

Dynamic Consent



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A group of six people, seen from behind, are walking along a beach at sunset. They are holding hands and their silhouettes are reflected in the wet sand. The sky is filled with golden clouds and the sun is low on the horizon over the ocean.

the engaged patient is

‘the blockbuster drug of the century

[Hersh, HL7 Standards, 2012]

‘The Patient will see you now’ E. Topol, 2015

The move to patient empowerment: with digital tech at their fingertips, and access to all their data to drive their own decision-making and have greater choice in their care

Digital health – clinic and research

- Traditional separation between clinical care and biomedical research:
 - ‘you will not receive any results’
 - ‘research will not personally benefit you’
- Greater crossover as data increasingly flows back and forth between research and the clinic

How do patients keep track of their data: what is being collected, stored, used and shared; and by whom?



Informed consent: definition

- ‘Informed consent is a fundamental principle that has marked the emergence of modern medical ethics based on personal autonomy’
- It specifies the details of the proposed research and attendant risks and potential benefits
- Prerequisite of research involving human beings since the Nuremberg Trials

Report of the International Bioethics Committee of UNESCO (IBC) ON CONSENT, 2008

Informed consent: issues

Research shows:

Consent forms long and complex

A particular challenge to engage people from culturally and linguistically diverse backgrounds, lower literacy, different ages

Lack of participant understanding, misconceptions about purpose of research, knowledge not retained

Not a real choice – just a hurdle requirement

Informed consent for future use

Donating for unknown future use

Samples might be shared across organisations,
national boundaries

Secondary findings

Recontact


Relevance to family members

Question of sustainability, changing legal landscape

Broad consent for future use

- Broad consent approach is common: covers as many future uses as possible.
- Accords with WMA Declaration of Taipei, and OECD Guidelines on Human Biobanks.
- BUT ethically and legally problematic: often research participants have no idea how their data and samples are being used



- 
- **Dynamic consent:**
 - **Electronic record of consent decisions**
 - **Opportunity to revisit, review and update**
 - **Granular choices – sub studies**
 - **Online secure personal profile:**
 - **Updates on how samples/data are used**
 - **Research updates and news**
 - **Use of different media: videos, audio, animations, interactive diagrams**
 - **Tailored to the individual**

What does Dynamic Consent do?

Puts the participant at the centre of decision-making

Enables on-going communication with the research team

Provides a secure record of all consents and interactions in one place

Engages with individuals as part of a personalised medicine approach

e-consent vs DC



e-consent

- Electronic version of the same process
- Not clear if it counts as a 'written signature'
- How do you verify identity?
- Replacing face to face?



Dynamic consent

- Requires a behaviour change – patients as partners
- Ongoing interaction
- Two-way communication
- Greater control
- May start with a paper form!



Common concerns:

- Will control over data hamper research?
- Can (and therefore will) people withdraw more easily?
- Will loss of control over data compromise the data-set?
- Is the cost / benefit worth it?
- What about people who don't want to use computers?

Examples



National Institute for Health Research



Sign up today

More Information



What is Rudy?

Rudy is a study in Rare diseases of the bones, joints and blood vessels. Headed up by a research team at the University of Oxford, Rudy aims to transform clinical care for participants through patient driven research.

My Profile

Personal Details:

Edit



Name: D G
Age: 34
Gender: Male

Address:
93 Ridgefield Road
Oxford
OX4 3BY

07834626103

General Practitioner:

Edit

East Oxford Health Centre
Oxford

Consultants:

Edit

Nuffield Orthopaedic Centre
Oxford

Primary

Other Studies:

Edit



StudyName: D
REC ID:
Lead Research Centre:
Contact Name:

Diagnosis:

Edit

XLH (X-Linked Hypophosphatemia)

My Settings:

My Consent



✓ My Consent

Events

I agree to provide [information](#) about [previous events](#) and [consequences](#) using my secure personal profile on the RUDY website and for this information to be made available to the [RUDY research team](#)



I agree to provide [information](#) about [current and future events](#) and [consequences](#) using my secure personal profile on the RUDY website and for this information to be made available to the [RUDY research team](#)



Records

I agree that my previous NHS and social care medical records can be made available to researchers.



I agree that my current and future NHS and social care records can be made available to researchers.



Samples

I agree that any tissue removed in the course of medical care related to my condition may be used by the researchers. I consider this tissue a gift and I understand I will not gain any direct personal or commercial benefit from this.



What the participants think:

- It makes the study less overwhelming
- It allows participants to be selective about taking part in sub-studies
- It makes substantial amendments much easier and quicker
- It lets participants shape the project

What is Rudy?

Rudy is a study in Rare diseases of the bones, joints and blood vessels. Headed up by a research team at the University of Oxford, Rudy aims to transform clinical care for participants through patient driven research.



The GCOF Simulation Project is developed in the context of the 'Genetics Clinic of the Future'. It enables members of the consortium to go beyond a theoretical consideration of the challenges ahead, by gaining firsthand experience of having their genome sequenced. The 'Genetics Clinic of the Future' (GCOF) started on January 1 2015 as a 2.5-year research project, granted by the H2020 Framework of the European Commission (HCO15-643349-GCOF).

Log in

Email

Password

Remember me?

Log in

Forgot your password?

GCOF 004



What the participants think:

- Concept is good in principle but needs a complete eco-system to support it
- It is the direction of travel – ‘the only way...to make meaningful sense of what informed consent and giving consent means’
- Disagreed on how consent should be organised – some wanted to consider everything, others wanted a ‘yes to all’

GCOF 007



Platform for Engaging Everyone Responsibly (PEER)



PEER enables a range of granular access controls, with ease

Participants use access controls to specify who can, and cannot, access or use their data, and for what purpose

“Contact Information” And separately, who can have access to their contact information

“Use” And who can use or export data from the PEER system

“Discovery” Each participant controls who can locate their de-identified data...

And the opportunity to change these preferences over time¹

For multiple categories of uses, and specified usage rights

This can include:
Bridge
Personal Genome Project
PatientsLikeMe, and so on

	Discover My Data <small>what's this?</small>	Contact Me <small>what's this?</small>	Use My Data <small>what's this?</small>	
Advocacy & Support Groups				
DIS-listed organizations serving your condition	✓ Allow	✓ Allow	⚠ Ask Me	Edit
Non-profit organizations serving your condition	✓ Allow	⚠ Ask Me	⚠ Ask Me	Edit
Medical Researchers				
Researchers recommended by a DIS-listed organization serving your condition	✓ Allow	⚠ Ask Me	⚠ Ask Me	Edit
IRB-approved research addressing your condition	✓ Allow	⚠ Ask Me	⚠ Ask Me	Edit
All researchers	✓ Allow	⊘ Deny	⊘ Deny	Edit
Data Analysis				
"Show related content" feature	N/A	N/A	✓ Allow	Edit
"Compare with others" feature	N/A	N/A	✓ Allow	Edit
Genetic Alliance Translational Research Network	✓ Allow	N/A	✓ Allow	Edit
Oracle Health Sciences Network	✓ Allow	N/A	✓ Allow	Edit
Newly-Released Data Analysis Platforms	⚠ Ask Me	N/A	⚠ Ask Me	Edit

And given the option to Permit, Decline, or wait for more information before deciding

¹ So long as the data is in PEER or a system that adheres to the person's Private Access settings.

With a highly intuitive guide structure, notifications & dynamic consent

Participants can draw support from knowledgeable members of their community about considerations regarding data sharing and access controls

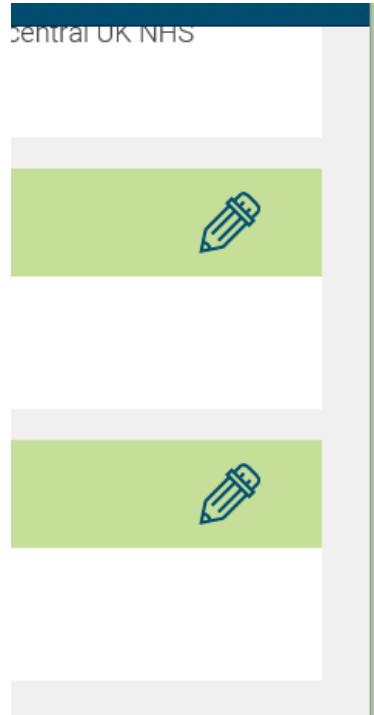
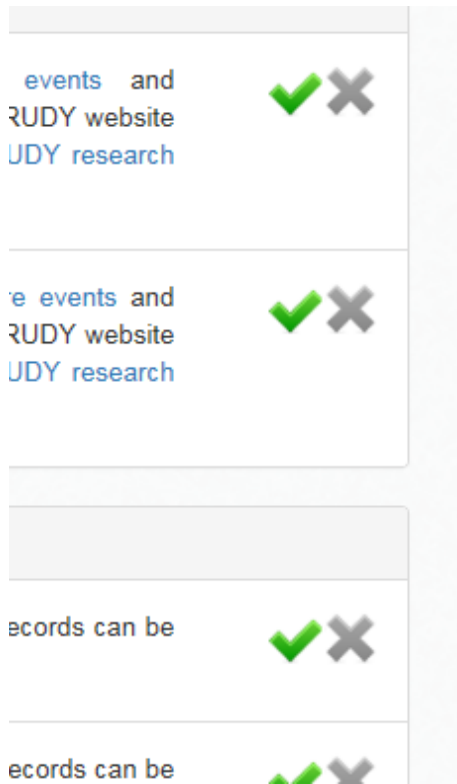
...and do this for each member of their family, or use an existing group of settings as the basis for others

And with an easily accessible audit log for all activity being maintained at all times

With dynamic consent from a computer or a smartphone

...or set their preferences manually, without influence by anyone

The screenshot shows the TrialsFinder website interface. At the top, there is a navigation bar with links: Home, My Account, Health Profiles, Privacy Settings, Notifications, Activity Log, and Sign Out. Below the navigation bar, the main content area is titled "Select a guide". On the right side of this section, there is a dropdown menu labeled "Select a guide for:" with "Adam" selected. The main content area contains three profiles of individuals who provide guidance: Sharon Terry (President and CEO, Genetic Alliance), Donna Cryer (Past president, American Liver Foundation), and Robert Shelton (Founder and CEO, Private Access, Inc.). Each profile includes a photo, name, title, and a short bio. Below the profiles, there is a "Create Preferences Manually" section with a wrench and screwdriver icon and a "Set preferences manually" link. At the bottom right of the main content area, there is a "Go Back" button. In the foreground, a smartphone displays a "Research Opportunity" notification with the text "Researcher Nicole Tartem, KS&A, P.O. Box 400, Ames, IA 50010, USA" and "Request: Adam P...". The notification also includes a "Purpose:" section and an "Explanation:" section. At the bottom of the notification, there are three buttons: "Consent", "Decline", and "Snooze".



Granular choices
 Tailoring involvement
 Change mind over time
 Ongoing interaction

- Engagement, not just consent

Dutch projects:

The Personal Health Train (PHT) (and the MyConsent tool) aims to increase the interoperability and (re-)use of health data. The two main concepts behind the PHT are that (i) data stay with, and are controlled by the data owner or custodian and (ii) research (questions and analyses) are brought to the data and executed using distributed learning technologies (Peter-Bram Hoen – Radboud UMC).

kDus (*It's Me*) – an online personal health environment which allows an individual person to manage his/her health data. This data can be gathered from different sources, such as a hospital, a diagnostic laboratory, a biobank and also directly from the individual (Marleen Schippers – UMC Groningen).



Does it work?

Dynamic Consent: An Evaluation and Reporting Framework

Journal of Empirical Research on Human Research Ethics

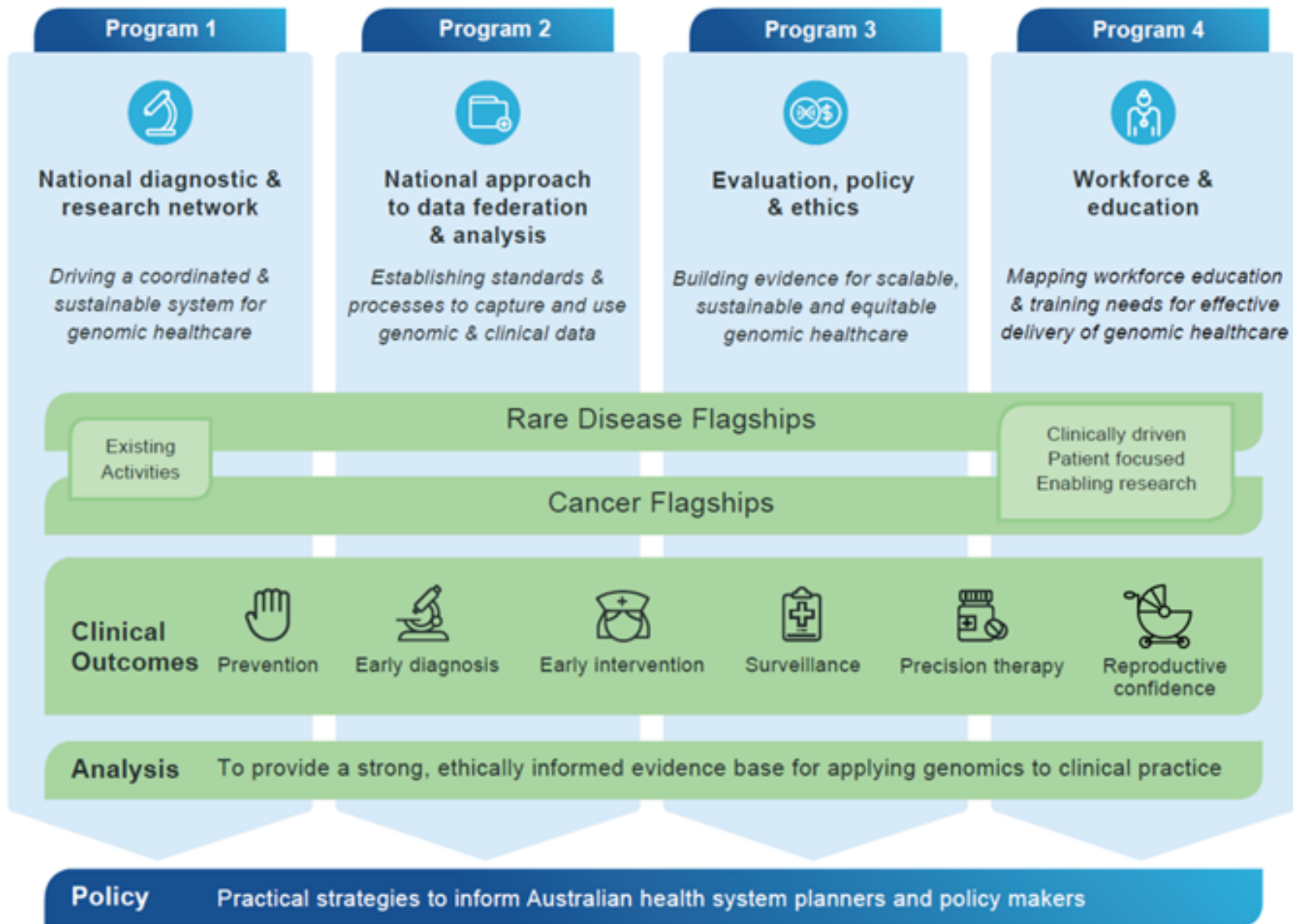
/ 2019

Gan Prictor¹, Megan A. Lewis², Ainsley J. Newson³, Matilda Haas^{4, 5}, Sachiko Baba⁶, Han
⁷, Minori Kokado⁶, Jusaku Minari⁸, Fruzsina Molnár-Gábor⁹, Beverley Yamamoto¹⁰, Jan
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Australian Genomics: DC Evaluation

Australian Genomics is preparing Australia for the integration of genomic medicine into healthcare. We are providing the evidence needed to transform the diagnostic process, inform the healthcare workforce, and to show how genomics is best delivered in the clinical setting.





DC pilot – launched in Dec 2018

- Piloting new online platform ‘CTRL’
- Allows participants to choose more specific consent options and receive information about the research
- 2 participating flagships:
 - chILDRANZ (child interstitial lung disease)
 - HIDDEN (end-stage kidney disease)
- Randomised participation – DC vs paper consent
- Baseline survey and 6 month follow up

Welcome to CTRL

Consent for participating in the Australian Genomics program

[Register Now](#)

[Log in](#)

Challenges for the evaluation:

- Trying to coordinate a study within a study
- Adding survey questions to existing surveys – without making them too onerous
- Fitting with flagship timelines (including ethics amendments)
- Building in option for patients to decline using DC
- Engagement focus as part of next phase

Thank you!

- HeLEX Centre, Oxford
- HeLEX@Melbourne
- GCOF partners – Terry Vrijenhoek, Bogi Eliassen, Daan Schuurbiers
- Dynamic consent partners (Including RUDY and the AGHA working group)



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