Pediatric Terminology Summit Introduction

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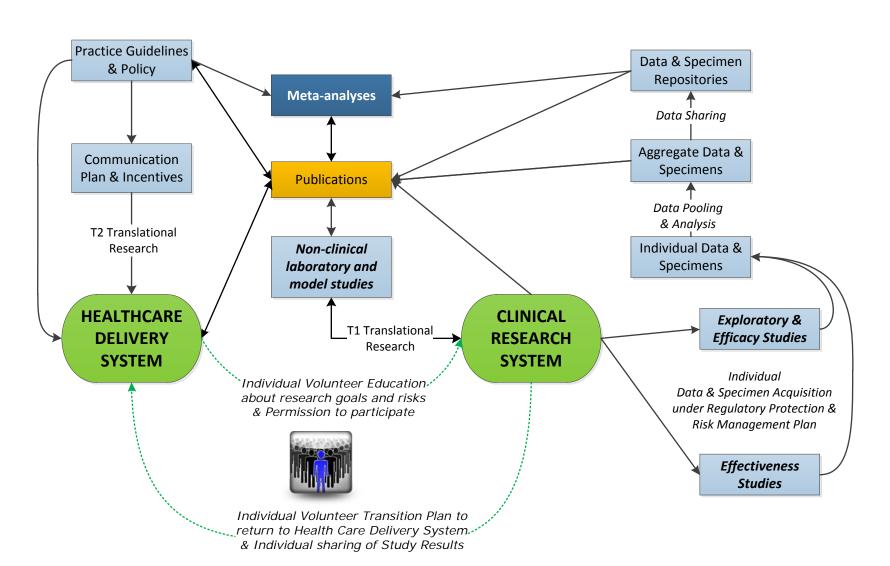
Goals

- 1. Provide an update on the progress of the pediatric terminology initiative since 2012
- 2. Illustrate utility and develop specifications of terms through use cases
- 3. Discuss dissemination and uptake opportunities
- 4. Plan for next steps

Background Context

- Providing data is a gift of time, effort, privacy, and other factors
- Collecting data is a responsibility and an investment
- How can we respect the gift and protect the investment?
- Data can continue to be of value if:
 - Permission is granted to reuse the data
 - The data has content and format that allows others to accurately interpret it
 - The data can be combined with other data

Health Care Delivery & Clinical Research Systems



NICHD Terminology Initiative

The NICHD terminology initiative is based on the following model

- Precise concepts -> defined terms to describe the concept
- Terms can be:
 - Mapped to other terms in other systems, if applicable
 - Inserted into a hierarchal framework
 - Linked to a developmental timeline
 - Used in many ways such as:
 - Variable names
 - Outcomes
 - Metadata
 - Values for tags

Need for human-machine interaction

- Data quantity and complexity require machines to compile, analyze, store, retrieve, and represent the data
- Interface between humans and machines is imperfect- humans interpret terms and their underlying concepts dependent on context, learning, and history
- Machines require instructions

Some concepts and terms defined

- <u>Typology</u> = classification or grouping based on common characteristics
- <u>Taxonomy</u> = classification or grouping based on origin
- Ontology = full listing of what exists in a system, how the entities can be grouped, related within a hierarchy, and subdivided according to similarities and differences = spectrum of child health specific concepts
- <u>Semantics</u> = how to describe or represent what exists = child health terminology
- <u>Syntax</u> = the formal relationships among the elements of the system = relationships among the child health concepts and terms