

# AN ACADEMIC MEDICAL CENTER BUILDS A MEDICAL HOME FOR THE SAFETY NET

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# Faculty Disclosure

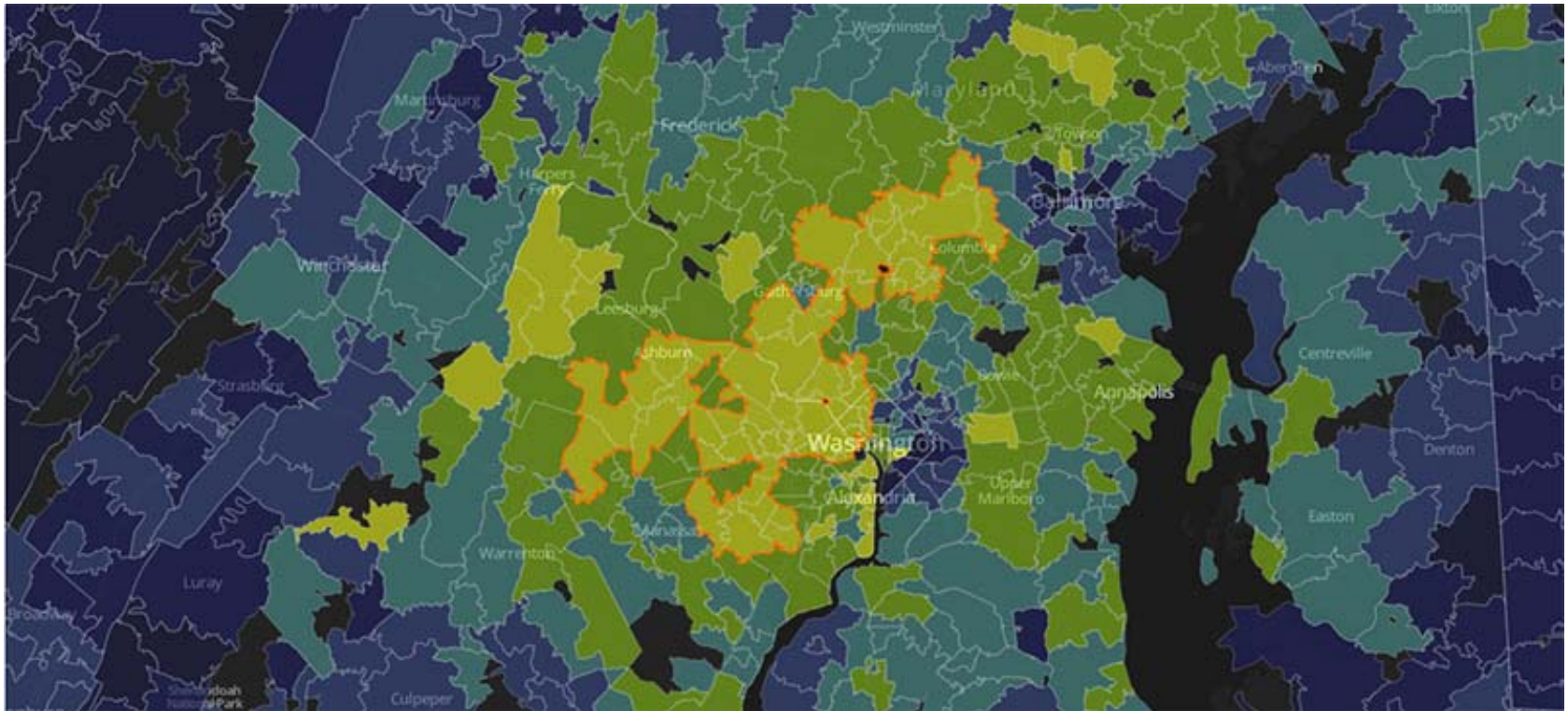
- **Mark Weissman, MD** has no financial relationships or conflicts to disclose relating to the subject matter of this presentation.
- Special thanks to **Michaela Morton, MPH** for assistance with presentation.



# Washington DC: A Tale of Two Cities



# Super Zip Codes: Washington DC Region #1



A *Washington Post* analysis of the latest census data shows that more than one third of ZIP codes in the DC metro area rank in the top 5% nationally for income and education



# Washington DC landscape

- DC population: 650,000
  - 1 million during the day
- DC children 0-18 years: 111,000+
- DC Medicaid enrolled children (0-20): 97,000+ \*



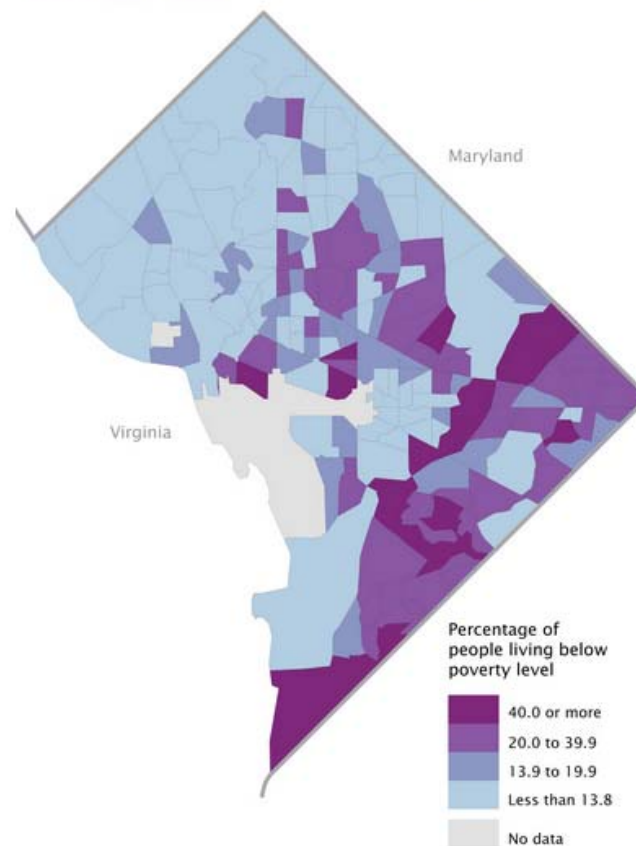
Source: United States Census Bureau, State and County Quick Facts ,District of Columbia. <http://quickfacts.census.gov/qfd/states/11000.html>

\*DC Department of Healthcare Finance, Data Snapshot – Children's Coverage. <http://dhcf.dc.gov/node/791852>

# A Different DC Perspective

- 27% of DC's children live in poverty
  - 29% children live in areas of concentrated poverty
  - 16% live in extreme poverty
- 42% of DC's children live in households that lack secure employment
  - 55% in single parent homes
- 2132 (19/1000) children annually reported victims of maltreatment (2013)
- 22% of children live with food insecurity

Percentage of People in Poverty in the Past 12 Months for the District of Columbia by Census Tract: 2006-2010



Source: U.S. Census Bureau, 2006-2010 American Community Survey. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see <[www.census.gov/acs/www](http://www.census.gov/acs/www)>.

# DC: Median Income of Families With Children

Location	2000	2010	2013
Ward 1	\$38,400	\$48,800	\$61,133
Ward 2	\$47,300	\$105,600	\$185,878
Ward 3	\$195,400	\$192,400	\$219,921
Ward 4	\$74,800	\$72,300	\$76,141
Ward 5	\$44,400	\$25,200	\$49,730
Ward 6	\$39,500	\$86,200	\$110,753
Ward 7	\$33,500	\$31,800	\$32,178
Ward 8	\$27,000	\$26,700	\$24,442



# A Zip Code Should Not Determine A Child's Future





## Infant Death Rate (per 1000 live births), By Race

Location	Race	Data Type	2011
District of Columbia	All Races	Rate	7.4
	White, Non-Hispanic	Rate	1.5
	Black, Non-Hispanic	Rate	11.7
	Hispanic	Rate	5.2
	Other, Non-Hispanic	Rate	5.0

# Children's Hospital of the District of Columbia

## Community Care: Then & Now

- Founded 1870: Civil War “foundlings”
- 2015: U.S. News and World Report “top 10” children’s hospital
- 1950: First “well baby” clinic
- Today- largest **primary care** provider for children in the District of Columbia



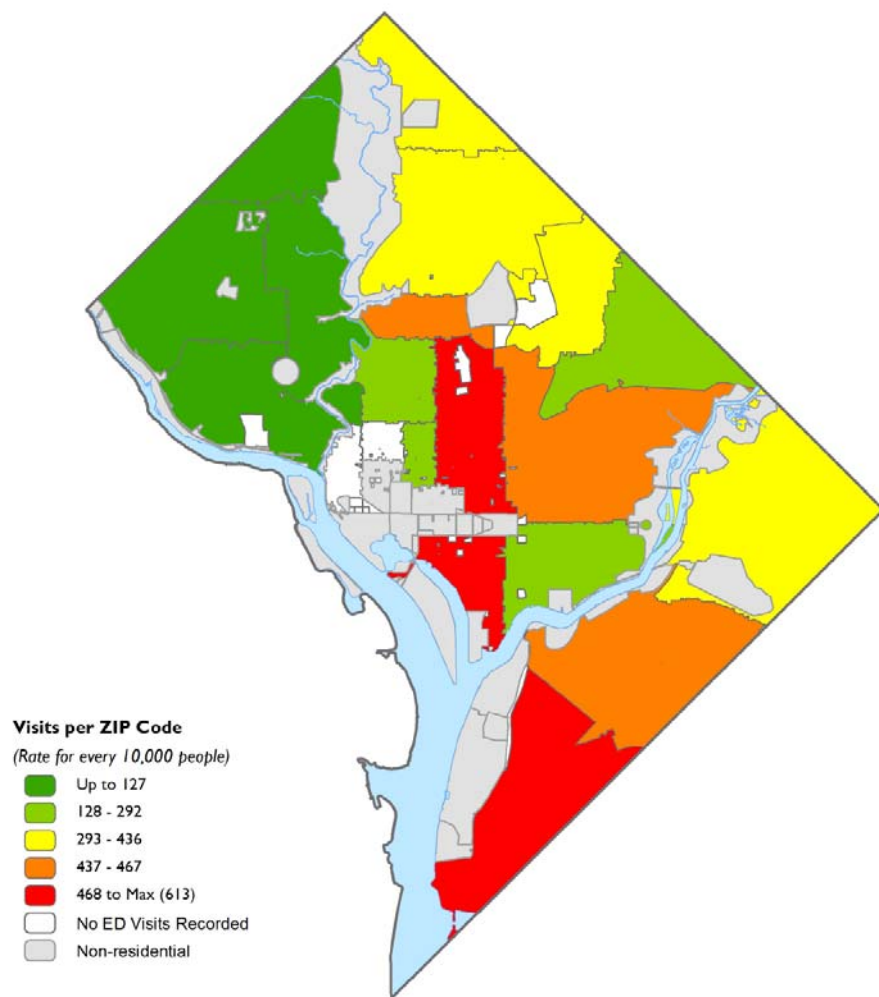
# Children's National Health System: Primary Care

- Children's National Health System is Washington, DC's children's hospital and regional health system for children
- Goldberg Center for Community Pediatric Health
  - Dedicated Center of Excellence
  - Operates 7 primary care health centers at main campus and underserved neighborhoods across DC and mobile health program
  - All recognized as NCQA Level 3 PCMH (2011 and 2014)
- Almost 40,000 attributed patients
  - Largest primary care provider and largest primary care provider for children in DC
  - 100,000 annual visits and growing

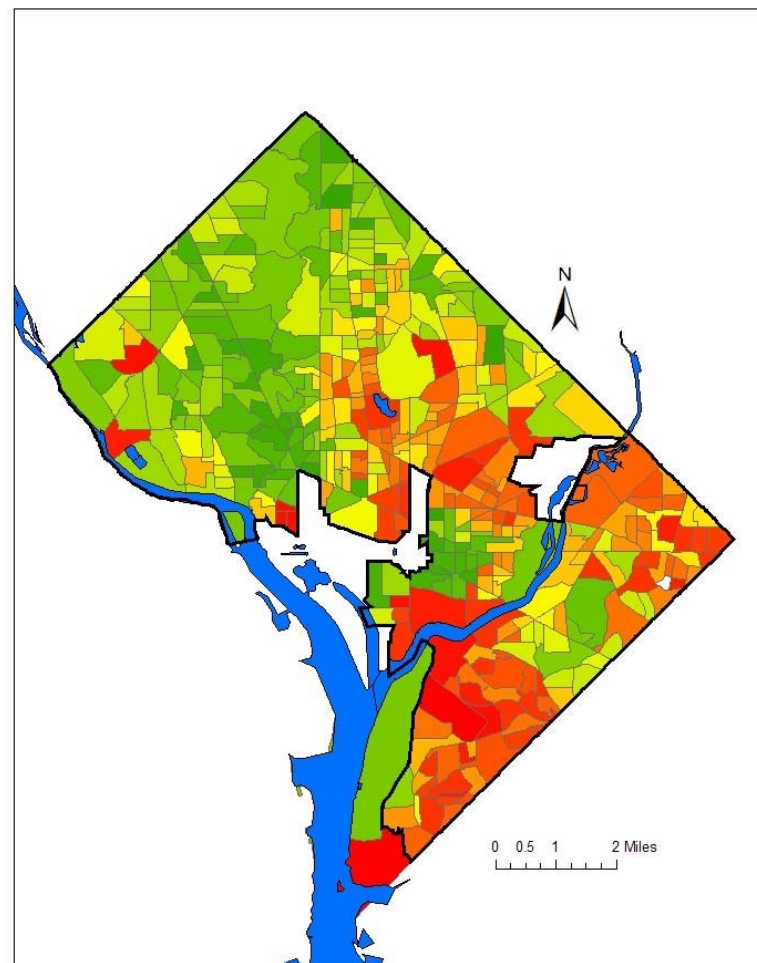


## EMERGENCY DEPARTMENT VISITS IN WASHINGTON, DC - 2010

Asthma as Primary, Secondary or Tertiary Diagnosis (5 - 14 years)



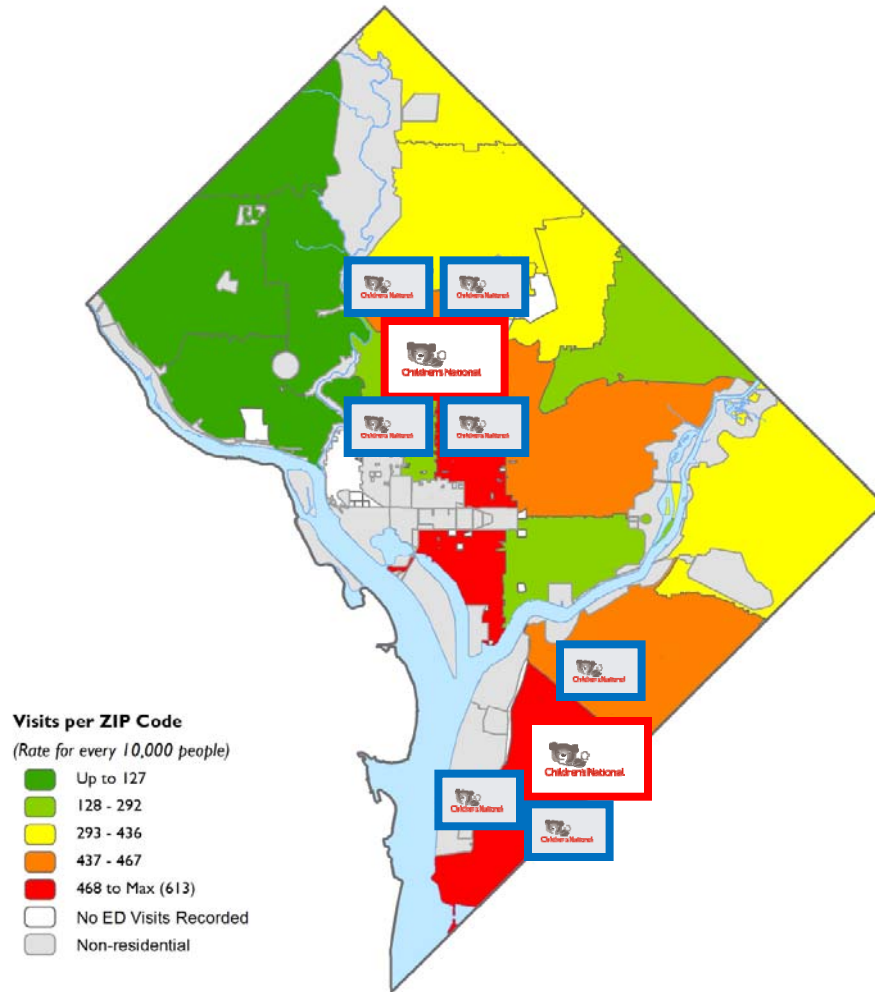
## Poverty in DC, 2000



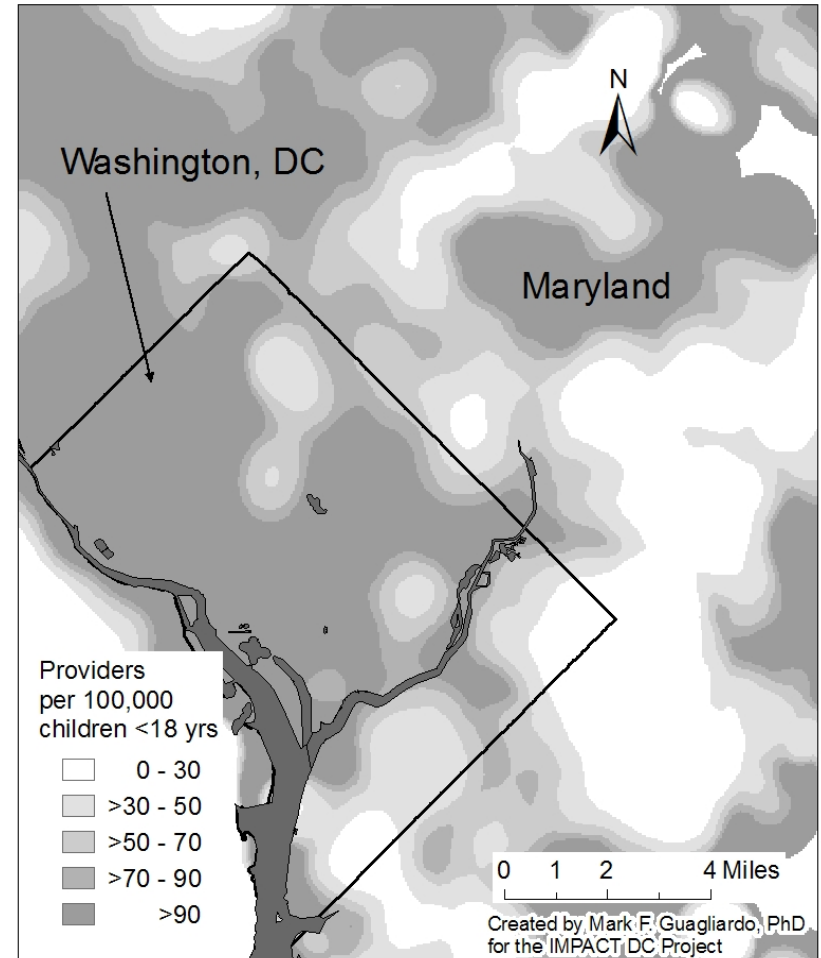


## EMERGENCY DEPARTMENT VISITS IN WASHINGTON, DC - 2010

Asthma as Primary, Secondary or Tertiary Diagnosis (5 - 14 years)



## Primary Care Access, 2005





# Children's National: Medical Home to DC's Most Vulnerable Children



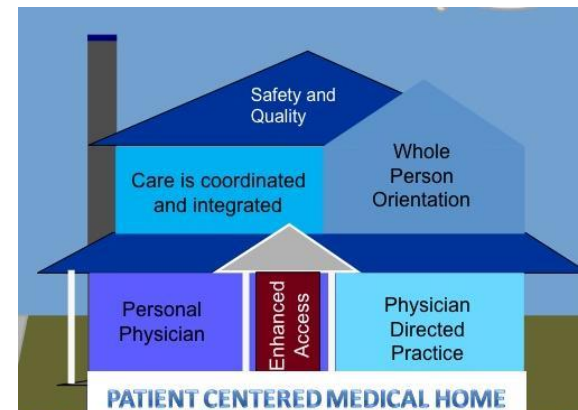
- “Medical Home” is not a place-better way of delivering care
- Team-based care
- Puts patient at the center of the health care system
- Provides primary care that is:
  - Accessible
  - Comprehensive
  - Coordinated
  - Culturally effective
  - Continuous
  - Family-centered
  - Compassionate
- Coordinated with community partners and resources

# Building the 21<sup>st</sup> century Medical Home

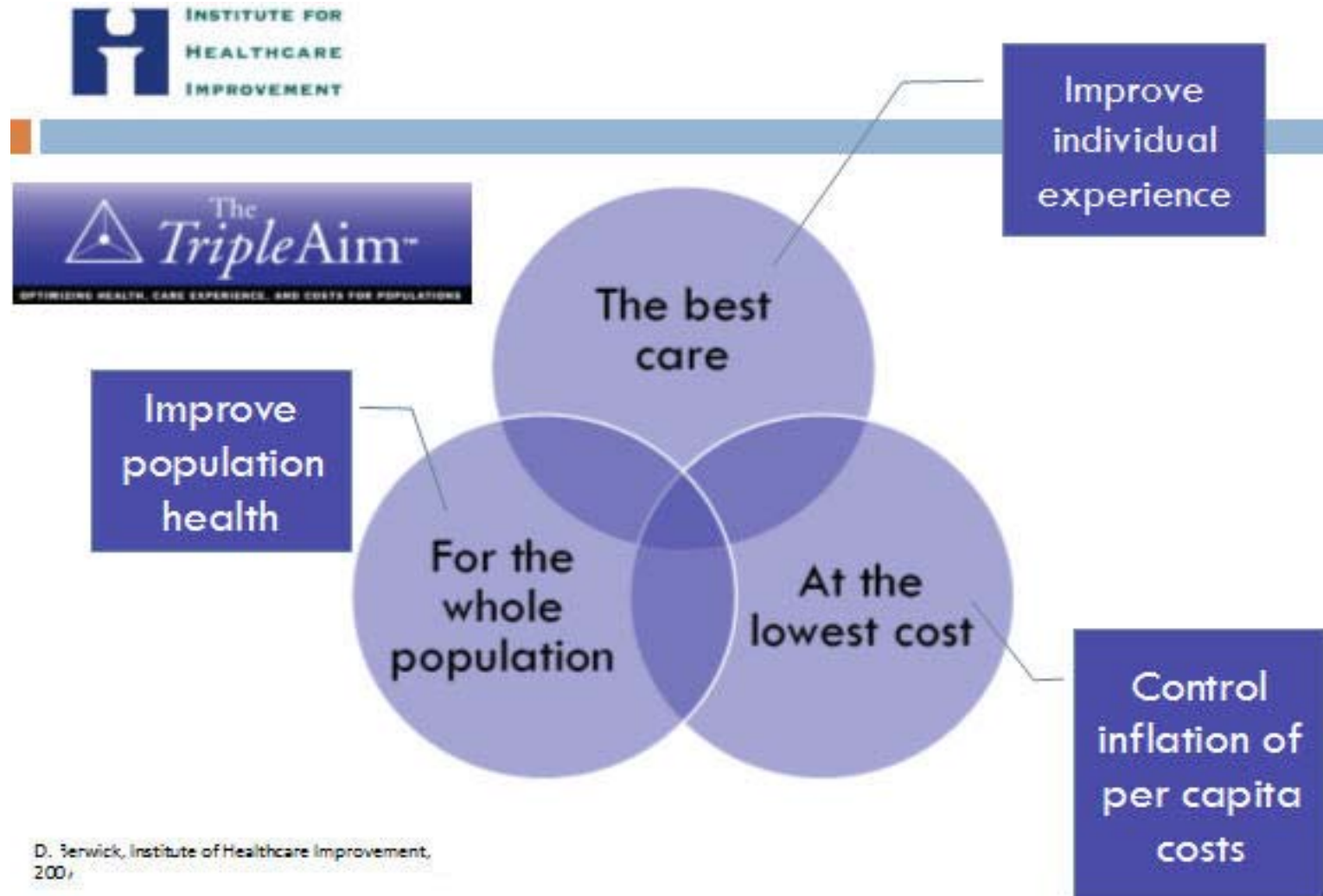


# “Medical Home” : Origin in Pediatrics

- AAP: “Every Child Deserves a Medical Home” (1978)
  - Calvin Sia, MD (AAP)
- CSHCNs ⇒ All children
- Medical Home expands to all Primary Care
  - Endorsed by AAP-AAFP-ACP
  - Emerging as payment model to achieve “triple aim”



# Triple Aim Requires New Academic Model



D. Berwick, Institute of Healthcare Improvement, 2007

# Think differently about patients and population





# Expand focus beyond individual patient



# Manage care & cost outcomes for ALL patients



# From teaching clinic to medical home

- Historic academic “teaching clinic” model
  - Evolved based on priorities & needs of:
    - Faculty
    - Residents, students & other learners
    - Nursing & hospital administration
  - NOT needs of patients & families



# Rationale for PCMH redesign

- It's the RIGHT thing to do!
  - For our patients and families
  - For modeling and training the next generation of healthcare providers
- Aligns our practice with emerging models for primary care delivery and reimbursement
- Building the primary care practice of the future as we plan, design, and move into a new ambulatory environment
  - New practice facility design



# Challenges for our Academic Practice

## Patient Demographics

- 15% of children live with head of household without HS diploma; 50% with head of household have high school diploma
- 77% of fourth grade public school children do not read at level\*
- 1550 children in the district are in foster care

## Medicaid payment

- 85-90% Medicaid enrolled through Managed-Care Organizations
  - ~10% commercial or uninsured
- No immediate state or payer incentives for PCMH transformation or NCQA certification

## Staffing Model

- Mixed model: attending and resident
- 67 faculty (attending physicians)
- >60 resident trainees cycle through each year
- Hospital siloes: Medical/physician, nursing, administration/operations



# Continuity

**Challenge:** Establishing continuity in a mixed staffing model (intermittently present faculty and residents)

- **Focus on care teams, pods & team-based care**
- Smaller practice sites and teams can establish continuity more easily
- Larger sites with rotating providers/residents have a greater challenge defining and documenting continuity
  - Faculty/preceptor-resident continuity teams
- Helping families understand the “academic model” of care
  - “Why do so many people come into my visit?”
  - “What is a teaching hospital?”
- Allowing families to decide who is their PCP; encouraging them to tell us
  - “Families are the captain of the ship”

# Redesigning the pediatric academic medical home



# Enhanced Academic Medical Home Blueprint

## ENHANCED “MEDICAL HOME”

(will build to suit - No “clinics” allowed - NCQA PCMH recognized)

### Enhanced Primary Care (10,000 – 12,000 patients)

Small practice team focus/accountability + large center resources/efficiency

**Small Practice Team**  
(5000-6000 Patients)  
3-4 FTE Providers  
4 Residents/Day  
(20 Residents/Week)

#### Community Health Support Services

Social Work  
Health Education  
Care Coordination  
Parent Navigators  
Family Help Desk  
Children’s Law Center  
WIC

#### Clinical Programs

Adolescent  
Generations (Teens & Tots)  
Complex Care (CSHCN)  
ImpactDC (Asthma)  
Obesity

#### Specialty:

Developmental Peds  
Sickle Cell Program  
Sports Medicine

**Small Practice Team**  
(5000-6000 Patients)  
3-4 FTE Providers  
4 Residents/Day  
(20 Residents/Week)

**CO-LOCATE: LAB, RADIOLOGY, DENTAL, BEHAVIORAL HEALTH, URGENT CARE?**

### Goldberg Center “Call Center” ⇔ Advanced Health Management Center

Appointments, Triage/Advice, Refills, Results, Referrals, Outreach/Reminders/Clinical Compliance  
Care Coordination, Patient Education and Self-Management, Disease Management

Technology enabled: eCW Web Portal (Required for EMR Meaningful Use Funding)



FTE = full-time equivalent; WIC = Women, Infants, and Children; CSHCN = Children with Special Health Care Needs; eCW = eClinicalWorks; EMR = electronic medical records

An Academic Medical Center  
Builds a Medical Home for the Safety Net

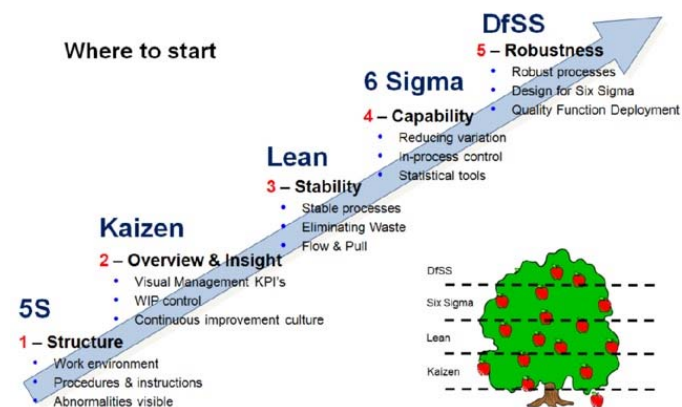
# Commitment at all levels

- PCMH Recognition incorporated into the strategic plans for Children's National Health System and the Goldberg Center for Community Pediatric Health- leaders, managers, faculty, staff
- Primary care faculty and management incentive goals
- Build into education & training curriculae for students, residents & fellows
- Dedicated PCMH project team
  - PCMH champions at each primary care site
    - Physician, nursing, administrative managers aligned
    - Defined & protected meeting times
- Established at QI/learning collaborative model across all practices



# Leveraging improvement tools

- Quality Improvement expertise & infrastructure embedded in academic faculty division
- Prioritize Quality Improvement
  - QI methodologies for implementing change
    - Learning collaborative
    - LEAN
      - Identifying “value” for families, care team, and learners
- Transparent benchmarking, run charts, dashboards for all centers/providers
- On-going patient experience surveys





# Family experience & engagement

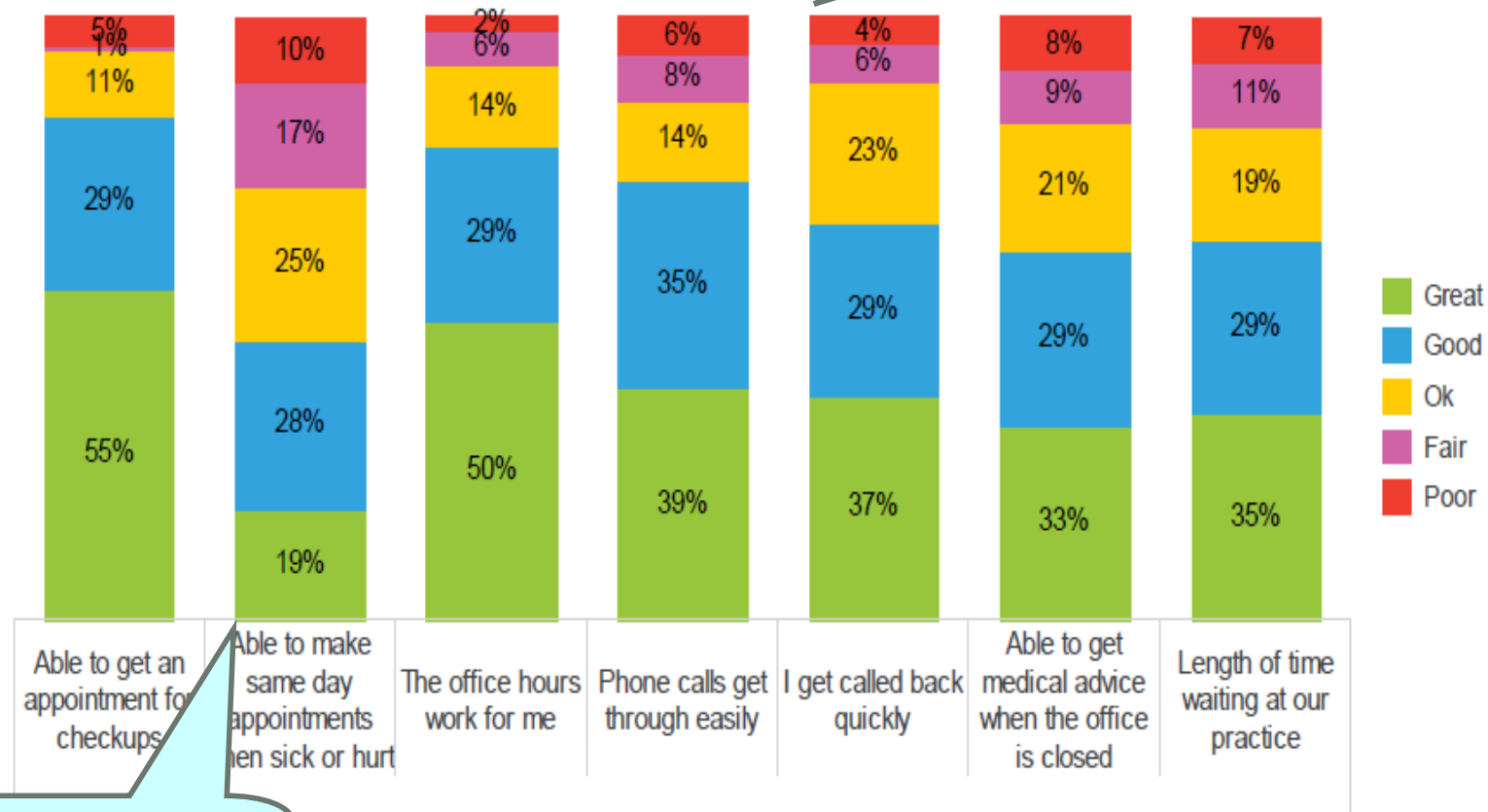
**Challenge:** Going beyond patient satisfaction surveys

- We established a robust survey process for ongoing family feedback
  - Over 10,000 surveys collected within the past 5 years
  - Monthly reports targeted goals and interventions
- We gather qualitative feedback
  - Suggestion box
  - Exit surveys
  - Rounding
- Parent partners actively participated in all PCMH project meetings



# Primary Care Patient Satisfaction Timely Access

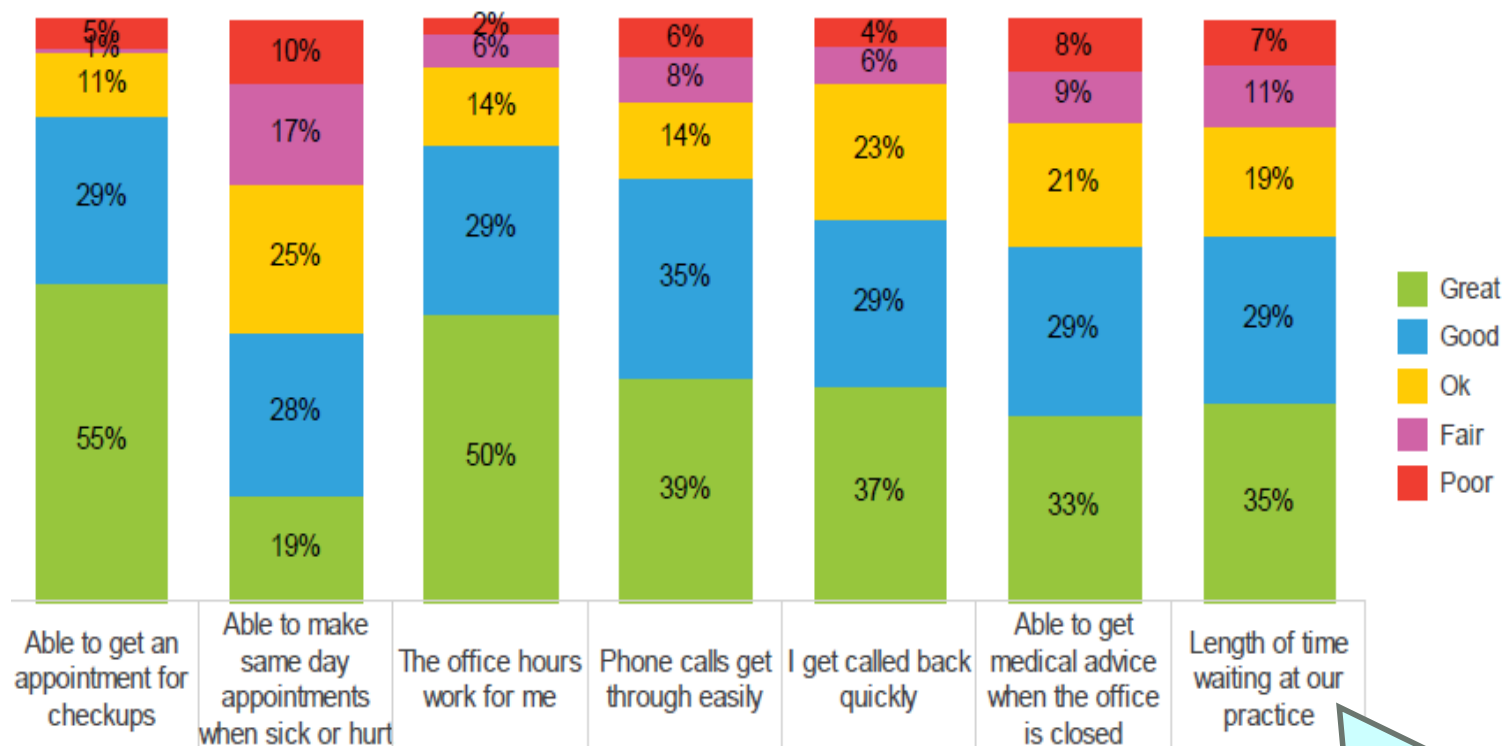
EXT HOURS & ADVANCED  
CALL CENTER:  
ADD APPTS, CENTRALIZED  
ADVICE NURSES



TIMELY ACCESS  
FOR ADVICE OR  
APPTS

# Primary Care Patient Satisfaction

## Wait Times

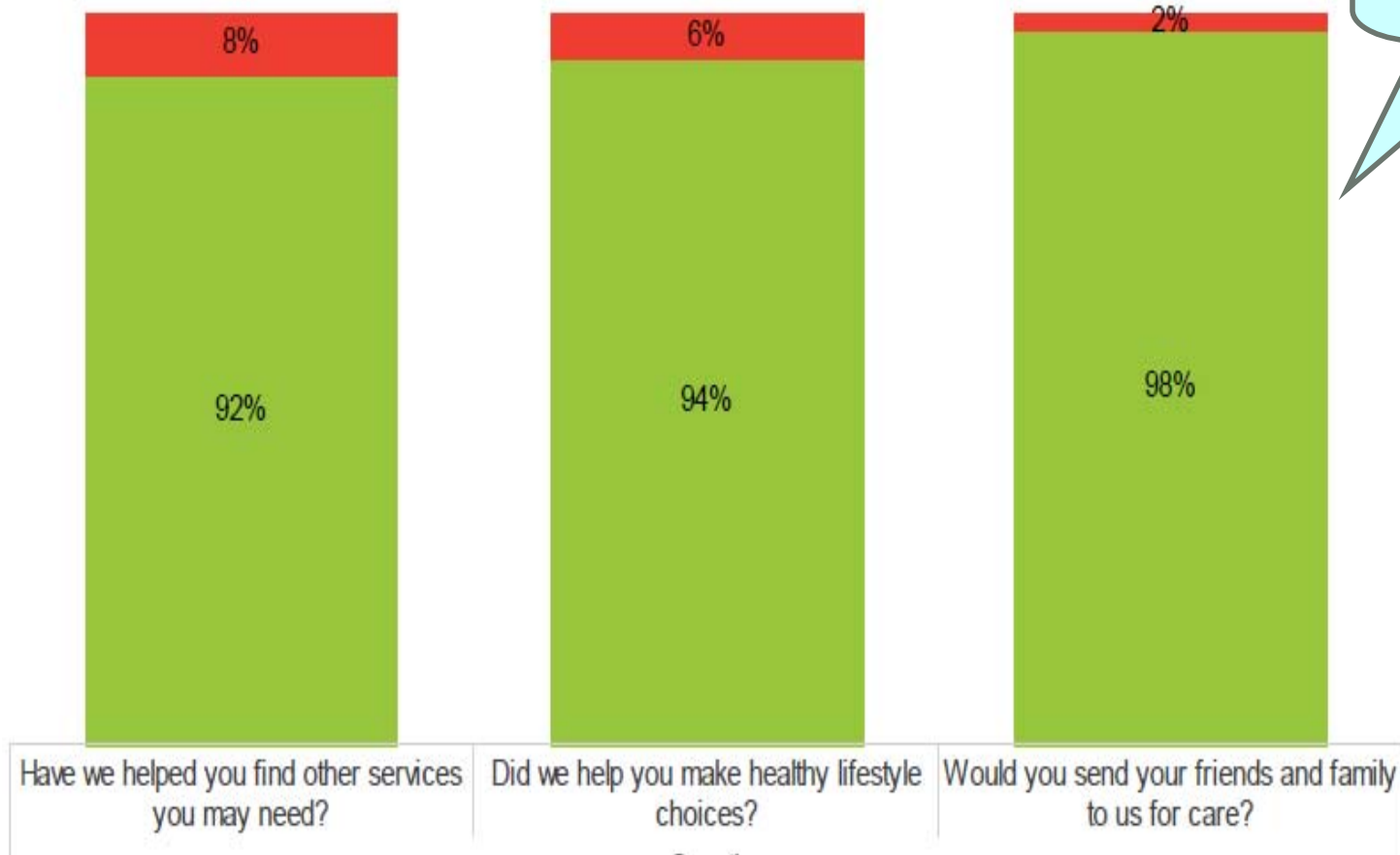


LONG WAITS: WAITING ROOM,  
EXAM ROOM, IMMUNIZATIONS  
LEAN REDESIGN, POD TEAMS,  
ADDED MA's & RN's

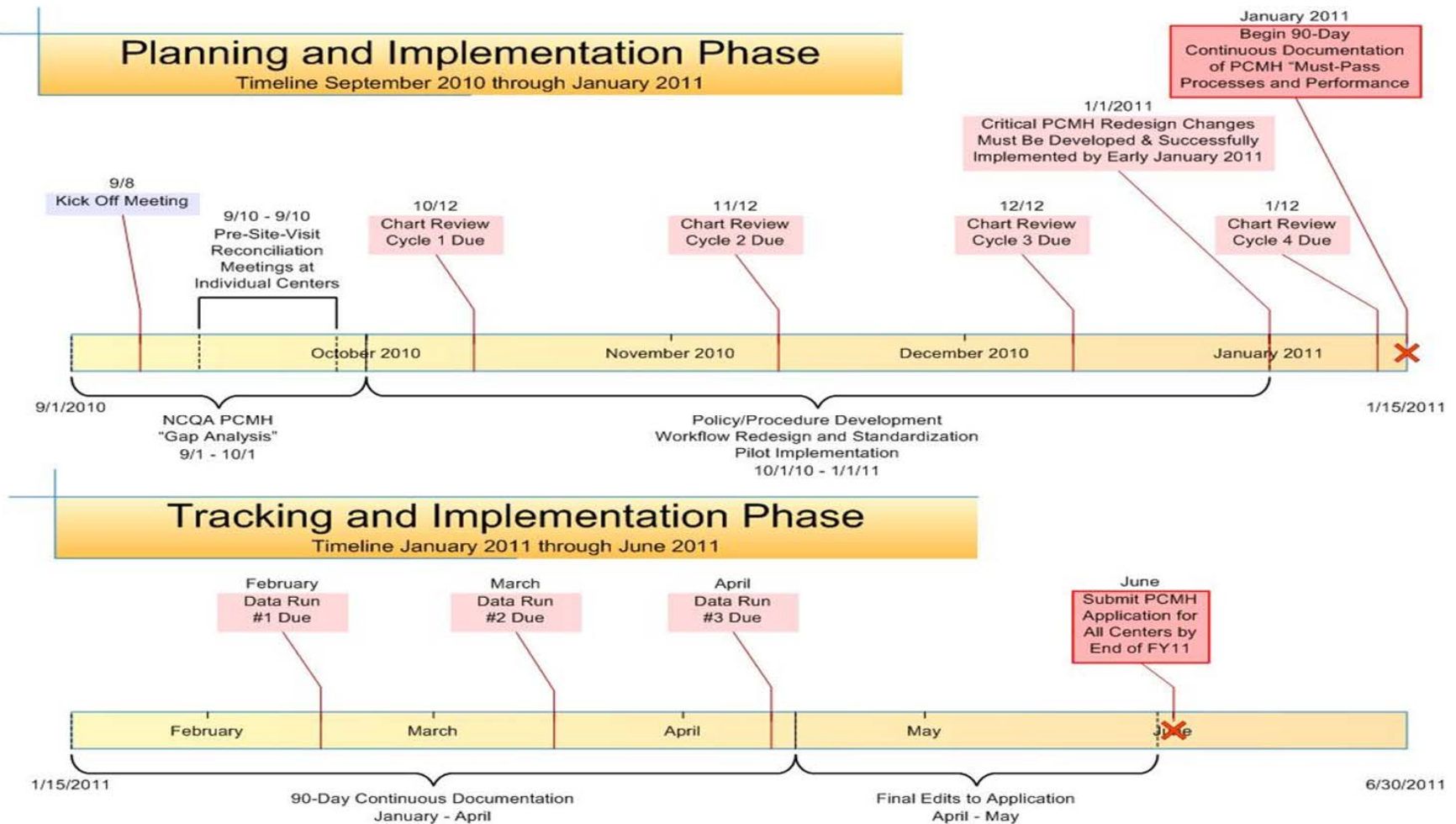
# Primary Care Patient Satisfaction

## Overall- likely to recommend

>95% WOULD  
RECOMMEND!



# PCMH NCQA Application Project Timeline



**Children's National**™

Builds a Medical Home for the Safety Net



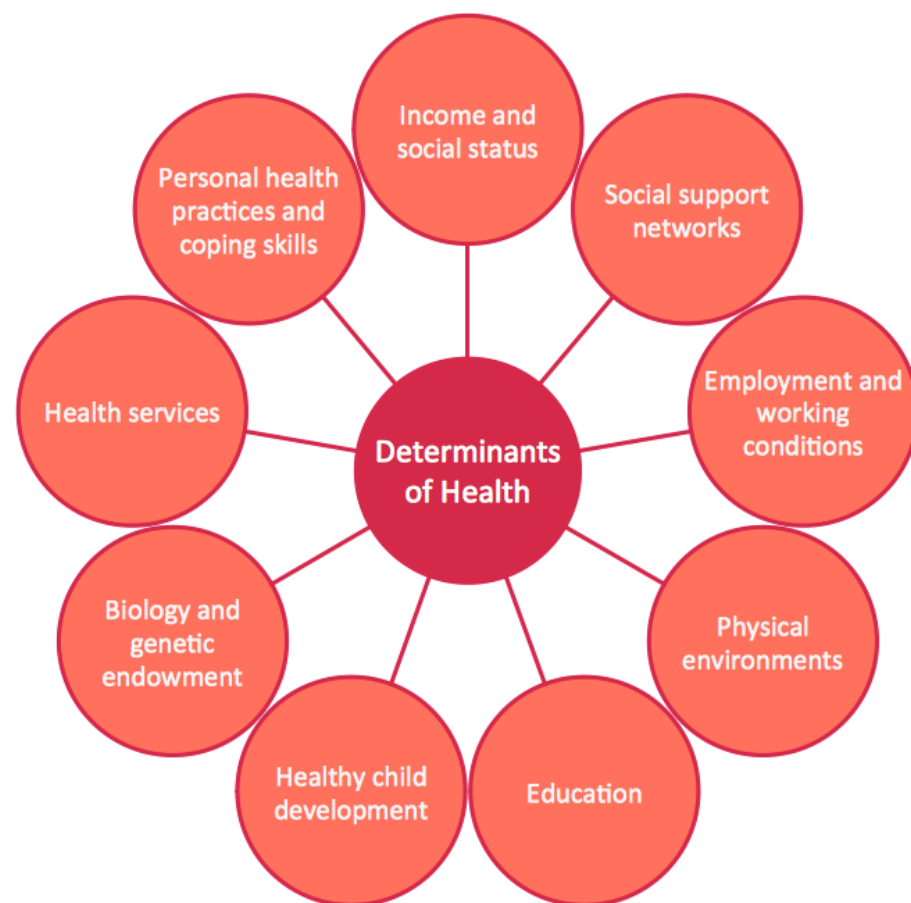
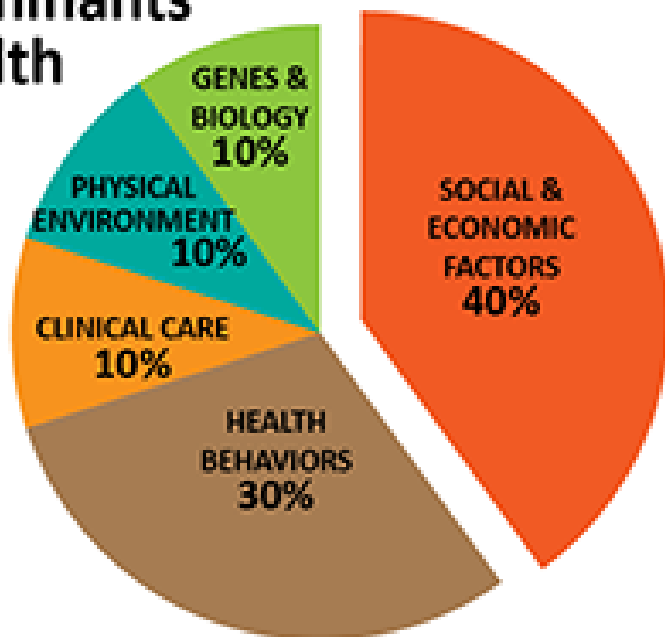
# PCMH Results: NCQA Recognition

- All seven primary care practice locations received NCQA PCMH Level III Recognition in 2011- and again in 2014
  - Continuous: re-submission planned for 2017
- Only pediatric practices in DC NCQA PCMH III
- CAVEAT: Medical Home transformation is ongoing
- NCQA recognition is (mostly) useful framework & metric for organizational change



# Social Determinants of Health

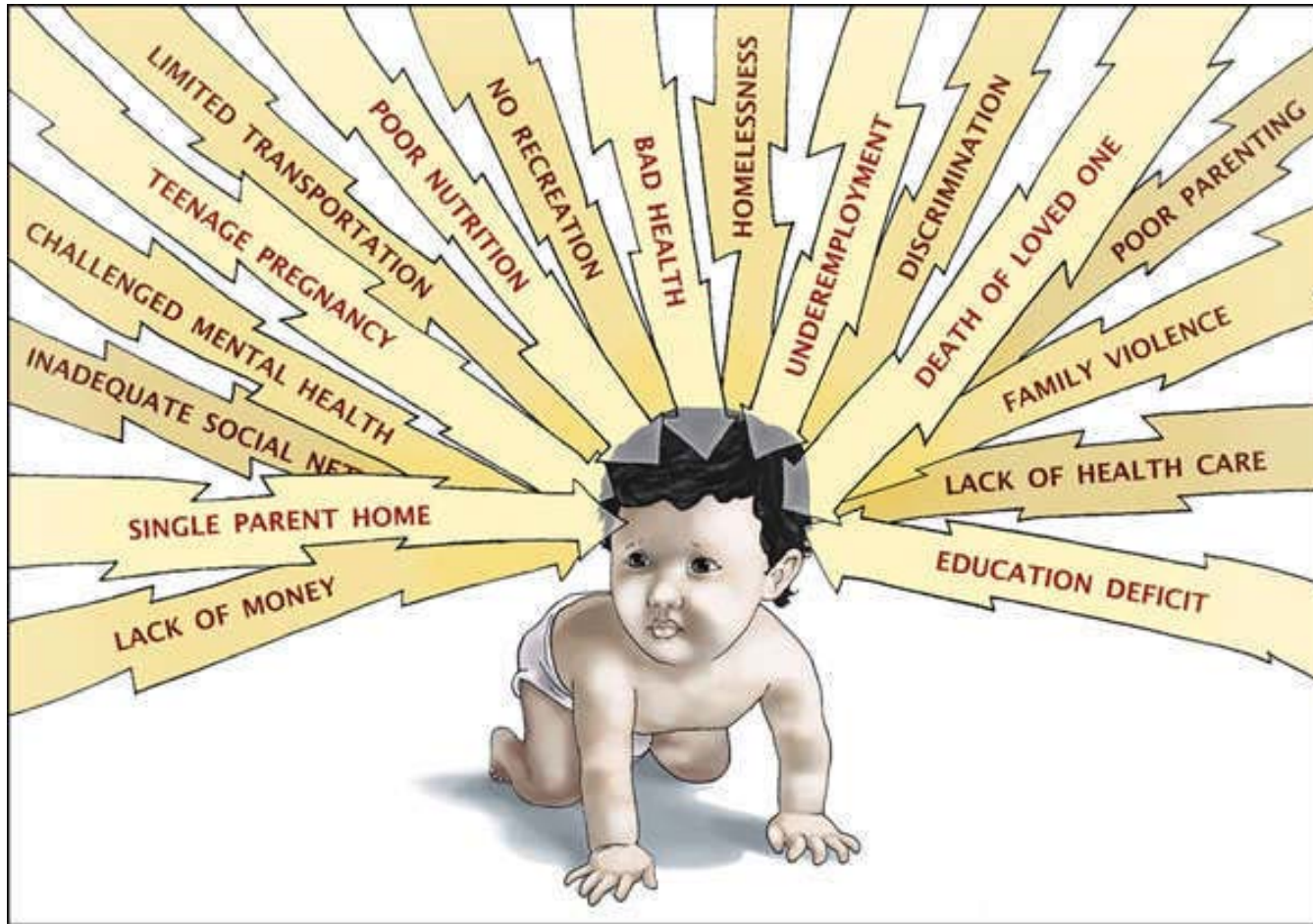
## Determinants of health



# Adverse childhood experiences (ACEs)



# Chronic adverse childhood experiences are “toxic” & yield poor health and life outcomes





# Primary Care at Children's National: Signature Programs & Services for Vulnerable Populations

- WIC (Supplemental Food Program)
- Social Worker(s)
- Health Leads (Project Health-Community Resources/Referrals)
- Children's Law Center (Legal Aid for Health, Housing, Education)
- Reach Out and Read (Early Literacy)
- Behavioral/Mental Health (co-located psychologists, psychiatrists)
- IMPACT DC (Community Asthma)
- IDEAL Clinic (Obesity)
- Oral Health: Pediatric Dentistry
- Children's Health Project (Mobile Health- 3 vans)
- Child & Adolescent Protection Center (Abuse & Neglect)
- Complex Care Program (Medical Home & Care Coordination for CSHCNs)
- Parent Navigators (Children with Special Health Care Needs)
- CSHCN Care Coordinators
- Healthy Generations (Teen Parents & Infants Program)
- HIV Services (Burgess Clinic) (Adolescent Medicine)
- Youth Pride (LGBTQ) Clinic (Adolescent Medicine)

**Supported primarily through  
grants & philanthropy**

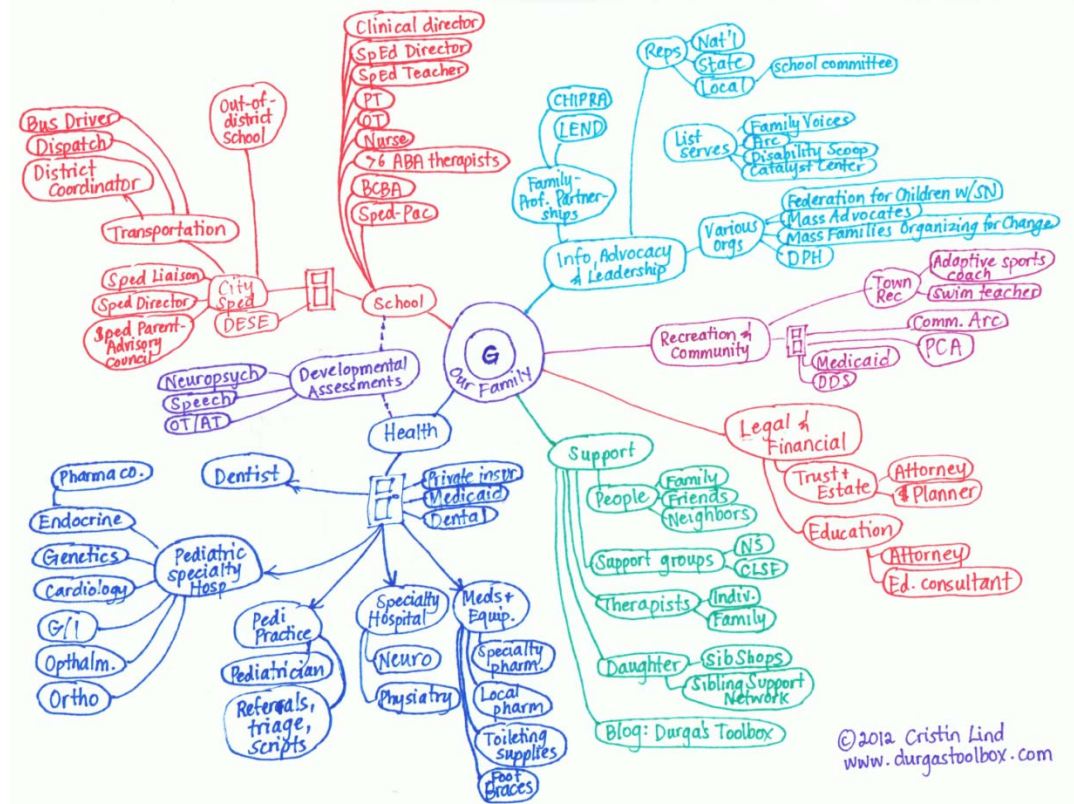


**Children's National™**

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# Care Coordination for medically complex children (CSHCN's)

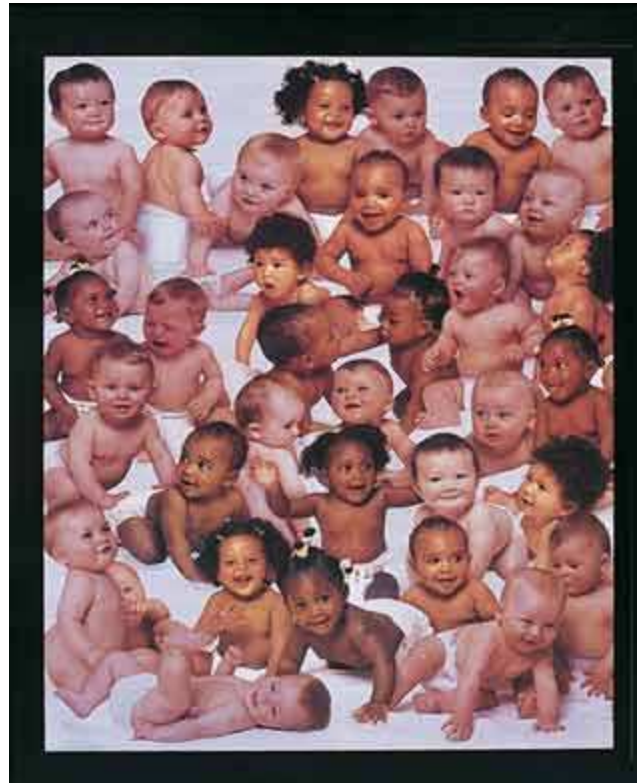


# Parent Navigators

- Parent navigators provide peer-to-peer guidance and support for families of CSHCNs in our primary care medical homes & Complex Care Program
  - Employees of CNHS
  - Partially supported through state (DC & MD) grants
- Active members of Medical Home practice redesign and management teams



# Community Health is population health



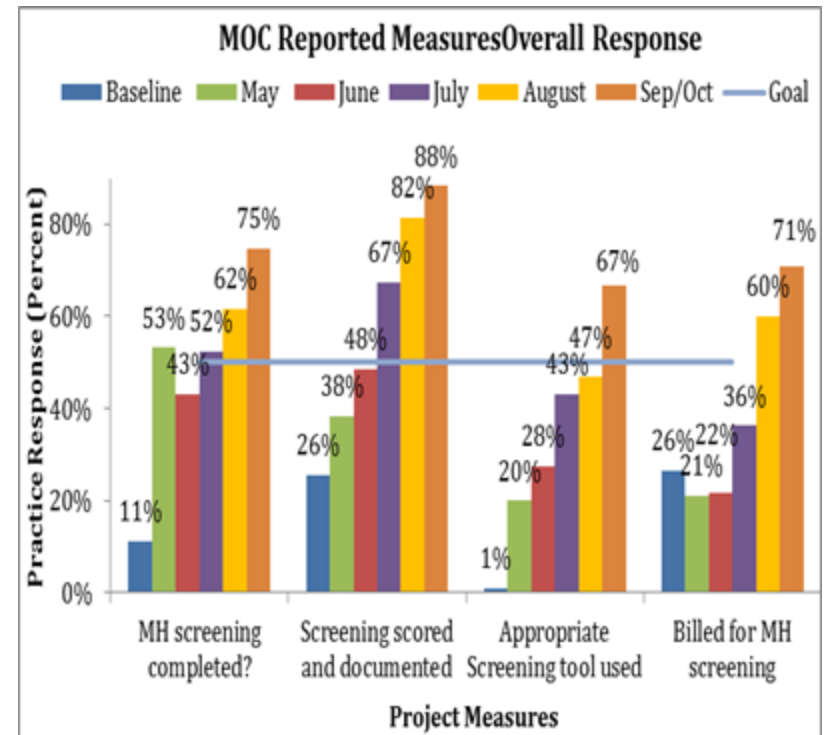
# Old & New: Medical Homes & Pediatric Population Health

- Annual well-child exams
  - EPSDT screening, immunization rates
  - Adolescent & reproductive health
- ED utilization for low acuity non-emergent (LANE) concerns
- Chronic disease management: asthma, obesity
- Mental health screening & co-located services
- Children with special health care needs
  - Children with medical complexity (CMC)
  - Parent navigators
- Leveraging technology & telemedicine



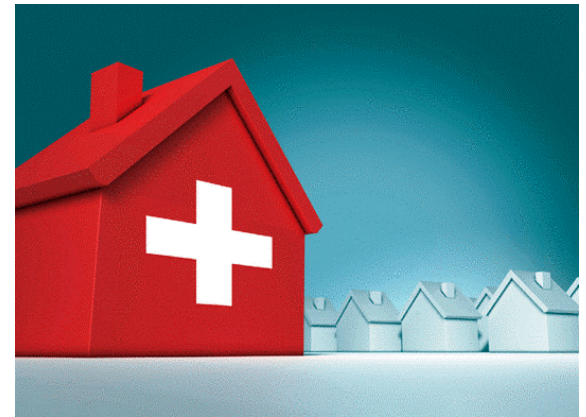
# Integrating Mental Health into Primary Care Medical Home

- 1 in 5 children have MH concern in childhood- often under recognized and addressed
- Co-locating psychiatry (PT) and psychology into all primary care settings
- Training and coaching all pediatric providers city-wide
  - Mental Health & ACE screening
  - Initial evaluation & referral
  - Management of common behavioral concerns
- DC MAP: Psychiatry Access Line for PCP's
- Coordination with early child care & schools





# ED2MH: Emergency Department to Medical Home



# Key ED2MH Interventions

- Negotiated enhanced payments and incentives from Medicaid Managed Care Organizations
- Implemented extended hours at primary care health centers (evenings and Saturdays)
- Offered scheduled appointments in extended hours for all visit types
- Acute illness, well-child care, follow-up and chronic disease management, influenza vaccination, immunizations
- Introduced and reinforced extended hours and medical home



# Bus Stops Across SE DC

Evening and  
weekend hours  
available.

Check out extended hours and the location  
of a Children's Health Center near you.  
Visit [www.ChildrensNational.org/MyMedicalHome](http://www.ChildrensNational.org/MyMedicalHome).

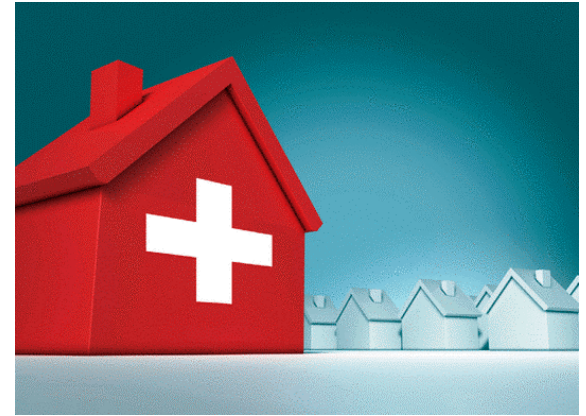


For evening  
sniffles and  
weekend coughs.

Check out extended hours and the location  
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## ED2MH: Early Bending of Curve



First two years ED2MH experience:

- Overall primary care visits increased 10%
- 15-20% of primary care visits now in extended hours (evenings & Saturdays)
- Overall ED utilization by Medical Home patients down 5%
- Still high utilization for low acuity concerns



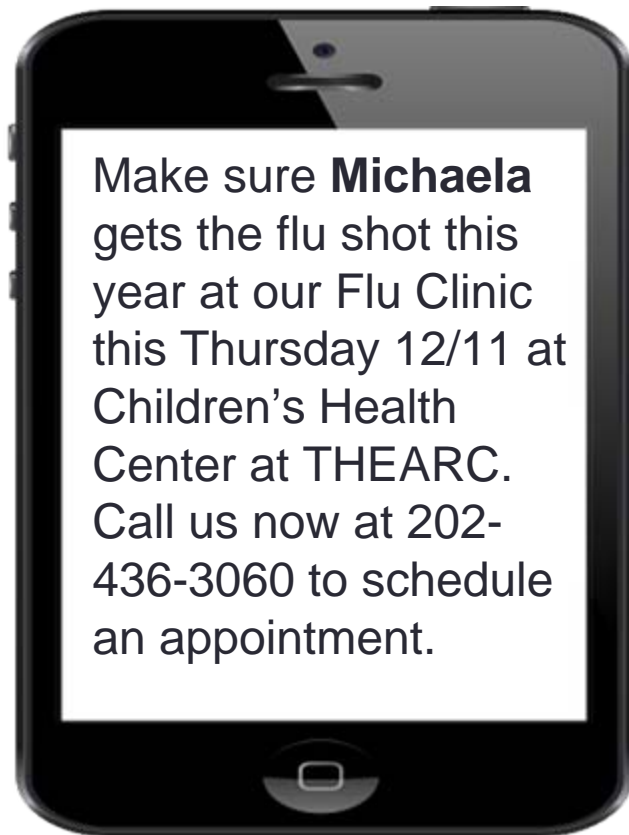
# Re-imagining patient engagement

- Today's *toddlers* are tech savvy
  - Almost 96% of 1 year olds use mobile device by 1<sup>st</sup> birthday
  - Most 2 year olds use mobile device daily
  - Most 3 – 4 year olds use devices without help; 1 in 3 multi-task
- H Kabali, et al, *Pediatrics*, October 2015
- Studied inner city population



# Patient engagement

## Flu vaccines



## "Pollen busters"





# Telemedicine extends Medical Home

- Technology moving faster than medicine
- Patients are connected to friends & family...
- Patients and student learners are teaching our medical teams



# Medical Homes & Academic Centers: Lessons learned

- Even academic centers can implement and teach change
  - Medical Home model can be implemented successfully in academic settings
  - Children's National: ongoing journey to redesign primary care delivery and training of current & next generation of pediatric health care providers
- Improved care delivery can generate more volume & revenue to support academic Medical Home model
  - FFS revenue shifting to value/population based payment
- Train next generation:
  - Best care for individual patients & families
  - Medical Home model & team-based care
  - Community and population health models- increased focus on community & social determinants of health
- Challenges continue: particularly re-imagining primary care/Medical Home curriculum and clinical training models that balance family-centered needs and needs of educators/learners



# Contact information

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