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8th Annual *Help Me Grow* National Forum

Academic Detailing and Quality Improvement: An Approach to Enhance Pediatric Primary Care Capacity to Mitigate the Impact of Toxic Stress

Tuesday, April 25th, 2017

Help Me Grow National Center

This project is generously supported by The JPB Foundation.

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Toxic Stress. Center on the Developing Child. Harvard University. http://developingchild.harvard.edu/science/key-concepts/toxic-stress/

WHAT IS TOXIC STRESS

Positive stress is normal and essential part of healthy development

Tolerable stress is caused by severe, time-limited difficulties

Toxic stress responses occur when children experience frequent and extended activation of the stress response without the positive protective presence of a supportive adult

It can disrupt brain development and lead to negative developmental, behavioral, and life course outcomes.

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WHY A FOCUS ON TOXIC STRESS

Developmental trajectory of young children is influenced by adverse childhood events and social determinants of health

Unique access of child health providers and significant opportunity to promote development and resiliency

Despite the recognition of pediatric primary care as a venue to address toxic stress, physicians perceive multiple barriers to effectively engaging in screening and surveillance

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STRATEGIES TO SUPPORT PEDIATRIC PRIMARY CARE

The American Academy of Pediatrics (AAP) has identified multiple strategies for pediatric practices as they move toward supporting families in new ways, including developing resource guides, providing support for referral and linkage, and identifying validated screening tools

Prompted the design of a multi-pronged intervention that leverages these strategies to support pediatricians in addressing toxic stress in the practice setting

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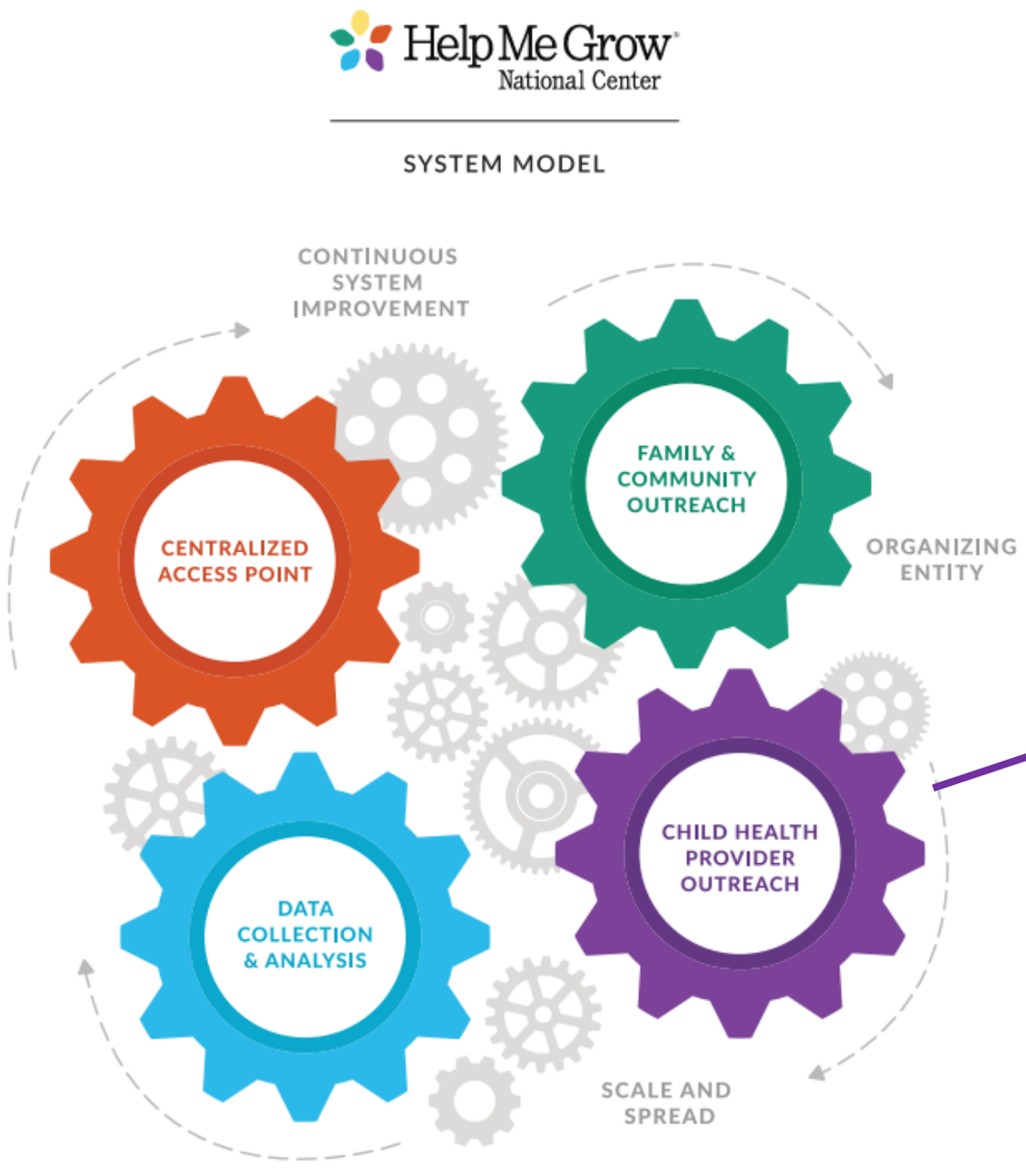
PROJECT OVERVIEW

Structure



Greater Hartford, CT

Chittenden County, VT

Alameda, CA

6 participating pediatric primary care practices from 3 *HMG* communities

Approach

Educating Practices in the Community (EPIC)

A model of academic detailing that trains providers and practice staff in the office setting on a variety of topics

Practice Quality Improvement (PQI)

Support practices in setting quality improvement aims, using data for feedback, and testing changes iteratively.

PROJECT EVALUATION

Physician Survey

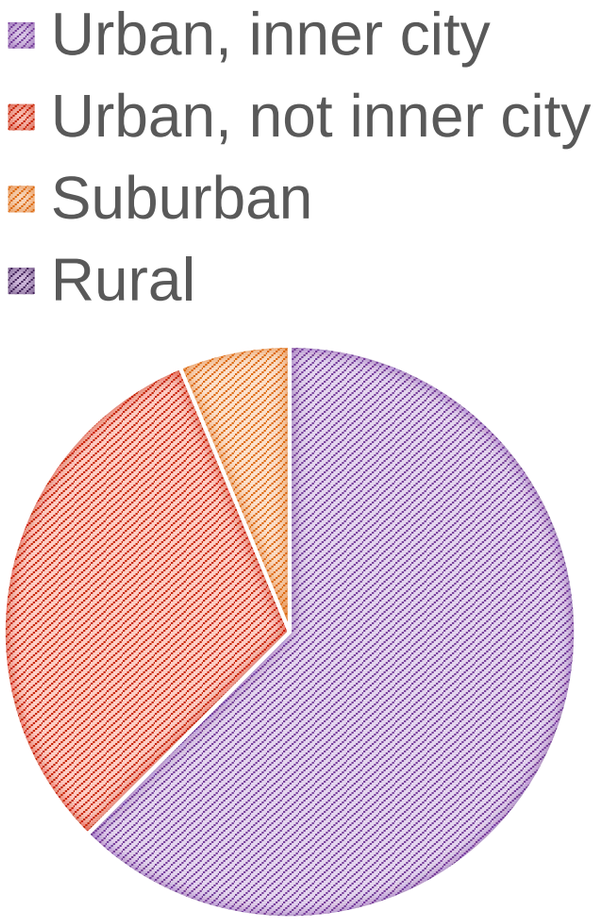
- Goal: To assess the degree to which providers have adequate knowledge and feel supported in their efforts to address developmental promotion, surveillance and screening; surveillance and screening for family mental health concerns; and promotion of the five protective factors at two time points.

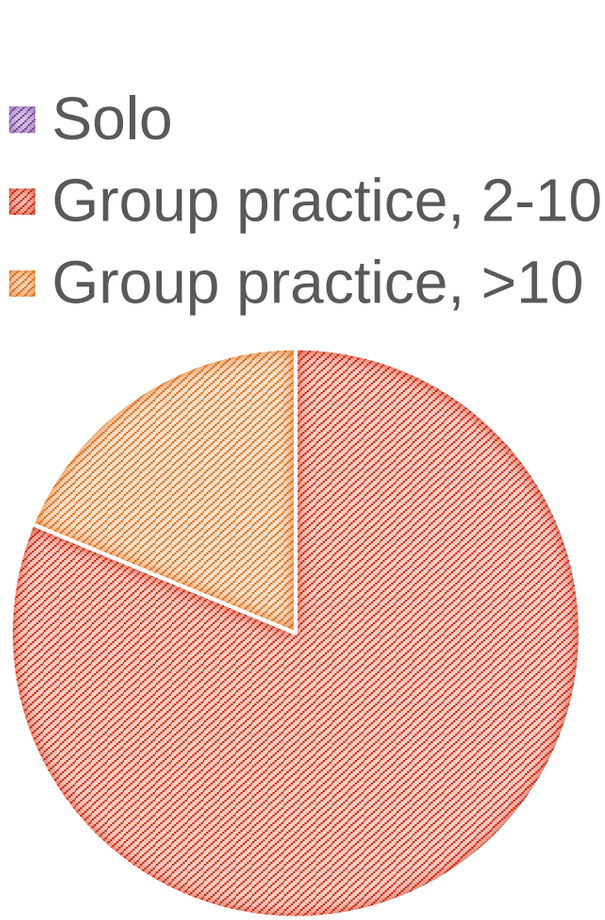
- 1) Inform the broader project team as to the baseline attitudes, knowledge, and practice capabilities related to toxic stress

- 2) Yield descriptive findings at baseline and at follow-up that suggest a possible pattern to explore in a subsequent, more rigorous manner

- 3) Provide important feedback about future modifications or improvements to better support pediatric primary care providers

Demographics





- Average of 13 years post-residency
- Average of 65 office visits per week

PROJECT EVALUATION

Frequency of Inquiry, Screening, Treatment and Referral

- Compared frequencies across childhood depression, maternal depression, and developmental concerns/delays

- **Inquiry** most common for developmental screening

- **Screening** (with formal instrument): highest for developmental screening, lowest for maternal depression, though 30% report usually screening for maternal depression

- **Treatment** rare for maternal depression, more common for child developmental and depression

- **Referral** frequency similar across all

PROJECT EVALUATION

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Developmental screening and surveillance	**6.25%** 1	**0.00%** 0	**0.00%** 0	**50.00%** 8	**43.75%** 7
Infant mental health (0-2)	**12.50%** 2	**0.00%** 0	**37.50%** 6	**31.25%** 5	**18.75%** 3
Early childhood mental health (3-6)	**0.00%** 0	**25.00%** 4	**18.75%** 3	**43.75%** 7	**12.50%** 2
Child mental health	**0.00%** 0	**18.75%** 3	**18.75%** 3	**50.00%** 8	**12.50%** 2
Maternal mental health	**6.25%** 1	**18.75%** 3	**43.75%** 7	**25.00%** 4	**6.25%** 1
Strengthening Families Protective Factors Framework	**6.25%** 1	**43.75%** 7	**25.00%** 4	**18.75%** 3	**6.25%** 1
Toxic stress	**6.25%** 1	**37.50%** 6	**25.00%** 4	**31.25%** 5	**0.00%** 0

Prior QI Experience

- Half of physicians surveyed reported prior practice-based QI work
  - 25% had completed 5 or more QI projects
- The most frequent reason for participating in QI was to fulfill requirements for MOC

PROJECT EVALUATION

Toxic stress and primary care

- All physicians agreed that prolonged or excessive stress in childhood can disrupt brain development and impair academic achievement

- 75% disagreed that screening for social and emotional risk factors within the family were beyond the scope of the medical home

- The most **common reported barriers** to addressing early brain development included:

  - Inadequate time for screening for social and emotional risk factors

  - Inadequate time for counseling parents on promoting healthy child-parent relationships

Practice Quality Improvement (PQI) [Formerly, Maintenance of Certification (MOC)]

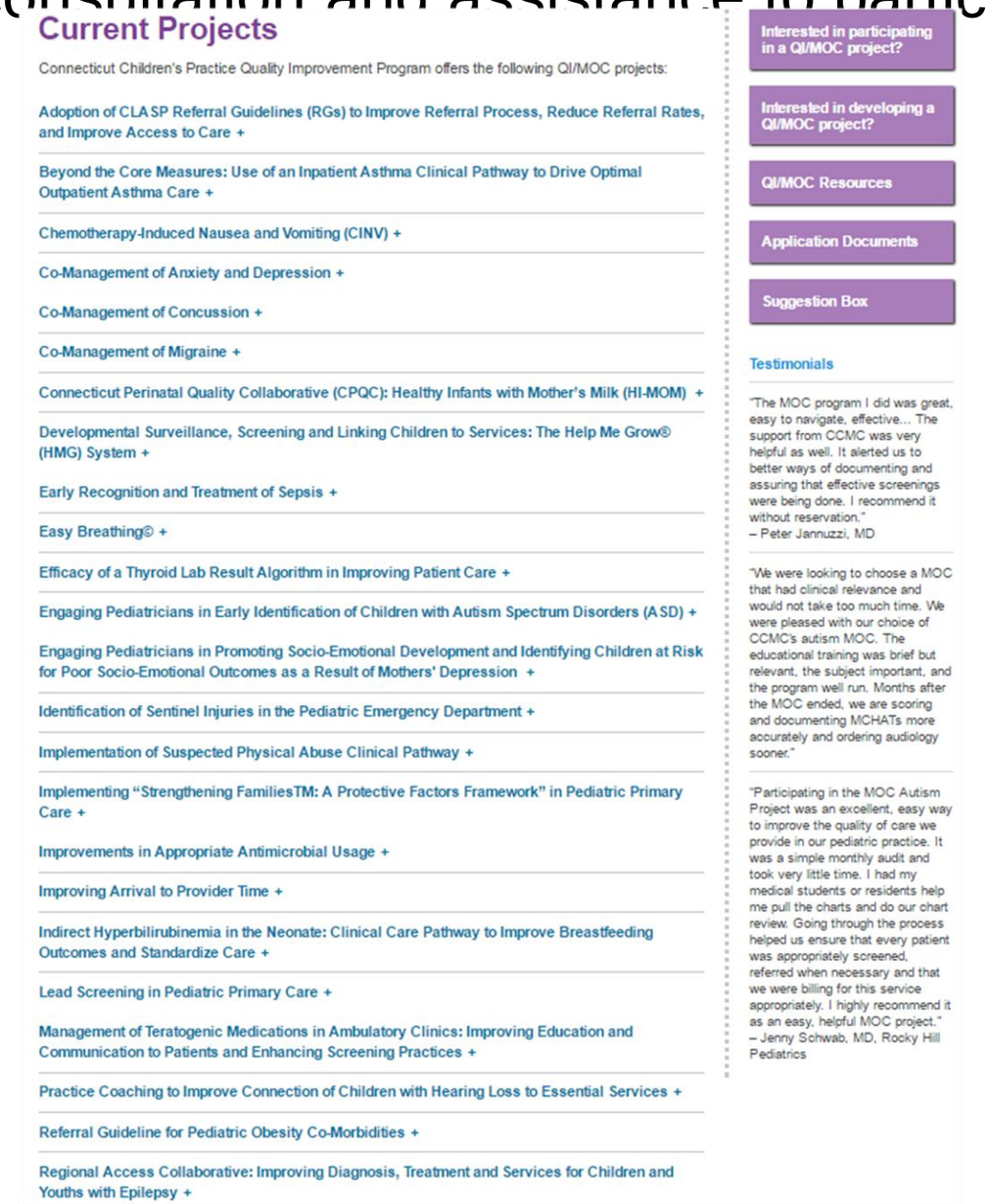
Eminet Abebe Gurganus, MPH

Engaging Hospital and Community Providers

PQI bridges the Medical Center to community pediatricians by engaging them in QI projects that lead to sustained improvements in the delivery of care.

Program Components

- Web-based education on QI methodology
- QInsight, a web-based data collection and reporting system
- Ongoing consultation and assistance to participating practices



Current Projects

Connecticut Children's Practice Quality Improvement Program offers the following QI/MOC projects:

Adoption of CLASP Referral Guidelines (RGs) to Improve Referral Process, Reduce Referral Rates, and Improve Access to Care +

Beyond the Core Measures: Use of an Inpatient Asthma Clinical Pathway to Drive Optimal Outpatient Asthma Care +

Chemotherapy-Induced Nausea and Vomiting (CINV) +

Co-Management of Anxiety and Depression +

Co-Management of Concussion +

Co-Management of Migraine +

Connecticut Perinatal Quality Collaborative (CPQC): Healthy Infants with Mother's Milk (HI-MOM) +

Developmental Surveillance, Screening and Linking Children to Services: The Help Me Grow® (HMG) System +

Early Recognition and Treatment of Sepsis +

Easy Breathing© +

Efficacy of a Thyroid Lab Result Algorithm in Improving Patient Care +

Engaging Pediatricians in Early Identification of Children with Autism Spectrum Disorders (ASD) +

Engaging Pediatricians in Promoting Socio-Emotional Development and Identifying Children at Risk for Poor Socio-Emotional Outcomes as a Result of Mothers' Depression +

Identification of Sentinel Injuries in the Pediatric Emergency Department +

Implementation of Suspected Physical Abuse Clinical Pathway +

Implementing "Strengthening FamiliesTM: A Protective Factors Framework" in Pediatric Primary Care +

Improvements in Appropriate Antimicrobial Usage +

Improving Arrival to Provider Time +

Indirect Hyperbilirubinemia in the Neonate: Clinical Care Pathway to Improve Breastfeeding Outcomes and Standardize Care +

Lead Screening in Pediatric Primary Care +

Management of Teratogenic Medications in Ambulatory Clinics: Improving Education and Communication to Patients and Enhancing Screening Practices +

Practice Coaching to Improve Connection of Children with Hearing Loss to Essential Services +

Referral Guideline for Pediatric Obesity Co-Morbidities +

Regional Access Collaborative: Improving Diagnosis, Treatment and Services for Children and Youths with Epilepsy +

Interested in participating in a QI/MOC project?

Interested in developing a QI/MOC project?

QI/MOC Resources

Application Documents

Suggestion Box

Testimonials

"The MOC program I did was great, easy to navigate, effective… The support from CCMC was very helpful as well. It alerted us to better ways of documenting and assuring that effective screenings were being done. I recommend it without reservation."
– Peter Jannuzzi, MD

"We were looking to choose a MOC that had clinical relevance and would not take too much time. We were pleased with our choice of CCMC's autism MOC. The educational training was brief but relevant, the subject important, and the program well run. Months after the MOC ended, we are scoring and documenting MCHATs more accurately and ordering audiology sooner."

"Participating in the MOC Autism Project was an excellent, easy way to improve the quality of care we provide in our pediatric practice. It was a simple monthly audit and took very little time. I had my medical students or residents help me pull the charts and do our chart review. Going through the process helped us ensure that every patient was appropriately screened, referred when necessary and that we were billing for this service appropriately. I highly recommend it as an easy, helpful MOC project."
– Jenny Schwab, MD, Rocky Hill Pediatrics

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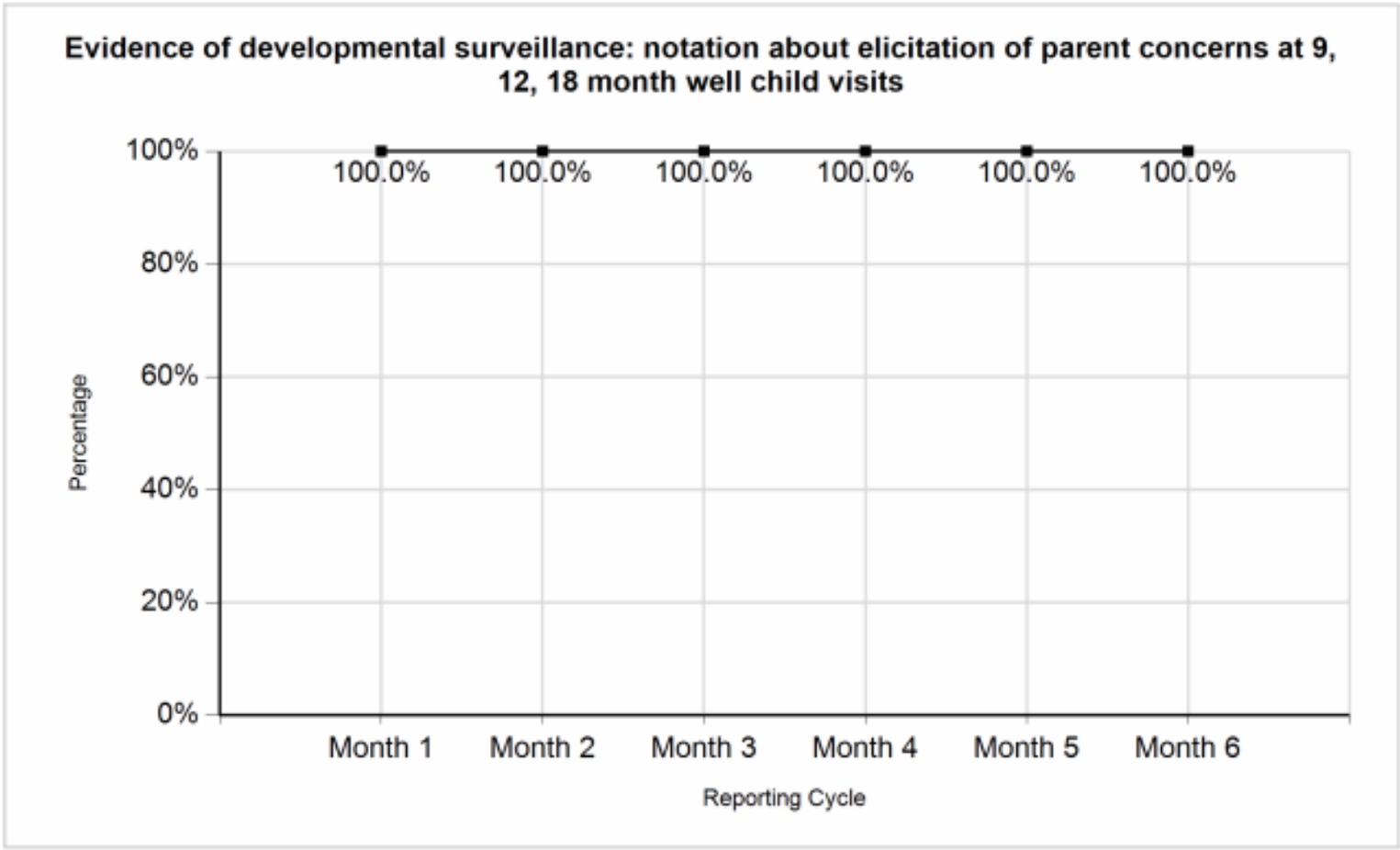
Project Measures



Report Cycle	# of Charts	Total # of Parental Concerns Asked/Noted
1	20	20
2	20	20
3	20	20
4	20	20
5	20	20
6	20	20

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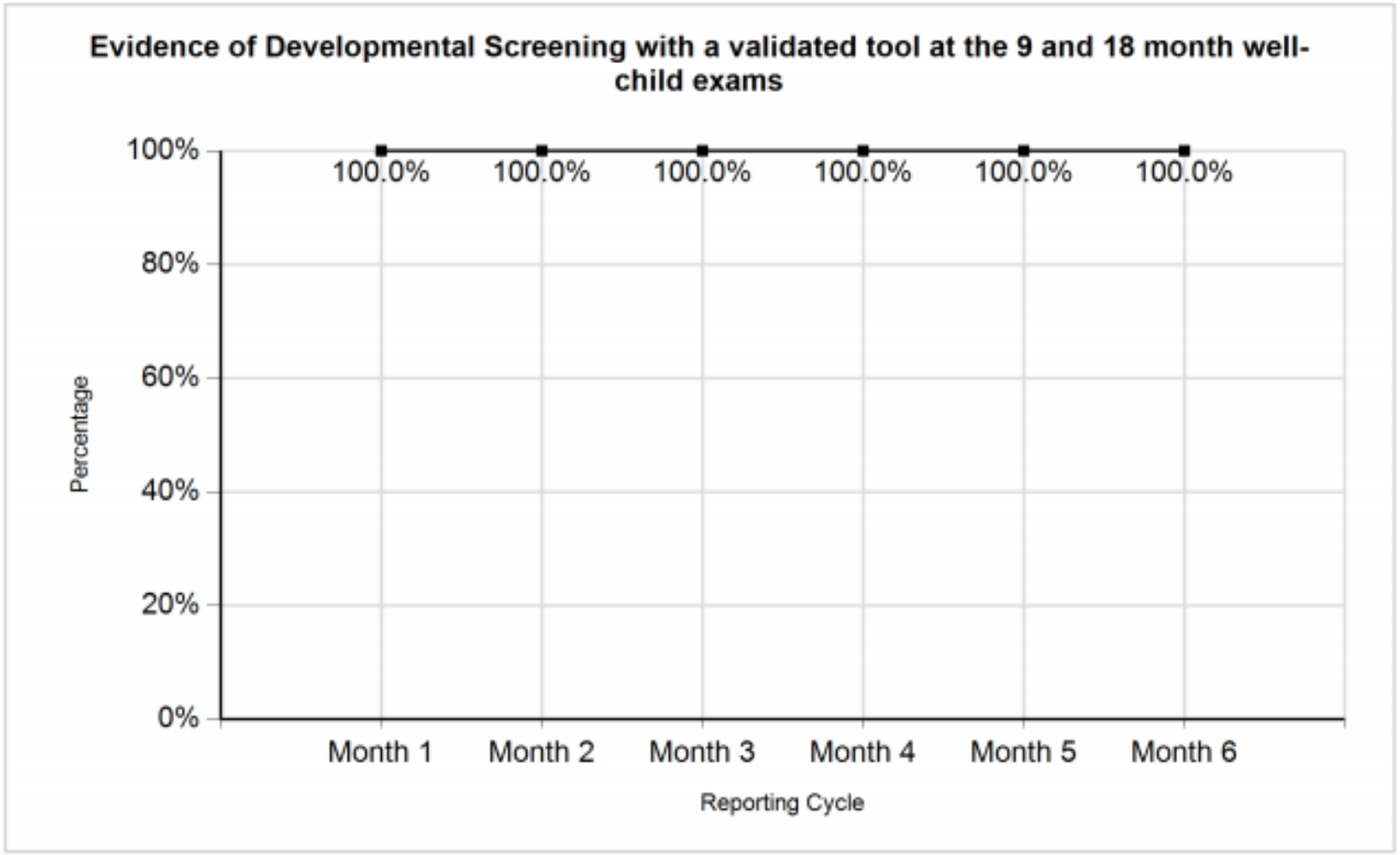
Project Measures (cont'd)



Report Cycle	# of Charts	# of charts (9 and 18 Months)	# of Completed Developmental Screenings
1	20	10	10
2	20	14	14
3	20	12	12
4	20	12	12
5	20	13	13
6	20	15	15

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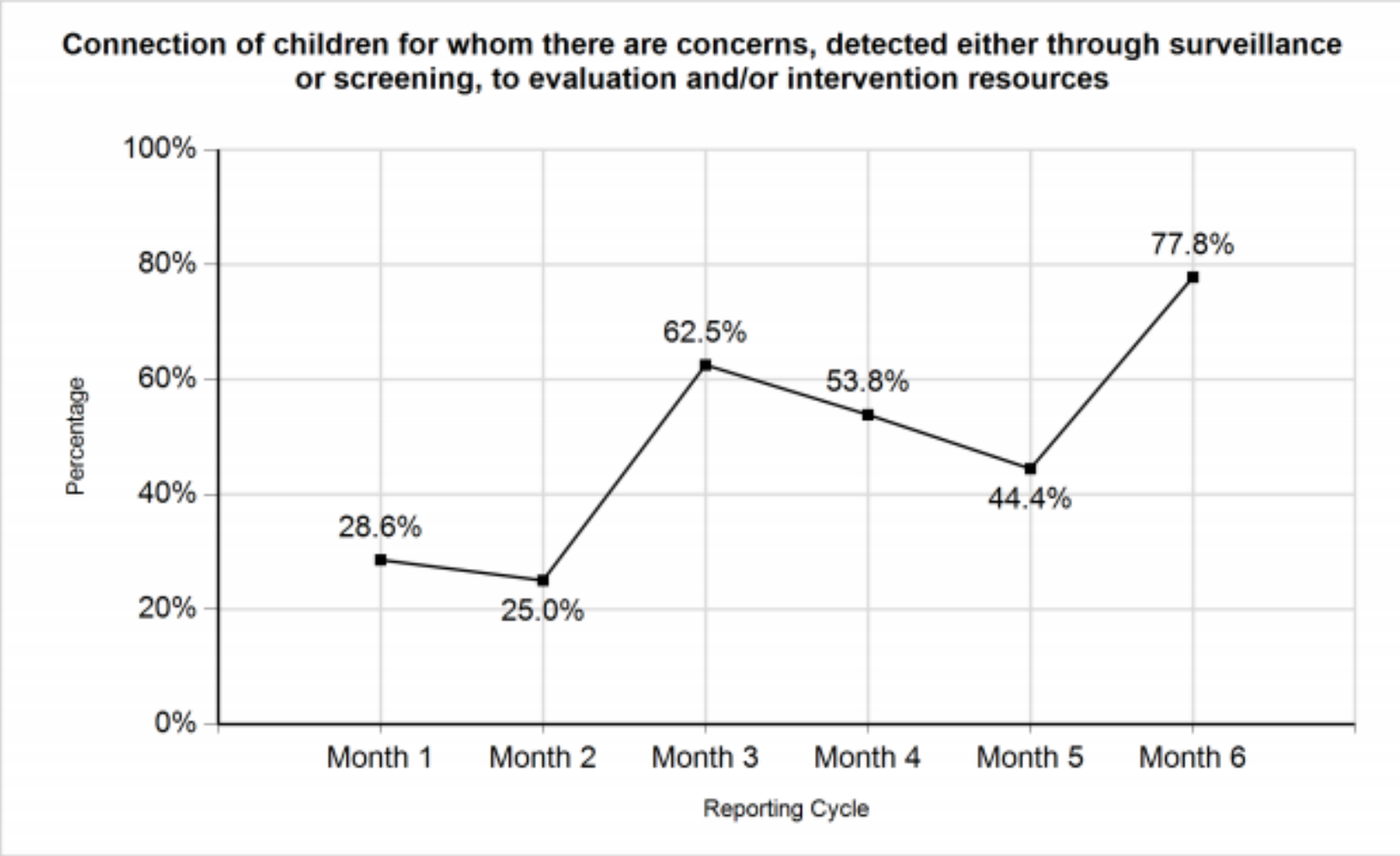
Project Measures (cont'd)



Report Cycle	Total Surveys	# of failed developmental screenings	# of children who received services
1	20	7	2
2	20	12	3
3	20	8	5
4	20	13	7
5	20	9	4
6	20	9	7

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The Model for Improvement: Three Questions

1. **AIM:** What are we trying to accomplish?

Improve the rates of:
- **developmental surveillance**
- **developmental screening**
- **connection of children for whom surveillance and/or screening show concerns to intervention services**

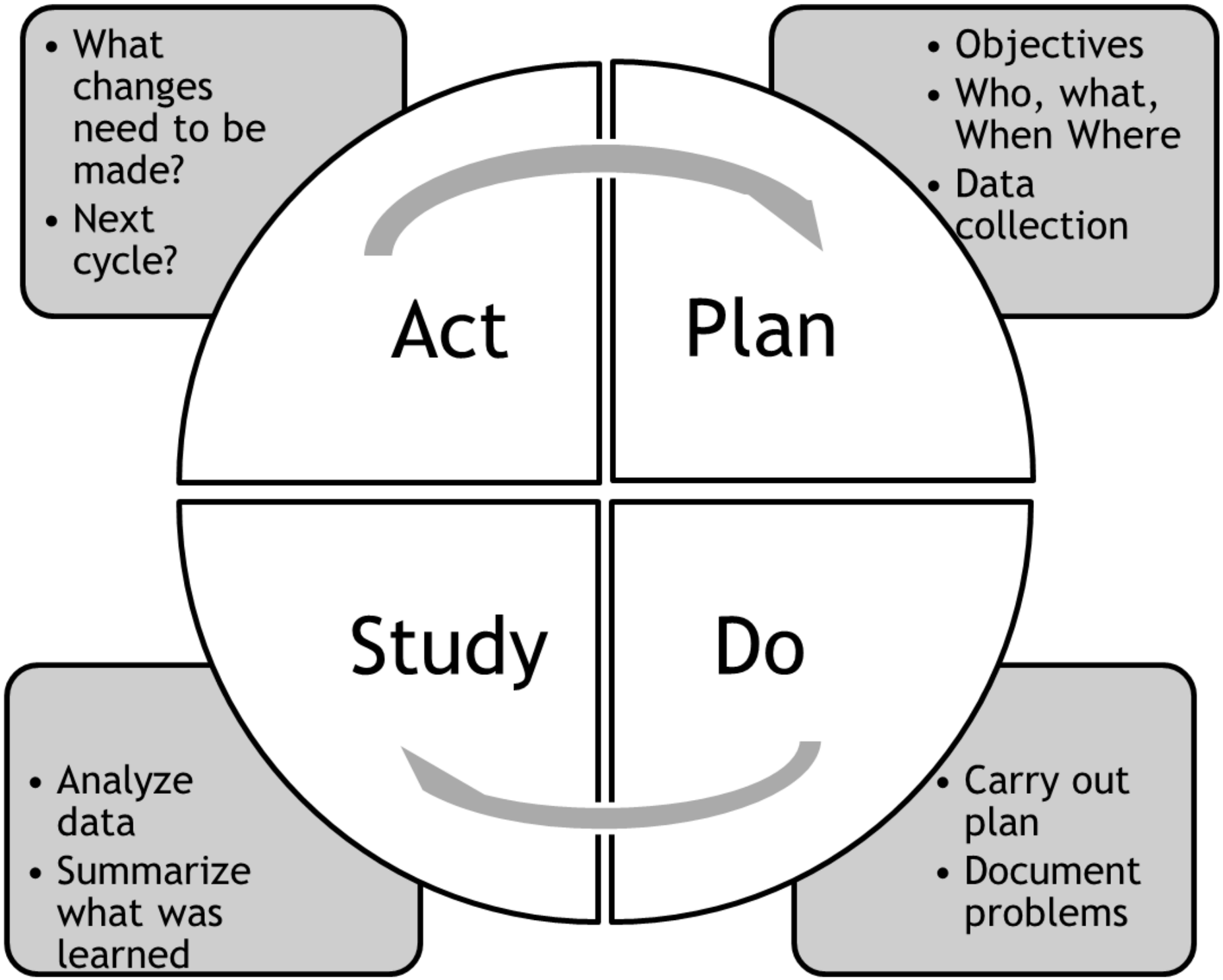
2. **MEASURES:** How will we know a change is an improvement?

3. **CHANGES:** What changes can we make that will result in improvement?

- **Make copies of referral forms and put into accessible folders/bins**
- **Medical assistants make note of parental concerns for doctor to follow-up**
- **Call intervention services to learn more about them and build relationship**
- **Ask parents to fill out ASQ in waiting room or mail to complete before visit**
- **Implement a referral flag in EHR**

Connecticut Children's MEDICAL CENTER

Plan-Do-Study-Act (PDSA) Cycles



PDSA

- **PLAN:** Plan the test or observation, including a plan for collecting data
- **DO:** Try out the test on a small scale
- **STUDY:** Set aside time to analyze the data and study the results
- **ACT:** Refine the change, based on what was learned from the test

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Educating Practices in the Community: Supporting Pediatric Practices in Mitigating the Effects of Toxic Stress

EPIC (Educating Practices in the Community)

- Lunch time visits to practices
- Presentation by respected expert/local service provider
- Topics of importance to child health providers
- Emphasize local system support
- Quality improvement opportunity
- Free to practices

EPIC: Structural Requirements

- Backbone organization to coordinate visits and ensure core components are present
- Quality monitoring data system
- Connection to state and community resources
- Connection to pediatric primary care

Changing pediatric practice

Research supports Academic Detailing as an effective strategy for promoting practice change in several areas:

- Pediatric pain management (Schechter, N. L., Bernstein, B. A., Zempsky, W. T., Bright, N. S., & Willard, A. K. (2010) Educational outreach to reduce immunization pain in office settings. Pediatrics, 126(6), e1514-1521.)

- Autism screening (Honigfeld, L., Chandhok, L., & Spiegelman, K. (2011) Engaging pediatricians in developmental screening: The effectiveness of academic detailing. Journal of Autism and Dev Dis, (DOI) 10.1007/s10803-011-1344-4.)

- Asthma management (Cloutier, M. M., & Wakefield, D. B. (2011) Translation of a pediatric asthma-management program into a community in Connecticut. Pediatrics, 127(1), 11-18.)

Key components of Academic Detailing

- Knowledge of baseline behavioral and barriers to change
- Clear educational and behavioral objectives
- Credibility of sponsoring organization
- Referencing authoritative and unbiased resources
- Active participation from learners
- Concise visual materials
- Repetition of essential messages
- Positive reinforcement for practice improvement through follow-up

Why focus on child health providers?

- Near universal utilization of child health services
- Near universal access to parents
- Longitudinal relationship with families
- Trusting relationship
- Opportunity to connect with other services

Three EPIC Modules to Help Practices Address Toxic Stress

1. *Help Me Grow* Developmental Monitoring and Connecting Children to Services

2. Family Mental Health

3. Strengthening Protective Factors to Help Reduce Toxic Stress

Conducting all three modules in practices in CT, VT and CA

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Help Me Grow Module

Help Me Grow **Developmental Monitoring and Connecting Children to Services**

- AAP guidelines related to developmental surveillance and screening at well child visits in the first two years of life.
- Importance of conducting developmental surveillance and screening
- Components of developmental surveillance
- Validated developmental screening tools and how to use them:
  - PEDS (Parents' Evaluation of Developmental Status)
  - Ages & Stages Questionnaire
- Tips to help practices make developmental screening part of their office system
- Billing and coding for reimbursement
- Using *Help Me Grow* to connect children at risk of developmental delay to evaluation and intervention services

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Family Mental Health Module

Family Mental Health

- Importance of nurturing and responsive care for babies
- Brain development, toxic stress and responsive caregiving
- Maintaining a "family mental health history" for all patients
- Postpartum mental health concerns
- Postpartum mental health screening, including screening tools and reimbursement
- Promoting social-emotional development
- Soliciting and responding to parental and caregiver concerns
- Using *Help Me Grow* to connect families to supports/resources

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The Protective Factors Framework Module

Strengthening Protective Factors to Mitigate the Effects of Toxic Stress

- Five Protective Factors in the Framework
- Promoting the Protective Factors in pediatric visits
- Toxic stress risk factors and infant/toddler brain development
- Review of how pediatric practices can respond to trauma
- Screening and reimbursement options
- Using *Help Me Grow* to connect families to supports/resources

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CHDI Support of Affiliates

- Training in three project modules-so far we have completed one module. Considering in person training as we develop other modules
- Sharing of protocols, resource materials, evaluation and feedback forms
- Training on Quality Improvement Data Entry
- Modification of existing materials to meet specific community needs
- Sharing of reporting tools
- Technical assistance as needed

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HMG Vermont

Help Me Grow® Vermont

and the JPB Foundation Pilot: Enhancing Quality Improvement Initiatives in Vermont

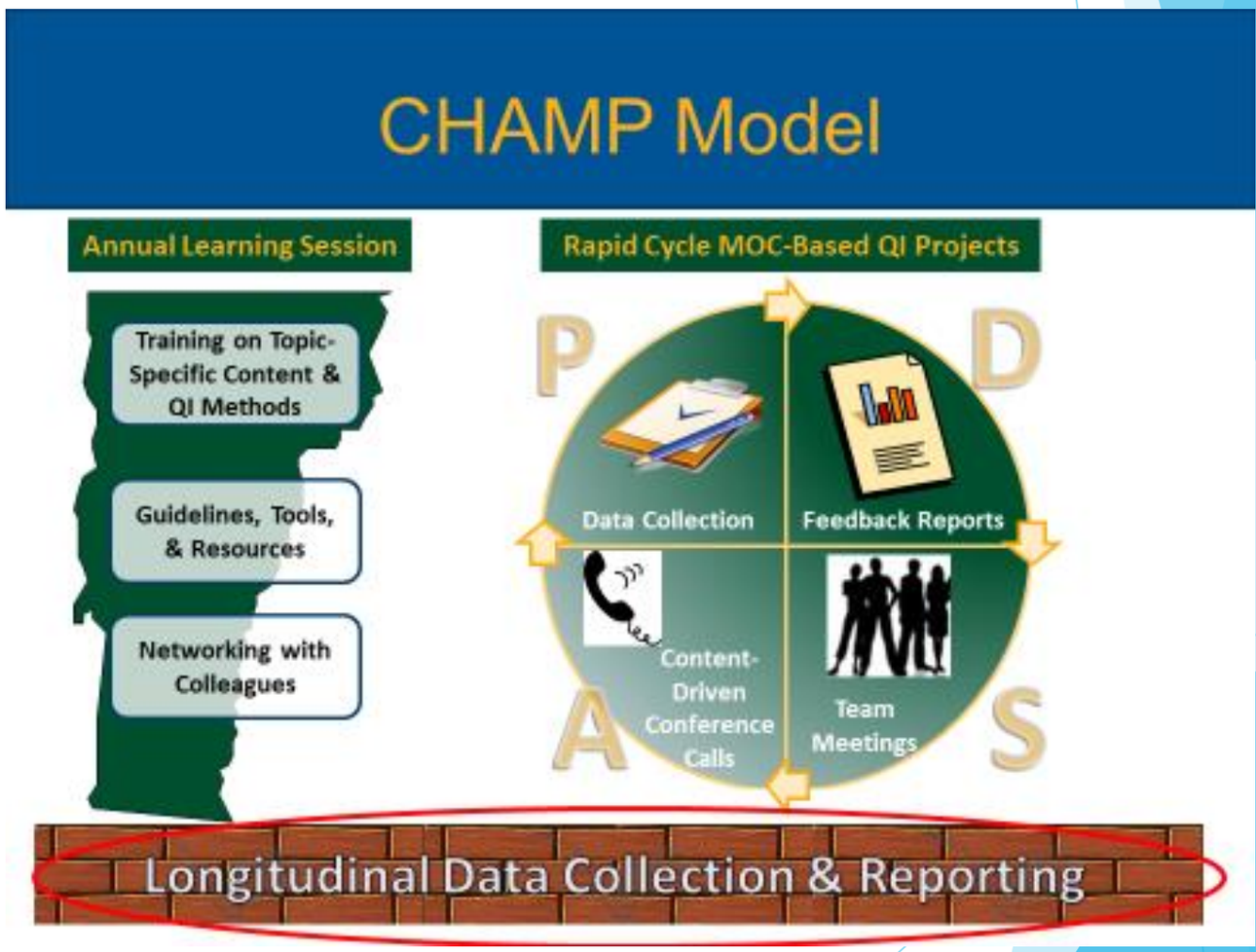
Quality Improvement: Promoting Protective Factors, Mitigating Toxic Stress, and Linking to Community Resources

Vermont Adaptations:

- Worked with 2 affiliated practices
  1. UVM Ped Primary Care Clinic
     - Ped Immigrant Clinic
  2. UVM Ped Primary Care Clinic in Williston (smaller, suburban)
- Coordinated with the existing VCHIP QI schedule and reporting
- Engaged the local Parent Child Center, the Family Room, (PCC) Director as a co-project lead
  - The PCC works with many immigrant and refugee families seen at clinic
- Embedded HMG referrals
  - into the 6 month well child visit
  - at any appointment when parents have questions

Coordination Versus Replication

Vermont Child Health Improvement Program
UNIVERSITY OF VERMONT COLLEGE OF MEDICINE

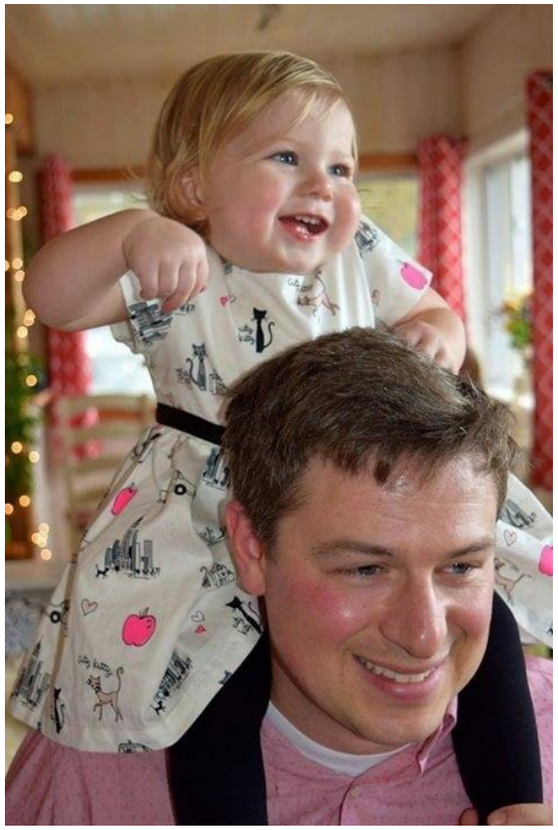


Engaging Practices

- Partner with Community Resources
  - Family Room
  - Toxic stress and protective factors
- Surveillance and referral:
  - 6 month visit
  - Other times as needed
- Meet the practice where they are:
  - Piggyback on existing efforts

Next Steps

- Continue the HMG JPB Pilot
  - Enhance protective factors and connections to community resources such as the Family Room
- Electronic HMG referral form
  - Embed the new referral form in the EMR
- Target these pediatric practices for the developmental screening registry pilot
  - Include Head Start as a partner in the project
  - Include the Parent Child Center



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HMG Alameda County

Help Me Grow
Alameda County

The HMG Alameda County JPB/Toxic Stress Project Experience

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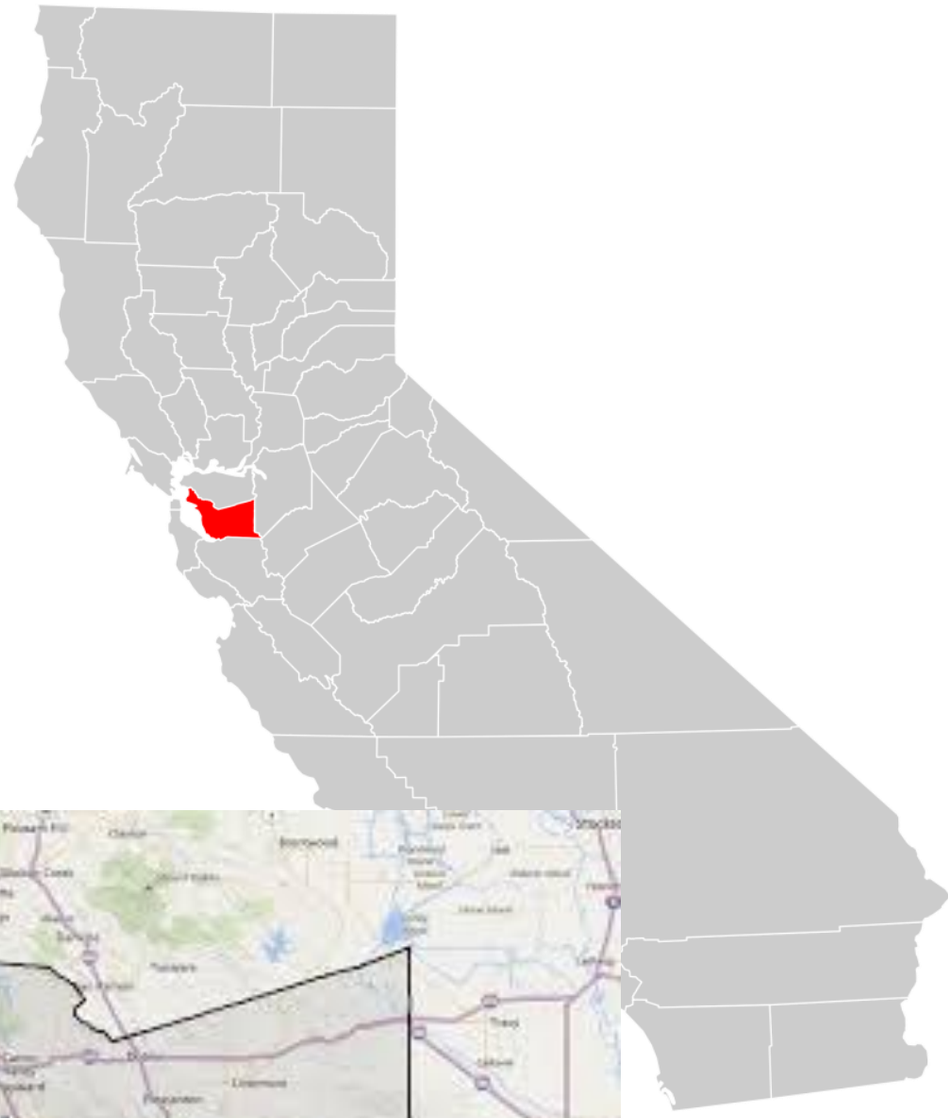
FIRST 5 ALAMEDA COUNTY

Help Me Grow Alameda County

- Alameda County
  - Population=1.5 million (2010)
  - Urban, diverse
- HMG since 2011
- Pediatric Outreach
  - 50 offices
  - 9726 screens 2016
    - 6342 ASQ
    - 3384 MCHAT



Recruitment of Practices

- Recruited from existing partners
  - Contacted larger sites eligible for participation
  - Targeted 4 Federally Qualified Health Centers (FQHCs) with emails/calls/outreach by TA providers
- Depended on existing relationships

Integrating the 1st Module

- Focused on Developmental Surveillance, Screening, and Referral
  - Challenge- both sites already screening and referring
  - Tailored module
    - Adding intervals
    - Increasing Referrals
    - Strengthening Implementation
    - Getting to Universal

Implementing Module 1

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- Successes
  - 1 site added the 9 month interval
  - PCP saw higher 9 month “of concern” score for problem solving in Chinese speaking population
    - New Ideas!
  - Determined screening process and barriers
- Challenges
  - Data Collection
  - Impact on practice and other staff

FIRST 5 ALAMEDA COUNTY

HMG Connecticut

Connecticut Practices

- CHDI also responsible for implementing Toxic Stress project in 2 CT practices

The reality of the situation:

- Practices had just been converted to new owners, Connecticut Children's Medical Center

- Slow start up to project because office staff were not hired yet

- One practice was much smaller than the other practice

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Approach To Work in CT

- In the beginning of the project, I was in contact with one key provider that worked in both practices. He was essential to scheduling
- Scheduling is usually during lunch time- Bringing food is key
- Registering Docs for Project-I brought my lap top and had each Doctor sit down at the laptop to register during a lunch meeting
- Delivering Modules: Try and get a physician or someone knowledgeable about the topic to deliver module (if possible)
- Data Entry for PQI- I had to figure out the best way to work with each practice. They all have their own unique way of doing things. In one practice they identified one person who was the go to person for data entry and in the other practice it was one of the three pediatricians.

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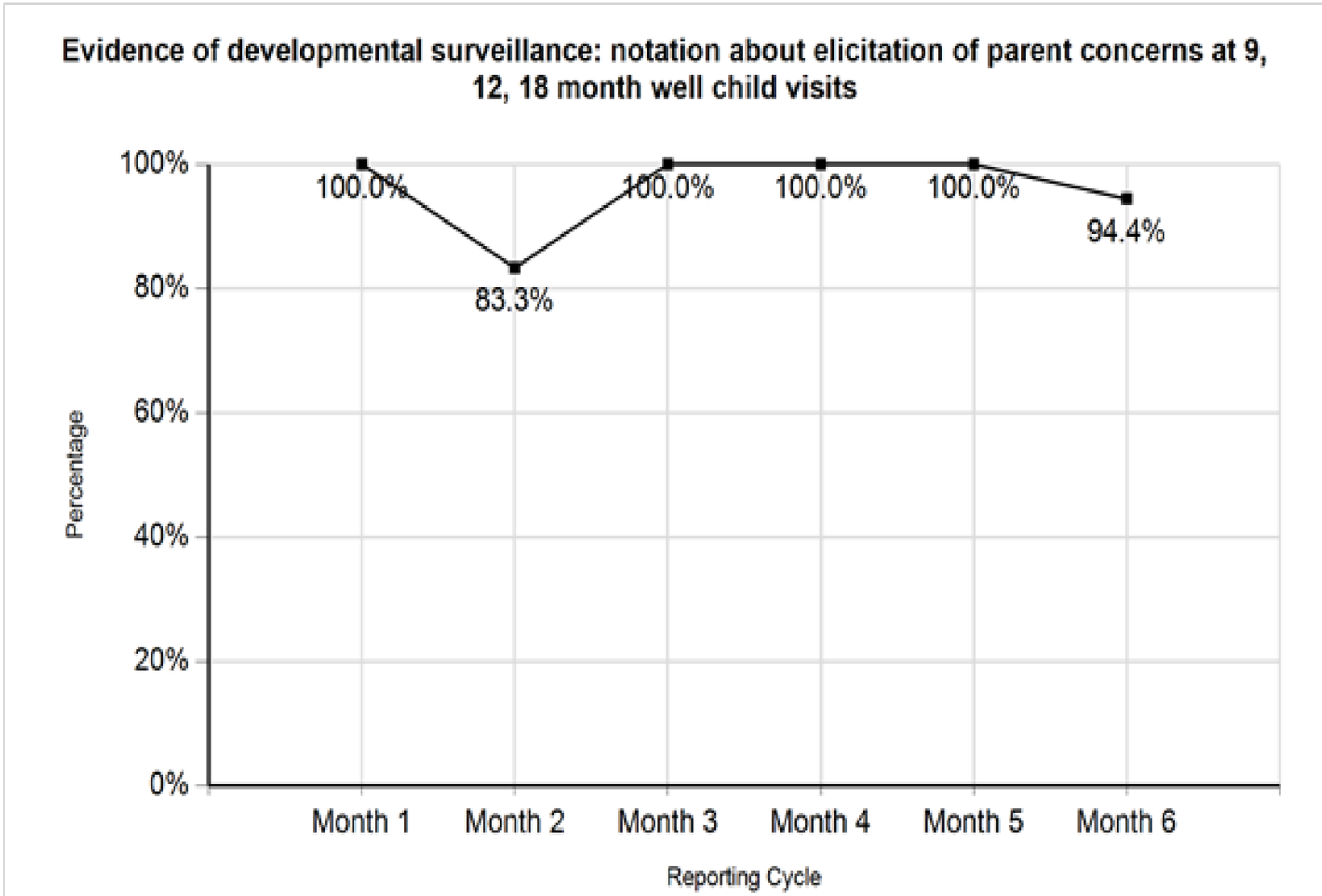
QI Improvement Results-Example



Report Cycle	# of Charts	Total # of Parental Concerns Asked/Noted
1	18	18
2	18	15
3	12	12
4	20	20
5	20	20
6	18	17

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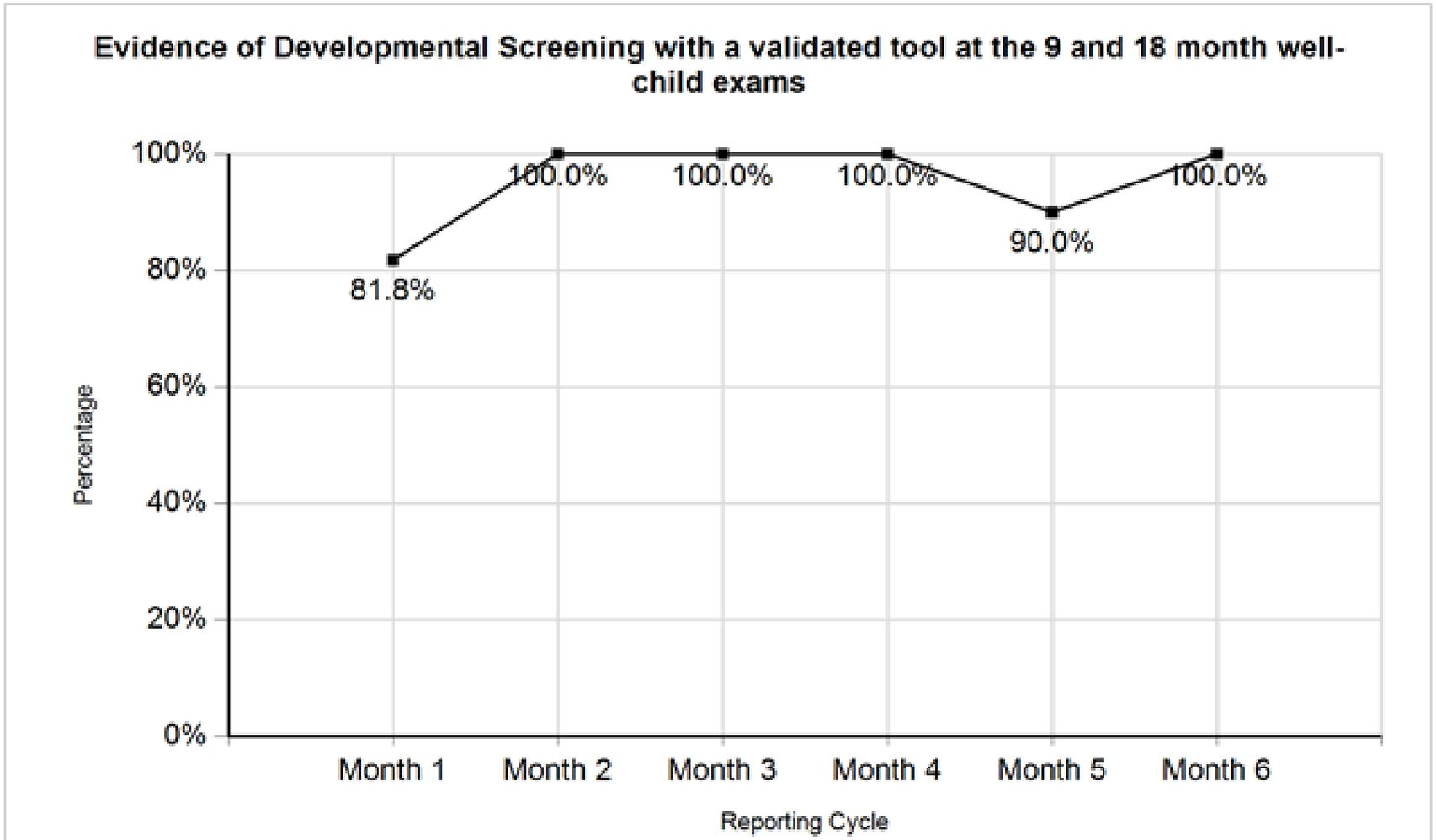
QI Improvement Results-Example



Report Cycle	# of Charts	# of charts (9 and 18 Months)	# of Completed Developmental Screenings
1	18	11	9
2	18	14	14
3	12	8	8
4	20	14	14
5	20	10	9
6	18	12	12

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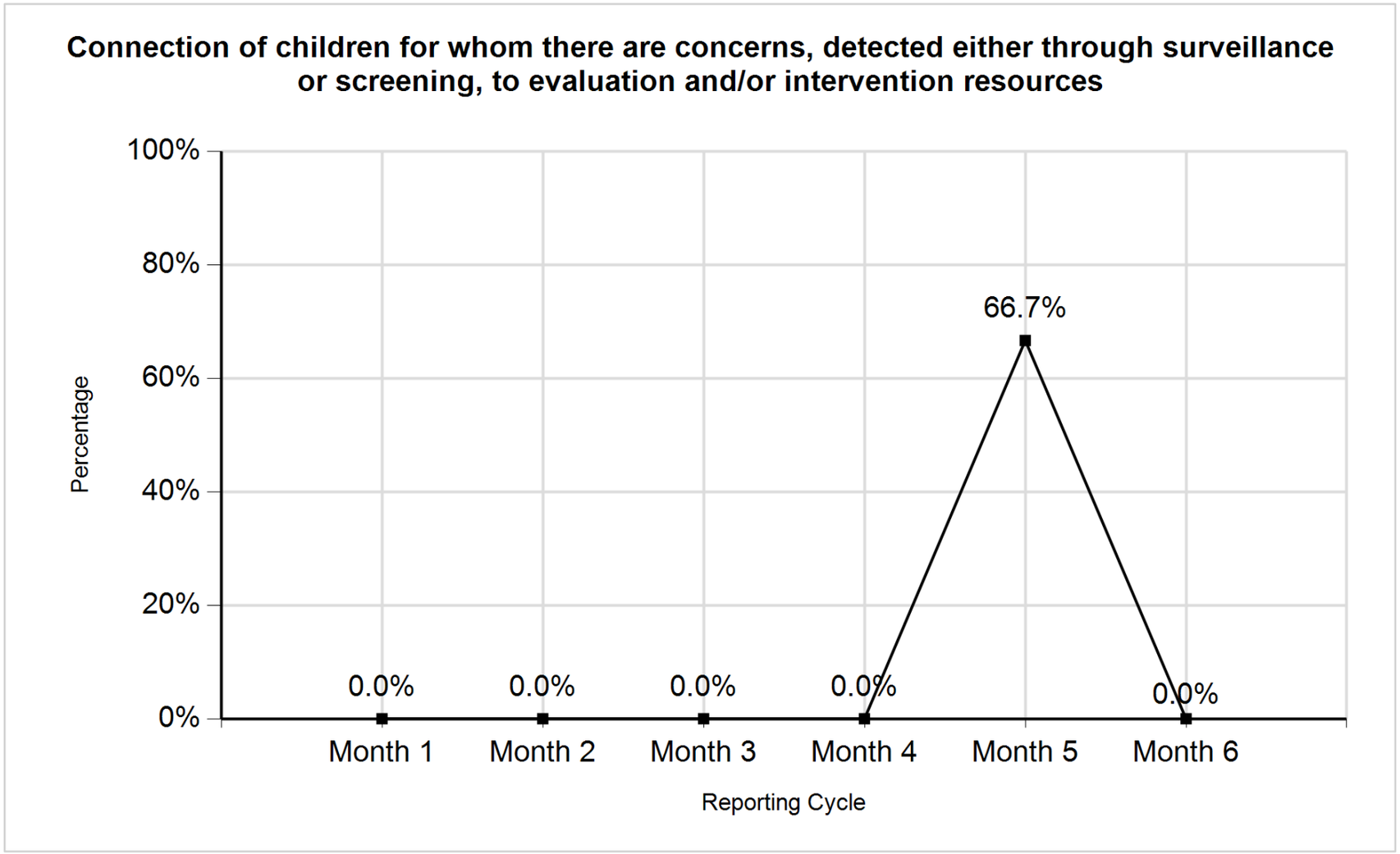
QI Improvement Results-Example



Report Cycle	Total Surveys	# of children with concerns noted during surveillance and/or screening that required follow-up outside of the practice	# of children who were linked to services
1	18	1	0
2	18	2	0
3	12	2	0
4	20	0	0
5	20	3	2
6	18	1	0

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Practice	Rpt Cycle	Created	Type	Note
	Oct-2016	12/06/2016	Notes	Baseline data
		12/06/2016	Plan	We had a meeting to discuss QI project, this is the baseline for us. We know our numbers are not as good as they will be.
		12/06/2016	Do	We started handing out PEDS.
		12/06/2016	Study	Baseline data, we will improve overtime.
		12/06/2016	Act	We have instituted office procedures so that all 9 and 18 months patients get the PEDS
	Nov-2016	12/14/2016	Notes	Thank you so much, we only had 18 patients in Nov. Hopefully we make the 20 for December.
		12/14/2016	Plan	We plan to give out the peds to every 9, 18 and 24 months. We started to have the patients do them first before they fill out the other documents.
		12/14/2016	Do	We started handing out the PEDS. I observed that many people were asking why they have to fill out all these forms. But it has been getting easier for them.
		12/14/2016	Study	We have learned that things take time, but we will do better.
		12/14/2016	Act	We will try to hand out the forms so that we have a higher success rate.
	Dec-2016	01/06/2017	Notes	We will strive to improve ourself monthly
		01/06/2017	Plan	Our objective was to improve from last month's one and we did.
		01/06/2017	Do	We handed out the PEDS to everyone, we checked for Parental concerns.
		01/06/2017	Study	I learned that everyone scores PEDs differently, so had to get clarification if it was a Pass or fail.
		01/06/2017	Act	I have asked the doctors to score this as a pass or fail instead of see score sheet or peds

LESSONS LEARNED

LESSONS LEARNED

- Be flexible
- Identify a physician to serve as a champion for the project
- Designate an office person to do data entry and spend time training that person
- Offer to come in to assist them in the first few cycles of data entry -- bring food!
- Provide copies of any screening tools that you can (if free)
- Leave providers with plenty of resources for referrals

LESSONS LEARNED

- Requires creativity and buy-in from practice management and staff to manage competing priorities and projects related to quality improvement

- Challenges associated with data collection and strategies that have helped lessen these challenges

- Opportunity to interact with practices on another level and generate other avenues to support the interface with *HMG*

Q&A