Quantitative research - Data collection- Managing data flow	Set-up & Conduct- Methods & Data Collection	
	VERSION	5.0

Aim
To describe how to manage data streams through a database system, e.g. for sending out questionnaires, producing labels, documenting names, addresses etc. This is essential for projects with complex and/or large-scale data streams.

Requirements
- To test the administrative database on proper functioning;
- To provide instructions to those who will be working with the database, e.g. in a field guide.
- To separate participant contact details from research data. Research data should never be stored in an administrative database.

Documentation
- A schematic overview of the data logistics;
- A manual for people working with the database, such as research assistants;
- A list of persons who have access to the administrative database (including the Data Management department);
- Test documentation: a filled in template for every person who tested the administrative database within the team and an independent person/party where applicable
- A copy of the authorization log of all persons who have access to the database.

Responsibilities
Executing researcher:
- In case of complex and/or large-scale data streams:
- To create an administrative database in consultation with the Research Data Management;
- To test this database/ tool;
- To provide (documented) instructions how to use the database to research assistants/other users.

Project leaders:
- In case of complex and/or large-scale data streams:
- To ensure that the executing researcher:
- Creates an administrative database / uses a routing tool in consultation with the Data Management department;
- Tests this database;
- Instructs research assistant(s)/other users how to use the database.

Research assistant:
- To receive instructions of the executing researcher on how to use the administrative database.

How To
For sending out questionnaires, producing labels, documenting names, addresses etc. it is helpful to create an administrative database. In general, an administrative database (e.g. in Access or R) will

only be required when data streams are complex and/or large-scale. Otherwise it is just as easy to manage your administration in Excel, as creating a database would proportionately cost too much time. An administrative database is not used to input registration forms and questionnaires. Research data, such as health data, is not allowed to be stored in the same place as participant contact details.
An administrative database is used to monitor and manage the data flow during the data collection process in a research project. Databases such as these are used, for instance:

- To send out questionnaires (surveys or e-mail links) at particular points in time to research participants
- To send out reminders when questionnaires are not returned on time.
- To generate reminders for invitations for a visit.

Variables will partly need to be entered manually, when something arrives, or automatically by the computer, when something needs to be sent and has been sent. Variables that are often incorporated in an administrative database are, among others:

- Name,
- (e-mail) Address,
- Clinician, like general practitioner or doctor,

Calendar dates on which a specific questionnaire or registration form was sent and received or a visit took place.
The administrative database is usually created and programmed by the Data Management department. A “standard” database is used and can be tailored to the projects’ configuration. Costs for this will be outlined in a quote for the work and are charged to the research project (for more information about this process, please refer to the Data Management Plan guideline).
Before an administrative database can be created, it is necessary for the researcher to provide a schematic overview of the data logistics. In this overview, the time points and associated conditions for sending out information to the research participants and/or general practitioners (for instance), are described in columns. Furthermore, the overview should also contain information what needs to be imported into the database at that point in time, manually or automatically (for instance questionnaires). See under Download for example of such a diagram.
Once the administrative database has been designed, the researcher has to test the database for errors by entering a number of fictional respondents into the administrative database. This is important, for example, to investigate whether respondents will be sent their questionnaires on time. Once the database has passed these tests, the administrative database will be installed on one of the network drives in a project folder to be created by the local ICT department. Support and administrative staff associated with projects and the principal researcher are authorized to add, amend and/or view the data. This may only be undertaken once the confidentiality agreement has been signed (refer to storage of research data and privacy/security aspects). The daily user(s) of the administrative database will receive instructions from the developer on how to use it.

Audit questions

1. (applicable to all research projects)
    a. Does the administrative database adhere to ethical guidelines?
2. (Only applicable if an advanced administrative database is used, e.g. in Access or R.).
    a. Has the administrative database been tested by the researcher?
    b. Has the daily user received instructions from the developer for using the administrative database?

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LINKS

	Link

DOCUMENT HISTORY

Version	Status	Date	Name
5.0	Revision	26MAY2021	Elize Vlainic, Dr. Wouter van Ballegooijen
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DOCUMENT APPROVAL

Role	Name	Date
Project Leader	Dr. Seta Jahfari	26MAY2021