

831458 – Trials@Home

Center of Excellence – Remote Decentralised Clinical Trials

WP2 - TECH

D2.1 - Glossary of terms and definitions used

Lead contributor	Jeroen de Bruin (FH JOANNEUM)
	Jeroen.debruin@fh-joanneum.at
Other contributors	Sonia Houston Pichardo (Boehringer-Ingelheim)
	Amy Rogers (University of Dundee)
	Rachel Copland (University of Dundee)
	Kate Harwood (University of Dundee)
	Christa Müller-Vössing (UCB)
	Petra Naster (Vital Transformation)
	Linda Rutgrink (Sanofi)
	Ute Kohlhaas (Bayer)
	Evert-Ben van Veen (MLC Foundation)
	Jozef Aerts (FH JOANNEUM)
	Bianca Schnalzer (FH JOANNEUM)
	Christoph Reiter (FH JOANNEUM)
	Robert Rehb (FH JOANNEUM)

Due date	29.02.2020
Delivery date	dd Mmm YYYY
Deliverable type	R,
Dissemination level	CO,

Description of Work	Version	Date
---------------------	---------	------

	V1.0	02/11/2018
--	------	------------

Document History

Version	Date	Description
V0.8	21 Feb 2020	First Draft
V0.85	25 Feb 2020	Comments
V0.9	26 Feb 2020	Draft
V1.0	28 Feb 2020	Final Version

Publishable Summary

This document reports the processes used to develop a glossary of terms and definitions used within WP2 (task 2.1.1). The consortium agreed to expand the WP2 glossary to a project-level glossary since a common language should be established not only within but also across work packages. The aim of the glossary is to establish a common language within the project and to aid understanding of key terms that will feature in project outputs. The glossary itself, presented in the document, may be updated during the Trials@Home project so that important new terms can be added, obsolete terms removed, or existing terms updated to significant new insights. This approach has been chosen to reflect the fast-changing remote decentralised clinical trial landscape. The current version of the glossary can also be found online.

Methods

To create a glossary of terms and definitions used within the Trials@Home project (hereafter simply called “glossary”), we employed a variety of methods for information gathering, concept extraction and definition, conflict management, and glossary validation and quality control.

For the creation and conception of the glossary, a workgroup was formed comprising members of work packages 1-5, 2 members per work package: one from the EFPIA side, and one from the public side. This workgroup then set out to find suitable concepts related to remote decentralised clinical trials (RDCTs) for inclusion in the glossary. Furthermore, they convened on a weekly basis to discuss and ameliorate results. A more thorough discussion on these processes is provided below.

Information gathering

By “information gathering”, we mean the process of finding information sources that potentially contained concepts that were potentially relevant to the Trials@Home project. It is the first step towards exploring the landscape of terms that are commonly used in discussing remote decentralised clinical trials.

We first employed crowdsourcing among the project partners, asking all partners involved in the creation of the glossary to provide concepts that, in their opinion, belonged in the glossary. We also asked project partners to identify information on other glossaries or source material that cover similar topics, i.e. remote decentralised clinical trials (RDCTs), or clinical trials in general. Concurrently, we performed a literature scan on sources that address RDCTs, clinical trials with telehealth, or clinical trials with parts that are remote, or include site visits.

Concept extraction and definition

Concept extraction and definition is the process of identifying concepts relevant to the field of RDCT and extracting them to allow representation in a structured form.

After analysing the results of the information-gathering phase, and identifying terms used in the Trials@Home project proposal, each member of the glossary workgroup tried to match suggested glossary concepts with definitions found in existing glossaries and publications, and, where available, selected a suitable, existing definition.

The results of concept extraction and definition were entered into a standardised Excel database structure, which was reviewed by all contributors. Furthermore, the data was open to all project partners in the consortium, and all could propose comments / amendments. Table 1 shows the information recorded for potential glossary concepts.

Table 1: Captured for potential glossary concepts

Field name	Description
Concept (context)	The concept to be defined in the glossary. For some concepts, a context is specified between brackets to demarcate the definition of the concept
Acronym / Abbreviation	The common acronym or abbreviation of the concept, if any
Definition	A definition of the concept. This is where the main definition is stated

Reference / Regulation	Identifier for the information source in which this concept was found and defined (if definition is not novel)
Synonyms	Concepts that are considered synonyms to the current concept

Conflict management

Concepts and definitions to be included in the glossary, dubbed “main terms”, and other terms designated as synonyms for these, were agreed using a conflict management process. Conflict management was performed by the workgroup on a “majority rules” basis. The workgroup discussed modifications and comments on a weekly basis and all members of the workgroup present in the conference call voted on proposed actions and changes (minimum of 3).

Validation and quality control

After development of a stable first draft, this version was then forwarded to the Executive Board (ExBo), after which ExBo members then presented it to the project partners in their respective work packages. All project partners were given the opportunity to propose changes if they were in substantial disagreement with the presented concepts and definitions. Any partners proposing changes were required to provide an alternative definition. These definitions were then assessed using described conflict management processes, after which a first version of the glossary was finalised.

Results

Adaptive trial design

Original source: FDAⁱ

A clinical trial design that allows for prospectively planned modifications to one or more aspects of the design based on accumulating data from subjects in the trial.

Auxiliary medicinal product

Original source: CTRⁱⁱ

Abbreviation: AMP

A medicinal product used for the needs of a clinical trial as described in the protocol, but not as an investigational medicinal product (e.g., rescue medication, challenge agents, medicinal products used to assess clinical trial end-points, or medicinal products used for background treatment).

Basic building block

See "Trial building block".

Big data

Original source: OEDⁱⁱⁱ

Data of a very large size, typically to the extent that its manipulation and management present significant logistical challenges; (also) the branch of computing involving such data.

Central monitoring (of data)

Original source: ICH GCP^{iv}

A remote evaluation of accumulating data, performed in a timely manner, supported by appropriately qualified and trained persons (e.g., data managers, biostatisticians).

Clinical study

Original source: CTRⁱⁱ

Abbreviation: CS

Any investigation in relation to humans intended:

- (a) to discover or verify the clinical, pharmacological or other pharmacodynamic effects of one or more medicinal products;
- (b) to identify any adverse reactions to one or more medicinal products; or
- (c) to study the absorption, distribution, metabolism and excretion of one or more medicinal products; with the objective of ascertaining the safety and/or efficacy of those medicinal products.

Clinical trial (interventional)

Original source: CTRⁱⁱ

Abbreviation: CT

A clinical study which fulfils any of the following conditions:

- (a) the assignment of the subject to a particular therapeutic strategy is decided in advance and does not fall within normal clinical practice of the Member State concerned;
- (b) the decision to prescribe the investigational medicinal products is taken together with the decision to include the subject in the clinical study; or
- (c) diagnostic or monitoring procedures in addition to normal clinical practice are applied to the subjects.

Controller (of data)

Original source: GDPR^v

The natural or legal person, public authority, agency or other body which alone, or jointly with others, determines the purposes and means of the processing of personal data

Data consent

Original source: GDPR^v

Any freely given, specific, informed and unambiguous indication of the data subject's wishes by which he or she, by a statement or by a clear affirmative action, signifies agreement to the processing of personal data relating to him or her.

Depot-to-Patient IMP Distribution

Original source: ISPE^{vi}

IMP distribution method whereby IMP supplies are shipped directly to the patient's home from either the distribution centre, or regional depots.

Digital biomarker

Original source: Digital Biomarkers^{vii}

Objective, quantifiable physiological and behavioural data that are collected and measured by means of digital devices such as portables, wearables, implantables or ingestibles.

Digital trials

Trials@Home

A trial that involves the use of mHealth and mobile technology to capture insights.

Direct-to-patient (trial activity)

Trials@Home

Trial activity that is done directly with the study participant, with minimal participation by the conventional study site.

Direct-to-patient (IMP delivery)

Trials@Home

Method of IMP delivery that ships it directly to the patient. Two strategies are common here, site-to-patient IMP delivery and depot-to-patient IMP delivery, which require different regulatory approaches.

Electronic health

Original source: WHO^{viii}

Abbreviation: e-Health, eHealth

Activities that use electronic means to deliver health-related information, resources and services: it is the use of information and communication technologies (ICT) for health.

Electronic participant reported outcome

See “Electronic Patient Reported Outcome”.

Electronic patient reported outcome

Adapted from: FDA^{ix}.

Abbreviation: ePRO

Measurement based on a report that comes directly from the patient (i.e., study subject) by use of electronic data capturing about the status of a patient’s health condition without amendment or interpretation of the patient’s response by a clinician or anyone else.

External stakeholder platform (Trials@Home)

Trials@Home

Abbreviation: ESP

A consultation group that is actively involved in the Trials@Home project. It consists of representatives from relevant stakeholder groups and expertise fields to provide expert views, insights and knowledge about RDCT approaches. They also serve as ambassadors of the project.

Health technology assessment

Original source: WHO^x

Abbreviation: HTA

The systematic evaluation of the properties and effects of a health technology, addressing the direct intended effects of this technology, as well as its indirect unintended consequences, and aimed mainly at informing decision-making regarding health technologies.

Hybrid trial

Trials@Home

Trial model that involves both remote/decentralised and traditional site based trial elements.

Informed consent (trial participation)

Abbreviation: ICF

See “Study consent”.

Investigational medicinal product

Original source: CTRⁱⁱ

Abbreviation: IMP

A medicinal product that is being tested or used as a reference, including as a placebo, in a clinical trial.

Mobile health

Original source: WHO^{xi}

Abbreviation: m-Health, mHealth

Medical and public health practice supported by mobile devices, such as mobile phones, patient monitoring devices, personal digital assistants, and other wireless devices.

Non-investigational medicinal product

Abbreviation: Non-IMP, NIMP

See "Auxiliary medicinal product".

Patient-centric trial design

Trials@Home

A study design principle where the needs and wishes of the patient are considered as much as possible.

Person (or patient) identifiable data

Abbreviation: PID

See "Personal data".

Personal data

Original source: GDPR^v

Any information relating to an identified or identifiable natural person ('data subject'); an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person.

Personalised medicine

Original source: IMI ADAPT/SMART^{xii}

Medicine that is targeted to individual patients or stratified population of patients with specific characteristics. Personalised medicine can also be interpreted more narrowly to mean targeted treatment according to genetic variations only or to mean a unique treatment for the individual patient rather than groups of patients.

Processor

Original source: GDPR^v

A natural or legal person, public authority, agency or other body that processes personal data on behalf of the controller.

Pseudonymisation

Original source: GDPR^v

The processing of personal data in such a manner that the personal data can no longer be attributed to a specific data subject without the use of additional information, provided that such additional information is kept separately and is subject to technical and organisational measures to ensure that the personal data are not attributed to an identified or identifiable natural person.

Real world data

Adapted from: IMI GetReal^{xiii}

Abbreviation: RWD

Observational data collected in a manner that reflects how interventions would be used in routine clinical practice or secondary research data derived from routinely collected data.

Real world evidence

Adapted from: IMI GetReal^{xiii}

Abbreviation: RWE

Results derived from the analysis and/or synthesis of real-world data.

Remote clinical trial

Adapted from: CCT^{xiv}

A clinical trial that enables participants not having to attend investigator sites, or at least not as often as in classical clinical trials, and typically uses technology such as telemedicine.

Remote decentralised clinical trials

Trials@Home

Abbreviation: RDCT

Remote Decentralised Clinical Trials make use of digital innovations to make trials more accessible to participants by moving clinical trial activities to more local settings or even the participants home and thus enable participants to visit a clinical trial centre less frequently, if at all.

Scientific advisory board

Trials@Home

Abbreviation: SAB

A selective group of stakeholders that will review the trial and project design and is not involved in the shaping of outputs. It consists of independent, sovereign thought leaders in the field of RDCTs who serve in a private capacity. The SAB will provide a scientific review of the project and will report this back to the IMI in a formal report.

Siteless trial

See “Virtual trial”.

Site-to-patient IMP distribution

Adapted from: ISPE^{vi}

IMP supplies that are shipped via the investigative site.

Study consent

Original source: CTRⁱⁱ

A subject's free and voluntary expression of his or her willingness to participate in a particular clinical trial, after having been informed of all aspects of the clinical trial that are relevant to the subject's decision to participate or, in case of minors and of incapacitated subjects, an authorisation or agreement from their legally designated representative to include them in the clinical trial.

Telemedicine

Original source: WHO^{xv}

The delivery of health care services, where distance is a critical factor, by all health care professionals using information and communication technologies for the exchange of valid information for diagnosis, treatment and prevention of disease and injuries, research and evaluation, and for the continuing education of health care providers, all in the interests of advancing the health of individuals and their communities.

Trial building block

Trials@Home

A set of related and coordinated services and solutions that supports one or more activities within a clinical trial.

Trial site

Original source: ICH GCP^{xvi}

The location(s) where trial-related activities are actually conducted.

Virtual trial

Trials@Home

A trial where there are no physical sites and no face-to-face interactions with patients, or even one where there would be no human-to-patient interaction at all.

Wearables

Original source: OED^{xvii}

Portable devices, especially those incorporating microprocessor technology, designed to be worn on one's person to collect, store and/or transmit healthcare data in real-time.

Discussion

The glossary published in this document is only the latest version in its life cycle. It was decided by the consortium that the glossary should be a living document, where terms get added or deleted as work progresses in the project, new insights are gained, and our conceptual understanding of RDCTs, as well as its position in the landscape and future of clinical trials, matures. As such, new versions of this document with new concepts and definitions, as well as possible modifications of glossary methodology, will appear in the future on a yearly basis.

Although supplied to IMI as a deliverable document in accordance to their terms, the primary publishing method of the glossary will be the Trials@Home website (www.trialsathome.com), where it will be published as an online standard. In this context, online standard means a) that the glossary is available online on the website and b) that all defined concepts in the glossary are linked to from other pages on the website (e.g, as is done in

Wikipedia), where possible.

References

- ⁱ Food and Drug Administration (2019): *Adaptive Designs for Clinical Trials of Drugs and Biologics - Guidance for Industry*. Available from <https://www.fda.gov/media/78495/download>
- ⁱⁱ Regulation (EU) no 536/2014 of the European parliament and of the council (2014): Official Journal of the European Union L158, art. 2, 16 April, pp.1-76. Available from <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0536&from=EN>
- ⁱⁱⁱ Oxford English Dictionary (2020): Big data. Available from <https://www.oed.com/view/Entry/18833#eid301162178>
- ^{iv} ICH GCP (2020): 5. *Sponsor*. Available from <https://ichgcp.net/5-sponsor/>
- ^v Regulation (EU) no 2016/679 of the European parliament and of the council (2016): Official Journal of the European Union L119, art. 4, 27 April, pp.1-88. Available from <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R0679&from=EN>
- ^{vi} Eli, M. & Hall, C. & Oth, M. & Peskett, A. & Sadler-Williams, E. (2014): *Establishing and managing processes enabling delivery and returns of investigational medicinal products (IMPs) to patient's homes*. Pharmaceutical Engineering November/December 2014, 34(6), pp. 20-30.
- ^{vii} Digital Biomarkers (2020): *Author guidelines*. Available from <https://www.karger.com/Journal/Guidelines/271954>
- ^{viii} World Health Organization (2020): *E-health*. Available from <http://www.euro.who.int/en/health-topics/Health-systems/e-health>
- ^{ix} Food and Drug Administration (2009): *Guidance for Industry Patient-Reported Outcome Measures: Use in Medical Product Development to Support Labeling Claims*. Available from <https://www.fda.gov/media/77832/download>
- ^x World Health Organization (2020): *WHO Definition (EB 134/30)*. Available from <https://www.who.int/health-technology-assessment/about/Defining/en/>
- ^{xi} World Health Organization (2011): *mHealth - New horizons for health through mobile technologies*. Available from https://apps.who.int/iris/bitstream/handle/10665/44607/9789241564250_eng.pdf
- ^{xii} IMI ADAPT SMART (2017): *Glossary of definitions of common terms, version 2*. Available from <http://adaptsmart.eu/wp-content/uploads/2017/10/D2.02-Glossary-IMI-ADAPT-SMART-version-2-October-2017.pdf>
- ^{xiii} IMI GetReal (2017): *Glossary of Definitions of Common Terms*. Available from https://www.imi-getreal.eu/Portals/1/Documents/01%20deliverables/D1.3%20-%20Revised%20GetReal%20glossary%20-%20FINAL%20updated%20version_25Oct16_webversion.pdf
- ^{xiv} Orri, M. & Lipset, C.H. & Jacobs, B.P. & Costello, A.J & Cummings, S.R. (2014): *Web-based trial to evaluate the efficacy and safety of tolterodine ER 4mg in participants with overactive bladder: REMOTE trial*, Contemporary Clinical Trials, 38(2), Pp. 190-197.
- ^{xv} World Health Organization (2010): *Telemedicine – Opportunities and developments in member states*. Available from https://www.who.int/goe/publications/goe_telemedicine_2010.pdf
- ^{xvi} ICH GCP (2020): 1. *Glossary*. Available from <https://ichgcp.net/1-glossary/>
- ^{xvii} Oxford English Dictionary (2020): Wearables. Available from <https://www.oed.com/view/Entry/226610>