

# Enhancing Cardiometabolic Disease Research through AccessCMD: A Novel Approach to Patient Recruitment and Data Collection

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## Objectives

The burden of cardiometabolic diseases (CMD) such as diabetes, heart disease, and stroke, along with associated risk factors like obesity, hypertension, and hyperlipidemia, represents a global health crisis that significantly impacts life expectancy, quality of life, and healthcare costs.

To address this challenge, the AccessCMD project aims to create a comprehensive registry with recall capacity for CMD and multimorbidity.

This initiative leverages electronic health records (EHR) to identify potential participants, enhancing our understanding of CMD through robust data collection and participant engagement strategies.

## Methods

AccessCMD collaborates with general practitioners (GPs) with a population reach of 6m across the UK to identify candidates for the registry using targeted EHR data.

Engagement occurs through SMS, letters, and emails. The registry operates entirely remotely, with online consent processes in place to ensure ease of access. For those unable to use technology, trained nurses can provide necessary assistance via telephone. This approach overcomes barriers associated with physical locations and disabilities with the potential to enhance diversity and inclusivity, which in turn ensures the generalisability of the data collected.

Patients complete a curated set of internationally translatable electronic patient-reported outcomes (ePROs) linked to routinely collected healthcare data.

**Table 1.** Data routinely collected from participants in AccessCMD.

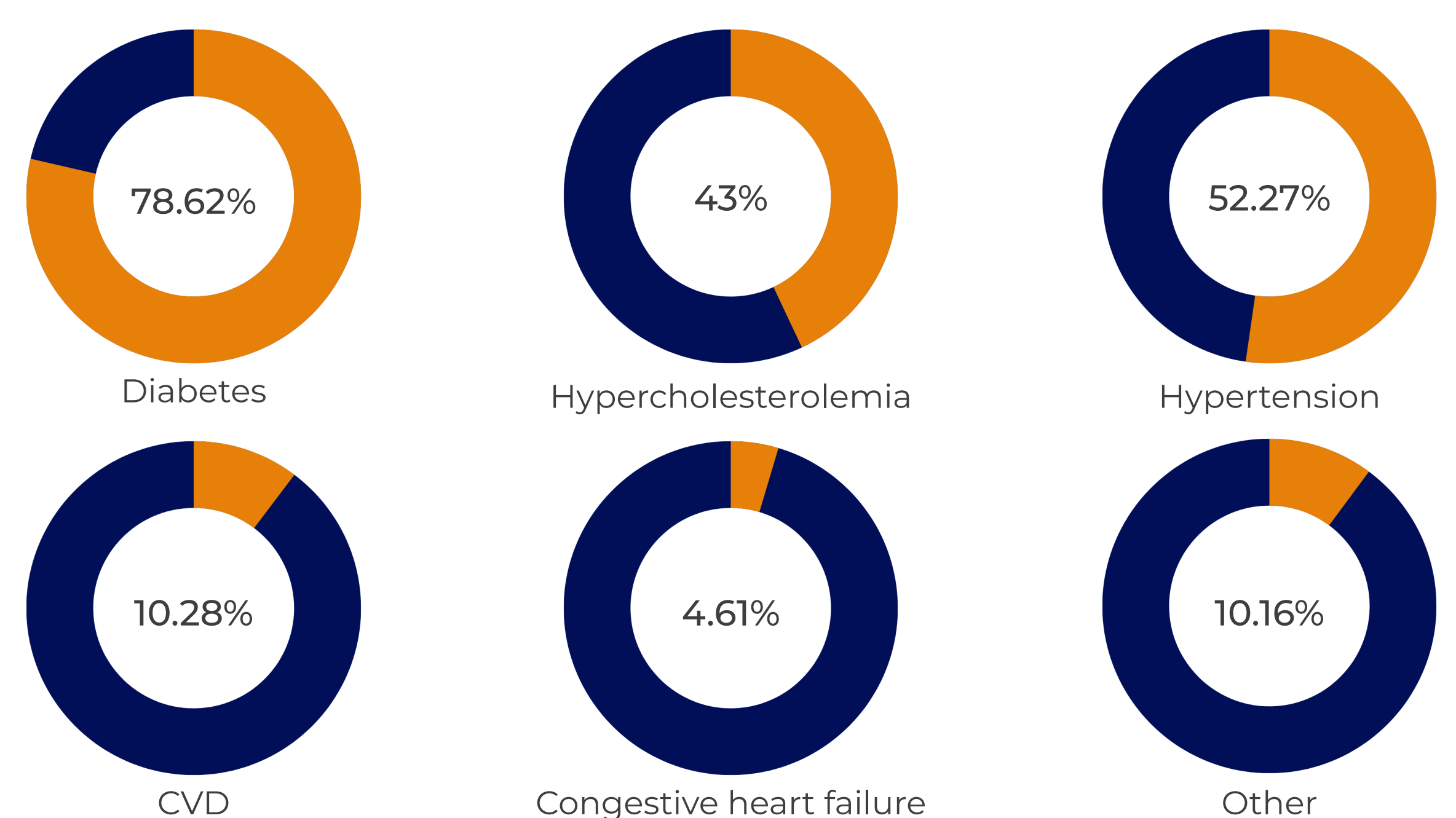
Patient profile	
	<ul style="list-style-type: none"> <li>Demographics (incl. ethnicity)</li> <li>Date of Diagnosis</li> <li>First symptoms and onset</li> </ul>
EHR & ePROs	
	<ul style="list-style-type: none"> <li>Current symptoms</li> <li>Vital signs</li> <li>Caregiver arrangements</li> <li>Family and social history</li> </ul>
Treatment journey	
	<ul style="list-style-type: none"> <li>CMD and other medication codes</li> <li>Current and previous medications</li> <li>Medication duration &amp; switching</li> </ul>
Patient outcomes	
	<ul style="list-style-type: none"> <li>HRQoL (EQ-5D-5L, KCCQ)</li> <li>Sleep disturbance (Jenkins Sleep Scale (JSS))</li> <li>Anxiety (Generalized Anxiety Disorder 2-item (GAD-2))</li> <li>Treatment AEs (FACIT Item GP5)</li> </ul>
ePROs	
	<ul style="list-style-type: none"> <li>HRQoL (EQ-5D-5L, KCCQ)</li> <li>Sleep disturbance (Jenkins Sleep Scale (JSS))</li> <li>Anxiety (Generalized Anxiety Disorder 2-item (GAD-2))</li> <li>Treatment AEs (FACIT Item GP5)</li> </ul>

## Results, structure & timeline

There are 3,500 participants in AccessCMD, as of September 24.

The registry is designed for continuous participant engagement and long-term data collection.

In the first two months of the pilot phase, over 600 patients were recruited (67% with two or more cardiometabolic conditions), with a male to female ratio of 53 to 47 and a median age of 64.



**Figure 1.** Aggregated comorbidity data collected from participants within AccessCMD. Note that 67% of participants within the cohort report 2 or more cardiometabolic conditions.

Additionally, home test kits for collecting biological samples, such as DNA, can be distributed as part of the study.

The project's timeline is structured to allow for the progressive integration of more participants and longitudinal analysis of the data to observe trends and outcomes over time.

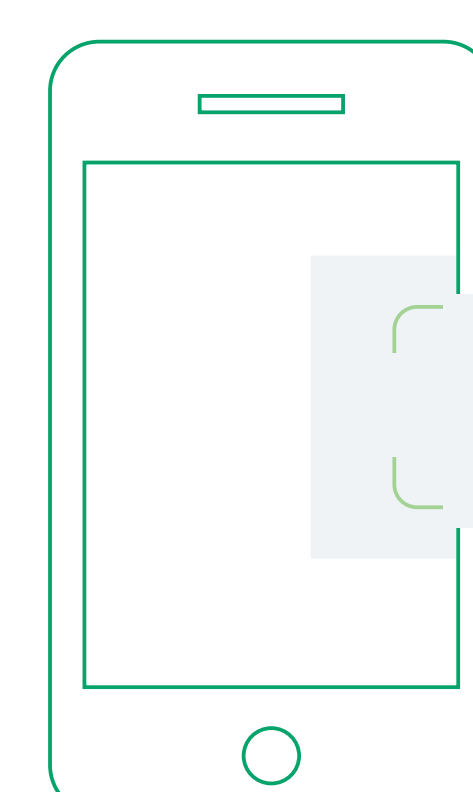
AccessCMD is set to launch in the US by the end of 2024, broadening its reach and impact.

## Potential relevance & impact

The AccessCMD registry presents a scalable and adaptable approach to patient recruitment of targeted populations, offering potential for international collaborations to benchmark global health impacts and inform public health policies.

This strategy involves ongoing participant engagement and diverse data collection to enhance understanding of the effects and treatment of cardiometabolic multimorbidity. The project aims to refine research precision and advance the development of personalised medicine, providing tailored treatments based on individual health profiles.

Insights from the registry are expected to improve patient outcomes, enhance CMD management, and reduce healthcare costs and disease burden.



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