



NATIONAL CENTER FOR DATA TO HEALTH

KEY PARTNERS



OREGON CLINICAL
& TRANSLATIONAL
Research Institute



JOHNS HOPKINS
INSTITUTE for CLINICAL &
TRANSLATIONAL RESEARCH



Institute of Translational Health Sciences
Accelerating Research. Improving Health.
UNIVERSITY OF WASHINGTON



Washington University in St. Louis
Institute of Clinical and
Translational Sciences



Northwestern University
NUCATS
Clinical and Translational Sciences Institute



THE UNIVERSITY OF IOWA
Institute for Clinical and
Translational Science



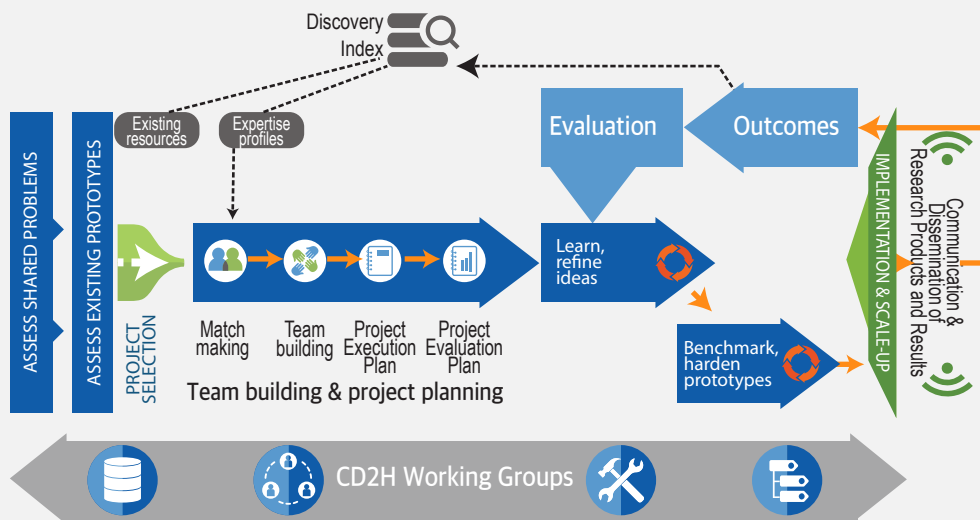
OVERVIEW

There is an ever-increasing volume of complex and fragmented health data being generated that have the potential to revolutionize the efficiency and efficacy of healthcare. The challenge is in identifying and utilizing these data to transform patient care and accelerate research discoveries. Translational research centers across the country house a wealth of clinical data. However these data, like the diversity of data being generated by the larger healthcare system, basic researchers, and personal tracking devices, are difficult to access, share, and use. In order to realize the potential of these data, the informatics community must build the infrastructure to tie the data ecosystem together, enable innovative new analytics, and promote effective collaboration across the researcher-clinician spectrum. The National Center for Data to Health (CD2H), led by Oregon Health & Science University, was launched by NIH in the fall of 2017 to accelerate the translation of data into medical knowledge and better patient outcomes.

GET INVOLVED WITH CD2H

The CD2H supports a vibrant and evolving collaborative informatics ecosystem for the CTSA Program and beyond. We strive to engage the larger community and to serve as a portal for industry partnerships with the national CTSA Program. The CD2H harnesses and expands an ecosystem for translational scientists to discover and share their software, data, and other research resources. Our initiatives are focused on creating a framework for effectively promoting collaborative innovation in health informatics to improve patient outcomes. We invite and encourage you to get involved with the CD2H by sharing how we can help, joining one of our workgroups, or by actively participating in developing solutions through one of our Idea- to-Implementation projects.

IDEA-TO-IMPLEMENTATION PIPELINE (I2I)



The CD2H will adopt an I2I approach for developing innovative solutions to key problems faced by the informatics community. Successful I2I projects require multidisciplinary teamwork and will serve as vehicles for engaging the larger community and industry. The I2I process starts with an environmental scan to identify an important unmet need. Next, teams begin to brainstorm, invent, prototype, and test potential solutions through an iterative think-build-rethink process. The lead solution that emerges from this process then moves forward to the implementation and dissemination phase.

CD2H INITIATIVES

Next Generation data sharing network

- Harmonizing clinical data models and building an adaptor
- Cross-hub data quality methods
- Data sharing governance pathways
- FHIR Open Terminologies server
- LOINC2HPO semantic phenotyping tool

Resource Discovery and Development

- Tools to support attribution, dissemination, and discoverability of translational resources
- Science of translational science research platform
- Educational resource and competency harmonization
- Data inventory and API registry
- Systematic Review of NLP methods

Software and cloud infrastructure

- Secure cloud-based data sharing for CTSA hubs
- Infrastructure for shared Apps in the cloud
- Open Source Clinical Enterprise Data Warehouse (EDW) Data Browser (Leaf)
- DREAM challenges that bring algorithms to the data

Informatics Maturity and Best Practices

- Informatics maturity model for CTSA hubs
- Software standards and best practices
- Reusable data best practices wizard
- Personas library for translational science development projects
- BioData Club for local collaborative learning

More info at ctsa.ncats.nih.gov/cd2h/get-involved