The Childhood Obesity Performance Improvement (COPI) Collaborative: A Pilot to Improve Practice Systems for Children with Overweight or Obesity through Enhanced Care Coordination, Evidence-Based Practice, and Use of the Healthier Generation Benefit

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Background & Approach

- Evidence suggests that the assessment and treatment of overweight and obesity in pediatric primary care settings requires considerable improvement, relative to the 2007 Expert Committee Recommendations. Care coordination between pediatricians and Registered Dietitians (RDs) and obtaining payment for recommended services also pose significant challenges.

- To address these barriers, the American Academy of Pediatrics Institute for Healthy Childhood Weight, the Academy of Nutrition and Dietetics, and the Alliance for a Healthier Generation are partnering to conduct the Childhood Obesity Performance Improvement (COPI) Collaborative. 

- COPI is a pilot, 12-month, practice-level quality improvement collaborative to improve practice systems for youth ages 3-17, with overweight or obesity. Specific aims focus on aligning practice systems with the evidence base, improving care coordination between pediatricians and RDs, and facilitating use of the Healthier Generation Benefit (HGB). The HGB insurance benefit guarantees annual coverage for at least four follow-up weight management visits each with a primary care provider and an RD.

- The collaborative began in December, 2014 and will end in November, 2015. 

- Primary care pediatric practice teams were recruited from Pennsylvania and North Carolina, areas with a relatively high penetration of the HGB.

- Each team includes a lead pediatrician, a registered dietitian, an office staff person and 1-2 clinical support staff. Pediatric practices were not required to already be working with an RD. Alternatively, practices could locate and invite a local RD and 1-2 clinical support staff. Pediatric practices were not required to already be working with an RD. Alternatively, practices could locate and invite a local RD and 1-2 clinical support staff.

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Aims & Objectives

- Global aims: Collaboratively change pediatric practice systems, in the context of the HGB, to improve care delivery for children with a Body Mass Index (BMI) ≥ 85th percentile.

- Specific aims: 1) Document BMI percentiles and weight status for children 3-17 years at age 99% of the time, 2) Assess a child’s family’s level of readiness to change 80% of the time, 3) Determine insurance eligibility 50% of the time, 4) Determine weight management goal and plan follow-up 70% of the time, and 5) Conduct follow-up appointments 50% of the time.

- Evaluation: A mixed methods evaluation is underway to examine: 1) the feasibility of implementing provided strategies, 2) the effectiveness of participation in improving care and, 3) changes in collaboration between teams, particularly between pediatricians and RDs.

Methods

- Clinical quality measures are: 
  - Mapped to key drivers and include balancing measures (e.g., no shows).
  - Obtained at baseline and then monthly for 10 subsequent months.
  - Calculated with medical records and billing/scheduling data points from the pediatric and RD practices.
  - Based on well-child visits (n=26) and follow-up weight management appointments during the previous month for pediatric practices.
  - Based on weight management referrals during the previous month for RDs.
  - Accompanied by a narrative report, describing changes the team tested, tools used, successes, and barriers to change.

- Evaluation indicators are derived from: 
  - Monthly clinical quality measures and narrative reports.
  - Pre- and post-collaborative surveys of all team members (motivation, ability, self-efficacy, behavior).
  - Team Climate Inventory, completed quarterly by all team members (and also provided to teams as feedback).
  - Post-collaborative key informant interviews with lead pediatricians and RDs (care coordination details, key successes and challenges, etc.)

Key Driver Diagram

Participants

Practices (n=8): 
- 5 Pennsylvania, 3 North Carolina 
- 1 urban, 6 suburban, 1 rural 
- Median # pediatricians at site: 8 (range=2-25) 
- 2 co-located with RD. 3 worked with an RD prior to COPI, 1 had no prior relationship with an RD 
- Mean est. % patients ≥ 85th percentile: 36.0% (SD=16.4) 
- Median est. % patients with access to the HGB: 39% (range: 9-60)

Implementation

- Challenges: 
  - The collaborative was delayed for 2 months, due to a fire in the O’Hare Airport control tower, which postponed Learning Session 1.
  - Time/process required for RD insurer credentialing (median = 2; range = 1-5.5).
  - Pediatric practice makes appointment reminder calls for RD visits 
  - Organizational policy that prevents RD from seeing patients at practice 
  - Lack of patient/family interest in weight management visits

Conclusions & Next Steps

- Preliminary results suggest that, in the context of COPI participation, evidence-informed strategies can be implemented to foster improvements in obesity-related care and care coordination; however, not all interested teams were able to participate.

- Practices with diverse initial conditions have reported improvements.

- Reported successes include improved patient engagement when: 
  - RD sees patients at the pediatric practice 
  - Pediatric practice makes appointment reminder calls for RD visits 
  - Pediatrician becomes more skilled in motivational interviewing

- Reported barriers to change include: 
  - Time/process required for RD insurer credentialing 
  - Organizational policy that prevents RD from seeing patients at practice 
  - Lack of patient/family interest in weight management visits

Interim Results

- Clinical Quality Measures: 
  - Clinical measures result for each team are based on a relatively small number of medical records and show considerable variability.
  - Despite this limitation, preliminary data (above) suggest that teams are making progress in reaching goals for most measures related to obesity care, without increasing no-show rates (which appear stable or improved).
  - Some measures (BMI assessment, RD goal-setting) were met by most teams at baseline; others (insurance assessment and planning follow-up) appear more challenging.
  - Improvements related to weight management planning (readiness assessment; goal setting) may be more achieved quickly when weight management is the primary focus (i.e., during RD visits).
  - Between baseline and month 9, the median number of RD referrals increased from 2.5 to 5 per month; however, one practice has only had a few RD referrals throughout.

- Narrative Reports: 
  - Reported successes include improved patient engagement when: 
    - RD sees patients at the pediatric practice 
    - Pediatric practice makes appointment reminder calls for RD visits 

- Pediatrician becomes more skilled in motivational interviewing

- Reported barriers to change include: 
  - Time/process required for RD insurer credentialing 
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