Seeding and Scaling Health Care Innovation

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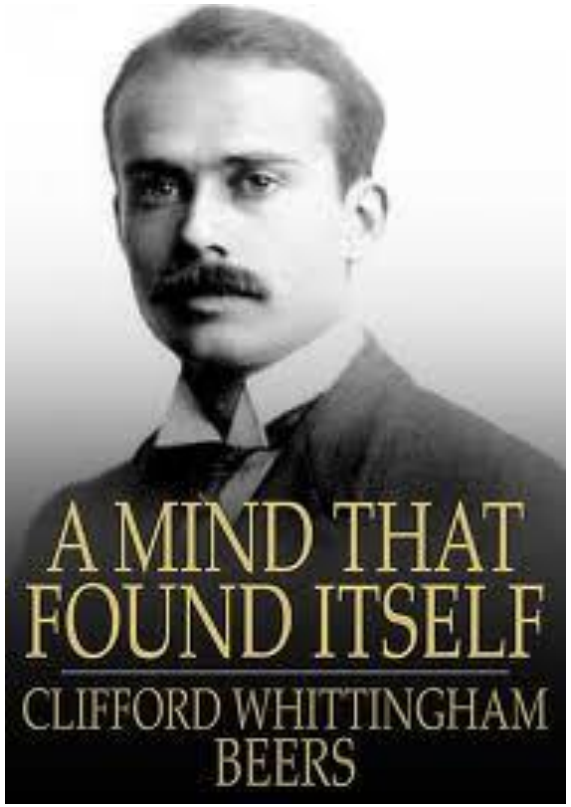
MOVING FAMILIES FORWARD

The Who and the Why



"A pen rather than a lance has been my weapon of offense and defense; with its point I should prick the civic conscience and bring into a neglected field men and women who should act as champions for those afflicted thousands least able to fight for themselves."
— Clifford W. Beers, 1907

Strategic Question: What support would our families need to thrive, be healthy and well?

We believed that a new model of care must address:

1. **The Whole Family**
2. **Reduced Chronic Stress (Trauma)**
3. **Integrate multidisciplinary services to address Physical, Mental and Social Determinants of Health**

Seizing Opportunity

Health Care Reform Launched: Triple Aim

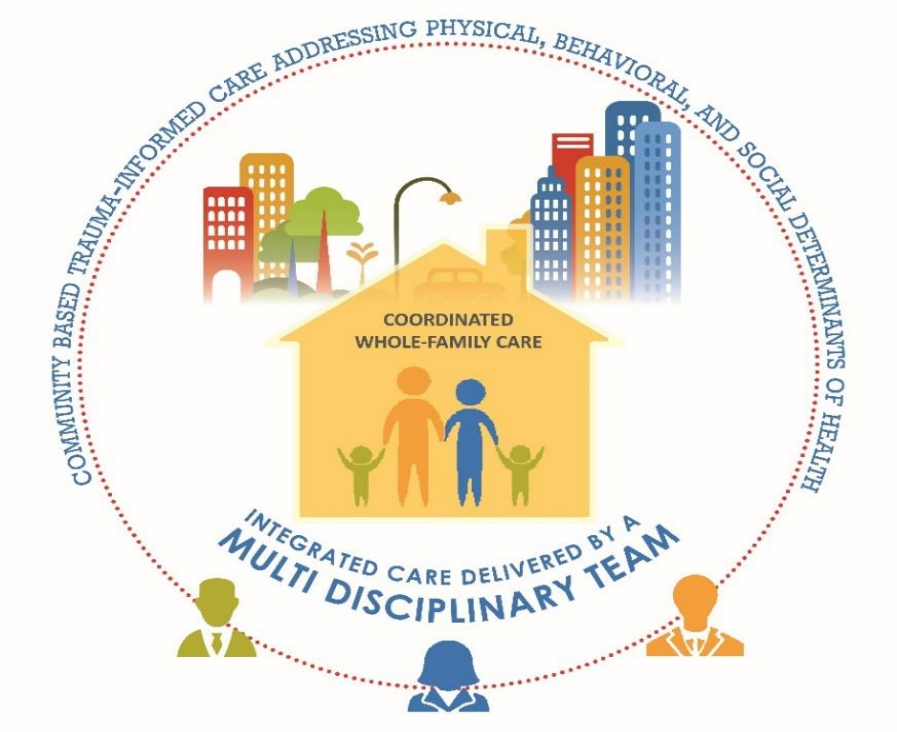
- ❑ We believed that mental health providers could greatly contribute to working with the complexly ill.

School Reform Launched:

- ❑ Success was not achieved; mental health issues became the focus

It is IHI's belief that new designs must be developed to simultaneously pursue three dimensions, which we call the "**Triple Aim**": Improving the patient experience of care (including quality and satisfaction); Improving the health of populations; and Reducing the per capita cost of **health care**.

Institute for Healthcare Improvement: The IHI Triple Aim



Clifford Beers strategic innovation efforts since 2013:

1. **"ACCORD" Program**
2. **Schools Trauma Coalition**
3. **Specialty Center for Autism and IDD**

In Home, In School, and In Office

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ACCORD

"Advanced Care CoORDination" In Home

- ACCORD is based on Clifford Beers' findings following a three-year pilot -- *Wraparound New Haven* -- funded by a $9.7 million innovation grant from the Centers for Medicare & Medicaid Services.

- The pilot began in 2014; families were enrolled through January 2018.

CHRONIC MEDICAL

- Hypertension
- Obesity
- Asthma
- ASD
- Celiac
- Diabetes

CHRONIC BEHAVIORAL

- Anxiety
- Depression
- Alcohol/Substance Abuse
- PTSD

SOCIAL DETERMINANTS OF HEALTH

- Physical environment
- Social support networks
- Socioeconomic status
- Education
- Access to health care
- Employment

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ACCORD offers a unique combination of elements designed to get results

- **TEAM APPROACH**: ACCORD teams consist of a care coordinator, a behavioral health therapist, psychiatrist, pediatrician, adult primary care connections made to relevant community providers, and medical consultation
- **WHOLE-FAMILY APPROACH**: all participating family members receive care
- **WHOLE-PERSON APPROACH:** participants' needs are addressed across the board – physical, behavioral, and social.
- **COLLABORATIVE RELATIONSHIPS**: YNHH, Embedded Clinician in Yale Priamry, DSS, DCF and local primary care offices
- **IN-HOME SERVICE DELIVERY:** ACCORD services are delivered in the home

WHAT HAPPENS IN ACCORD?

- Assessments for all participating family members that explore
  - physical health
  - behavioral health
  - social well-being

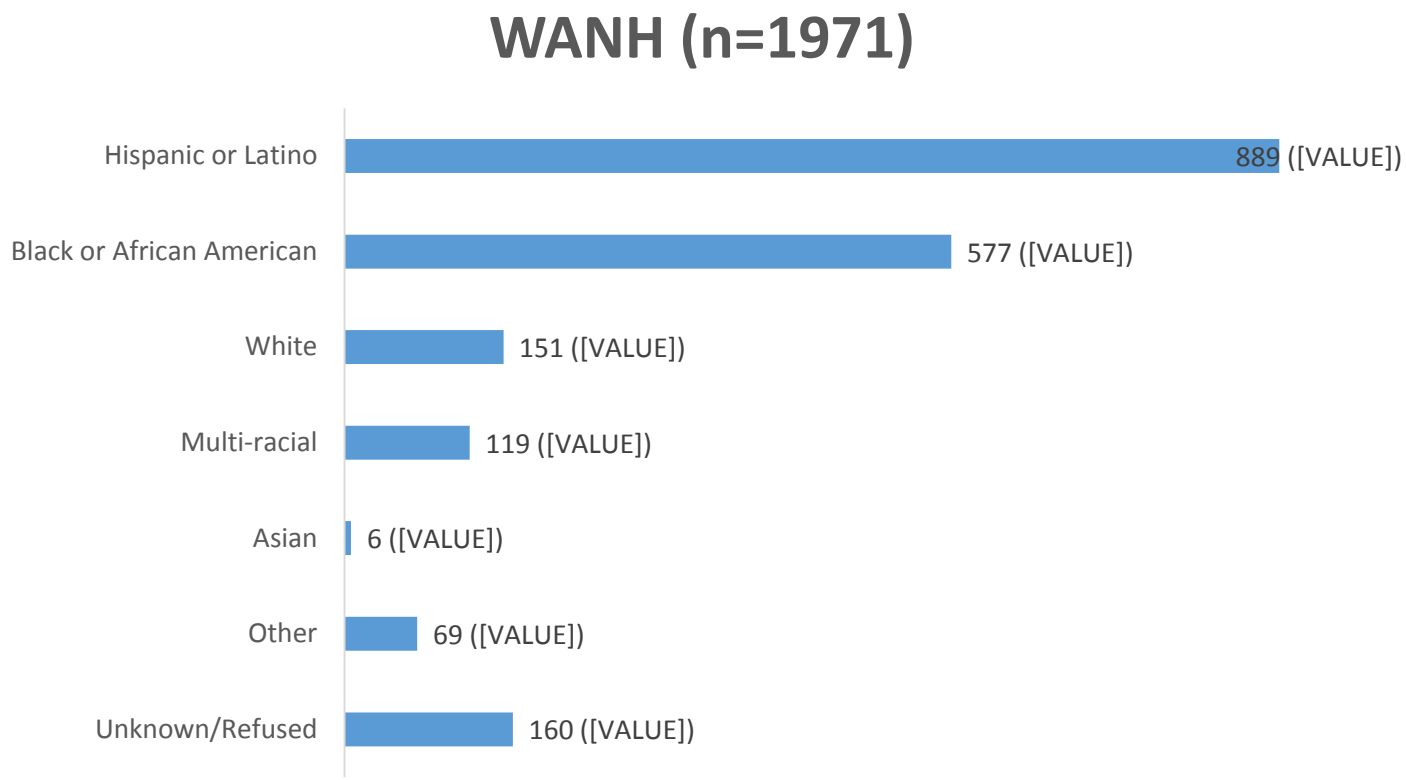
- **A "playbook" is developed based on what the family wants/needs**
  - **specific wellness goals for all family members**
  - **detailed action steps to reach goals for all family members**
  - **a crisis plan**
  - **how to manage medication**

THIS IS THE FAMILY'S PLAN OF CARE

- Delivered IN THE HOME – added convenience and supporting better results
  - Weekly visits/monthly child and family team meetings and telephone check-ins

ACCORD/
Wraparound New Haven
Data Analysis
Health Management Associates (HMA)

Overall Program Enrollment



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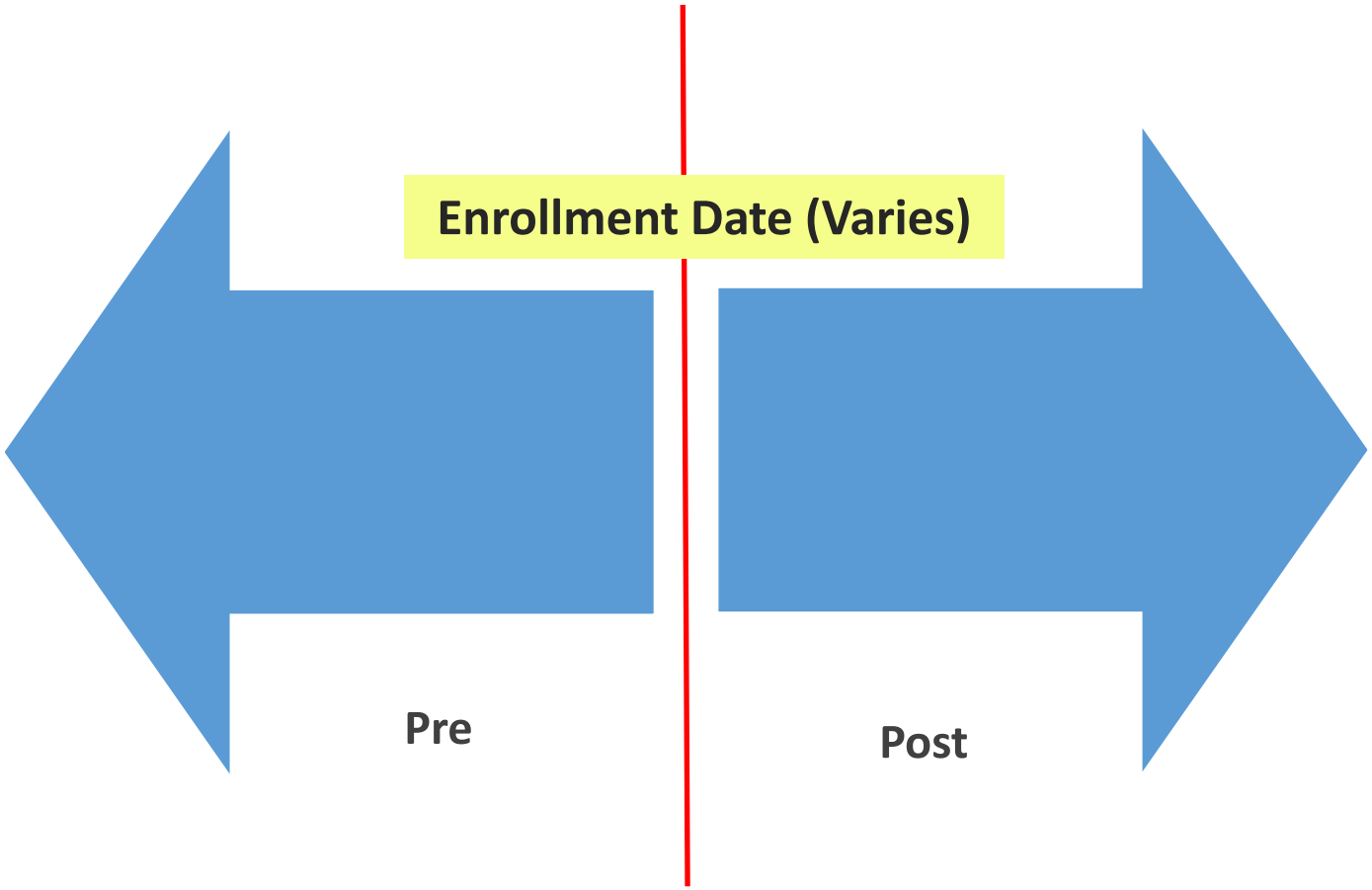
Overview of Data

- **Claims data from January 1, 2013 through December 31, 2016**
- **Received data for 1,284 patients**
- **T-test and regression analyses on all costs includes data on 1,075 patients**

Spans



Example:
Patient enrolls in program on 5/15/2015 and has been continuously Medicaid eligible since 2012.
"Pre" period is 1/1/2013 through 5/14/2015.
"Post" period is 5/15/2015 through 12/31/2016 or shorter if disenrolled before six months in the program or no longer Medicaid enrolled.

Overview of Methods

Compared pre-enrollment versus post-enrollment per patient per month costs using:

- Each patient's **pre-enrollment span,** determined by their Medicaid eligibility start date and their program enrollment date
  - Mean pre-enrollment span: 31.7 months

- Each patient's **post-enrollment span,** using their program enrollment date and ending on December 31, 2016 as the end date (unless Medicaid eligibility or program enrollment ended prior to December 31, 2016)
  - Mean post-enrollment span: 9 months

Information About Chronic Conditions

The mean number of chronic conditions is 2.4.

- 26% have no chronic conditions
- 74% have 1 or more chronic conditions
- 14% have one chronic condition
- 21% have two chronic conditions
- 39% have three or more chronic conditions

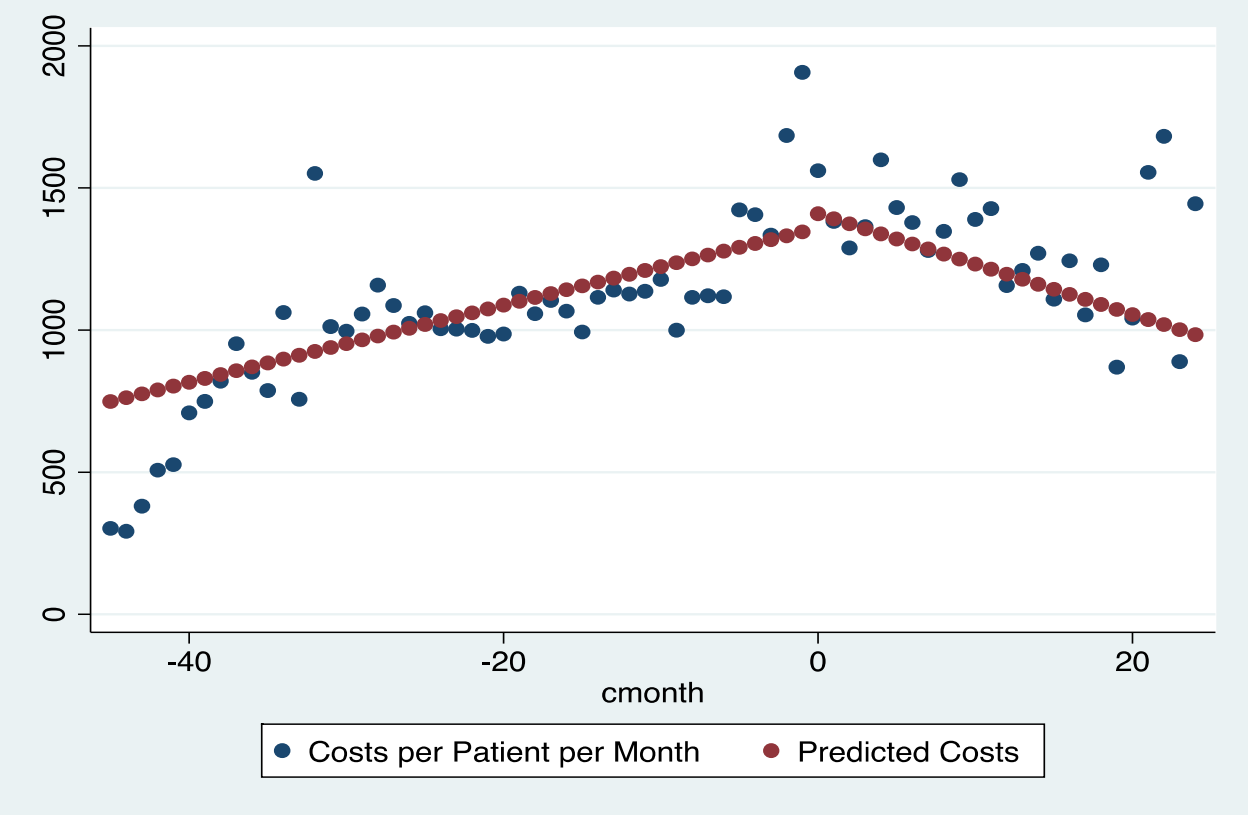
Total Costs: Regression Results

Costs were significantly higher for:

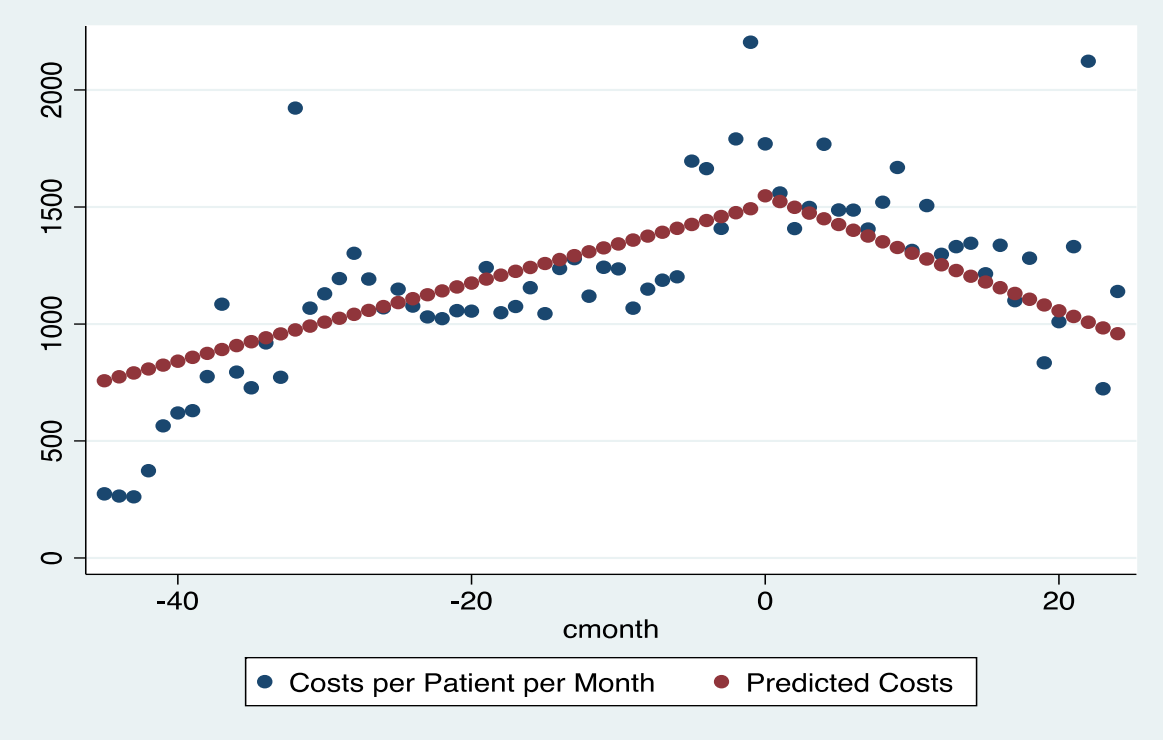
- Men
- People with more chronic conditions
- People with heart disease, cancer, hypertension, and asthma
- Younger patients

- Costs decline in the post-period similarly across all groups – no significant differences between groups in their cost reductions

Total Costs: Regression Results



Age 0-17: Regression Results



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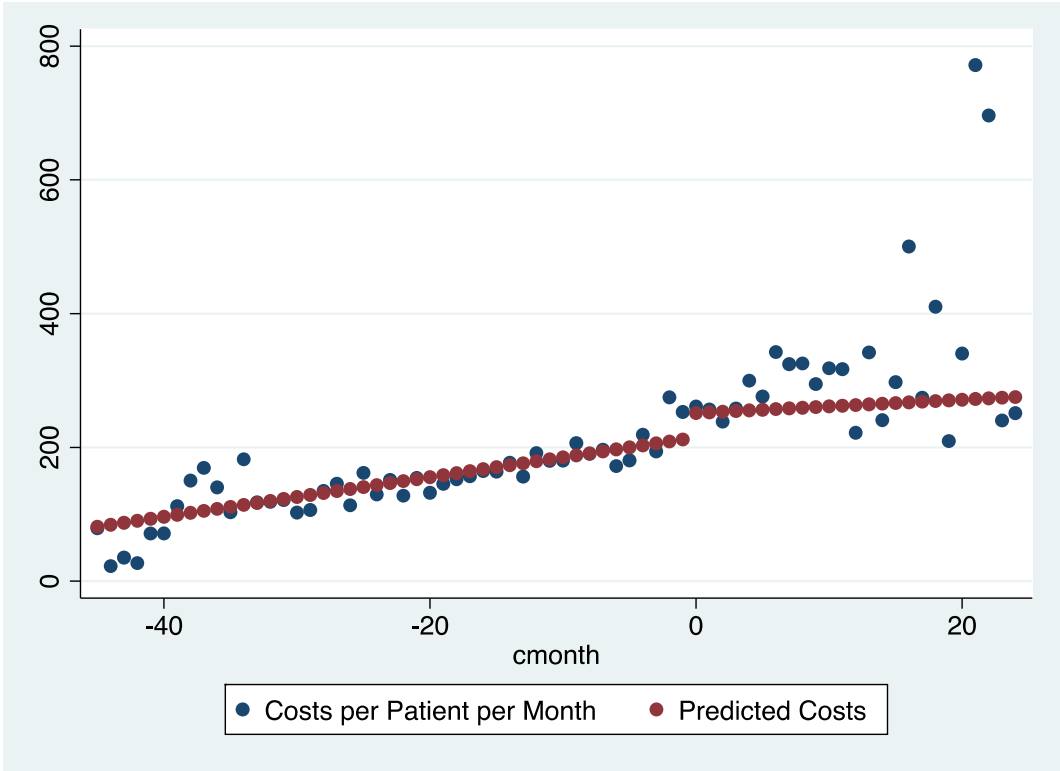
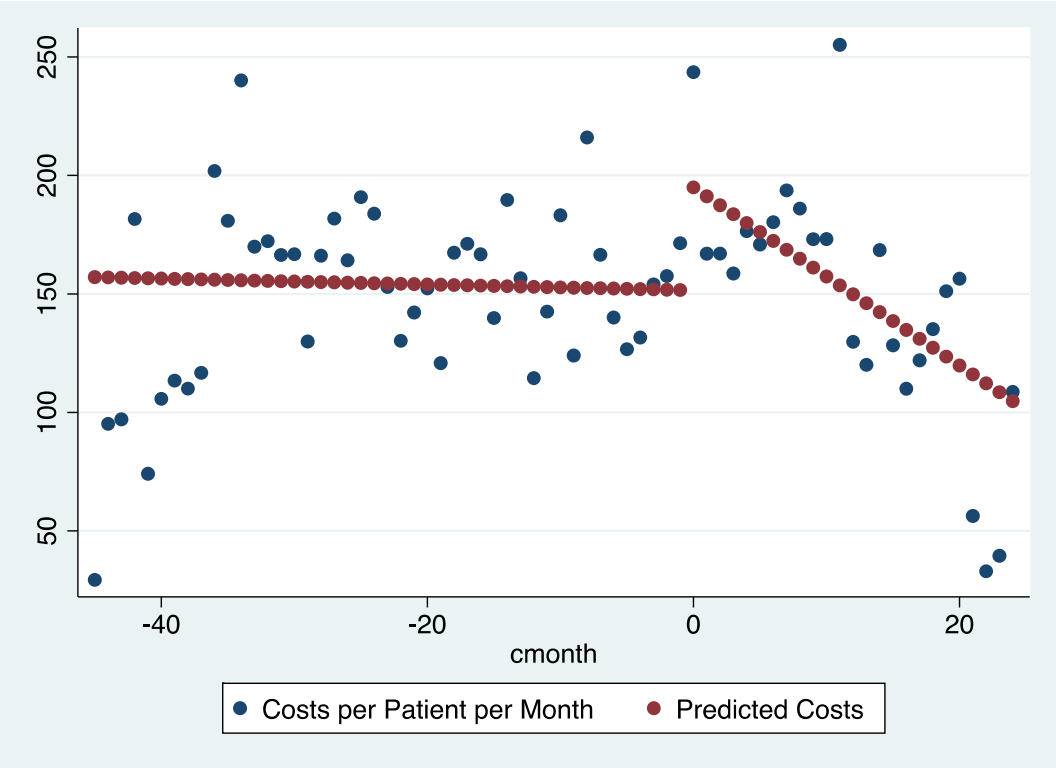
Pharmacy: Regression Results



Outpatient: Regression Results



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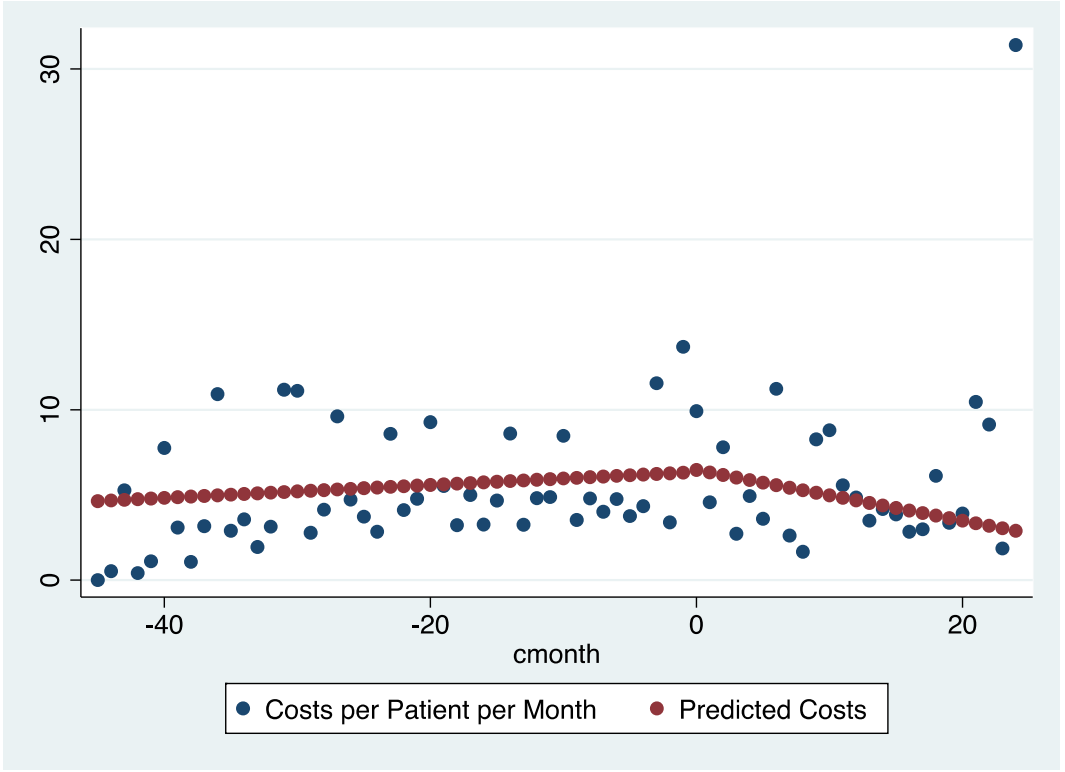
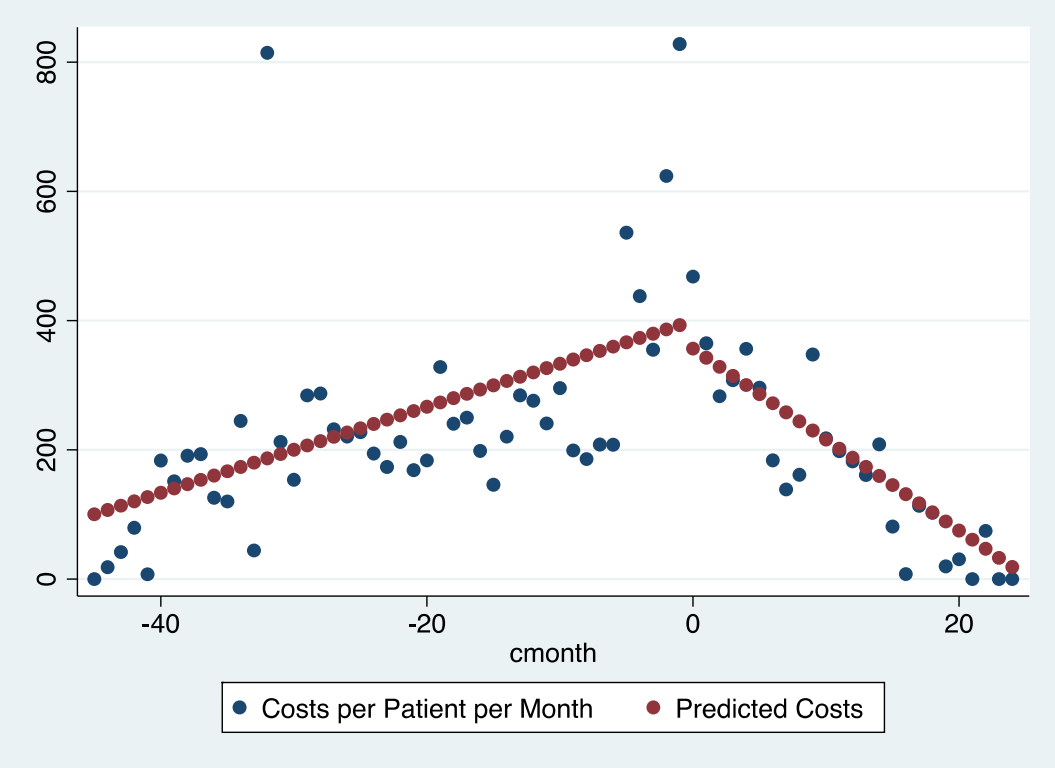
Lab: Regression Results



Inpatient: Regression Results



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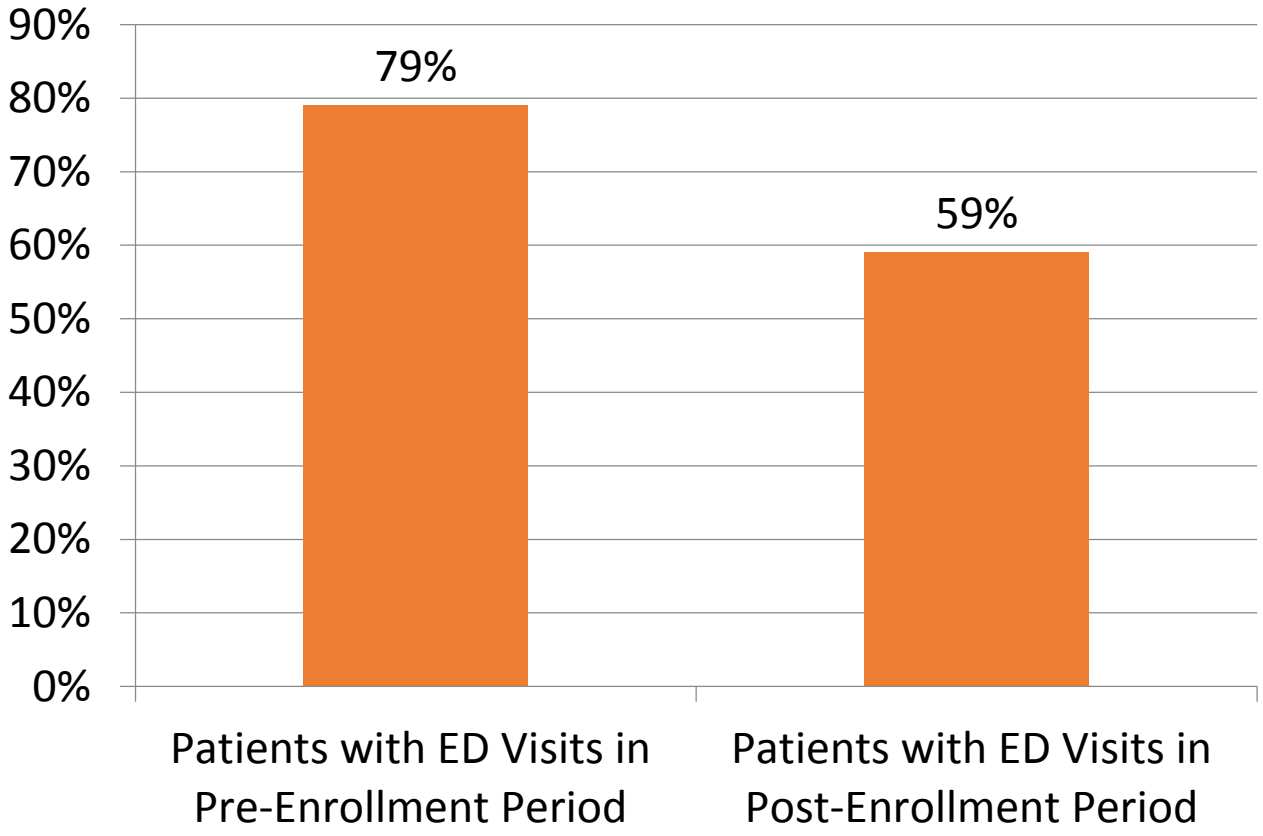
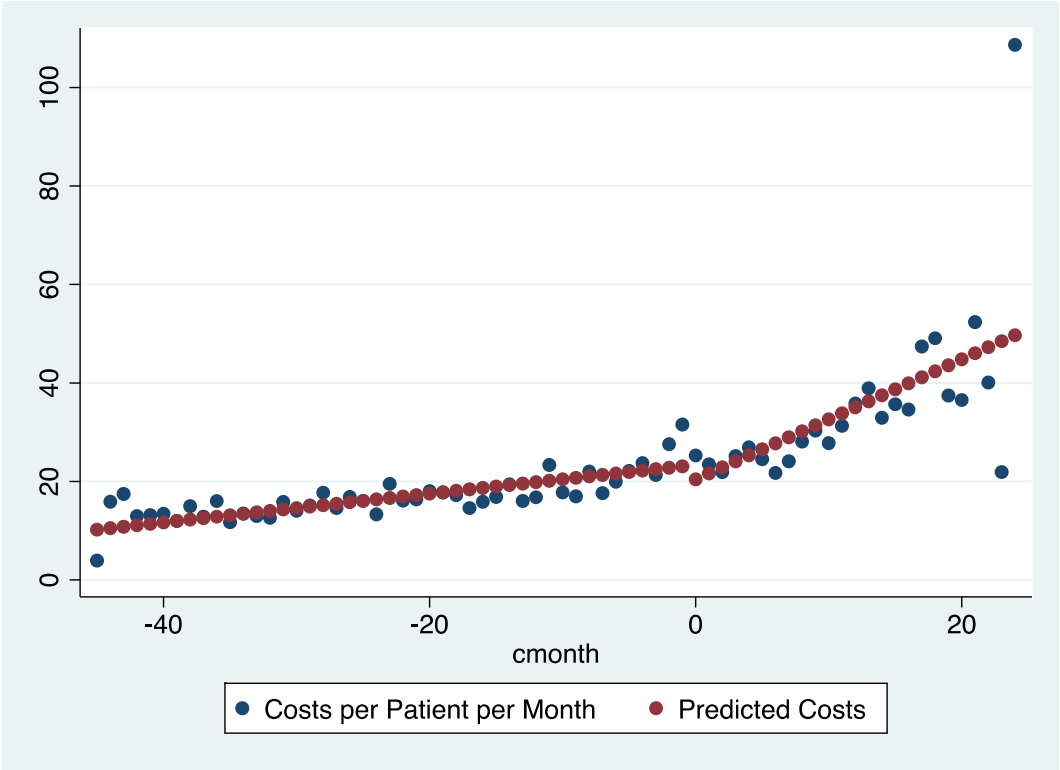
Emergency Room Utilization



Emergency: Regression Results



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Emergency Room Utilization

Primary Diagnosis Codes Pre-Enrollment:

- **Asthma**
- **Acute Upper Respiratory Infection**
- **Cough**
- **Fever**
- **Abdominal Pain**

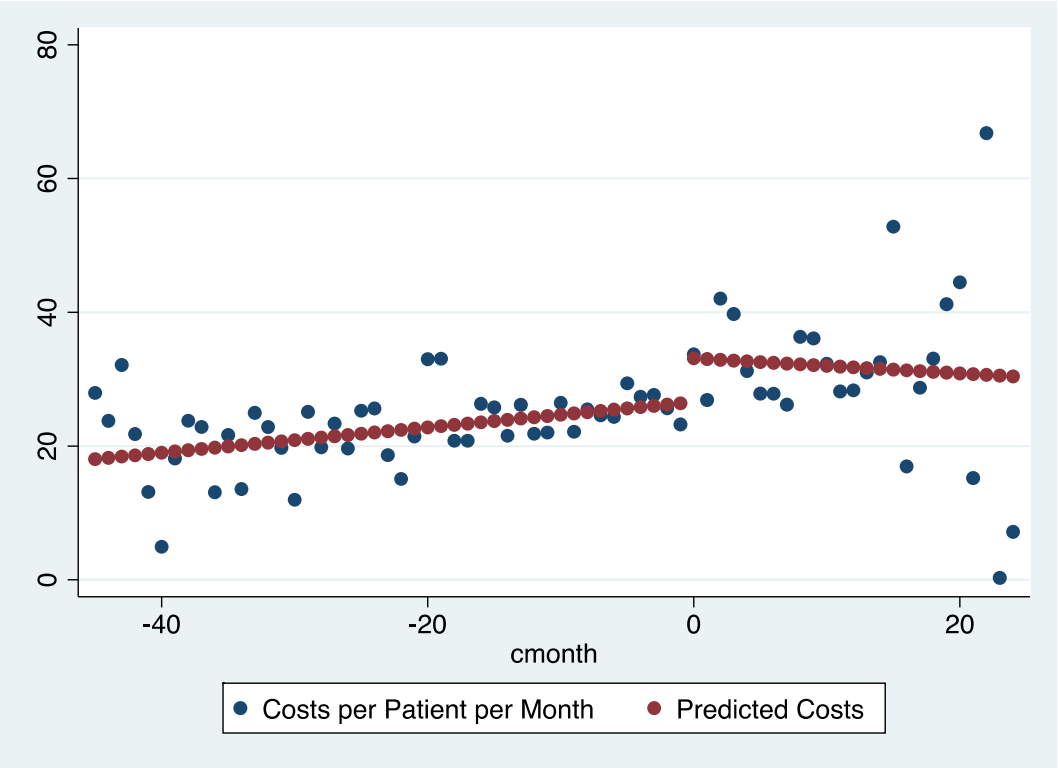
Primary Diagnosis Codes Post-Enrollment:

- **Asthma**
- **Acute Upper Respiratory Infection**
- **Hypertension**
- **Viral Infection**
- **Fever**

Emergency Room Utilization

Utilization Based on the Day of the Week:							
Day	Sun	Mon	Tues	Weds	Thurs	Fri	Sat
Pre-Enrollment	14.6%	15.1%	15.2%	15.2%	14.5%	12.3%	13.1%
Post-Enrollment	14.3%	15.7%	15.6%	14.0%	14.9%	13.8%	11.7%

Dental: Regression Results



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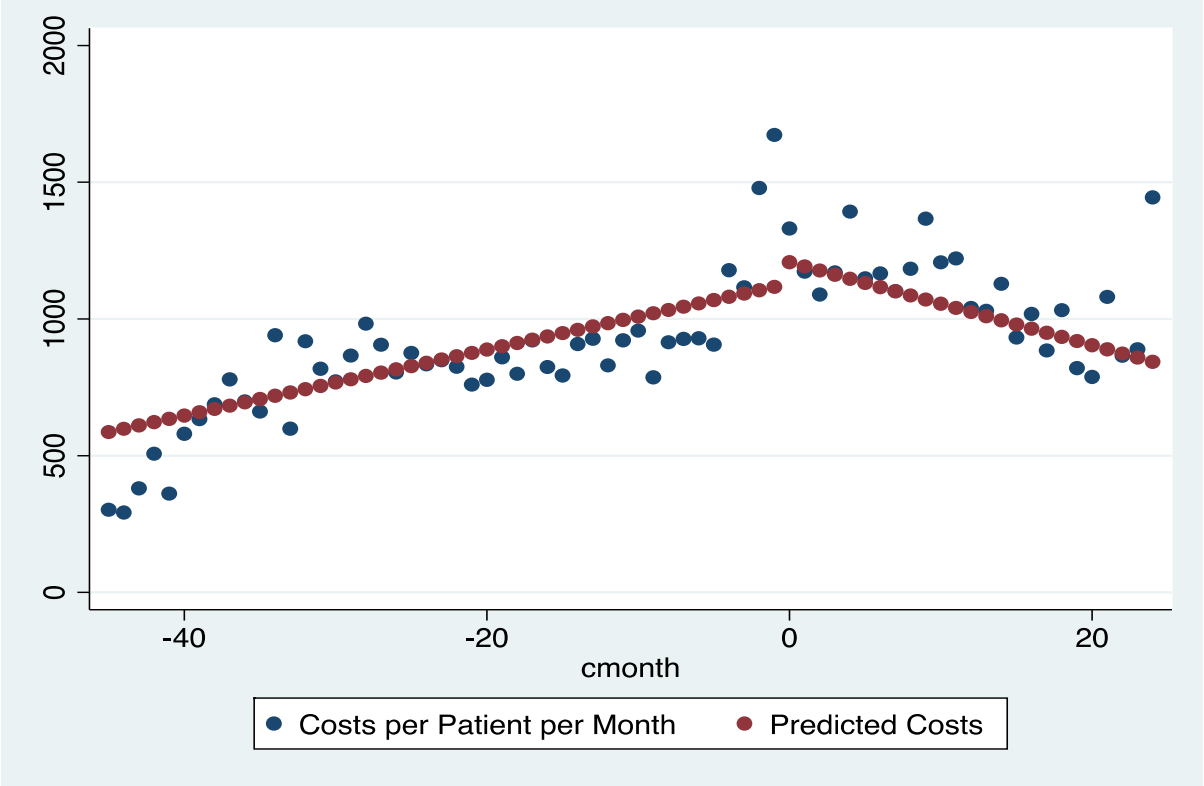
Regression Line without Outliers



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Total PMPM Costs Pre-Enrollment, Point of Enrollment and Post Enrollment

Patient Population	Pre-Period (PMPM)	One-Month Prior to Enrollment (PMPM)	Post-Period (PMPM)
All Patients (n=1,075)	$1,370	$1,906	$1,284

Program Costs approximately $600 per month x 6 months per family= $3,600 total.
Run about $600 flex funds per family. Total approximate costs $4,200 total

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Conclusions and Next Steps

- Conclusions
  - Costs are trending in the right direction
  - Changes do not seem to be related to missing claims from claims lags

- Possible Next Steps
  - Estimate cost savings
  - Compare to comparison group

Additional Results

- **Patient activation** scores for parents regarding their ability to manage their child's health significantly increased from average of 77.1 a baseline to 85.8 after 12 months
- **Depressive symptom scores** for indexed children and all children significantly decreased from 18.4 at baseline to 14.9 at six months and 12.5 at 12 months (CES-DC scores)
- **Adult depressive symptoms** also significantly decreased from 8.4 to 5.8 (PHQ-9 scores)
- **Participant costs were steadily increasing** in the pre-enrollment period from an average of $1,000pmpm to $1,900pmpm at enrollment.
- **Post enrollment costs immediately began steadily decreasing** from the $1,900pmpm figure back to the $1,200pmpm average after 12 months.

Additional Results

- **Costs dropped most substantially** for indexed children
- The program **reduced expensive hospital** stays.
- The largest cost savings for individuals completing the program occurred for patients with: **asthma, hypertension, heart disease and serious and persistent mental illness (SPMI) or serious emotional disturbances (SED).**

In School Model of Care

Whole School Approach for Trauma Informed Schools

- Grant Funded
- Seeking to address the chronic absenteeism, lower grades, clinical symptomology that interferes with school success
- Build on lessons learned in Newtown; Partners City, NHPS, United Way and CB

<u>Two Levels of Service for Schools 12 Schools total</u>

- **NHTC Whole School**
- **Embedded Clinician**

Both receive all tiers and services for Child, Teacher, Parent and Community

NEW HAVEN TRAUMA COALTION (NHTC)

A PARTNERSHIP BETWEEN UNITED WAY OF GREATER NEW HAVEN, NEW HAVEN PUBLIC SCHOOLS, THE CITY OF NEW HAVEN AND CLIFFORD BEERS CLINIC

New Haven Trauma Coalition (NHTC): The mission of the New Haven Trauma Coalition is to reduce the negative health, mental health, and social effects of adversity, trauma and toxic stress on school-age children and their families in New Haven. **FOR MORE INFORMATION: Kim Jewers-Dailley, Project Manager, NHTC: kjewers-dailley@cliffordbeers.org**

	STUDENT	EDUCATOR	PARENT	COMMUNITY
TIER III	**Individual and Family Therapy (in five schools, Embedded Clinician)** **Groups for students:** **Cognitive Behavioral Therapy for Trauma in the Schools (CBITS)** **Bounce Back (K-4)**	*Student Services staff Co-leading CBITS/Bounce Back groups* **TBD— Clinical Consultation Services for Teachers- (Modeled after services for teachers in New Sandy Hook School)**	**Wrap Around Care Coordination In home** **Family Therapy** **Referrals to other community services**	**Emergency Mobile Psychiatric Services (EMPS, 211)**
TIER II	**Topic Specific Workshops taken from CBITS curriculum for whole class. Use whole class exercise to identify deregulated students.** **Trauma informed prevention activities, ALIVE! program, etc.**	**Review 360 Online Teacher Coaching Skills for Behavioral Interventions** **Support/Coaching for Staff** **SSST team attendance** **Alternative Placement Team Attendance** **EI/Trauma Group (Launch 16-17)**	**Needs Assessments and warm handoffs to community partner referrals** **Red Bead Club (ALIVE! Program)**	**Train community and school providers in trauma screening and help with referrals** **School Based Diversion Efforts- CHDI**
TIER I	**Behavior Screening, Whole Class- - Review 360** **Asset Mapping Whole School After school and during school supports identified —UW** **Michigan Model Trauma Class** **Basic Needs Screener piloted**	**Work with Staff to identify students with mental health needs before school begins** **Professional Development** **Partner with SEL efforts PBIS, Comer, and Restorative Justice, Integrated Wellness**	**Family Basic Needs Screener** **Participate in PTO, Orientations, Parent Teacher Nights**	**Mayor's City Transformation Plan: "No Wrong Door" and Trauma informed care initiatives** **LIST/NH Coalition/DMC**

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2016-17 NHPS Data New Haven Trauma Coalition, Whole School Approach

Screening

919 Students Screened for trauma

38-50% scored positive for PTSD Symptoms in 12 schools

Cognitive Behavioral Intervention for Trauma in the Schools (CBITS)

98 Children received CBITS
All identified were in clinical range for PTSD
91% completed all sessions
50% reduced to non clinical range of PTSD;
all but 3% had some reduction of PTSD
NHPS Data showed:
39% of these children had improved attendance
52% higher GPA, **30%** had less D's & F's

Wrap Around Care Coordination

130 Families Served
80% Met Goals set on Family Plan of Care
55% reduced Unexcused Absences
43% had improved GPA
43% Less D's & F's

Training

1291 School Personnel, Community members trained on Trauma; series of 5 trainings
90% reported able to identify resources for children
Over **85%** reported being able to identify trauma symptoms in child

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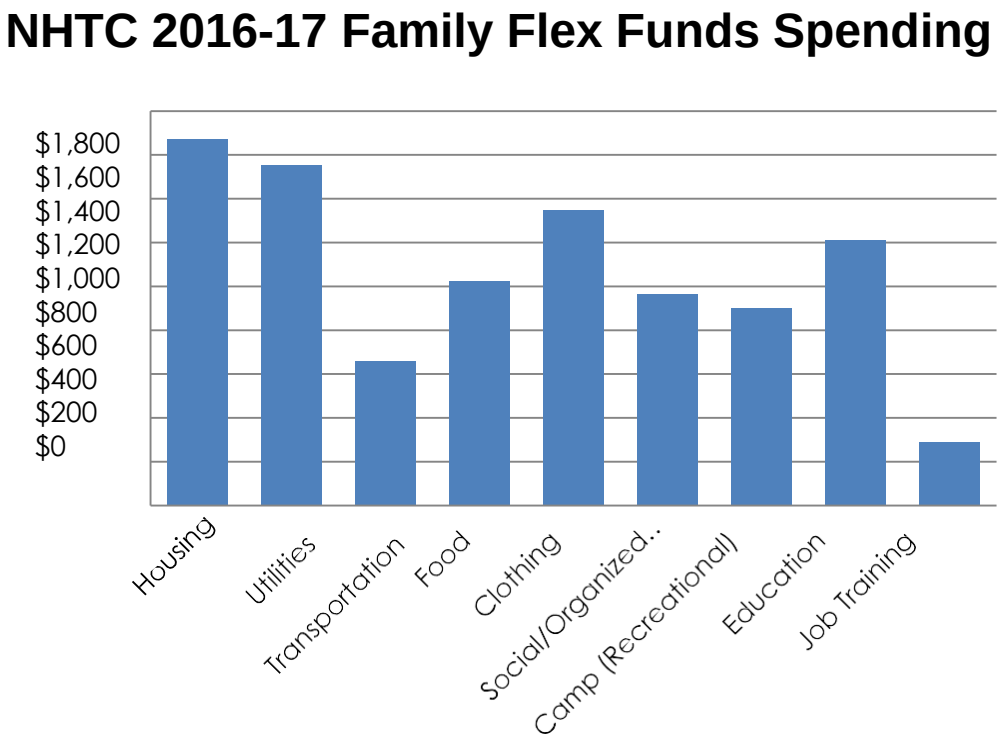
2016-2017 NHPS Data CB Whole School/Embedded Clinician
N=200 5 Schools, K-8 (3) 9-12 (2)

Model of services offered:

School identifies **at least 40 children** with most concerns
Family agrees to receive services
Family Plan of Care created; Children Screened
Child can receive clinical services (including CBITS)
Care coordination by Itself
Or "Comprehensive" Both Clinical and Care Coordination
Some Children have received 2 years of clinical services
All school received Professional Development Training

Some Results:

48% reduction of PTSD
46% Improved GPA



Flex Funding is Critical for Family Success

In Office/Clinic Integrated Care
Specialty Health Home (Still Building)

- The Marne Street Clinic provides comprehensive specialty care, including diagnostic evaluation, multiple therapies (e.g., OT, PT, ST), social skills groups, parent and sibling support groups, care coordination, individual and family behavioral health treatment and medication management.

- With partnerships within the healthcare community, the Clinic will expand to fully realize the one-stop shopping model and include the full complement of medical, dental, psychiatric, and general healthcare services.

- Treating all family members including parents and siblings

Expected Outcome to Measure

- **Family Stability**
- **Child Stability**
- **Quality of Life**
- **Functioning**
- **Sibling participation**
- **Sibling outcomes**
- **Parent Engagement**
- **Cost**

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Opioid Education and Family Support Group

Innovation in Action

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Small grant to write and deliver a curriculum guided non clinical support group for families impacted by opioid disease.

Grant Period is November 1 st through April 30th

Sustainability for the group was addressed by mandating the identification of volunteer facilitators to continue the work.

Although we used multiple means of marketing, flyering, websites, Facebook, and in person presentations, we were not successful to reach our population until we moved our location.** Our first location was not successful. Between November and December of 217, we offered the group for 9 weeks with only 2 people participating.

We continued to market the group via our website, flyers, and by presenting the group at community meetings, but we still were not successful in reaching our target demographic. With the understanding that social trauma, hopelessness and other socioeconomic factors play a key role in this epidemic, we focused our effort on finding a way to bring the group to the people, rather than expecting them to come to us. In late December, we engaged the New Haven Housing Authority in a conversation that resulted in us changing the location of the group to one of their housing complexes. Starting with January 10th, 2018 we moved the group to the 360 Orange Street Housing Complex. Another important change was adapting the curriculum to include more activities aimed at creating and fostering social connections.

Ongoing Group Structure Adjustments

Group is delivered by a care coordinator and a parent navigator.

Volunteer facilitators will be identified during the course of the group

Volunteers will be trained to deliver the group in their community

Before the end of the grant period we will have offered two 7 week sessions.

At the end of each session, we collect feedback that allow us to make edits and changes to the curriculum to make it more meaningful to the families.
Volunteer facilitators will be trained in group facilitation techniques and then they will co-lead a few group sessions to get hands on experience.

Facilitator Guide that aims at developing and strengthening facilitation skills.

Topics Covered: Basic Skills for Group facilitation- Group Dynamics-

List of Activities such as ice breakers that can be used during any session to increase energy and foster community.

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Promoting Innovation In Connecticut

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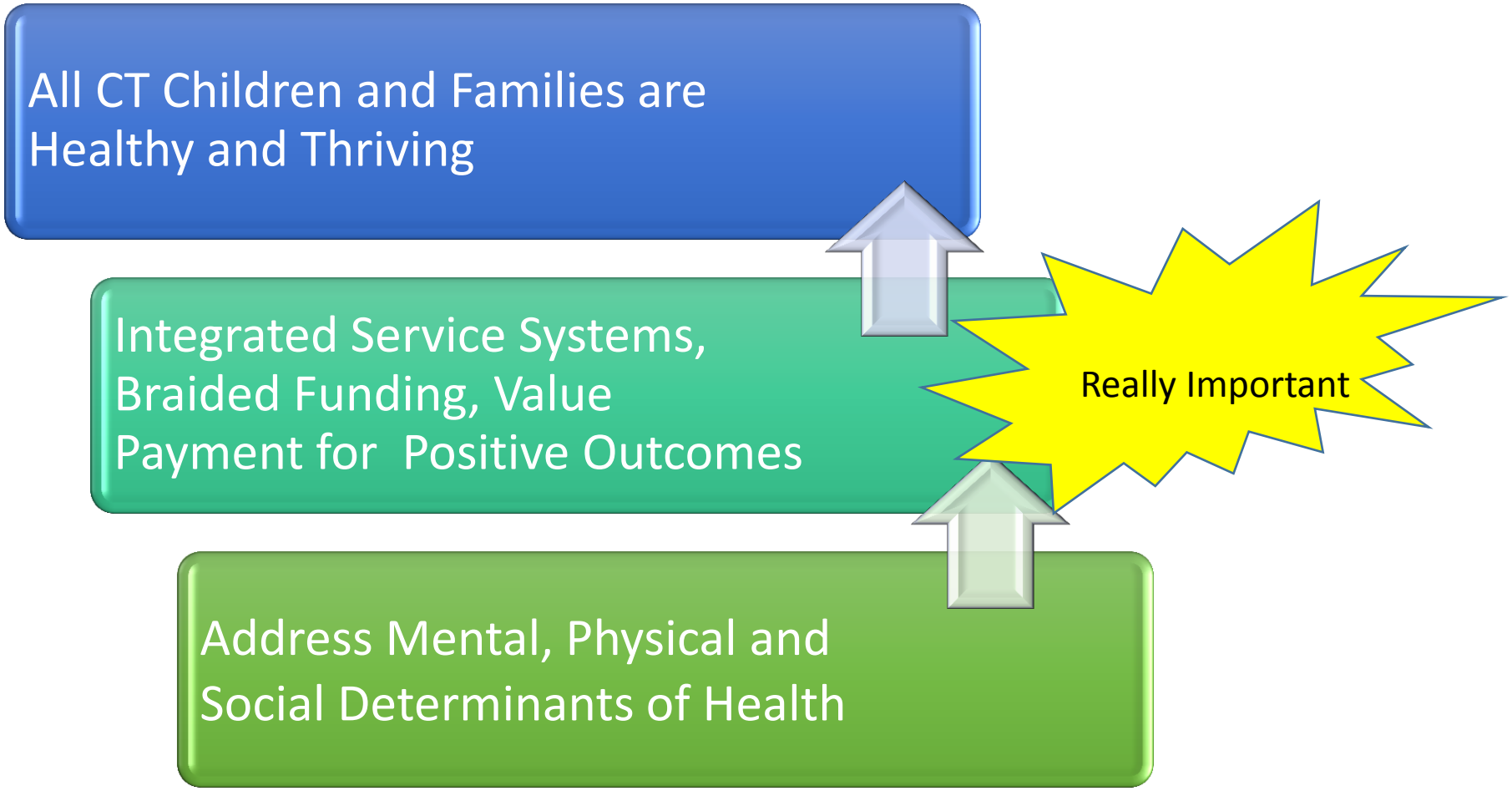
Barriers to Deliver Innovation

- Siloed Funding Streams
- Lack of Workforce with Integrated Care Knowledge
- Not easy to shared data cross disciplines
- Multiple Licenses Required
- Cross Program/Discipline/Collaboration is hard and takes a lot of work
- No Funding at all for Innovation/ Innovation needs to be local, conducted by providers
- Focus on Outcomes not Inputs
- Look at the BIG Outcomes/Strive for Family Health and Wellness

Vision for our Health Care Systems in CT



THE BIG IDEA

CONNECTICUT CAN BE THE LOCATION FOR THE HEALTHIEST, MOST THRIVING FAMILIES IN THE COUNTRY (URBAN,RURAL, AND SUBURBAN)

WE CAN HAVE HEALTH EQUITY AS WELL AS SCHOOL SUCCESS FOR ALL

HEALTH AND WELLNESS CAN BE **THE** ECONOMIC DRIVER FOR THE STATE

INNOVATION: BE IT GENETICS OR SOCIAL SCIENCE CAN DRAW NEW BUSINESS DEVELOPMENT FROM ALL OVER THE COUNTRY

FOLKS WILL FLOCK TO CONNECTICUT TO RAISE THEIR FAMILIES AND GROW THEIR BUSINESSES

THANK YOU

FOR MORE INFORMATION OR QUESTIONS: ALICE FORRESTER, PHD, aforrester@cliffordbeers.org