Digital exploration of on-boarding and care planning using semantic network, interface design, and automated testing
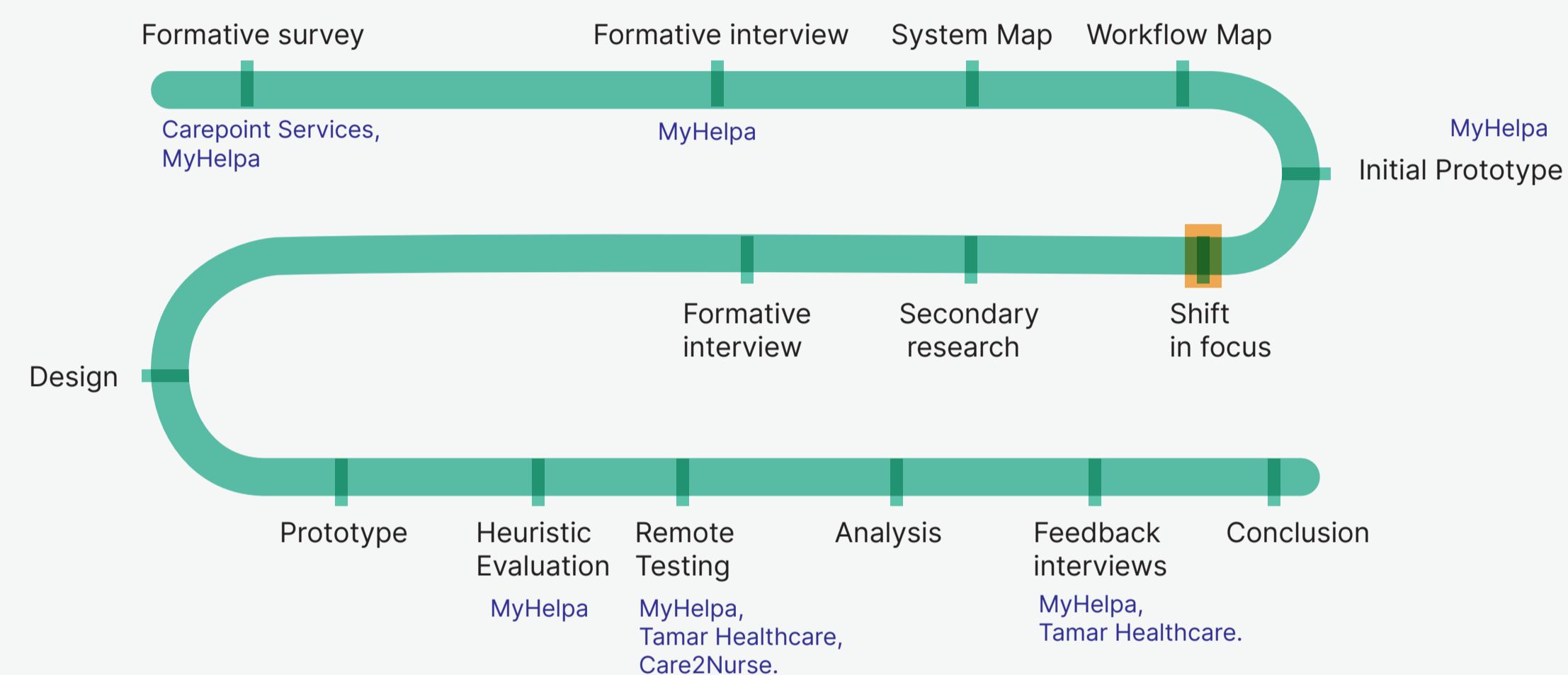
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Abstract

This project evaluates the digital transformation of care assessments and care planning targeting reduction in repetition, establishing intuitive flow between the assessments, and AI aided care planning. Semantic network was explored as a way to realize AI. The interface was tailored to care supervisors and their specific tasks using usability heuristics. Finally, the hypothesis for testing looked into acceptance of such a transformation based on accuracy of logic, interactive and navigational features of software interface.

Study Method:

Formative survey   Formative interview   System Map   Workflow Map

Carepoint Services,   MyHelpa
MyHelpa

MyHelpa
Initial Prototype

Design

Formative   Secondary   Shift
interview   research   in focus

Prototype   Heuristic   Remote   Analysis   Feedback   Conclusion
Evaluation   Testing   interviews

MyHelpa   MyHelpa,   MyHelpa,
Tamar Healthcare,   Tamar Healthcare.
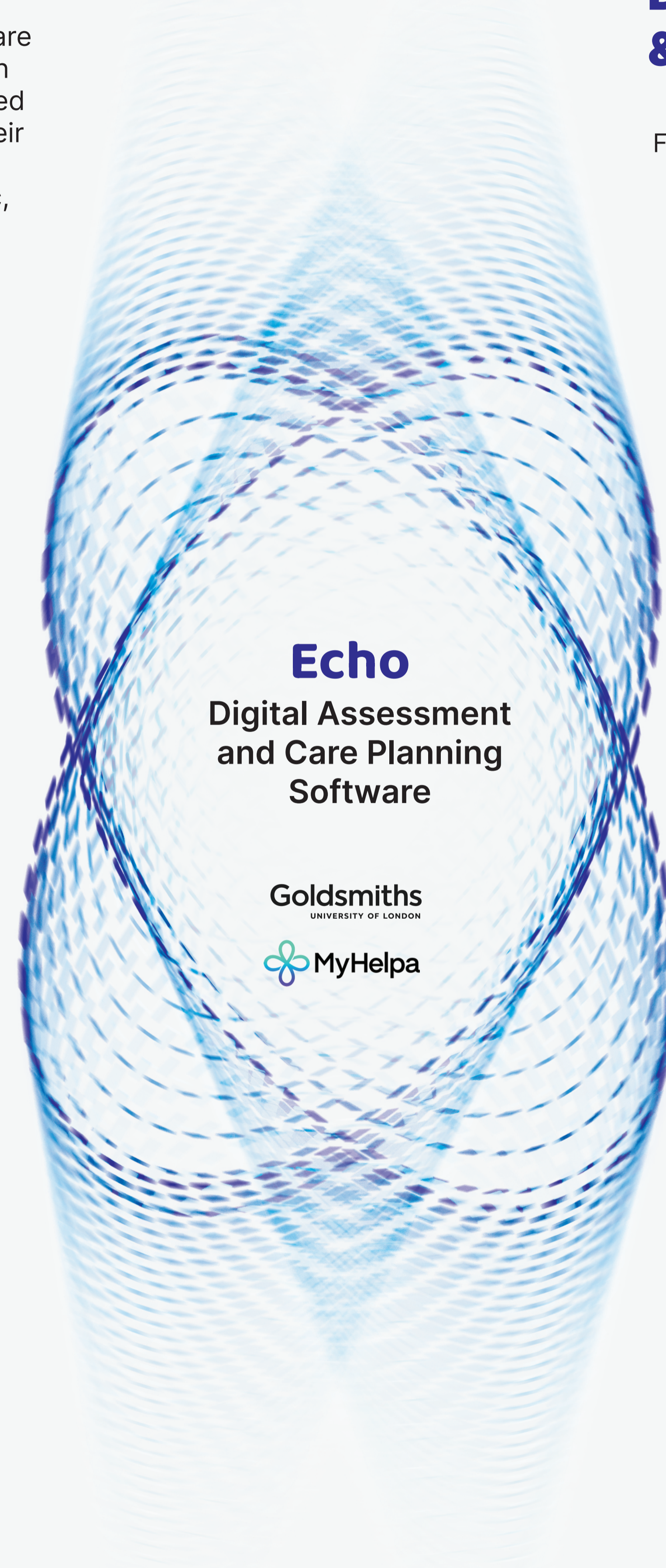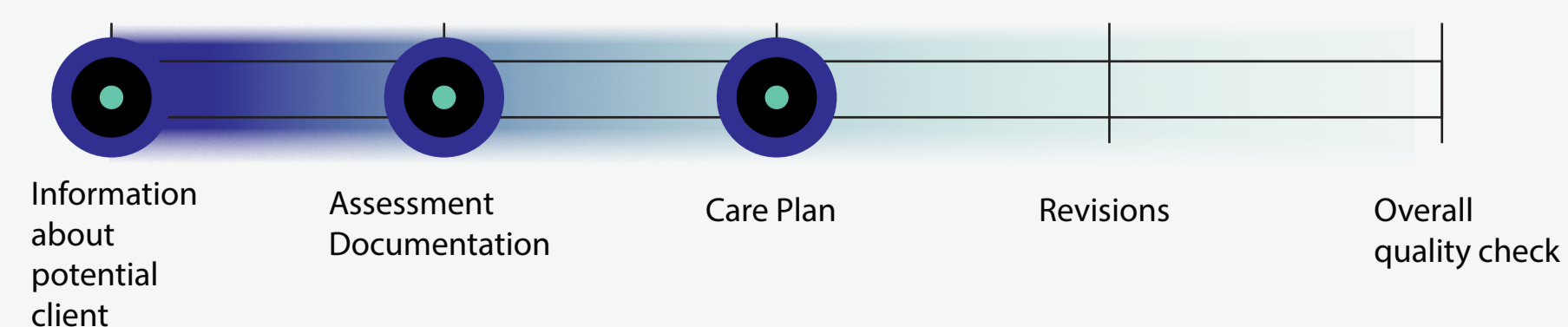Care2Nurse.

Introduction & Background

In the UK alone, the population of 65+ is projected to be 4.0 million more than under 16s by the year 2035 [r]. The projected shift in demographic calls for advancement of the current care systems [r].

After formative research, the problem of high repetition of data in the on-boarding assessments and the care plan was established as the primary focus. Assessment clearing and care planning are extensive tasks, that takes place in four to five parts, and take up to days to complete due to their complexity. The current paper records the assessments were not only leading to excessive repetition, but also lacked personalization due to a fixed template.

User Focus:
Care Supervisors- responsible for on-boarding new clients with the help of assessment forms and generating a care plan.

Journey of the Care Supervisor

Information   Assessment   Care Plan   Revisions   Overall
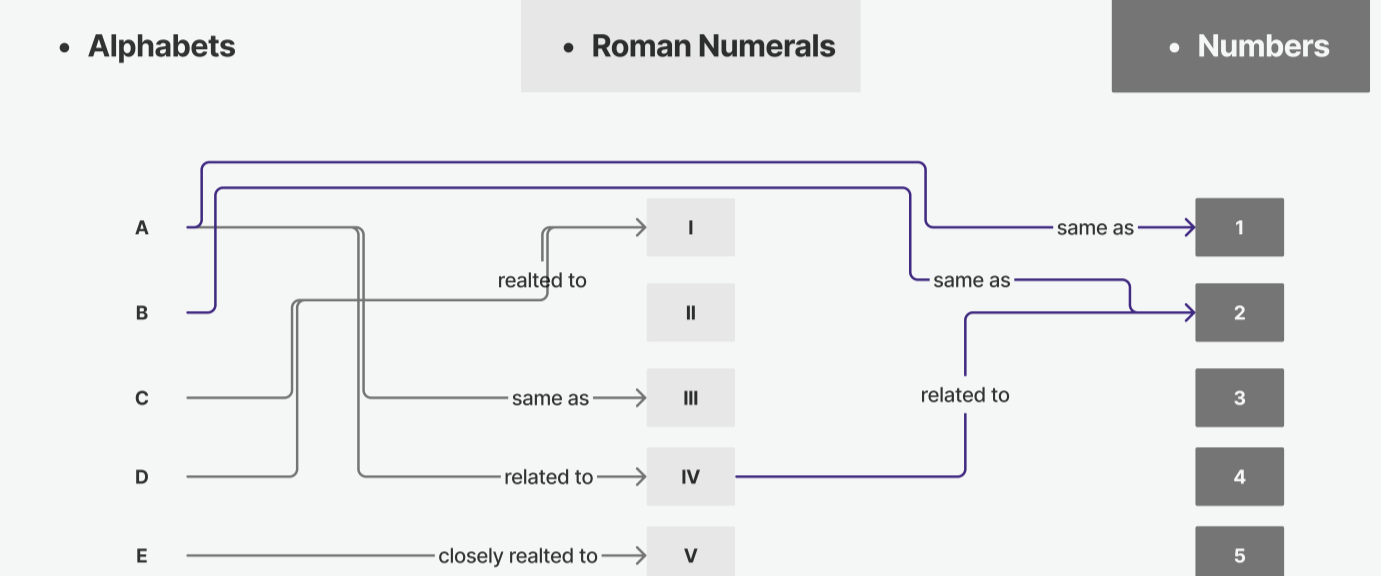about   Documentation   quality check
potential
client

Echo
Digital Assessment and Care Planning Software

Goldsmiths
UNIVERSITY OF LONDON

MyHelpa

Design & Diagram

Four Part Assessment

Pre-Assessment   Risk Assessment

Initial Assessment   Care Plan

Semantic Network sample logic

● Alphabets   ● Roman Numerals   ● Numbers

Same as = prefill data

Related to = suggest auto enable

Closely related to = auto enable

A → I → 1   same as
B   related to → II → 2   same as
C   same as → III   related to → 3
D   related to → IV → 4
E   closely realted to → V → 5

Screens & features
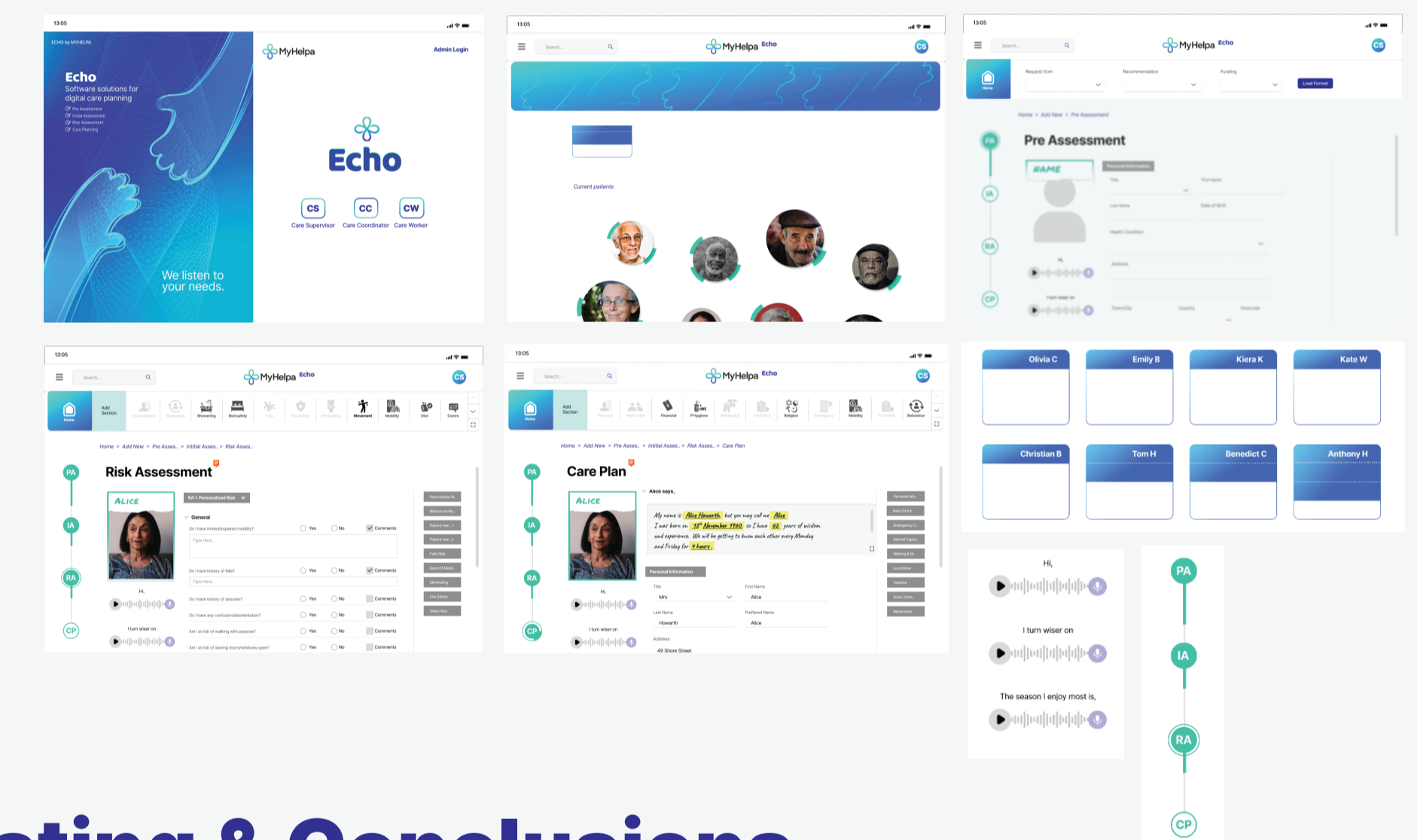
Testing & Conclusions

Remote testing was opted to gather feedback.

based on hypothesis

Pre-Study   Tasks   After task   Post-Study
Questionnaire   questions   Questionnaire
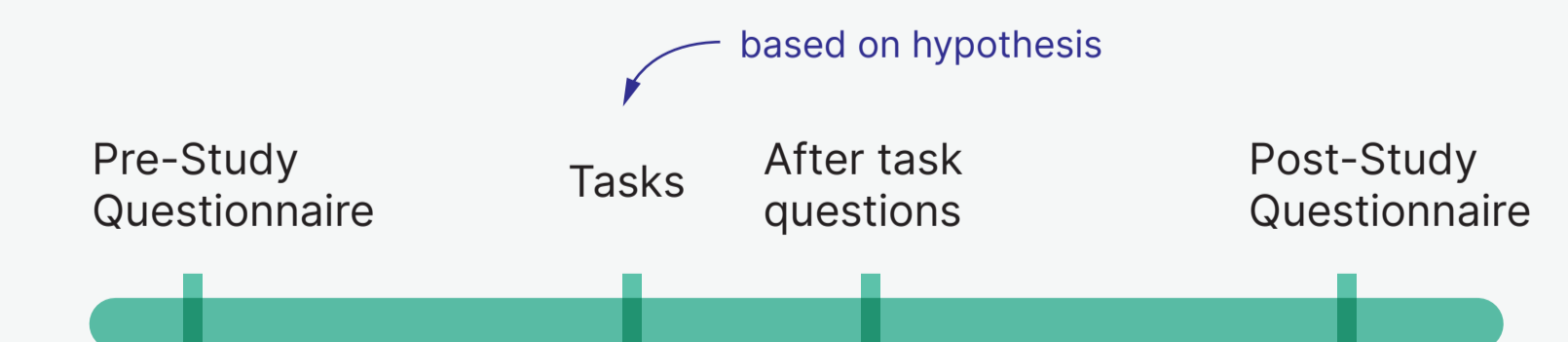
Conclusion summary:

•Restriction in input can regulate actions, and reduce errors.
•Smaller tasks lead to better efficiency.
•Limiting function in features can establish order.
•Degree of customization affects the perception of agency.