Implementation of the California Childhood Obesity Research Demonstration (CA-CORD) Project
Background: The problem of childhood obesity

<table>
<thead>
<tr>
<th>Race/Multiracial Group</th>
<th>Obesity</th>
<th>Extreme Obesity</th>
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</thead>
<tbody>
<tr>
<td>ASIAN</td>
<td>8.6</td>
<td>1.3</td>
</tr>
<tr>
<td>HISPANIC</td>
<td>21.9</td>
<td>7.6</td>
</tr>
<tr>
<td>NON-HISPANIC BLACK</td>
<td>19.5</td>
<td>8.6</td>
</tr>
<tr>
<td>NON-HISPANIC WHITE</td>
<td>14.7</td>
<td>4.4</td>
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</tbody>
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Source: Ogden et al., 2016
Intervention Aims

• **Goal:** To test a multi-sector, multi-level intervention on changes in 1186 children’s (2-11 years old) BMI

• **Objectives:** improve weight-related behaviors, Quality of Life, family support and parenting, satisfaction with healthcare
Participants and setting

Imperial County vs. California

- Childhood OW/Ob
- Latinx
- In Poverty
- Non-English Dominant

Counties: County
State: State

Source
Participants and setting

• N=1186 children from 848 families
• Ages 2-11
• BMI > 5%tile
Intervention Design

- Multi-level
- Multi-component
- 2X2 factorial design:

<table>
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<tr>
<th>Health Care &amp; Public Health</th>
<th>Public Health</th>
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<tbody>
<tr>
<td>Health Care</td>
<td>Control</td>
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</tbody>
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Children

Families

Organizations
- Clinic
- Schools
- Child Care

Community
- Community Recreation
- Restaurants
Clinic-based Intervention: Obesity Care Model (OCM)

• Outcomes:
  – Reach, dose, fidelity
  – Researcher-to-provider
  – Provider-to-patient
    • In progress
Implementing an OCM: Changing Policies

• Intervention:
  – Assessment of childhood overweight/obesity
  – Treatment of childhood overweight/obesity
  – Staff meetings and communication
  – BMI measurement
Implementing an OCM: Changing Policies

- **Measurement**
  - Clinic staff and provider interviews
  - Annual clinic reports

- **Results**
  - 100% clinics agreed to changes
  - Policies adopted by board of directors
Implementing an OCM: Changing Policies

• Lessons Learned
  – Policy changes reinforced (mandated) practice changes
  – Policies aligned with priorities of organization
Implementing an OCM: Clinical Information Systems

• **Intervention:**
  – Prompting assessment and diagnosis of overweight/obesity
  – Prompting appropriate treatment of overweight/obesity
    • Referral process
    • Goal setting through 4-point treatment plan
Implementing an OCM: Clinical Information Systems

• Measurement
  – Changes to EHR (NextGen)
  – Implementation of new treatment plan

• Results
  – EHR changes made and continue to be used
  – Treatment plans given but not always retained by families
Implementing an OCM: Clinical Information Systems

• Lessons learned
  – EHR changes required twice with update to EHR software
  – Processes can be circumvented if provider disagrees with plan
Implementing an OCM: Decision Support

• **Intervention:**
  
  – Hired Patient Care Coordinator
  
  – Trained all clinic staff (from medical assistants to providers) to use new information systems
Implementing an OCM: Decision Support

- **Measurement**
  - Position advertised
  - Implementation logs (% attendance)

- **Results**
  - Patient Care Coordinator hired
  - 83.3% of providers trained
Implementing an OCM: Decision Support

• Lessons learned
  – Turnover affected implementation
  – Turnover affected sustainability
Implementing an OCM: Self-Management Support

• Intervention:
  – Hired Community Health Worker (CHW) coordinator and CHWs
  – Integrated a Family Wellness Program into system of care (through referral)
    • CHW-led
    • 6 workshops including skill-building wellness + physical activity workshops
    • Whole family approach (but specifically parent and child)
Implementing an OCM: Self-Management Support

- **Measurement**
  - Number of workshops delivered
  - Number of workshops attended
  - CHW observations to assess fidelity
  - CHW notes

- **Results**
  - 82% families attended 1+ workshops
  - Mean hours attended 5.2 (SD=4.7)
Implementing an OCM: Self-Management Support

• Lessons learned
  – Reduced number of workshops to promote engagement
  – Parent readiness to change and family support critical
Conclusions and Next Steps

• High researcher-to-provider fidelity indicates feasibility
  – With appropriate leadership support

• Next steps: dissemination