Looking at measures related to utilization for these patients (e.g., symptom control, quality of life, utilization)

- HIGHLIGHT: CARAT allows us to compare certain factors across neighborhoods (e.g., roaches, mold, access to care)

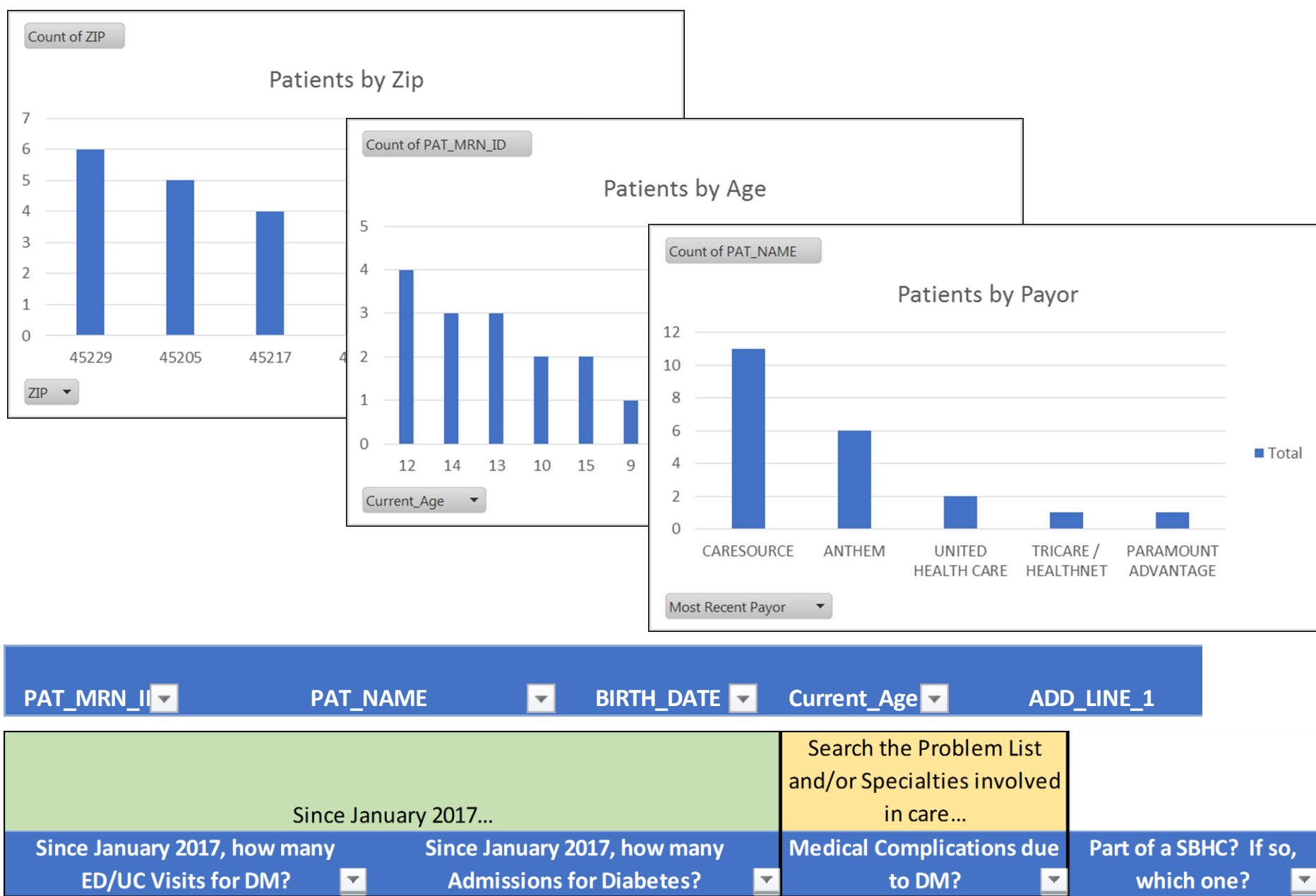
# Updates on Diabetes Work



## Our theory...



## Establishing Baseline...



## Learnings and Next steps...

- CHW has already established presence with our Endocrine Clinic and best practice for outreach, focusing on those T1DM patients in our target areas – has engaged with those at highest risk for bad outcomes
- We wish to further collaborate with the Specialty clinics to support “in-community” connections (merge chronic disease management with action on key social and environmental factors that influence health)
- Goal to continue to learn from families experiencing disparity (continue n of 1 stories)



*Thank you!*

*We welcome any questions or further discussion...*

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