

An integrated approach to data and specimen sharing for vulnerable populations: The National Children's Study as a case study

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**Informed Consent for Rare Diseases Patient Registries
Linked to Biorepositories**

Rockville, MD

December 13, 2010

Disclosures

- ▶ No financial or governance interests to disclose
- ▶ All opinions expressed are those of the author and may not represent the views and policies of the U.S. Federal government or any of its agencies

Presentation Outline

- ▶ Definitions
- ▶ Schema
- ▶ Regulatory Harmonization
- ▶ Partnerships
- ▶ Specific example

Conference Goals

- ▶ Recommend template(s) for short, simple and clear informed consent for patient registries
- ▶ Recommend elements to be included in informed consent for patient registries
- ▶ Recommend what type of formation and material should be available/provided to the patients before consenting

What is intended by harmonis(z)ation?

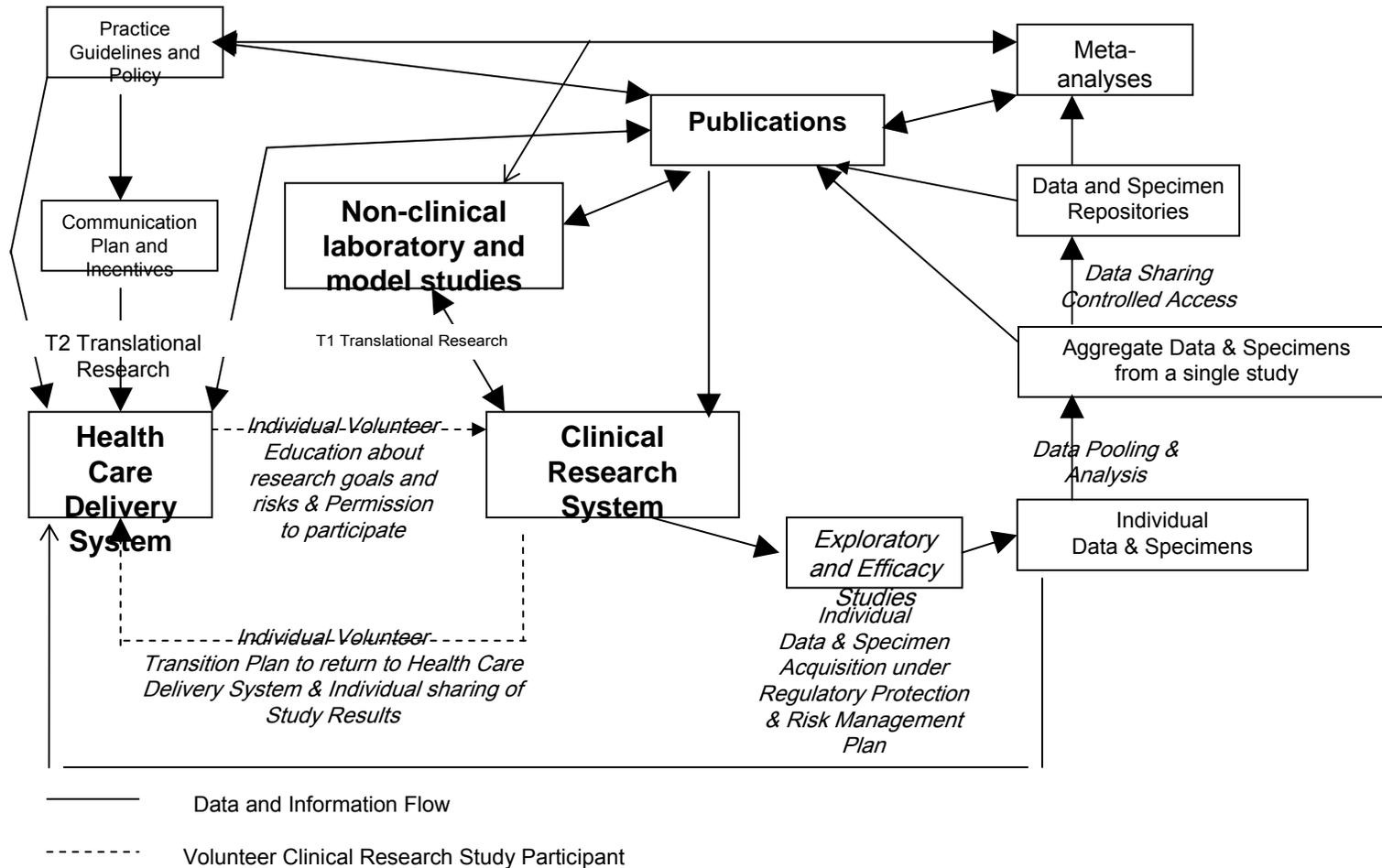
Capacity to be

- ▶ Understood

- ▶ Analyzed

- ▶ Interoperable = the capacity to integrate processes and operations and to leverage infrastructure and data acquisition investments

Interaction between Health Care Delivery System and Clinical Research System



Participant Interactions

- ▶ Stage 1: Education and permission – the participant and, if appropriate, parent or guardian is provided information about the research study, the benefits and risks, and is requested to participate in the study through the process of informed consent or permission in the case of a minor or participant who cannot provide consent on their own behalf
- ▶ Stage 2: Data acquisition – the participant transitions from the health care delivery system to the research system where data are collected as a gift from the participant;
- ▶ Stage 3: Transition or return to the health care delivery system – at the end of the participant's involvement in the study, when the research study no longer collects information from the participant or provides any sort of intervention to the participant (this is more relevant to clinical trials).

Individual Transition

- ▶ Transition plans and expectations are established during permission phase
- ▶ Transition plan sets a target time frame and range of target conditions with a referral plan for each condition
- ▶ Transition plan discusses sharing of individual and aggregate results including incidental findings

The New Paradigms

- ▶ Research data is an extension of the individual who volunteered to participate in the research and merits the same protections and respect as the person who was the source.
- ▶ Privacy and security are complementary aspects of protecting the individual and protecting data
- ▶ Research process will be optimally functional with adoption of interoperable standards and processes

Why the paradigm is new

- ▶ Clinical research experience is divided into process phases of permission, data acquisition and transition
- ▶ New focus on transition of individual and data from data acquisition phase to health care delivery system and data sharing
- ▶ Planning, protections and oversight extend to transition out of data acquisition as well as into data acquisition

Human Subject Protection Harmonization

- ▶ Priority given to local and regional practices and authority
- ▶ Harmonization is possible using international guidelines plus specific harmonization process
- ▶ Federated model of Institutional Review Boards (IRB) or Ethics Committee (EC) is in pilot testing
 - Federated model aligns IRBs and ECs through agreement on principles, process and performance
 - Several tiers of participation with emphasis on information sharing facilitated through a common operations center

Data Sharing

- ▶ Data sharing refers to the availability of data following initial data acquisition and study completion for review or additional analyses
- ▶ Data monitoring refers to data exchange and analysis during data acquisition
- ▶ Examples of data sharing include
 - Sharing of summary information such as in registries or publications or
 - Sharing of complete line listings such as in an information repository like genome wide association studies or data warehouse

Data Standards

- ▶ Data integrity, privacy protection and interoperability are best achieved with the use of data standards
- ▶ Data standards apply to data format and are flexible for data content
- ▶ Multiple data standards are in use

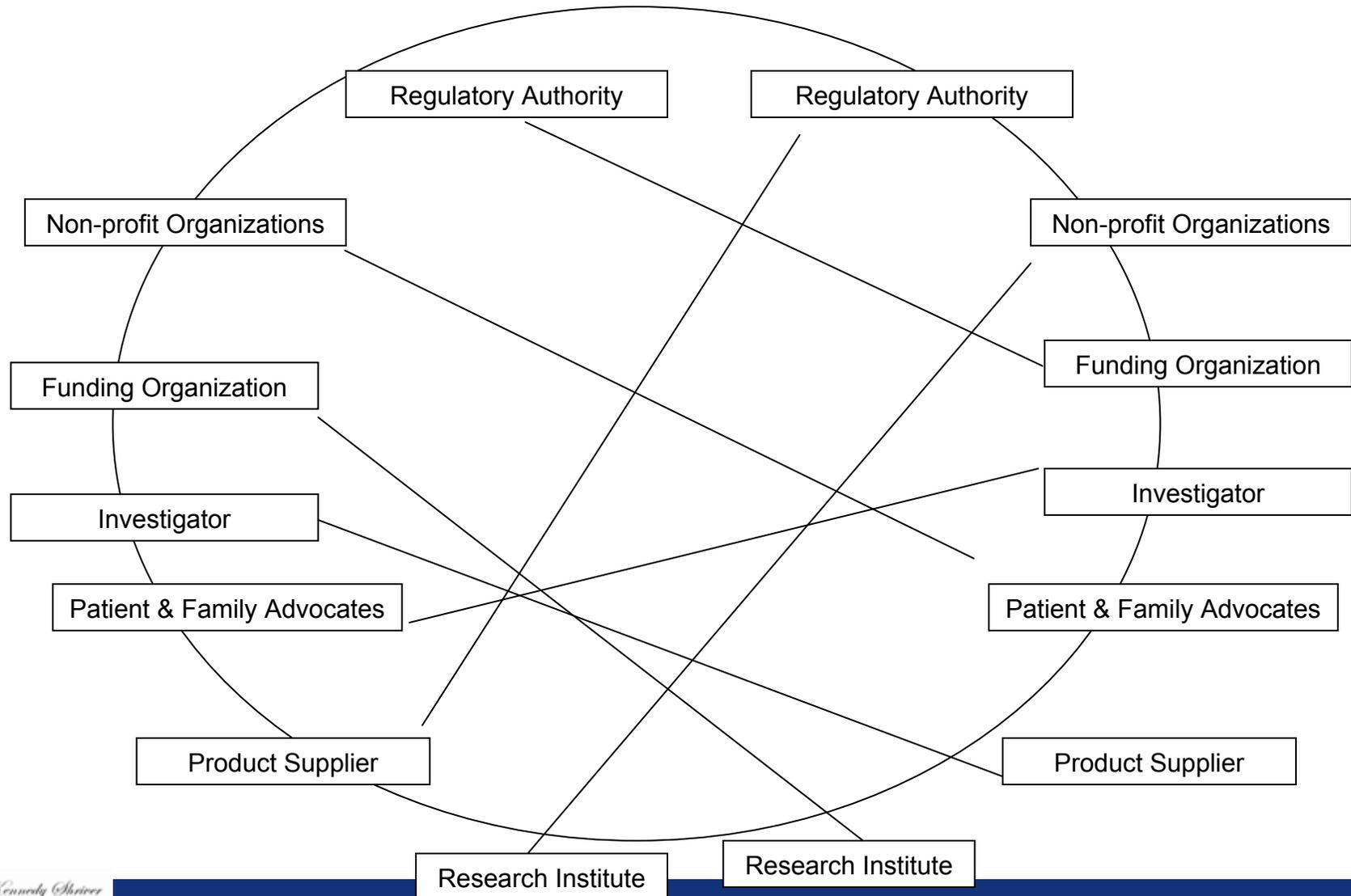
Regulatory Harmonization

- ▶ Systematic efforts began with International Conference on Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH), formally established in 1990, involves the regulatory authorities of Europe, Japan and the United States <http://www.ich.org>
- ▶ Inter-regional cooperation, for example, European Medicines Agency and the Food and Drug Administration
- ▶ Establishment of Paediatric Medicines Regulators Network by World Health Organization
http://www.who.int/childmedicines/paediatric_regulators/en/

Partnerships are necessary

- ▶ Clinical research is complex and resource intensive
- ▶ Partnerships allow the unlikely to become feasible
- ▶ Different partners have different constraints and options
- ▶ Expertise, resources and perspectives from partners can be complementary and even synergistic

Partnerships have many forms



Partnership topics to address

- ▶ Chain of decision making
- ▶ Chain of responsibility
- ▶ Resource allocation
- ▶ Confidentiality
- ▶ Data access
- ▶ Intellectual property
- ▶ Duration
- ▶ Exit strategy

Steps to successful partnership

- ▶ All parties meet concurrently to reach consensus on goals
- ▶ Allocate responsibilities
- ▶ Develop communication plan
- ▶ Agree on metrics to assess outcome

Implicit partnerships

- ▶ Research is built on trust
- ▶ Implied partnerships exist with
 - Health care delivery system
 - Regulatory and ethical oversight
 - Maintaining privacy protection
 - Communities that provide volunteers to participate in research
 - Study, specimen and data repositories
 - Data sharing

National Children's Study Engagement Process

- ▶ Education on Study Goals and policies
- ▶ General informed consent process that emphasizes flexibility and security
- ▶ Description of and assurance that access to data is through a formal Data Access process that has the responsibility to protect privacy

National Children's Study Engagement Process

- ▶ Each visit is preceded by a Visit Information Sheet with a description of the visit content and the option to not participate in any components
- ▶ A description of what information will be returned. In general physical measures are returned immediately and other data in general will be archived until a specific scientific request for data is processed.. The indefinite time lag between data acquisition and data analysis influences expectations.
- ▶ A specific review process to determine what information is returned to participants and how

Summary

- ▶ An integrated systems approach will provide the quality, sustainability and affordability required for pediatric research to continue and develop
- ▶ Major operational components such as clinical research infrastructure, human subject protection, participant transition, outcome measures, analysis, meta-analysis, regulatory oversight and review can be harmonized through consensus terminology and the use of data standards.
- ▶ Standards that are thoughtfully designed and implemented do not limit innovation but rather enhance opportunities through the use of interoperability
- ▶ Standards are building blocks to generate platforms that extend investments in data acquisition. Many of the components exist but require adaptation.
- ▶ Partnerships are necessary and become feasible through the use of standards

Future Directions

- ▶ Multiple ethical, technical, and process issues must be addressed
- ▶ Comprehensive and integrated view of all phases of research system required
- ▶ Potential partners and advisors need to be integrated
- ▶ Establishment of reference frames through longitudinal cohort studies of unbiased samples of all children

Future Directions

- ▶ Phased roll out in selected research settings
- ▶ Continuous monitoring of developments and opportunities for harmonization in the development of standards for the health care delivery system
- ▶ International collaboration

Hubert Humphrey Noted

- ▶ “The moral test of a government is how it treats those who are at the dawn of life, the children; those who are in the twilight of life, the aged; and those who are in the shadow of life, the sick, the needy, and the handicapped.” 1976

For further information or to request slide copies

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