The MHMD workflow

1. Data registration
   Hospitals can register themselves through a web-based application and upload their data.
   When uploading data, hospitals can manage their permission preferences, also in accordance with the available consent attached to the data.

2. Individuals
   Individual users can register themselves on a mobile application and sync their data from various sources (hospitals, other mobile applications, online websites, etc.).
   Individual users can easily set their consent options through the mobile app, regulating data access from third parties. Individuals can decide allowed data usage, for how long data will be available, what type of institution (public or private) can access, and more.

3. Data request
   Through the data catalogue, a researcher can browse datasets within the MHMD network, checking what data are available and under what conditions, data modality, data sensitivity and privacy profiles. The catalogue itself is powered by metadata, which describes the data available in the network without revealing any sensitive information.
   When a specific dataset of interest is found, the researcher can perform a request (study creation) for accessing this dataset. The study request is then managed through the blockchain and dedicated smart contract.
   If all data access conditions are met, data access is granted.

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Three key stakeholders can contribute to the MHMD ecosystem: hospitals, citizens, and research organisations/biomedical industries.