

Project Acronym: ClimSmart-Healthcare

Project title: Hospital Environmental Impact and Environmental Sustainability
Awareness of Healthcare Professionals: solutions towards climate-smart healthcare

DATA MANAGEMENT PLAN

This plan describes the management of the data to be created in the project, its handling and preservation. The project data will be FAIR (Findable, Accessible, Interoperable and Reusable). Data protection will be ensured in accordance with institutional rules.

1. Data Summary

1.1 Data typology and format:

The data collected, which will respond to the objectives of the project, will be collected and coded in an electronic Excel file format to be filled in for each hospital.

Data collected with self-completed questionnaires including socio-demographic data and answers to scales will be collected and stored in electronic format using the Survey Monkey platform. Leader Researcher 2 will be responsible for the management of personal data.

Information collected in focus groups will be audio-recorded and stored in NVivo 12 electronic file format.

1.2. Origin of the data

- The coordinating person for each hospital centre will detail, the necessary data to be collected and the time periods for the collection of each parameter.
- For the collection of data with self-completed questionnaires, Leader Researcher 1 has already contacted the management of each hospital and through their coordinator will send each health professional in their centre the electronic link to access the questionnaire (in this way, the research team of the project will not need to have access to the e-mail of each professional).
- For the constitution of the focus groups, members of the research team and coordinators of each hospital for the project will contact healthcare professionals with different profiles to constitute the planned focus groups.

1.3. Re-use of existing data

The data on indicators of hospital is usually collected by healthcare facilities for their internal management and will be reused and expanded upon for the project.

1.4. Size of the data

Data will be collected from 17 hospitals. Also, data from 359 healthcare professionals from Andalusia, 352 from Murcia and 353 from Catalonia will be collected through surveys. There will also be 15 focus groups of about 10 participants each.

1.6 Data utility

The data will be useful for health professionals to be aware of their practices in their workplace and daily life, at the institutional level the data will be useful to implement environmental measures and at the health policy level the data could be used to promote policies.

2. FAIR data

2.1. Making data findable, including provisions for metadata

The data will be stored openly in the Figshare repository which will provide a Digital Object Identifier (DOI). There will be separate files for each health centre's data and the files will be named with the acronym of the centre and the type of data so that they can be easily identified. If subsequent versions of the data are made, this will be indicated in the file name.

2.2. Making data openly accessible

The data will be deposited in the open repositories Healthcare Cost and Utilization Project (HCUPnet) and Figshare. The data will be easily searchable through a web search engine. The data can be freely opened in Google spreadsheets.

2.3. Making data interoperable

The data produced in the project will be useful to the participating centres and could even be used by government agents to implement environmental policies.

2.4. Increase data re-use (through clarifying licences)

The data will be *openly licensed via [CC BY 4.0](#)* from the beginning of the project.

3. Allocation of resources

The repositories chosen to host the open data are free of charge.

4. Data security

The data collected for the execution of the project will be guarded by the LR2 and stored electronically under custody and passwords on devices and computer equipment belonging to the University to which they belong.

5. Ethical aspects

All personal data that may be obtained in this study will be treated in accordance with the Organic Law 3/2018, on Personal Data Protection and guarantee of digital rights.

Permission will be sought from the relevant ethics committees and informed consents will be collected from participants.