Child Health Quality Opportunities
DESIRED GOALS OF THE PRESENTATION

1. Discuss some of the current challenges in Child Health Quality
2. Share AAP levers to address these challenges such as the CHILD registry
**Child Health Quality Challenges**

- Healthcare Equity and Disparities
- Child Health Measures
- Behavioral Health
- Childhood Obesity
**Equity in Quality Improvement**

- “Equitable care is when quality does not vary because of personal characteristics such as gender, race, ethnicity, geographical location and socioeconomic status” Crossing the Quality Chasm 2001

- Inequitable care is low quality care
DISPARITIES : RACIAL AND ETHNIC

2019 AHRQ’s National Healthcare quality and disparities report (racial and ethnic)

- Blacks and American Indians and Alaska Natives received worse care than Whites for about 40% of quality measures.
- Hispanics received worse care than Whites for more than one-third of quality measures.
- Asians received worse care than Whites for nearly 30% of quality measures but better care for nearly one-third of quality measures.
- Native Hawaiians/Pacific Islanders received worse care than Whites for one-third of quality measures.
Disparities : location

- Disparities vary by residence location:
  - For nearly a quarter (24 of 102) of quality measures, residents of large inner city areas received worse care than residents of large fringe metropolitan areas.
  - For one-third of quality measures, residents of rural areas received worse care than residents of large fringe metropolitan areas.
  - For a little less than 20% of quality measures, medium and small metropolitan residents received worse care than residents of large fringe metropolitan areas.
CHALLENGES FOR ADDRESSING EQUITY IN QUALITY IMPROVEMENT

• Lack of reliable data
  – Race, ethnicity, primary language, gender orientation, sexual orientation
• Fee For Service payment model
Child Health Measures

• HEDIS, CHIPRA measures were designed for accountability at the health plan, state level.
• Most measures are process measures, not measures directly linked to positive outcomes.
• Let’s measure what really matters...
Behavioral Health: COVID 19

• Increase in rates of depression /anxiety
  – 25% of children reporting depression
  – 21% of children reporting anxiety (JAMA Pediatr. 2021;175(11):1142-1150)

• Increase in ED visits (MMWR Morb Mortal Wkly Rep 2020;69:1675–1680.)
  – 5-11y increased by 24%
  – 12-17y increased by 31%
Behavioral Health: COVID-19

- 50.6% increase in suicide attempts in adolescents 12-17y (MMWR Morb Mortal Wkly Rep 2021;70:888–894)
- 140k children have lost a primary care giver to COVID-19

**CHILDHOOD OBESITY**

- 22% of children (2-19y) are affected with obesity during the pandemic (increased from 19%)
- Rate of increase of BMI doubled during the pandemic *(MWR Morb Mortal Wkly Rep 2021;70:1278–1283)*
AAP LEVERS TO ADDRESS CHALLENGES

• CHILD registry
• Quality Improvement Networks
AAP CHILD Registry

The CHILD Registry is a longitudinal record of children that can:

1. Facilitate data driven improvement in child health
2. Support clinical quality and health services research in the future
CHILD REGISTRY JOURNEY

Longitudinal data for trends
Advanced Analytics, Predictive Modeling

Research to improve children’s health

Measuring what matters in child health
Family/Patient reported outcomes

Integrate other data sources such as:
Claims, Pharmacy, Social Drivers of Health
Value Based Care / Population Health modules

Data quality metrics dashboard
Line of sight into Child Healthcare Disparities
Data for benchmarking and regional differences

Registry Journey
CHILD REGISTRY VENDOR: 
ARBORMETRIX

- Push/Pull connection to EMRs and other patient-level clinical data systems
- Connection to administrative databases, including PBMs, Claims, Scheduling Systems, CDC Databases, and more
- Smart, workflow-based Case Report Forms for efficient collection of specialized data elements
- Patient- and Family-reported data about outcomes of care
- Streaming and self-reported data from wearable and implanted devices
DATA PRIVACY AND SECURITY

Latest encryption and security protocols
CHILD Registry and Disease & Condition Registries

Acquire

- EHR APIs
- Databases
- Smart Forms
- PROs
- Devices

Assemble

- Data Quality
- Blending
- Patient Linking
- Analytics
- Statistical Models

Act

CHILD Registry

Disease & Condition Registries

Registry Services & Strategic Partnership
ADDRESSING EQUITY

• Improving Data collection
  – Dataset USCDI V2.0 data includes data elements around race, ethnicity and Social Determinants of Health (SDoH)

• Equity Dashboard
  – Measures segmented by race, ethnicity, gender, language, sexual orientation
Improving Healthcare Equity

Demographic Data Exploration  

Lorem ipsum dolor sit amet, vel nostrum consequuntur in, usa choro graeci fierent ad, nulla doming splendid te. Eu vituperata definitionem pri, invenire gubergren sed ad. Ad cum solet impetus instructur, pri an alli altera perpetua.

Demographics

Select a Measure

All

Race

Select Site

Select Facility

Select Clinician

Date

Clinical Filters

Select Diagnosis Category

Chronic Conditions

Behavioral

Acute

Diagnosis

Medication

All

Treatment History

All

Select Diagnosis Category

All

Behavioral

Acute

Chronic
Integrating Social Drivers of Health

- Integrating available data sets like:
  - CDC PLACES local data
  - American Community survey
- Ability to overlay relevant information
  - Food deserts
  - Schools
CONDITION SPECIFIC MODULES

• Proof of concept: Childhood Obesity
• Clinical Practice Guideline (CPG) anticipated publication in 2022
• Computable CPG recommendations to be tracked as measures by the CHILD registry.
Condition Modules: Childhood Obesity

Obesity CPG Key action statements and recommendations translated into digital measures

Uptake of CPG recommendations

Clinical Practice Guidelines

CHILD Registry

Measures that matter

QI Collaboratives
Condition Modules: Childhood Obesity

QI Collaboratives

Feasibility of reporting measures at the clinician level

CHILD Registry

Assess which measures are tied to positive child health outcomes.

Advocacy for inclusion in new Child Health measure set

Clinical Practice Guidelines

Measures that matter

Measures that matter

Clinical Practice Guidelines

Assess which measures are tied to positive child health outcomes.

Advocacy for inclusion in new Child Health measure set
CHILDHOOD OBESITY MODULE

• Launch Quality Improvement initiatives to improve performance on recommendations of the obesity CPG
Condition Modules: Childhood Obesity

QI Collaboratives around improving registry indicators. Data intake automatic

One stop shop with Statistical tools for quality improvement

CHILD Registry

Clinical Practice Guidelines

Measures that matter
List of patients for closing gaps in care

Patient Drill Down

Lorem ipsum dolor sit amet, vel mastra consequuntur in, usu charo grosci fierent ad, nulla doming splendide pro te. Eu vitae rerum definitionem pri. Invemare gucken gen sed ad. Ad sum scelit impetus instruction, pri an alli alters perpetua.

<table>
<thead>
<tr>
<th>First Name</th>
<th>Last Name</th>
<th>DOB</th>
<th>Practice</th>
<th>Clinician</th>
<th>Measure Name</th>
<th>Measure Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>John</td>
<td>Smith</td>
<td>10/29/1965</td>
<td>Practice A</td>
<td>Dr. Shahib</td>
<td>Obesity</td>
<td>Yes</td>
</tr>
<tr>
<td>Leslie</td>
<td>Knepe</td>
<td>07/22/2003</td>
<td>Practice A</td>
<td>Dr. Shahib</td>
<td>Obesity</td>
<td>No</td>
</tr>
<tr>
<td>Andy</td>
<td>Dwyer</td>
<td>11/07/1966</td>
<td>Practice B</td>
<td>Dr. Shahib</td>
<td>Obesity</td>
<td>No</td>
</tr>
<tr>
<td>Ben</td>
<td>Wyatt</td>
<td>01/19/1992</td>
<td>Practice B</td>
<td>Dr. Shahib</td>
<td>Obesity</td>
<td>No</td>
</tr>
<tr>
<td>Ann</td>
<td>Perkins</td>
<td>08/15/1997</td>
<td>Practice B</td>
<td>Dr. Shahib</td>
<td>Obesity</td>
<td>Yes</td>
</tr>
<tr>
<td>Tom</td>
<td>Haverford</td>
<td>01/29/2007</td>
<td>Practice B</td>
<td>Dr. Shahib</td>
<td>Obesity</td>
<td>No</td>
</tr>
<tr>
<td>Jerry</td>
<td>Gennish</td>
<td>06/23/2009</td>
<td>Practice A</td>
<td>Dr. Godashia</td>
<td>Obesity</td>
<td>No</td>
</tr>
<tr>
<td>Donna</td>
<td>Mesque</td>
<td>01/30/1984</td>
<td>Practice A</td>
<td>Dr. Godashia</td>
<td>Obesity</td>
<td>No</td>
</tr>
<tr>
<td>Chris</td>
<td>Tangor</td>
<td>05/23/1965</td>
<td>Practice J</td>
<td>Dr. Godashia</td>
<td>Obesity</td>
<td>No</td>
</tr>
<tr>
<td>Pend</td>
<td>Hayley</td>
<td>08/23/1965</td>
<td>Practice J</td>
<td>Dr. Godashia</td>
<td>Obesity</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Year 1 overview

**Planning & Design**
- **Strategic planning**
  - Develop strategic plan based on vision and goals from stakeholders
- **Pilot design**
  - Develop project plan and onboarding assets
  - Create evaluation tools
- **Registry design**
  - Create measure specs
  - Create report designs
  - Develop user resources

**Build & Pilot**
- **Implementation**
  - Connect to EHRs
  - Develop measure and reports
- **Pilot**
  - Assess data value
  - Track engagement
  - Respond to feedback

**Launch & Grow**
- **Launch**
  - Finalize registry and marketing assets
  - Continue to add new sites
- **Grow**
  - Expand the registry measures and reporting
  - Identify new clinical opportunities
  - Prepare registry sustainability efforts
Pilot

• 3 organizations
  – Allied Physicians Group (NY)
  – Fairfax Pediatric Associates (VA)
  – Pediatrust (IL)

• Develop new modules/reports
  – COVID
DISCUSSION / QUESTIONS??