

Amsterdam  
Ayu Koene

A case study on  
**Design for Health/Care**  
with OLVG as part of  
MSc Digital Design

# About this document

## Manual

This portfolio is prepared for the MSc Digital Design finals. It documents the D&O case, a referral tool designed for OLVG Oost.

It is structured around the Semester 2 indicators:

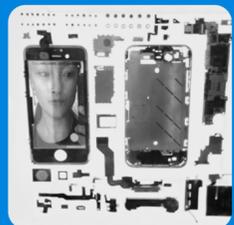
Framing & Strategising | Evidence

Creating & Crafting | Making

Concepting & Ideation | Evolution

Self-Directed Learning | Personal Perspectives

Self-Directed Learning | Peer Perspectives



Disclaimer · Built by AY

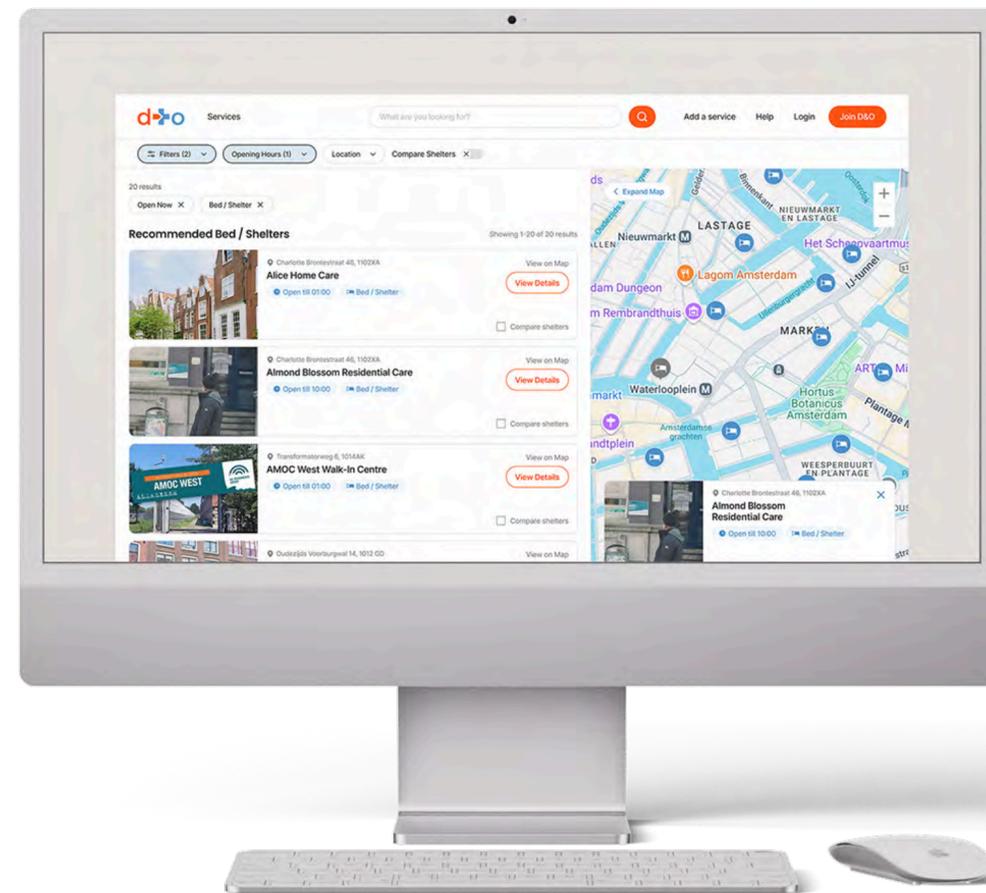
This document and the project were constructed with AI tools among others. All content has been authored, edited, and verified by me.

# About this case

## Design for Health/Care



**D&O connects crisis to care.**  
Because real care does not  
end at the exit door.



Client  
OLVG Emergency Physician | Dr. Niels van der Naald

Core Team  
Ayu Koene | Concept direction + People & communications  
Victor Jimoh | Interaction design & Prototyping  
Františka Jirásková | Concept Support  
Matin Mohammadi | Concept Support

Support  
LinkZorg | Dani Klein + Amanda Wee + Mihaela Chiselita  
Amsterdam University of Applied Sciences | Marije de Haas + Irene Kamp  
Deloitte Digital | Fabian Heeres + Bart Bolluijt

Problem

At discharge, ED staff lack a fast, reliable way to connect 3U patients to next steps.

Solution

A digital directory for staff, paired with patient handouts.

Why it matters

Humane handovers, fewer repeat visits, reduced staff distress.

Built with

OLVG, HVO-Querido, Deloitte Digital, Amsterdam University of Applied Sciences.

Next

Find funding for a pilot & maintenance owner.

## About this case In short...



Dutch healthcare is under sustained pressure.

This case zooms into the discharge handoff at the ED where a practical intervention can be of relief.

Amsterdam has 180+ services that could support Unhoused, Uninsured, or Undocumented (3U) patients after emergency care. Yet they're hard to find, hard to match, and hard to explain.

Patients are discharged onto the street. Emergency Department (ED) staff face moral distress and lost time. Providers get misdirected or late referrals.



This case was brought to our attention by Dr. Niels van der Naald, emergency physician at OLVG Oost.

# How did existing resources shape our design? From clutter to clarity.

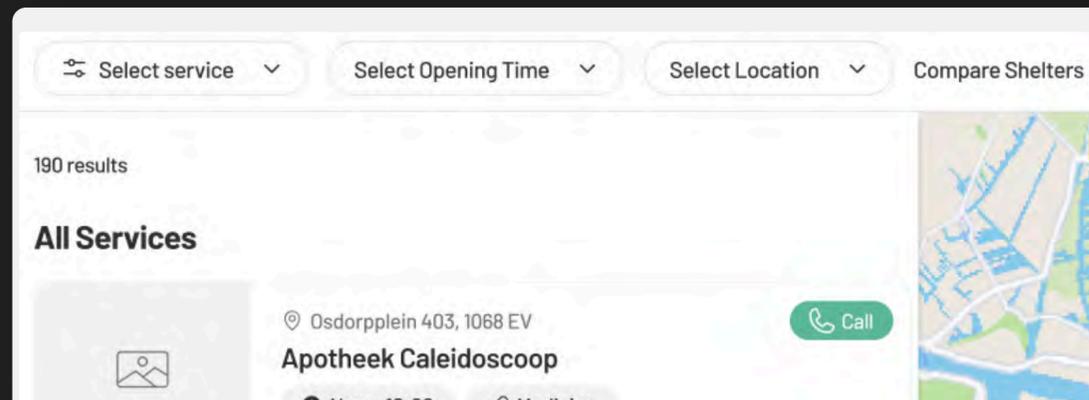
Information for 3U\*



Scraping & categorising 180+ services



Sorted for ED\*



Data Scraping

## Framing & Strategising | Evidence Desk Research

Decisions were made after researching the Dutch healthcare system and existing resources.

Finding

Implication

Het Blauwe Boekje by De Regenbooggroep and NGO directories listed 180+ services in different formats. We sorted them so staff could see options without wading through chaos.

Create a database with information on each service.

Group services into clear categories.

\*Collaboration note: The database was created together with Team LinkZorg.

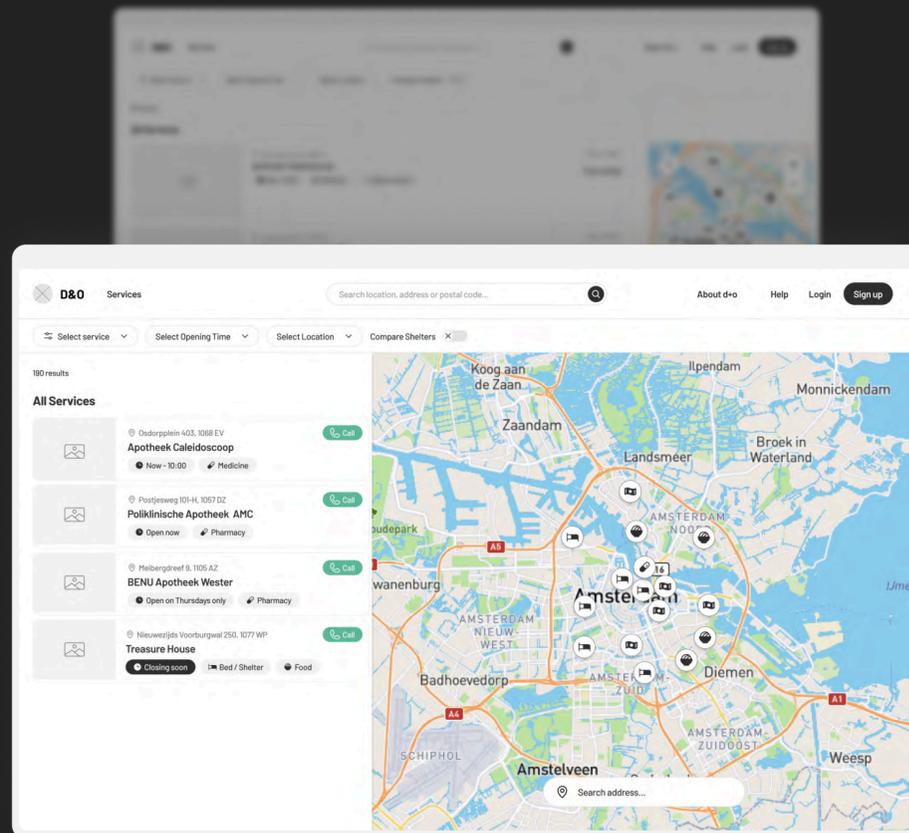
Existing referral guides were long lists that slowed staff down. A map made it easy to spot what was nearby and open, matching the speed of decisions in the ED.

Prioritise a map-first interface over long lists.

# How did insiders shape our design? From assumptions to decision.

17-04-25 | OLVG ED | Dr. Niels van der Naald | User test

Initial UI | List priority  
We assumed medical staff prefer a list-view.



Final UI | Map priority

After ED staff test, it became clear users focus on distance between hospital & service and prefer map-view.



## Framing & Strategising | Evidence Stakeholder Interaction

Stakeholder insights directly shaped concept, UI, and system features.

Meeting

Results

24-03-25 | OLVG ED | Dr. Niels van der Naald

Finding

“We save them from death, not from life.”

Decision

Focus the tool on ED discharge, not on the whole 3U life.

28-03-25 | HVO-Querido | Katrien Vermeulen

Finding

Many patients have low Dutch proficiency.

Decision

Create icon-based, general handouts.

29-03-25 | OLVG ED | Dr. Niels van der Naald

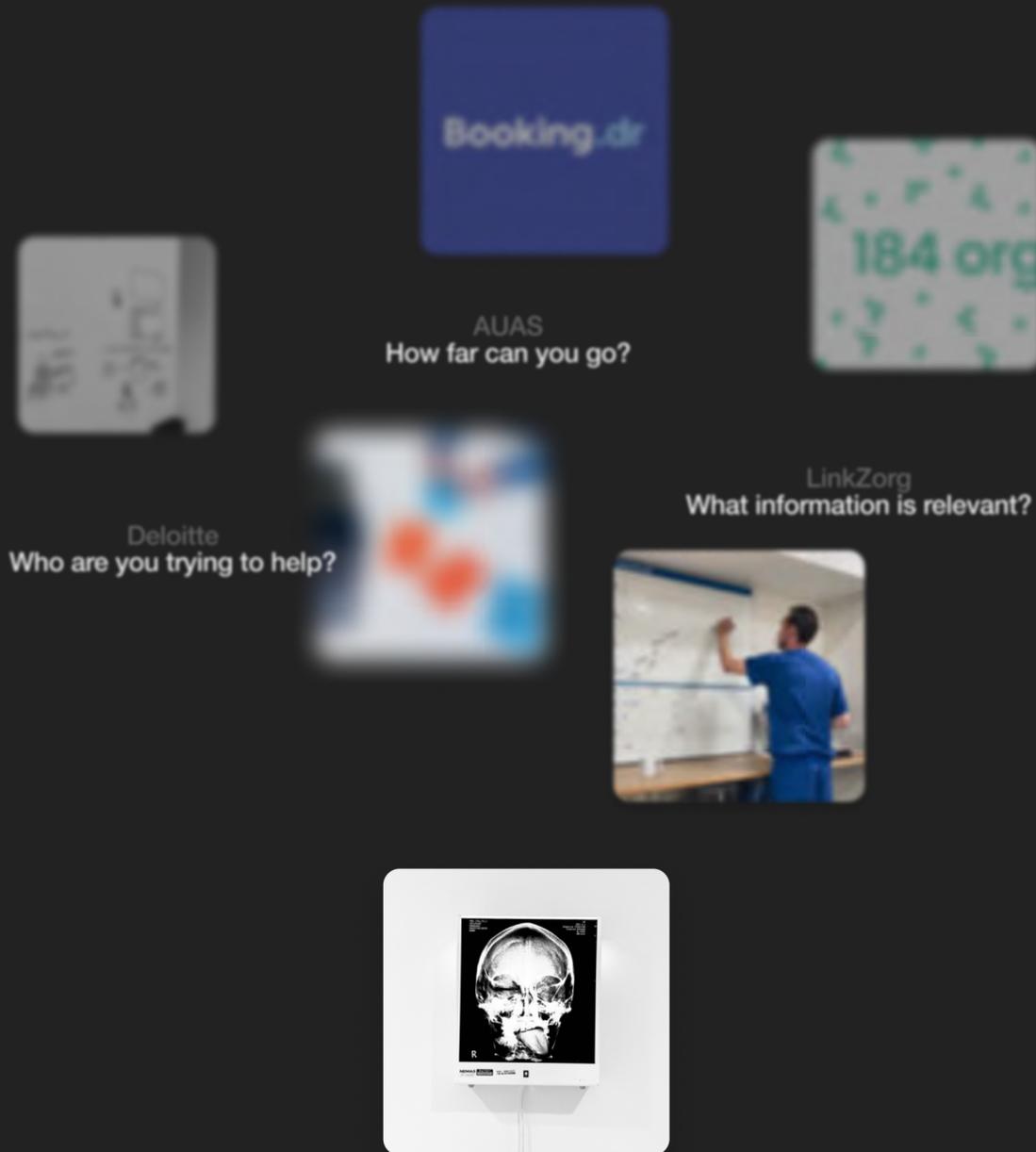
Finding

There is no maintained contact list. Outdated info is a big barrier.

Decision

Add a maintenance protocol: “last checked” date and flag for updates.

# How did outsiders shape our design? From questions to answers.



Q  
A  
Converging  
through  
Conversations

Remember!  
We are designing to help the ED.  
Not to control 3U patients.

## Framing & Strategising | Evidence Co-creation highlights

Collaborating with others helped us define the problem and concept.

Partner

Details

Deloitte Digital

**Activity**  
Sketching flows for problem framing.

**Decision**  
Frame design constraints around ED staff use.

Amsterdam University of Applied Sciences

**Activity**  
Journey mapping

**Outcome**  
Attach design to the discharge moment.

Amsterdam University of Applied Sciences

**Activity**  
Provocative design: booking.dr for shelters

**Outcome**  
Resist over-complex features

LinkZorg Team

**Activity**  
Scrape & normalise +180 services

**Outcome**  
Build functional filtering on normalised service data.

# How did creation shape our design? From prototypes to product.

## Creating & Crafting | Making Iterations

### Whiteboard flows



**Activity**  
Sketch flows to map actors + discharge trigger.

**Outcome**  
Clarified ED handoff as decisive moment, with staff + patient as main actors.

### Lo-fi wireframes



**Activity**  
Design wireframes with always-visible filters.

**Outcome**  
Cognitive overload. Switched to modal filters (open now, distance, service type).

### Provocation



**Activity**  
Test ambitious ideas: live feeds, auto-referrals.

**Outcome**  
Desirable but infeasible. Showed the need to resist over-complexity for feasibility and ethics.

### Mid-fi prototypes



**Activity**  
Compare list vs. map interfaces.

**Outcome**  
Map-first orientation was faster and clearer, set as default.

### Persona deck



**Activity**  
Build persona handout deck to explore tailoring.

**Outcome**  
Too slow and ethically risky for ED. Switched to a single general handout.

### Data work



**Activity**  
Scrape and normalise 180+ services.

**Outcome**  
Revealed inconsistencies; led to adding "last verified" + maintenance protocol.

### Paper A5 handout mock-up



**Activity**  
Mock up physical handout.

**Outcome**  
Icons + note space supported quick comprehension, confirmed low-barrier value.

### Branding



**Activity**  
Create naming + identity.

**Outcome**  
Dokter & Opvang (D&O) bridges medical + social care, Amsterdam-rooted, future-ready.

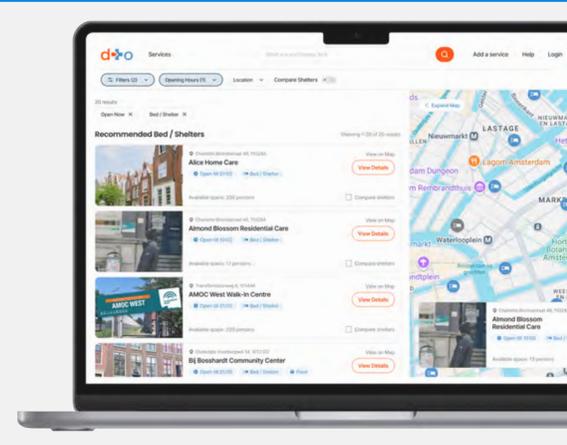
# The Result Overview



Approved by ED Staff | OLVG Oost | 26-05-2025

## Usable directory interface for ED discharge.

A simple, map-first resource hub that lets staff quickly filter by proximity, access type, and opening hours. Designed to fit ED pace: no logins, minimal clicks, clear results.



## Handout for 3U patients.

A printed A5 card with icons, a city map on one side, and space for medical notes at the back. Gives patients a tangible guide they can carry, even without language skills or phone access.



## Maintenance protocol for sustainability.

A lightweight update system: "last verified" dates, flagging outdated info, and regular partner check-ins. Keeps the tool reliable without heavy tech.



## What's next? Afterlife

We need funding for  
development, testing,  
and platform maintenance.

Like the 3U discharge itself, this  
project needs a clear next step...  
and should not be left on the  
streets.



Contact  
[ayukoene@gmail.com](mailto:ayukoene@gmail.com)

# How did my approach change compared to previous projects? From exploring to establishing.



In Stroll, we went broad. Many ideas, but messy to converge.

In D&O, we set constraints early. Feasible, but narrowed fast.

Both taught me something: vision opens, limits ground.

Which one works depends on context.

Next time I want a clearer switch, so the team knows when to explore and when to decide.

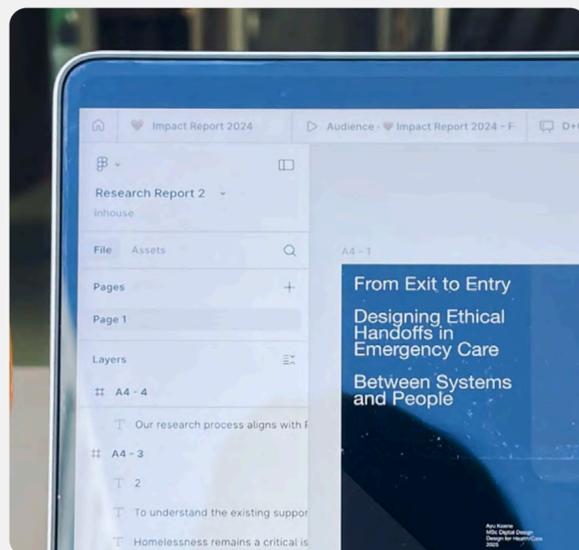
## Concepting & Ideation | Evolution Project Approach

MSc Project	1 Stroll   Emerging Interactions A screen-free, haptic navigation clip to reduce screen dependency and restore presence while walking.	2 D&O   Design for Health/Care A referral tool for ED, connecting 3U patients from emergency care to continued support.
Context	Consumer context	Clinical workflow context
Goal	Convey concept in emerging market	Realise concept in real system

Framing the problem	Speculative theme-led brainstorming. Problem emerged later.	Co-framed with stakeholders. Determined problem first.
Gathering input	Trend scan + anecdotal soundings.	Desk research + interviews. Audited existing directories as sources.
Setting constraints	Constraints surfaced after early concepts.	Constraints set before ideation.
Diverging	Many parallel directions. Preference-driven narrowing.	Provocative prototyping to test boundaries.
Converging	Founder-style calls. Low documentation.	Scrappy convergence. Small calls, adjusted often.
Tracking decisions	Ad-hoc notes. Rationale implicit.	Dates & attribution captured. No formal decision log.
Validating	Show-and-tell demos. Speed over alignment.	Stakeholder interaction + user tests.
Team	Tight, low-friction team. Minimal facilitation.	Variable availability, language constraints, uneven ownership.

# Self-directed learning | Personal Perspective

- Learning goal** | Being born at OLVG Oost, I wanted to see what it takes to make something real in a high-stakes context within just ten weeks.
- How I reached it** | My personal goal translated into taking the lead. I narrowed the scope to what ED staff could actually use tomorrow. Quick iterations revealed insights faster than meetings, and constraints reduced rework.
- Learning methods** | Visual and iterative approaches fit me best, because prototyping aligned the team more than discussions did.
- Next** | Balance vision, facilitation, and pace by setting up decision logs, short check-ins, and clear roles with the team from the start.
- More** | My goal is to be better in leading by not only shaping concepts but also motivating others.



# Self-directed learning | Peer Perspective

- Contribution** | Supported the team through facilitation: capturing notes, writing follow-ups with next steps, and leaving feedback comments. As the only Dutch native, I bridged context by translating and clarifying so stakeholder insights were accessible.
- Reflection** | At times, I carried too much of this role. Progress was made, but I learned that things run smoother if everyone feels invested and responsible.
- How my approach improved** | I moved from informal nudges to more structured, visible practices. Notes, comments, and follow-ups made collaboration easier and gave quieter teammates a chance to contribute.
- Team dynamics** | In a mixed-language, uneven-availability team, structure mattered as much as creativity. For the team to improve collectively, we were in need of shared rituals.
- Next steps** | In future projects, I want to set up practices together from the start. Rotating facilitation, weekly reviews, and shared check-ins to spread responsibility more evenly and make collaboration last.



About me  
Ayu Koene

Hello, I'm Ayu!

Trained to build, drawn to create.  
I like to get things done, and done well.

Born in Amsterdam, trained in mechanical engineering. Into design for as long as I can remember. I've worked in both worlds ever since, balancing structure with creativity, turning ideas into action. Currently Innovation Lead at BR-ND People, with past work across branding, strategy, and product design.



Amsterdam | 23 01 2001 | NL | ENG  
+31 6 10 67 22 83 | ayukoene@gmail.com

Work  
Innovation Lead + Designer  
BR-ND People

Education  
Amsterdam University Of Applied Sciences  
MSc Digital Design

University Of Twente | Vrije Universiteit Amsterdam  
BSc Mechanical Engineering

TU Delft  
Minor Architecture & Engineering