

Trusted Research Environments (TREs): Our ambition and plans



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Overview

Purpose

We will increasingly use Secure Data Environments such as Trusted Research Environments (TREs) to provide safe and secure data for analysis and research.

These slides set out:

- background to TREs
- our ambition for the future data access ecosystem
- our commitments to TREs (set out in the Data Strategy, with additional detail in our response to the forthcoming Goldacre Review)
- our plans for TRE standards and investments
- our priority actions for the next 3-6m

Agenda

1. What are TREs and their benefits?
2. Our ambition and commitments
3. Our plans and programmes of work
4. Our priorities for the next 3-6m

Annex

1. TRE standards
2. Real-world data (RWD) TREs
3. Governance

1. What are TREs and their benefits?



What are TREs?

TREs are secure spaces where researchers can access sensitive data without breaching privacy, to provide safe and secure data for analysis and research.

What are the benefits of TREs?

The features of TREs make them critical to winning and maintaining public trust in data-driven planning, research and innovation.

- **Data quality:** Allow for data sources to be linked at scale, and provide tooling for analysing linked data in a standardised way.
- **Security:** Data does not need to leave the data controllers' systems. Only individuals that meet requirements are allowed access to TREs.
- **Transparency:** Ability to record and audit all activity for oversight, and sharing analyses for interrogation and reuse by other users.
- **Privacy:** Security can be enhanced by the use of Privacy Enhancing Technologies, and only data which has been agreed as necessary for a project is made available.

2. Our ambition and commitments



Our ambition for the future data access ecosystem

- **TREs have proliferated and the landscape is complex.** Health sector organisations (as well as academia and industry) are developing and deploying their own versions of TREs, which provide access to data for analysts in a broad range of ways and diverge in their governance and technical implementation.
- We envisage a **future data access ecosystem made up of a relatively small number of TREs.** All TREs that hold or analyse health and care data will need to **conform to national standards and be accredited.** Only TREs that have been accredited may be procured or deployed.

Our headline commitments

- The Data Strategy, 'Data saves lives: reshaping health and social care with data', sets out **our vision for empowering researchers and innovators with the data they need** to develop and deliver life-changing treatments and solutions for the benefit of all citizens, staff and the system.
- This outlines our **commitments to using TREs** to provide safe and secure data for analysis and research.
- We will also **act on the findings and recommendations of the Goldacre Review**, on the use of data for research and analysis. Our response will be contained within the final version of the Data Strategy.
- We will **only start uploading GDPR data when a TRE has been developed and implemented** in NHS Digital. 4

3. Our plans and work programmes



To ensure TREs are fit for the future we will develop overarching standards and invest in TRE delivery

Overarching TRE specifications, policy and frameworks

- Standards for the technical design and deployment of TREs are essential to **ensuring interoperability and federation** and **guiding investments and activity across the system**.
- We are progressing work at pace on **technical specifications, policy (e.g. governance, exceptions) and an accreditation framework**.
- We will **co-produce these outputs with stakeholders across the system**, engaging widely and building on existing work (e.g. HDRUK).
- We will develop a **roadmap for transition** to ensure that existing data use for service improvement, research and innovation is not disrupted.

Investments in TRE development and delivery

- In FY21/22, we are investing in national and sub-national TREs:
 - **NHS Digital's TRE**: this is a key prerequisite for GDPR data collection, and will underpin NCRAS data access and DigiTrials programmes.
 - **'Real-world' data (RWD) TREs**: National data assets are not sufficiently comprehensive or granular to meet the RWD needs of some researchers and innovators. We plan to invest up to £2m across a small number of sub-national localities (ICs or groups of ICs) to develop RWD TREs.
- We will finalise our **FY22/23 investments** for TREs following CSR announcements.

4. Our priorities for the next 3-6m

1

Publish the final version of the **Data Strategy** (November/December 2021), including:

- A response to the Goldacre review, and plans for engaging with stakeholders to develop our detailed response
- Approach to ongoing communication and engagement, including sustained dialogue with patients and the public

2

Work with leading ICSs on **RWD TRE plans** and driver projects (November 2021)

3

Co-develop with stakeholders our overarching **standards for TRE specification, policy, accreditation** (March 2022+)

4

Finalise our FY22/23 investments (including TREs) following CSR announcements (March 2022)

5

Deliver the **NHSD TRE** (March 2022):

- meeting NDG and other stakeholder requirements for **GDPR**
- onboard additional data sets to meet other programme/ user needs

Questions?

