

# Childhood Obesity Data Initiative



<https://www.cdc.gov/obesity/initiatives/codi/childhood-obesity-data-initiative.html>

## THE ISSUE

### OBESITY BURDEN

Childhood obesity impacts almost **14 million children in the U.S.** and is associated with serious immediate and long-term problems including poor mental and physical health outcomes and lower academic achievement.



### THE DATA CHALLENGE

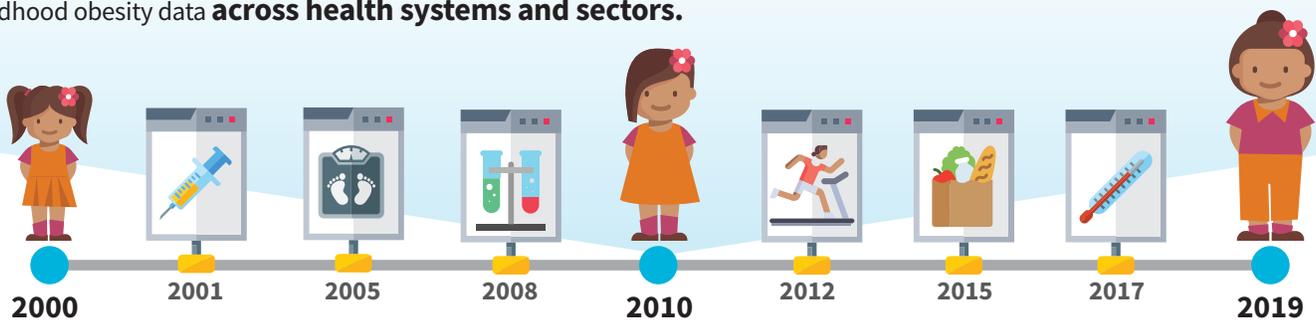
Research that assesses childhood obesity interventions is limited because researchers cannot easily link pediatric health-related data stored across different health information systems to assess what interventions are effective.

Child health data, including clinical information, social health determinants, weight management programs, and geographic markers are maintained throughout communities in many separate information systems operated by hospitals, provider networks, and clinical and community-based programs.



## THE CODI SOLUTION

To improve data capacity for childhood obesity research, the U.S. Centers for Disease Control and Prevention (CDC) is leading the Childhood Obesity Data Initiative (CODI) to leverage existing information technology tools in innovative ways to facilitate access to childhood obesity data **across health systems and sectors.**

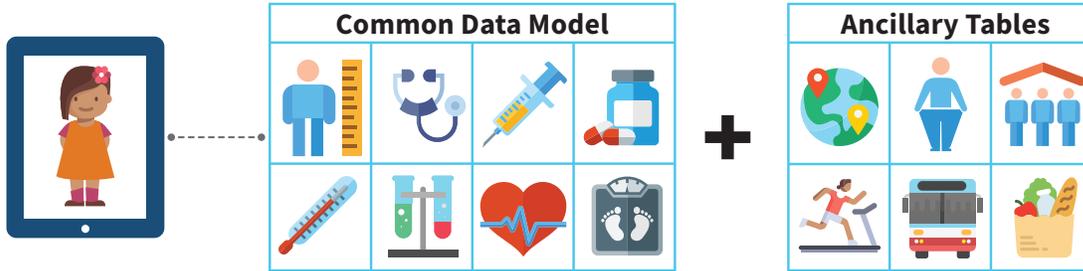


CODI will bring together data stored across different organizations to create an **individual-level, linked longitudinal record** that includes individual and community-level risk factors, weight management interventions delivered in clinical and community settings, and clinical outcomes across health information systems.

# BUILDING THE SOLUTION

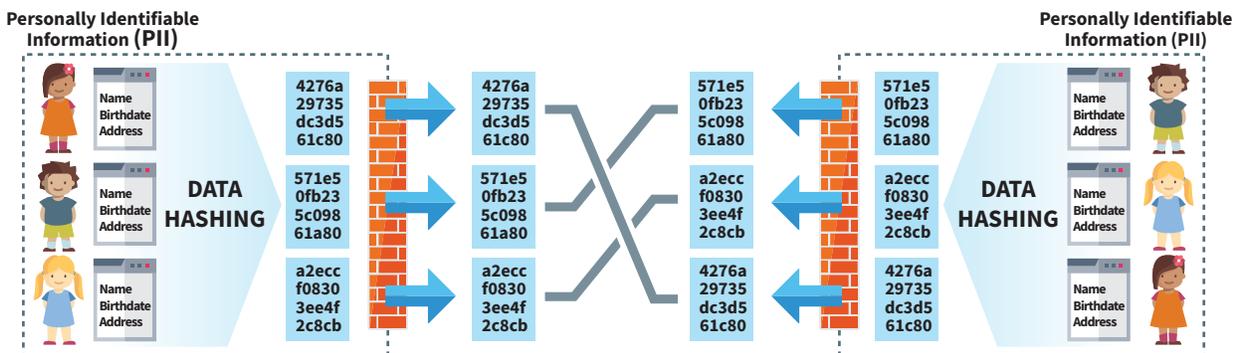
## BROADER ACCESS TO STANDARDIZED DATA

CODI will build on the existing, clinically focused Patient-Centered Outcomes Research Network (PCORnet) **Common Data Model (CDM)** by piloting —through the addition of ancillary tables to the CDM—improved access to social determinants of health, geographic risk markers, and information about participation in clinical and community weigh management programs.



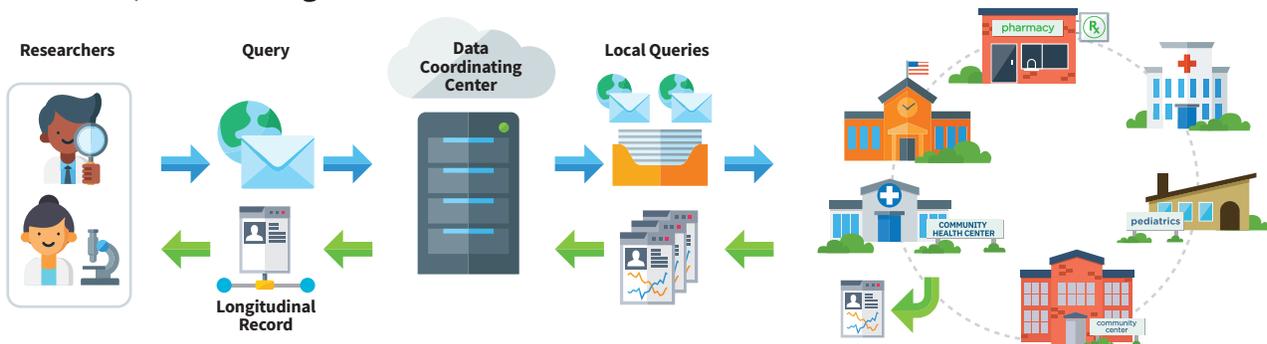
## PRIVACY PRESERVING RECORD LINKAGE

CODI will allow researchers to link a child's records across health information systems and community-based programs while protecting individuals' personally-identifiable information. Through **Privacy Preserving Record Linkage (PPRL)**, a child's information is **encoded in a secure, private** format behind a firewall prior to sharing, through a process called data hashing. **CODI uses these hashed data to link records across systems and programs.**



## DISTRIBUTED DATA NETWORK

CODI will allow scientists and researchers to **query** information from multiple data sources across IT systems and sectors to create a more comprehensive **longitudinal record** about a child.



# PILOTING THE SOLUTION

CODI will be piloted in **Denver, Colorado** using the Colorado Health Observation Regional Data Service (CHORDS). CHORDS operates a PCORnet-compatible data model called the CHORDS Virtual Data Warehouse.

Pilot participants include Denver Health, Children's Hospital Colorado, and Kaiser Permanente Colorado. Other potential clinical and community partners are being considered. The pilot is anticipated to **go live in late 2020**.