



Rare Disease Cures Accelerator-Data and Analytics Platform Virtual Workshop 2020

Up Next: Data ingestion and data governance





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C-Path





RDCA-DAP: Data ingestion and data governance

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Why share data?



Patients/Patient Groups

- Faster drug development
- Understand disease course/variance
- Visibility to industry
- Drive collaboration





Industry

- Design more effective trials
- Understand disease course/variance
- Understand / develop biomarkers/endpoints

Academics

- Improves their research
- Understand disease course/variance
- Understand / develop biomarkers/endpoints
- Visibility of data and research, collaboration
- Publish more/better papers



Patients are willing to share data – with conditions





N Engl J Med. Author manuscript; available in PMC 2018 Dec 7. PMCID: PMC6057615

Published in final edited form as: NIHMSID: NIHMS980034

N Engl J Med. 2018 Jun 7; 378(23): 2202–2211. PMID: 29874542

> Am J Hum Genet. 2020 Sep 14;S0002-9297(20)30292-5. doi: 10.1016/j.ajhg.2020.08.023. Online ahead of print.

Clobal Dublic Dorcontions of Conomic Data Sharing:

Clinical Trial Part

doi: 10.1056/NEJMsa1713258

Michelle M. Mello, J.D., Pl

▶ Author information ▶ Co

D., PI

> J Me Online

Pat sha

Shona , Ghisla Meta-analysis of 27 surveys concluded patients support data sharing IF specific conditions are met.

Rare disease patients are particularly willing to share data

 Conditions included: value, privacy, risk minimization, data security, transparency, control, information, trust, responsibility and accountability.

Anwer ⁴, Jerome Atutornu ⁵

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Anwer ⁴, Jerome Atutornu ⁵
stine Critchley ⁹, Josepine
, Gry Houeland ¹⁰, Heidi C
era L Izhevskaya ¹⁷, Aleksandra
, Brandi Leach ²², Keying Liu ²³
col ²⁷, Emilia
Lauren
ith ³
in Thorogood

am ¹, Xiaoqian

Orphanet J Rare Dis. 2

Published online 2019 July 2 up. 10 1100/513023-018-1123-4

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Share and protect our health data: an evidence based approach to rare disease patients' perspectives on data sharing and data protection - quantitative survey and recommendations

Sandra Courbier, 1 Rebecca Dimond, 2 and Virginie Bros-Facer 1

▶ Author information ▶ Article notes ▶ Copyright and License information <u>Disclaimer</u>

> AMIA Annu Symp Proc. 2014 Nov 14;2014:1699-708. eCollection 2014.

Sharing my health data: a survey of data sharing preferences of healthy individuals

Elizabeth A Bell ¹, Lucila Ohno-Machado ², M Adela Grando ³

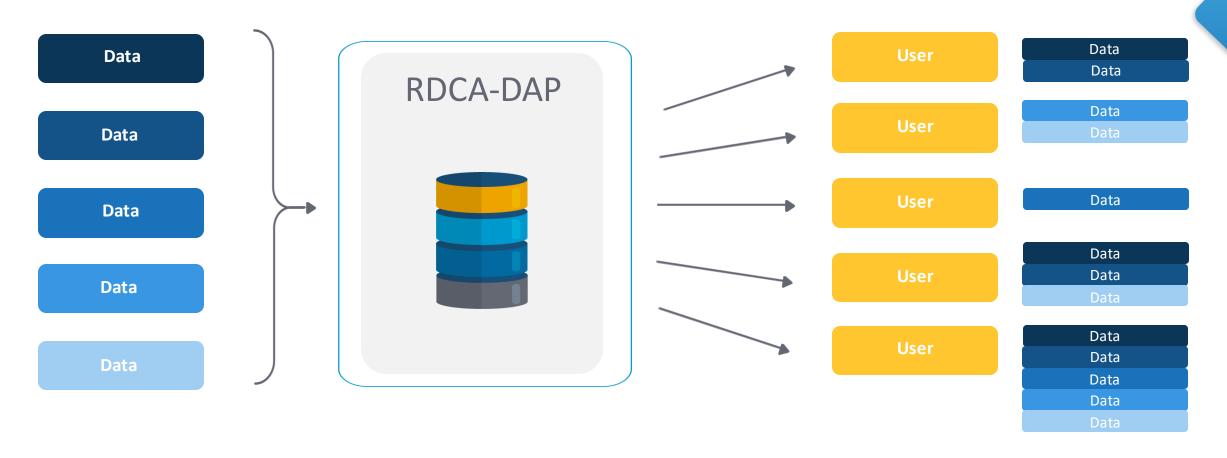
Affiliations + expand

PMID: 25954442 PMCID: PMC4419941

Free PMC article

Optimizing data ingestion and usability:





Permissions and conditions for sharing data

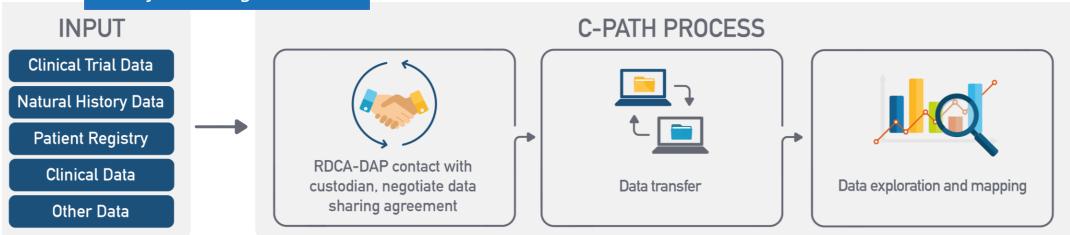
Permissions and conditions for using data

Data Flow in RDCA-DAP

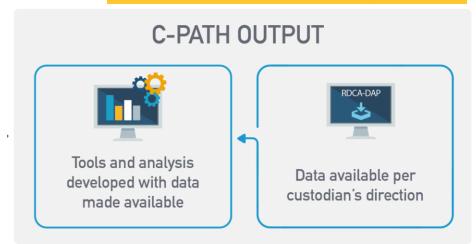




Permissions and conditions for sharing data



Permissions and conditions for using data



The Data Sharing Agreement



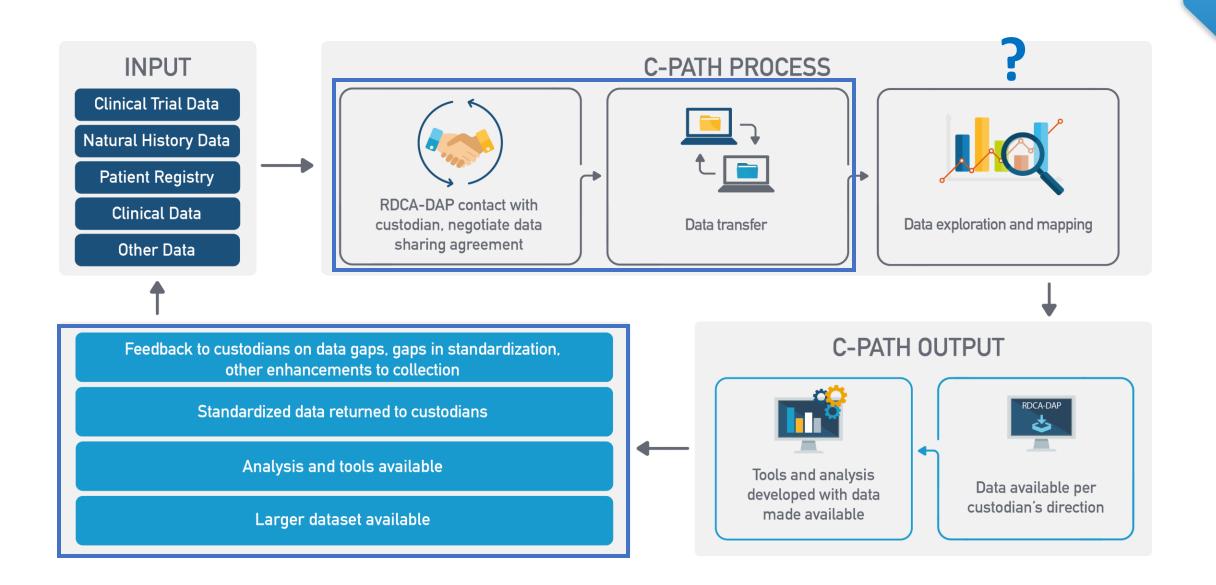
Legal document between RDCA-DAP and the custodian that dictates how RDCA-DAP can use a dataset.

- Tells us that the data was collected ethically, the patient consent allows sharing of the data, and that the custodian is able to share the data, and that it will be de-identified
- Tells us what we are allowed to do with the data share with anyone, share after approval, or only share metadata or summary data
- Assures the data custodian of data protection/ data privacy
- Details any other feedback agreed to by both parties (e.g. publication notifications, credit to the custodian)
- Provides details of the dataset and associated documents to help us interpret the data

Interactions with the custodian

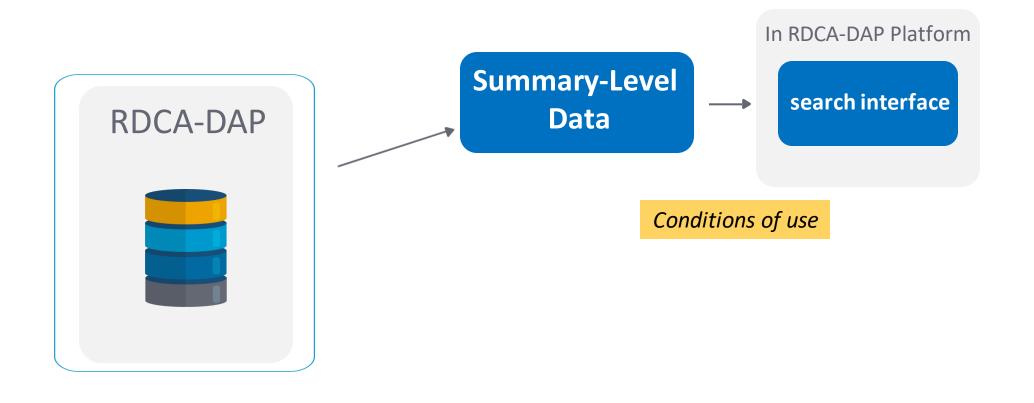






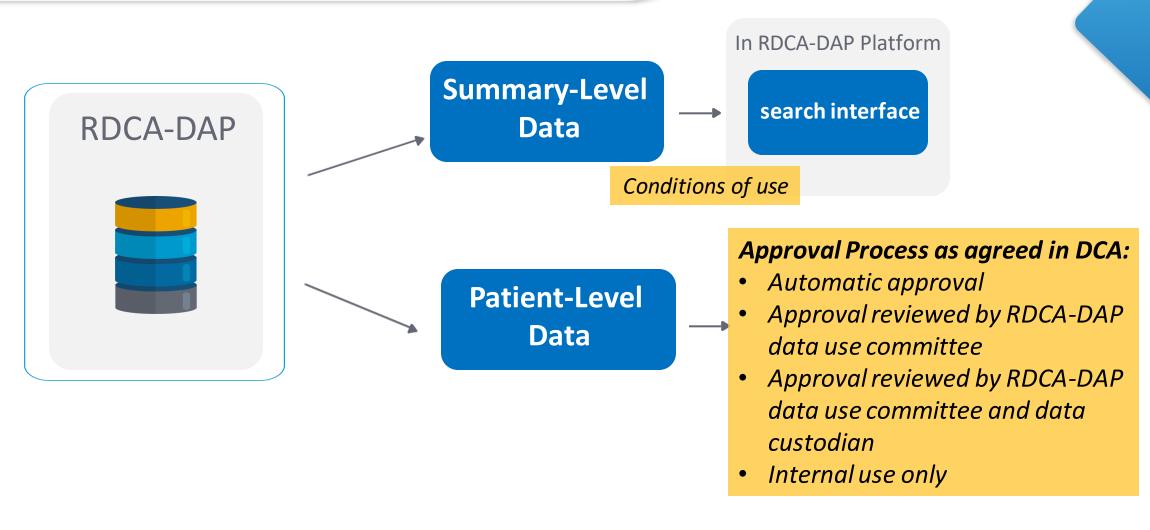
Accessing Data Through RDCA-DAP





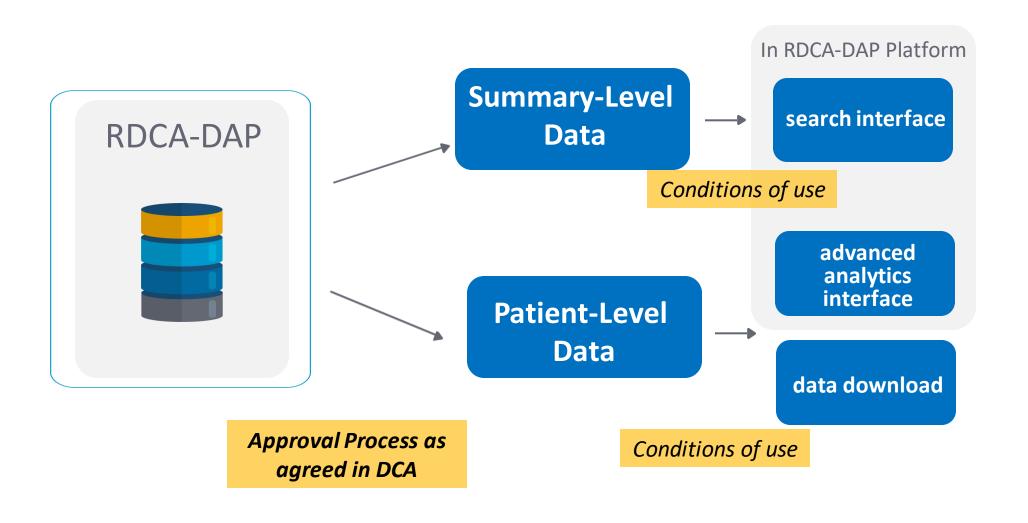
Accessing Data Through RDCA-DAP





Accessing Data Through RDCA-DAP





Terms and Conditions of Use of Data



Legal document between RDCA-DAP and the data users that dictates what the user can do with the data

- Ensures secure data storage, data privacy (limitations of use to approved researchers and subcontractors)
- Ensures that use is limited to the approved research
- Requires acknowledgement of data source in public disclosures
- Ensures ethical use of data
- Ensures data is not sold or shared on to other users, data cannot be patented etc.
- Encouragement of public disclosure of results, sharing results with data custodian



Patients/Patient Groups



Industry



Academia



By working together and sharing data together we can accelerate therapy development for Rare Diseases.

RDCA-DAP in the Ecosystem of Rare Disease Data



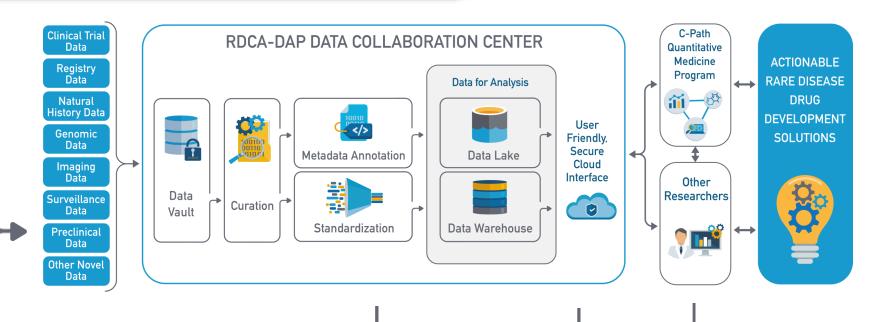




Groups that share Individual Datasets

Registry Systems

EHR systems



Improved standardization, ontologies, use of instruments, standardized data

Access to more data for analyses

Shared tools and analyses to improve future studies

More Efficient
Development
of New
Therapies





THANK YOU!

Don't forget to answer survey questions.

For more information, email rdcadap@c-path.org

#RDCADAP