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## Glossary

Attribution Highlighting the creator/publisher of some data to acknowledge their efforts, conferring

reputation.

Big data Very large data sets that may be analysed computationally to reveal patterns, trends and

associations.

Citation Providing a link or reference to the data itself, in order to communicate provenance or

drive discovery.

Clinical summary Integrated full report of an individual study of any therapeutic, prophylactic or

report diagnostic agent conducted on patients.

Data Reinterpretable representation of information in a formalised manner suitable for

communication, interpretation or processing (open archival information system definition).

Database A collection of factual information held in electronic form.

Data breach The loss, theft or other unauthorised access to data containing sensitive personal information

that results in the potential compromise of the confidentiality or integrity of the data.

Data sharing plan A brief description of how research data collected in research projects will be distributed

and shared with others having a valid purpose for access to the data.

**Data linking** A method of exposing and connecting data on the Web from different sources.

Data matching Bringing together data from different sources, comparing it and possibly combining it,

> provided a common link can be found to interconnect at least one field in the datasets. Automated analytical techniques that work by copying existing electronic information

—for instance, articles in scientific journals and other works, and analysing the data

they contain for patterns, trends and other useful information.

Data noise Also called noisy data, these are unwanted fields or information (such as duplicate

entries) that degrades the quality of data signals.

Data object An identifiable data item with data elements, metadata and an identifier (definition

from the FAIR principles).

Data reuse Any subsequent use of the original data by someone other than the originator(s).

Data signal As opposed to data noise, this refers to meaningful data patterns that can be gleaned

from data. The strength of the data signal increases by removing noise.

Data sharing The practice of making data from scientific research available for secondary uses.

Data sharing plan A brief description of how research data collected in research projects will be distributed

and shared with others having a valid purpose for access to the data.

Data use The first data use is by an individual or research team that originally gathered or collated

> the data. If the data originator(s) use(s) the same dataset for any later purpose, relating to the original project or not, that also counts as a 'data use'. See also 'data reuse'.

Gold open access Providing free and permanent access to the final version of an article immediately after

publication, and for everyone.

Green open access Also referred to as self-archiving, is the practice of placing a version of an author's

manuscript into a repository, making it freely accessible for everyone.

Information Any type of knowledge that can be exchanged. In an exchange, information is

represented by data.

Informed consent The process in which a patient learns about and understands the purpose, benefits and

potential risks of a medical or surgical intervention, including clinical trials, and then

agrees to receive the treatment or participate in the trial.

Metadata Structured information that describes, explains, locates, or otherwise makes it easier to

retrieve, use, or manage an information resource. (National Information Standards

Organisation).

Open access Refers to free, unrestricted online access to research outputs such as journal articles and

books. OA content is open to all, with no access fees.

Open data Data that can be freely used, shared and built-on by anyone, anywhere, for any purpose

(Open Knowledge Foundation).

Open science Transparent and accessible scientific knowledge, whether as publications or data, that is

freely shared and developed through collaborative networks.

Patient level data The individual data separately recorded for each participant in a clinical study.

Raw data (or source Unprocessed data sourced directly from research subjects or harvested by scientific data)

equipment. In the context of clinical trials, raw data are observations about individual

participants used by the investigators.

Data mining

Reproducibility In general terms, reproducibility involves replicating research experiments or verifying

the research results by reusing the original data and following the same data methods.

There is no shared understanding of this term among scientists.

Semantic data Data tagged with metadata and can be used to derive the relationships between data. Sponsored research

A research project commissioned by a private sector entity from a publicly funded

research organisation.

**Underlying data** Research data underlying the findings published in scientific publications.



