

# Surveying the landscape of OMOP CDM adoption in the UK

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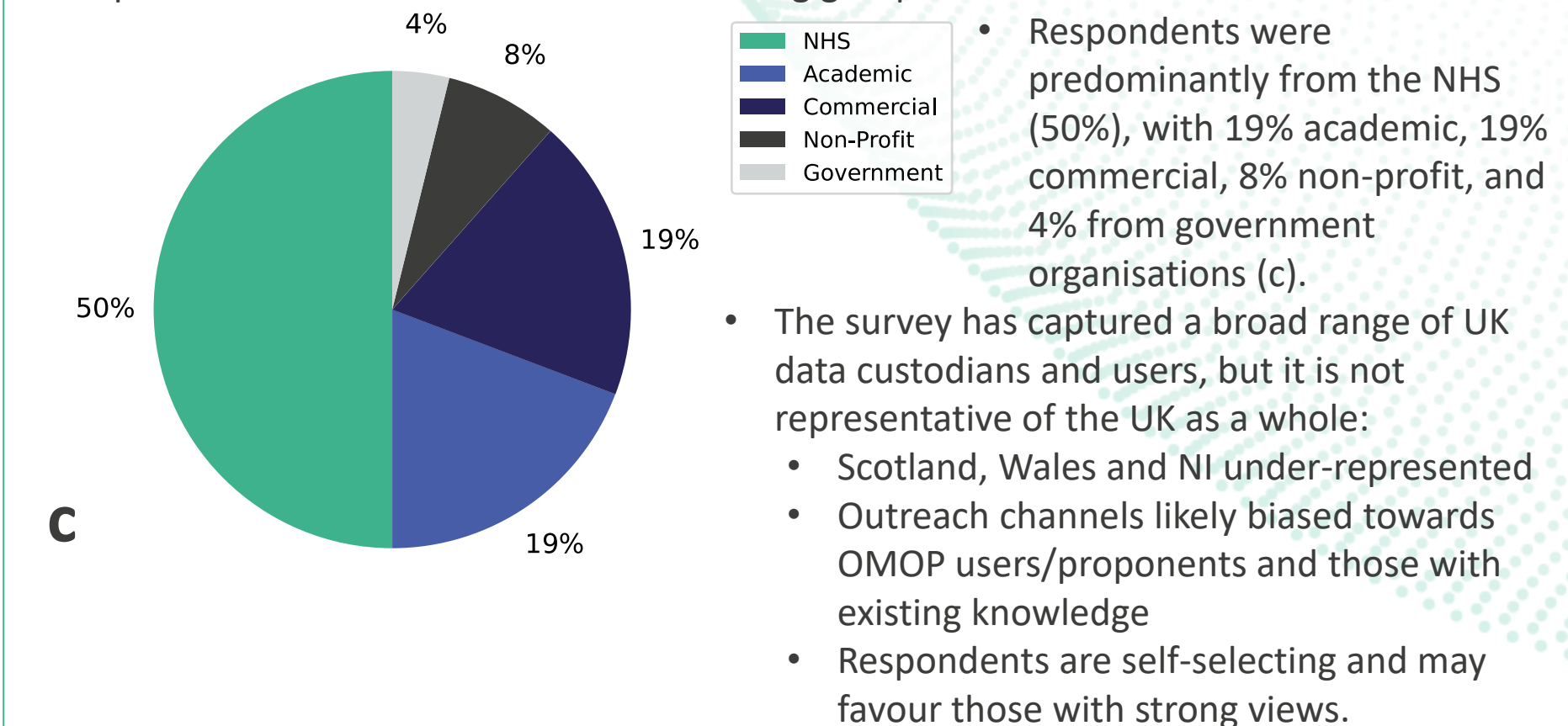
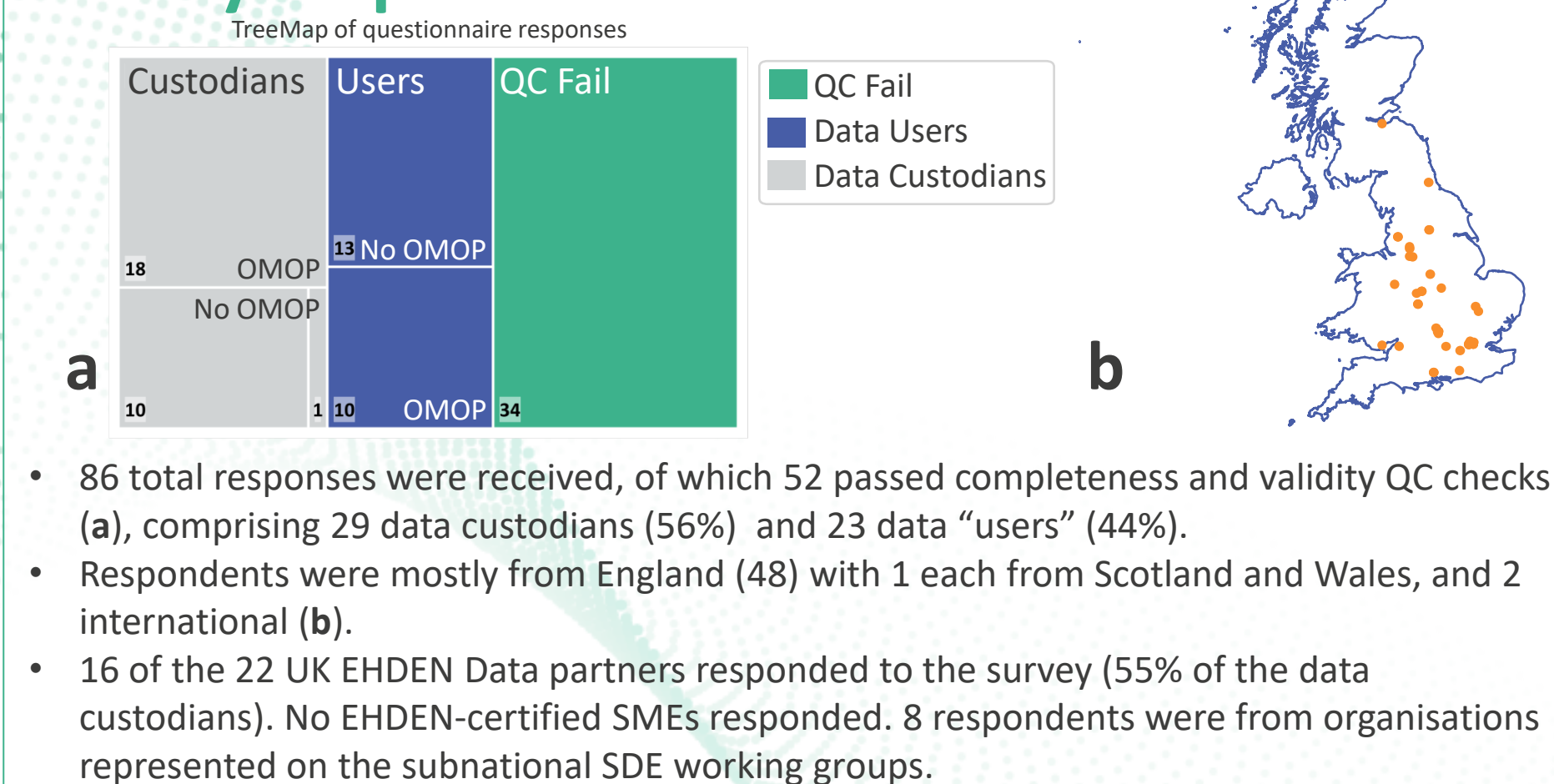
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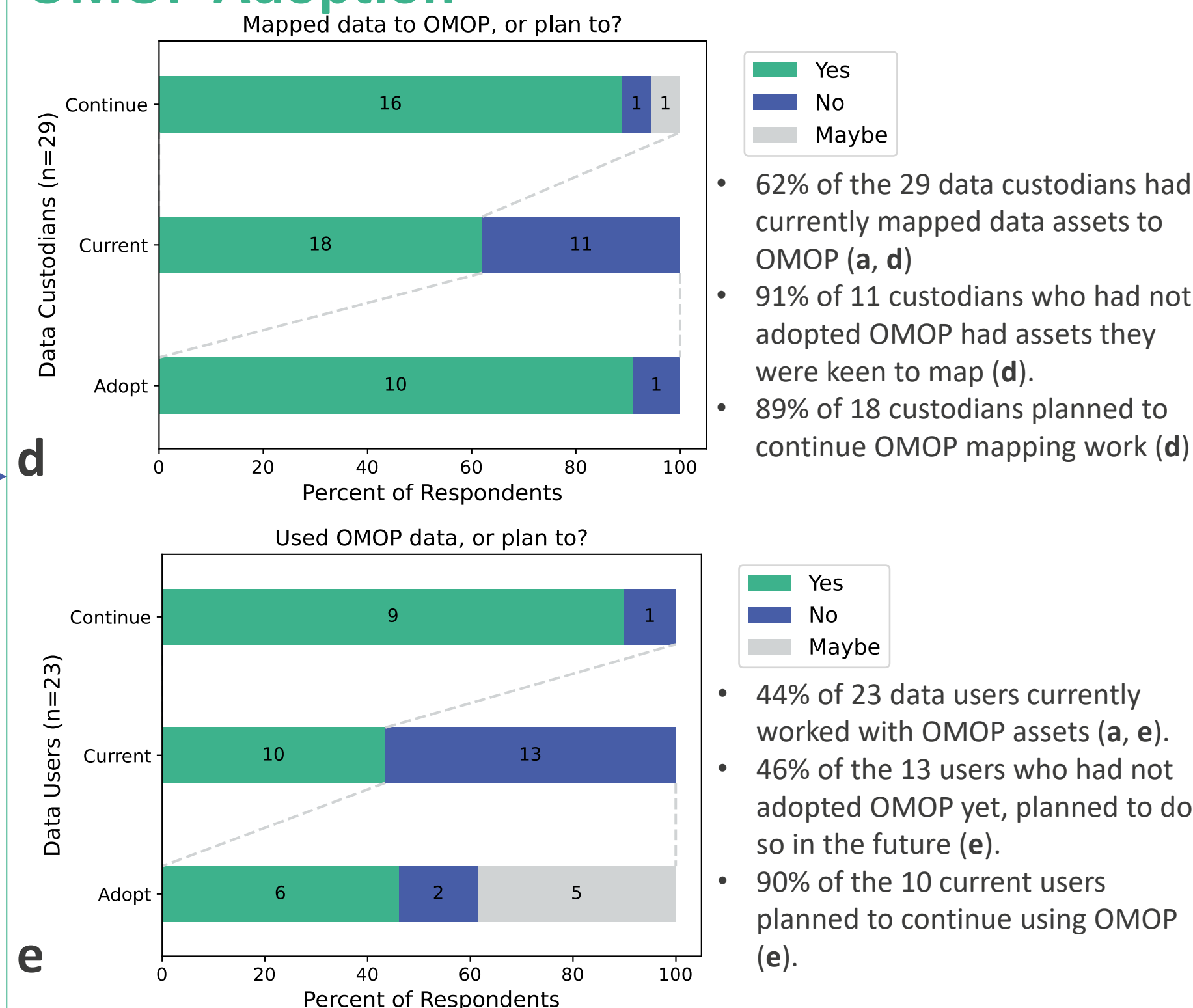
## Introduction

- Adopting a common data model (CDM) increases data interoperability, discoverability, facilitates research collaborations, enables large-scale analytics, and the development and use of shared tools and methods.
- To understand current level of OMOP CDM adoption across organisations in the UK, and to identify barriers that need to be mitigated, we designed an online survey using SurveyMonkey.
- The questionnaire employed branching logic to make it suitable for data users, and custodians, whether they were current OMOP users or not.
- The survey was circulated through the Alliance's members, social media, and NHS England's Research Secure Data Environment Network and responses were collected from 16<sup>th</sup> May to 28<sup>th</sup> August 2023.
- Responses were exported to CSV format and processed in JupyterLab Desktop in a Python notebook using the Pandas library.

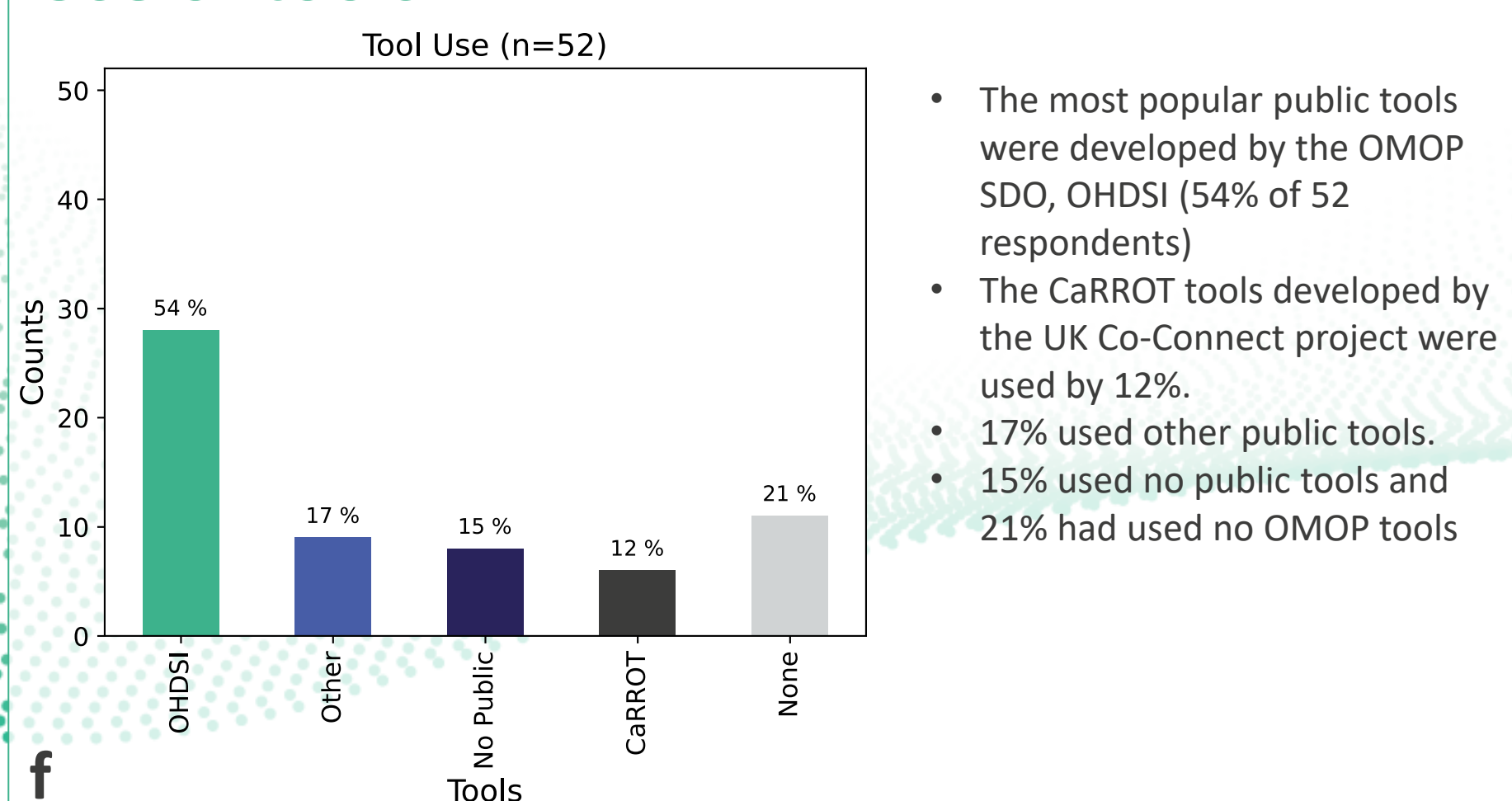
## Survey response



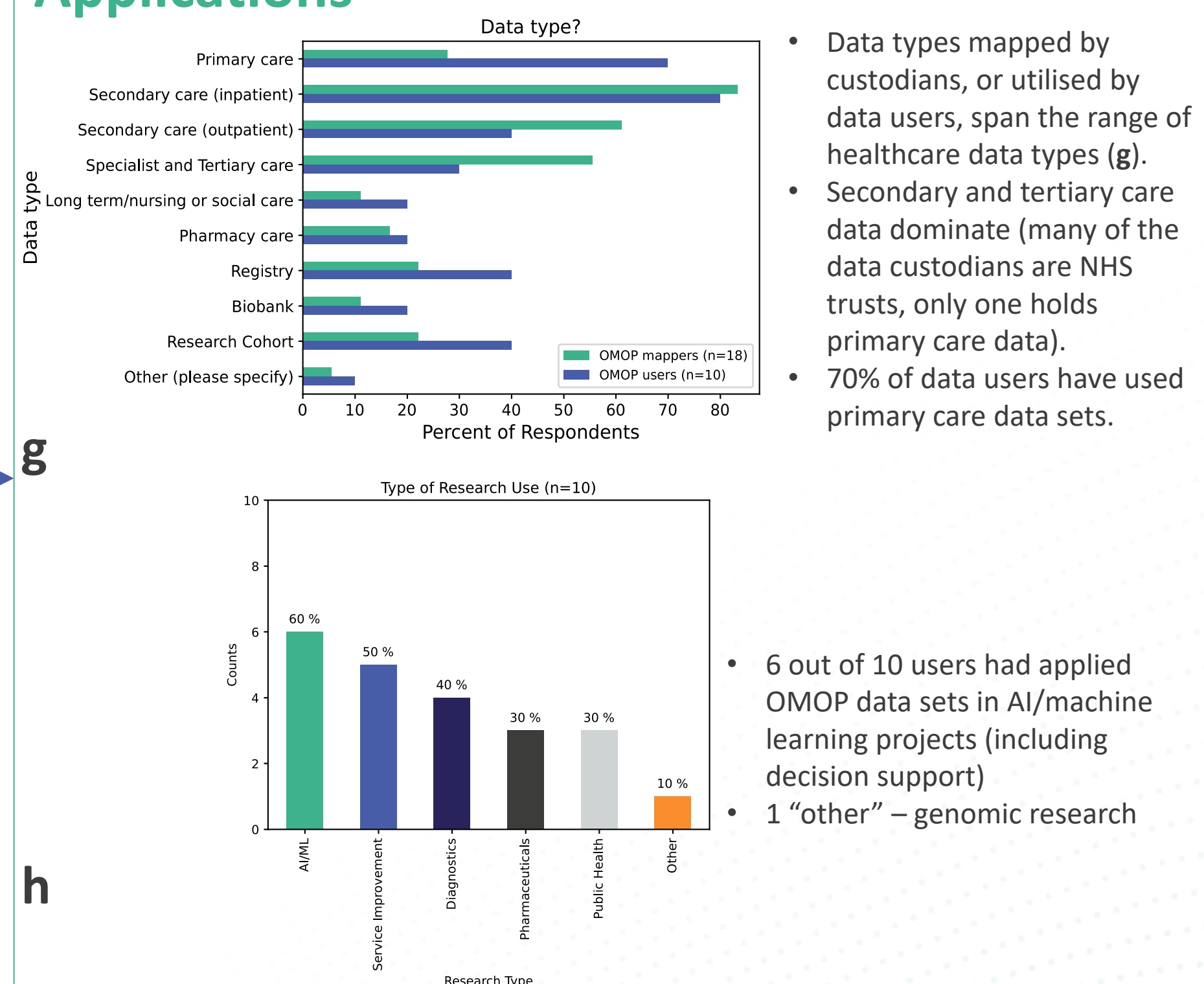
## OMOP Adoption



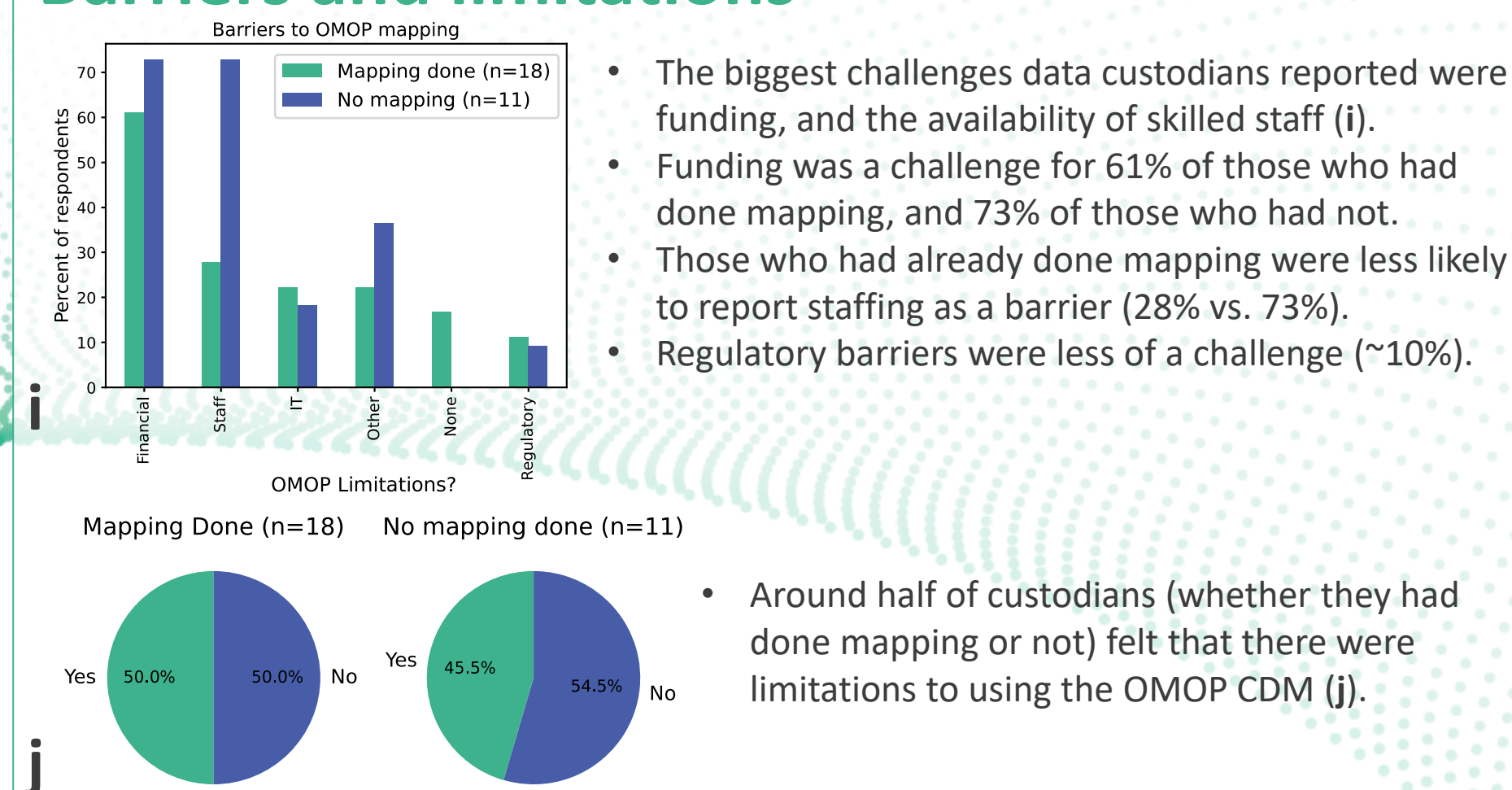
## Use of tools



## Applications



## Barriers and limitations



## Conclusions

Approximately half of those surveyed have already worked with OMOP CDM, showing a significant level of adoption of the OMOP CDM in the UK among both data users/researchers and custodians. The most significant factors limiting further adoption seem to be:

- Financial support.** Mapping new data sets to the Common Data Model can be a significant undertaking and is not the highest priority for many data custodians.
- Skilled staff.** Many organisations aspiring to undertake mapping projects report a shortage of staff with the necessary skills to deliver their mapping projects.
- Concerns** about the suitability of OMOP for different data types. Particular concerns expressed included:
  - The loss of granularity of data

- Inconsistent mappings of common data sets giving multiple different versions of common data assets or formats.
- The limitations of current OMOP CDM including incompatible data types, missing, unsuitable or inappropriate vocabularies, for example cancer scales, or the US-centric ethnicity codings.

The Alliance will work to address these barriers to adoption in the UK, working with UK and international organisations (e.g., OHDSI, EHDEN, OHDSI UK) to support our missions of uniting the UK's health data to enable discoveries that improve people's lives.

## Acknowledgements

Many thanks to everyone who took the time to complete the questionnaire (see list of participating organisations below). This questionnaire was conducted by the UK Health Data Research Alliance team in collaboration with the Data for R&D Programme's NHS Research Secure Data Environment Network. The survey results will be published on the Alliance website.