### Amsterdam Public Health

UNIVERSITY

OF AMSTERDAM

Amsterdam UMC VU STREET

 Quantitative research - Data collection
 Set-up & Conduct- Methods & Data

 Collection
 Version

 Version
 4.0

#### Aim

To ensure that data provided by third parties are suitable for the proposed study.

#### Requirements

- 1. Agreements with the supplier of the data should be made in writing in collaboration with <u>Legal Research Support (LRS)</u> for Amsterdam UMC employees and <u>IXA</u> for VU employees.
- 2. Performing a critical review of the data on suitability.

#### Documentation

- 1. Copy of the signed agreement. Never sign a contract before checking with legal counsel! The agreement should contain:
  - The procedures to be followed on how the data should be collected (and processed, e.g., entered and cleaned, if applicable);
  - Inspections (audits) during the work;
  - How and when the data are to be delivered/access will be granted;
  - The supplier provides an overview of the data quality, prior to delivery of the data. If the data quality is inadequate, then the data need to be able to be returned free of charge;
  - Property and publication rights regarding the data;
  - Potential co-authorships (if applicable);
  - Correspondence with the data supplier needs to be archived. This is of importance in the event of misunderstandings or differences in opinion;
  - Financial agreements;
  - The opportunity to view assessments and monitor methods;
  - Intellectual properties rights, if applicable;
  - Data security agreements, if applicable.

In case of laboratory-generated data:

- How and when the data are to be delivered;
- Quality assurances provided by the laboratory;
- The opportunity to view assessments and monitor methods;
- The archiving of measurement values, methods employed and logbooks and lab journals. If something has gone wrong, it is then possible to investigate what happened. Reconstruction of the measurements needs to be possible.
- 2. A documented review on suitability of the data

#### Responsibilities

Executing researcher:

- To organise and archive the agreement with the data supplier, in collaboration with LRS;
- To perform a critical review on the suitability of the data.

Project leaders:

• To make written arrangements with the data supplier. Research assistant: N.a.

How to

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Document all correspondence with the data supplier; this is of importance in the event of misunderstandings or differences in opinion.

There are three types of data provided by third parties, with specific possibilities for a critical review of the suitability of the data and for quality monitoring:

#### 1. Pre-existing data

Examples of this type of data supplier include Statistics Netherlands (CBS), Netherlands Institute for Health Services Research (NIVEL), Longitudinal Aging Study Amsterdam (LASA), Netherlands Study of Depression and Anxiety (NESDA), Netherlands Twin Register (NTR), etc. Research and document the following aspects of the data:

- Will the data be suitable for answering the research question?
- Which measurement instruments were used and have these been validated?
- Is the sample representative of the population?
- How did the data collection take place, which controls were carried out? Has this been documented?
- How have the data been created? Is there a code book?
- Was the data entry monitored? Have many errors been identified and how have these been corrected? Have the data been cleaned? If so, how?
- Inspect the data for completeness and odd findings, such as unusual frequencies and values that are not permitted.
- Has data transformation been applied? If so, which one?
- Does the data supplier use a quality assurance system? If so, what is the area covered by the quality system?

#### 2. Data that are still being/are to be collected

All of the above points apply also here. Document the reason for choosing the third party. It is recommended to agree with the data supplier to review the data collection process either once or on multiple occasions. For instance, you could arrange to conduct audits and data inspections for parts of the data already collected. This allows work practices to be adapted, if necessary.

**3. Laboratory-generated data** (whether or not specifically commissioned for this research) Document why this particular laboratory was selected. Investigate and document how this laboratory will guarantee that the data supplied are valid. The list below can be used as a starting point:

- Does the laboratory have a certified quality assurance system for the requested measurement?
- How does the laboratory monitor the correct operating of its measurement devices? What margin of error is employed? How often does it monitor the functioning of its equipment?
- How does it determine whether an analyst is qualified to carry out the required assessment?
- How does it prevent samples from being swapped?
- How does it deal with unusual results?

#### Audit questions

- 1. Have written agreements been drafted up with the data supplier?
- 2. Are all of the above points sufficiently clear? If not, why not?

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LINKS

	Link
Legal Research Support	https://intranet.amc.nl/web/organisatie/domeinen/research/legal-research-
(LRS)	support.htm
IXA	https://www.ixa.nl/for-researchers/collaborate-with-third-parties/

#### DOCUMENT HISTORY

Version	Status	Date	Name
4.0	Revision	15MAR2021	Dr. Erik Timmermans,
			Elize Vlainic
3.0	Revision guideline	12AUG2016	EMGO
2.0	Revision format	12MAY2015	EMGO
1.0	English translation	01JAN2010	EMGO

#### DOCUMENT APPROVAL

Role	Name	Date
Project Leader	Dr. Seta Jahfari	16MAY2021