The Importance of Data Policies:

Critical Elements of Successful Research

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Data will drive research across many disciplines

The importance of managing research data is growing, as illustrated by now mandates from research further is now there is now will be crithealthcare

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Data Policies

- The first step in ensuring there is added value in research programs
- Open access to research data allows for re-use, re-purpose and re-evaluation of previous results
- Access to research data can be grassroots and has been in the past, but policy instruments are key to ensuring open access continues to grow

Outline

- The Canadian Data Environment Tri-council Guiding Principles
- The United States National Science Foundation -Data Policy
- The Canadian IPY Program

Tri-Council Guiding Principles on Access to Research Results

- Actively promote a collaborative, vibrant and innovative research enterprise in Canada.
- Ensure research results are as widely available and accessible as possible.

Tri-Council Guiding Principles on Access to Research Results...continued

- committed to developing a shared approach for improving access to publicly funded research in keeping with internationally recognized best practices, standards and policies for funding and conducting research.
- Advance Knowledge
- Minimize Research Duplication
- Maximize Research Benefits
- Promote Research Accomplishments

Tri-Council Guiding Principles on Access to Research Results and Interventioned

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- Good news: The Tri-Counder 18 15 16 to work together to have a consist proach to data policies
- Bad news: It's not done yet...

US-National Science Foundation

- Investigators are expected to share with other researchers, at no more than incremental cost and within a reasonable time, the primary data, samples, physical collections and other supporting materials created or gathered in the course of work under NSF grants. Grantees are expected to encourage and facilitate such sharing.
- Proposals must include a Data Management Plan which describes how the proposal will conform to NSF policy on the dissemination and sharing of research results.

The Canadian IPY Program: Data Policy Genesis

- The IPY program was a joint WMO-ICSU initiative which had at the very beginning identified data management as one of the key objectives of the program.
- The Canadian IPY program developed in lock step with that philosophy and dedicated \$7M to achieve that objective.
- The Canadian IPY Data Policy was very closely linked to the International Policy with a few clauses included to address Traditional Knowledge and studies involving human subjects.

The Canadian IPY Program: Data Policy Objective

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The Canadian IPY Program: Data Policy

- Applied to all data collected during IPY regardless of scientific discipline;
- Fostered cross-discipline cooperation and equitable data sharing;
- Required the appropriate and secure preservation of data and physical samples;
- Encouraged the recognition of data providers as valuable contributors to the advancement of science; and,
- Ensured data, information and publications generated through IPY research are available for future generations.

The Canadian IPY Program: Challenges

- Having infrast
- Thus, f data ce objecti profess Science



• This network is currently operational as the Canadian Polar Data Network

The Canadian Data Management Environment: Future Challenges

- There are interesting times ahead as the federal government is beginning to get serious about open access, however, they are still missing the data policy instruments to effect positive change
- Funding agencies and academia are key to success
- Infrastructure like the CPDN will be crucial to ensuring open access becomes a reality.

The Canadian Data Management Environment: Future Challenges

- Not all questions are answered, especially regarding enforcement and adherence.
- Sustainability and long term support of data management as a part of research funding has not been sorted out...yet.
- Standardized data policies among research funders is key to realizing the potential in Canadian research investment.

Thank You...Any Questions?

