Adoption and Outputs session

RDA for HEALTH & BIOINFORMATICS
Key Challenge in the field

How do we ensure all stages of data collection and preparation within the scientific compendium are fully transparent and appropriately accessible to achieve reproducibility?
Scalable Dynamic Data Citation

RDA Data Citation WG: https://rd-alliance.org/groups/data-citation-wg.html
RDA WG Case Statement: https://www.rd-alliance.org/filedepot?fid=102
Executive Summary of Output: https://docs.google.com/document/d/1SUer28B30Gg4yNNHfmztRawP7zLJqmx2IpEZSceeBMs/edit?usp=sharing
<table>
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<td>Cost Assessment</td>
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<tr>
<td>Data Access</td>
<td>1/10/18 7:00 AM</td>
</tr>
<tr>
<td>Data Extraction - Structured</td>
<td>1/10/18 8:13 PM</td>
</tr>
<tr>
<td>Data Extraction Unstructured Data</td>
<td>1/10/18 6:16 PM</td>
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<tr>
<td>Ethical Assessment Review</td>
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<td>Participant Exclusion Criteria</td>
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<td>Participant Inclusion Criteria</td>
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<td>Project Metadata</td>
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<tr>
<td>RDA Health Data Service Center Data Brokerage Workflow</td>
<td>1/11/18 7:21 AM</td>
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Linking and describing cohort collection files

Data Extraction - Structured

- Query Script_Structured
  - Data_File Name
  - Link to Shared Query Script_Structured Data
  - Query Script_Structured Data_File Format
  - Query Script_Structured Data_Software Language
  - Query Script_Structured Data_File Version #
  - Query Script_Structured

- createExposureCohorts.R
  - .R
  - R, SQL, and JSON
  - 2.0
  - Rohit Vashisht, Jamie Weaver
Group Status and Next Steps

Seeking Working Group members and adopters

--Participate in workflow gap analysis
--Provide Adoption use-case or sample workflows for testing

JOIN HERE!

http://bit.ly/31Q9fHb
Blockchain Applications in Health WG

Read the Blockchain State of the Art Report


Join the WG

Issues and Gaps Assessed by Blockchain WG

Some key health data challenges
- Data mobilisation
- Legal and regulatory challenges
- Security

Blockchain – technical features and areas of interest in the health domain
- Blockchain 101
- Areas of interest

Future perspectives and integration/interaction with other technologies
- Business perspectives
- AI and blockchain

Existing solutions
# Impacts Across the Care and Research Landscape

<table>
<thead>
<tr>
<th>Category</th>
<th>Impacts</th>
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</thead>
</table>
| **Data Access and exchange**                 | • Improved access to data  
• Identity management tools  
• Longitudinal health record |
| **Drugs authenticity**                       | • Supply chain transparency  
• Provenance tracking  
• Reduce drugs counterfeiting |
| **Clinical trials**                          | • Improve transparency and auditing  
• Improve relationship management among stakeholders  
• Facilitate protocol and consent management and updates |
| **Epidemiology and public health**            | • Improve data flow on the spread of contagious diseases                                   |
| **Medical IoT**                               | • Encrypt and share securely patient generated data  
• Ensure privacy and security and identity of the medical device                             |
| **Improved service management**               | • Improved control and transparency over access to health services by individuals, including visit to GPs, drugs consumption, access to Emergency rooms |
| **Introduce reward systems of service tokenisation** | • Improve engagement of individuals, encouraging healthy behaviours or facilitating access to specific services |
| **Blockchain-based claims billing management / health insurance** | Improve health insurance services providing, tamper-proof claim management and fraud reduction, reduction of administrative burdens, as well as enabling personalised services, dynamic pricing, improved access |
Group Status and Next Steps

Seeking Working Group members and adopters
--Held session during P14 with updates of output report and use cases

Join the WG
Blockchain State of the Art Report

Get in touch!

Anthony Juehne
Leslie McIntosh-Borrelli
Oya Beyan
Ludovica Durst
Edwin Morley-Fletcher
Yannis Ioannidis
Aggelos Kiayias
David Manset

RDA-US
RDA-US
Aachen, Germany
Rome, Italy
Rome, Italy
Athens, Greece
Athens, Greece
Paris, France
THANK YOU!!!

● for participating in the plenary
● for interest in adoption
● for your time, attention, and engagement