

YUE WANG - SOFIA NORDIN - VICTORIA MCCREA



THE COMMUNITY LANTERN

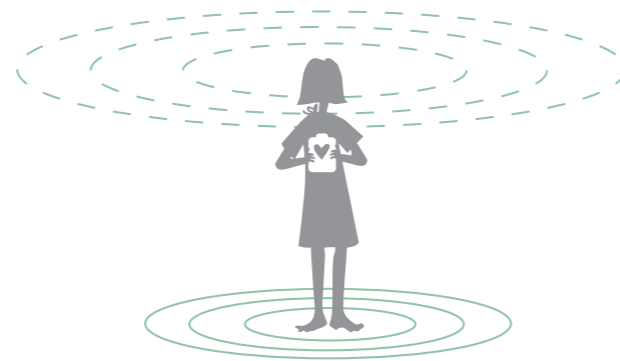
GUIDING PATIENTS AND PATRONS THROUGH A SAFE AND SUPPORTIVE HEALTHCENTRE



TABLE OF CONTENTS

VISION AND CONCEPT : THE STRENGTH OF THE PATIENT	3
ÖREBRO AND THE SITE	4
DESIGN PROCESS	6
SITE PLAN	8
SECTIONS	9
UNIT MODULES AND ARRANGEMENT	10
PROGRAM AND SCHEDULES	12
DETAILED PLANS	14
CONCEPT: MEETING POINTS	16
CONCEPT: UNIT ARRANGEMENT	18
CONCEPT: FAÇADE	20
CVA: COURSE THEMES	23

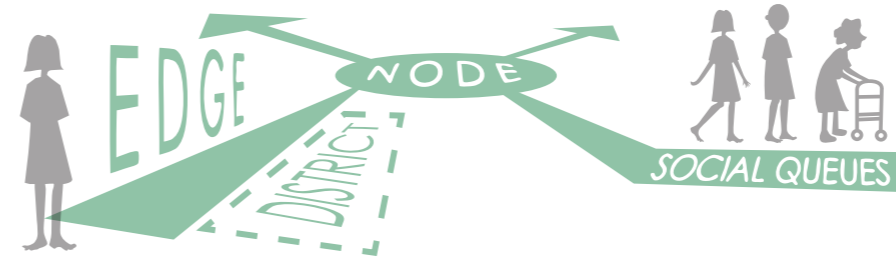
THE STRENGTH OF THE PATIENT



PRIVACY

When patients are faced with challenges to their health, they are often marked with certain levels of anxiety. Navigating these new challenges, as well as the entire healthcare system, can feel daunting. In this vulnerable moment, the patient may feel that their integrity is threatened. What they perceive as personal space may increase, and invading these boundaries creates stronger disturbances.

A key component in salutogenics is the patient's ability to maintain control of their personal space. The patient should feel that they have the choice to separate themselves from public situations and protect their privacy, should they feel they require a moment of introspection.



MOTILITY

The patient's ability to navigate a space is integral to their sense of internal strength. Motility; the ability for an organism to move itself through an environment, must be maximized in order for a patient to feel as though they are in control of the healthcare they receive.

The patient should be able to read their surroundings as they pass districts and arrive at nodes throughout the building. Clear wayfinding and accessible information are fundamental in the design of a healthcare centre.

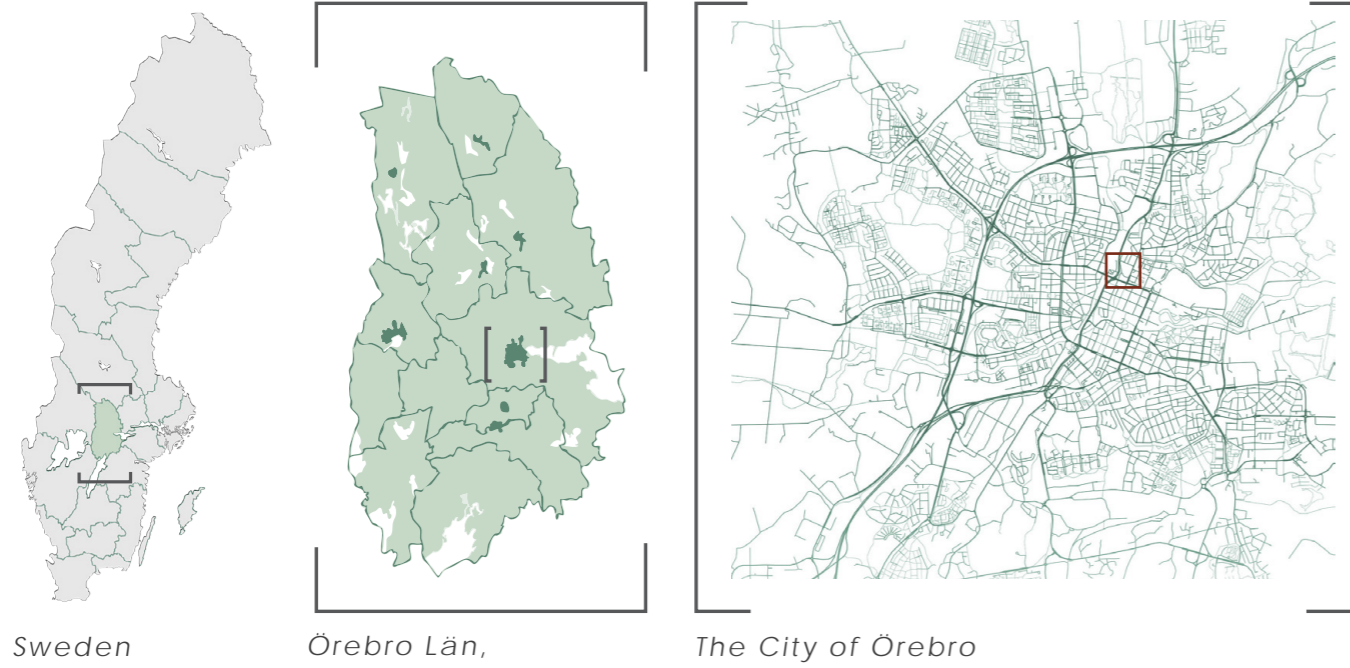
Furthermore, to avoid overwhelming the patient, the path they follow should be edited to show only information that is necessary to their particular needs. Any extra program functions should be hidden to create a simple, understandable environment.



COMMUNITY

Social connection has the power to minimize the isolating feeling that a patient may feel when struggling with health issues. This project will not only aim to connect patients with the healthcare they require, but will also promote social bonds throughout the community.

By creating spaces for social gathering and spontaneous encounters, the project hopes to knit together a supportive collection of resources that any patient or patron may access.

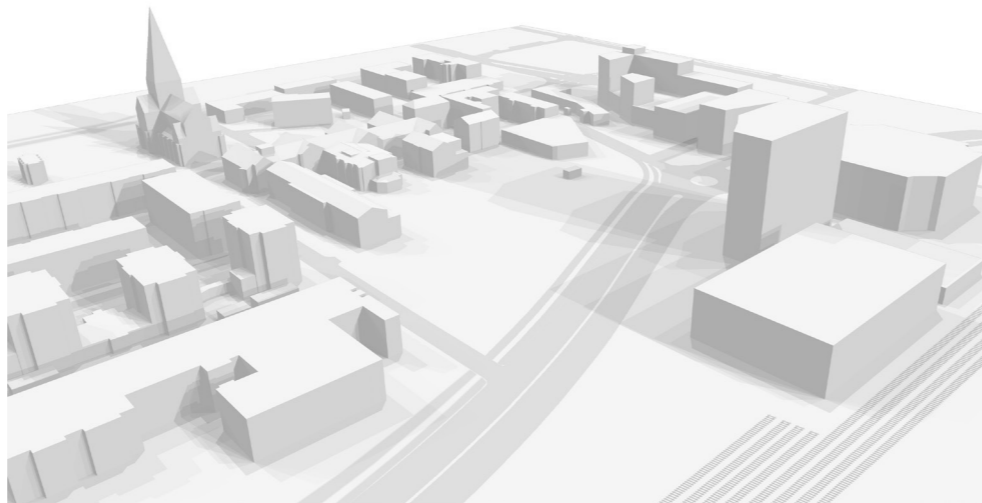


The site of the new Örebro Healthcentre

- Pedestrian Flows
- Bicycle Paths
- Bus Stops
- Train

THE CITY OF ÖREBRO

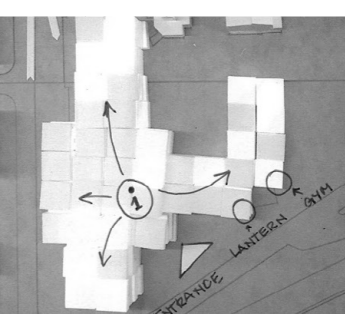
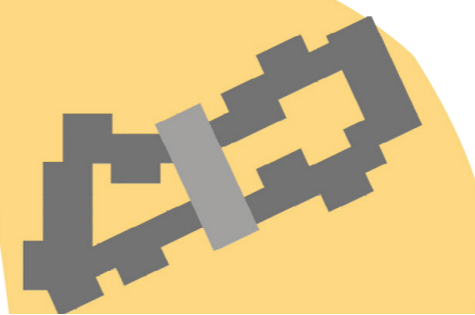
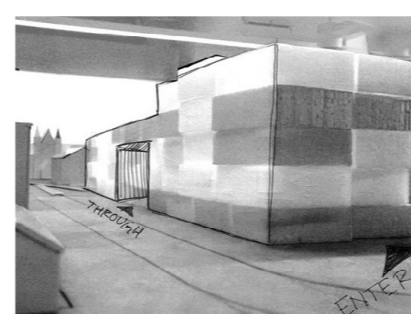
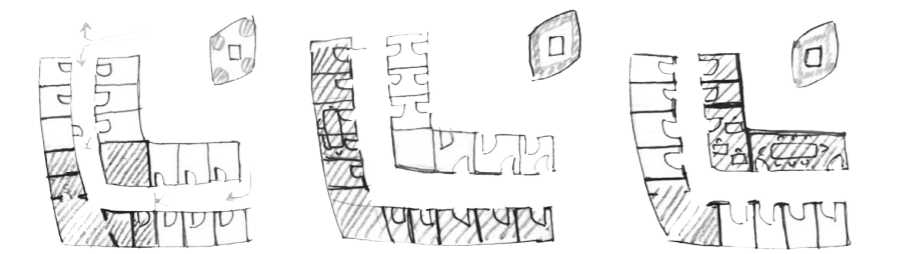
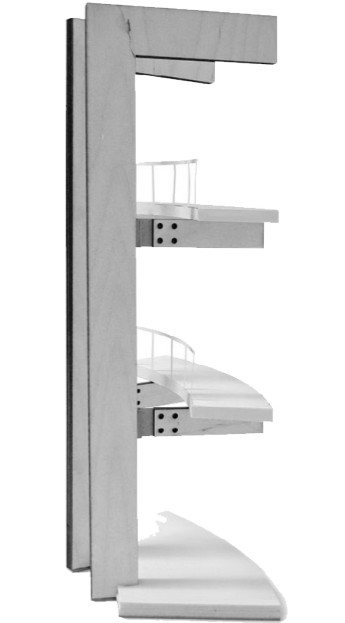
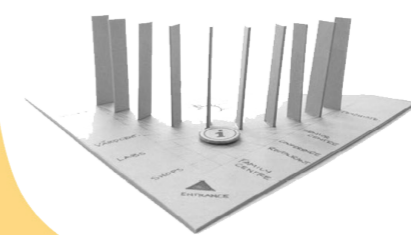
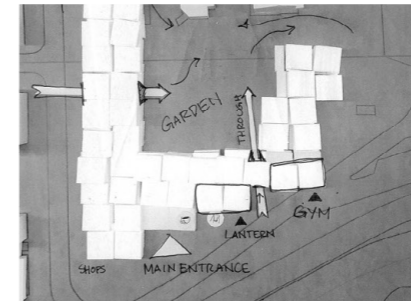
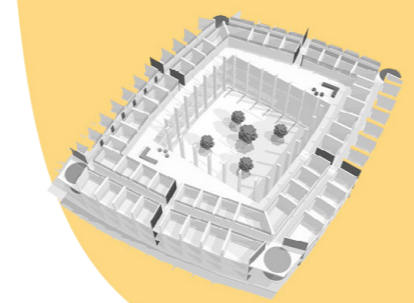
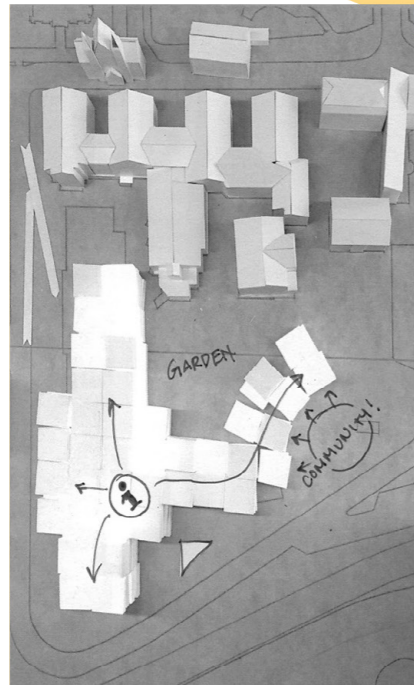
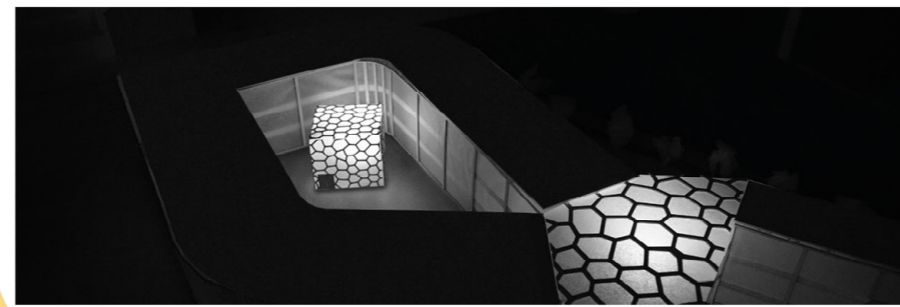
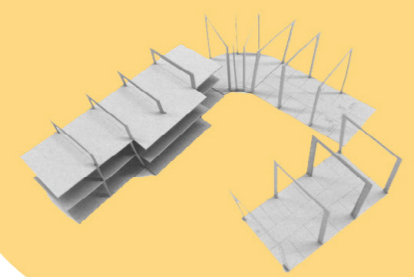
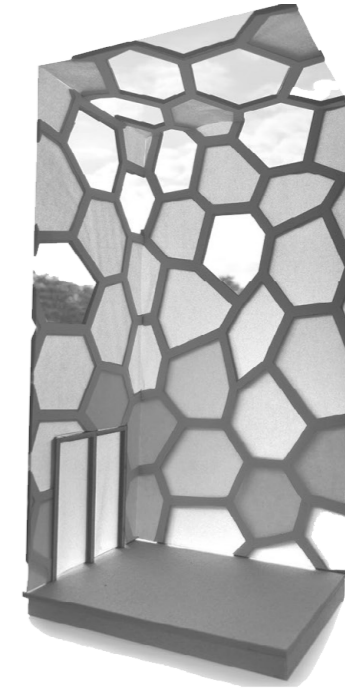
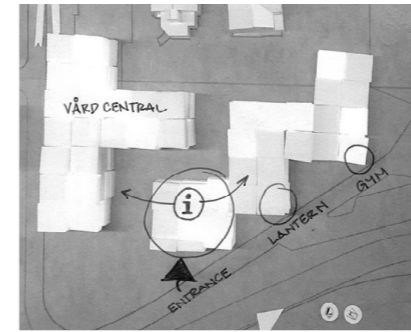
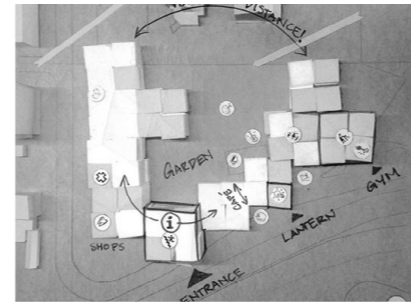
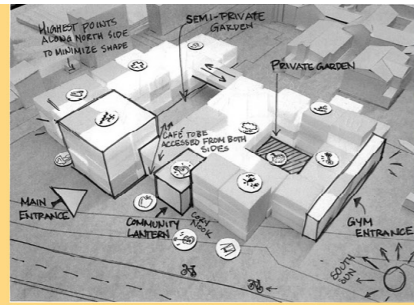
Örebro is Sweden's sixth biggest city and is in the middle part of Sweden. The site is placed right outside the central parts of the city. Like many other Swedish cities Örebro is dealing with an ageing population and a big amount of immigration. The project combines a healing environment where primary care, specialist care and possibilities for interaction is combined.

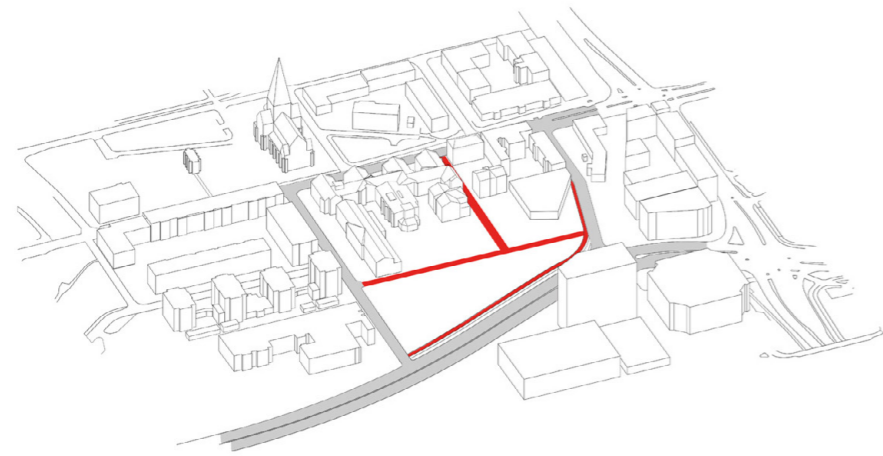


Daylight and shadow study

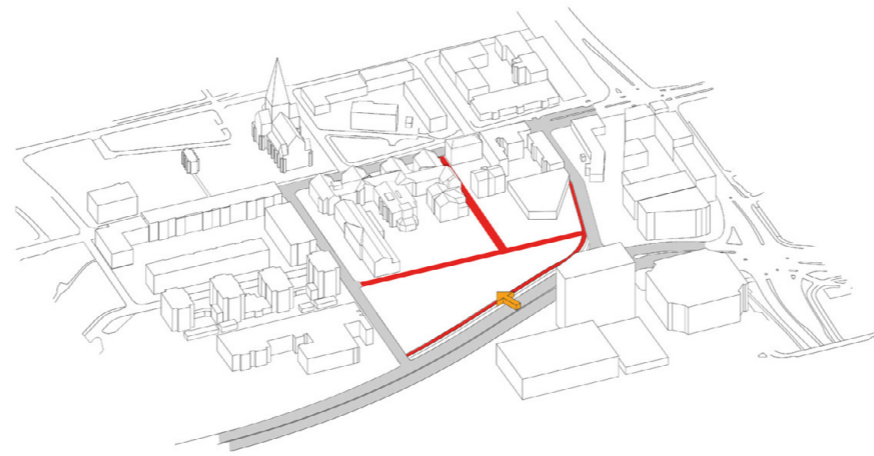


- Commercial
- Residential
- Green Space
- Parking
- Central station
- Existing Hospital

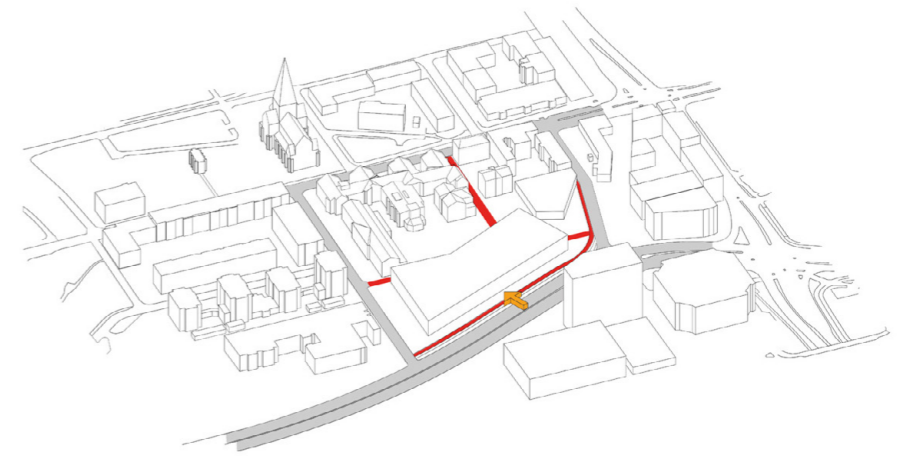




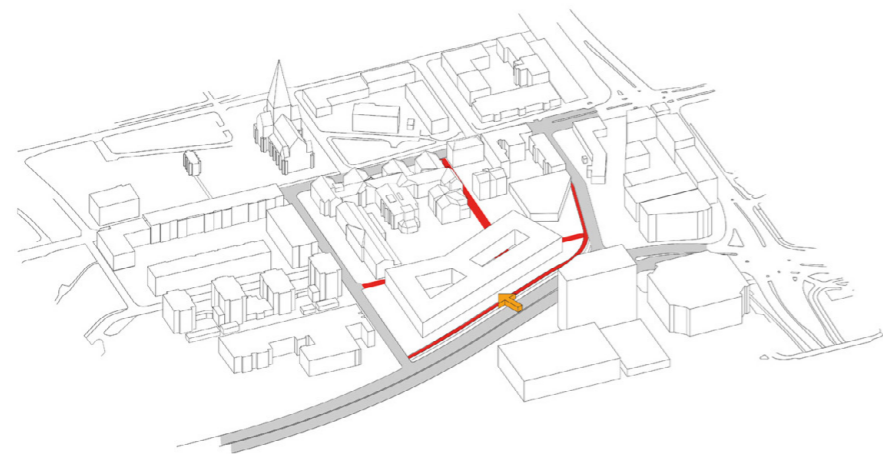
Flows



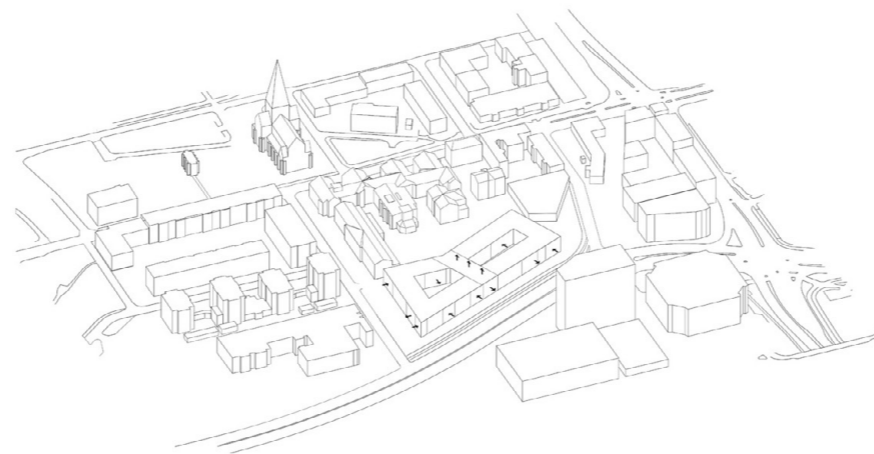
Entrance in central location



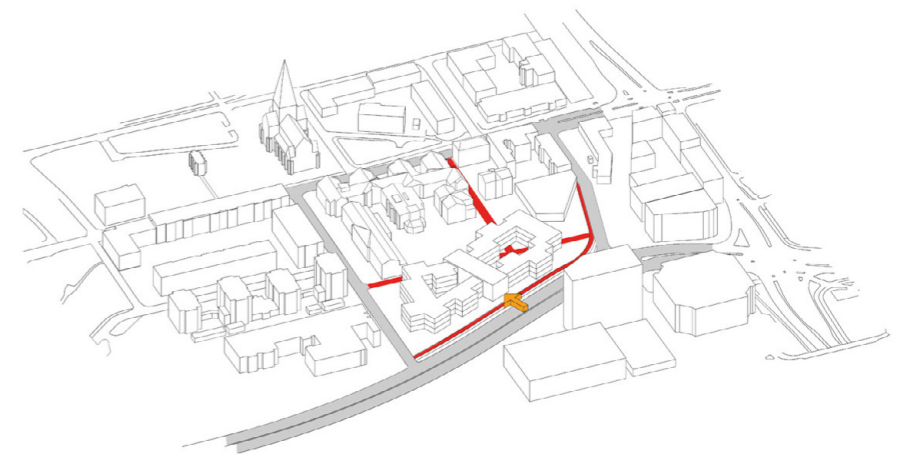
Massing



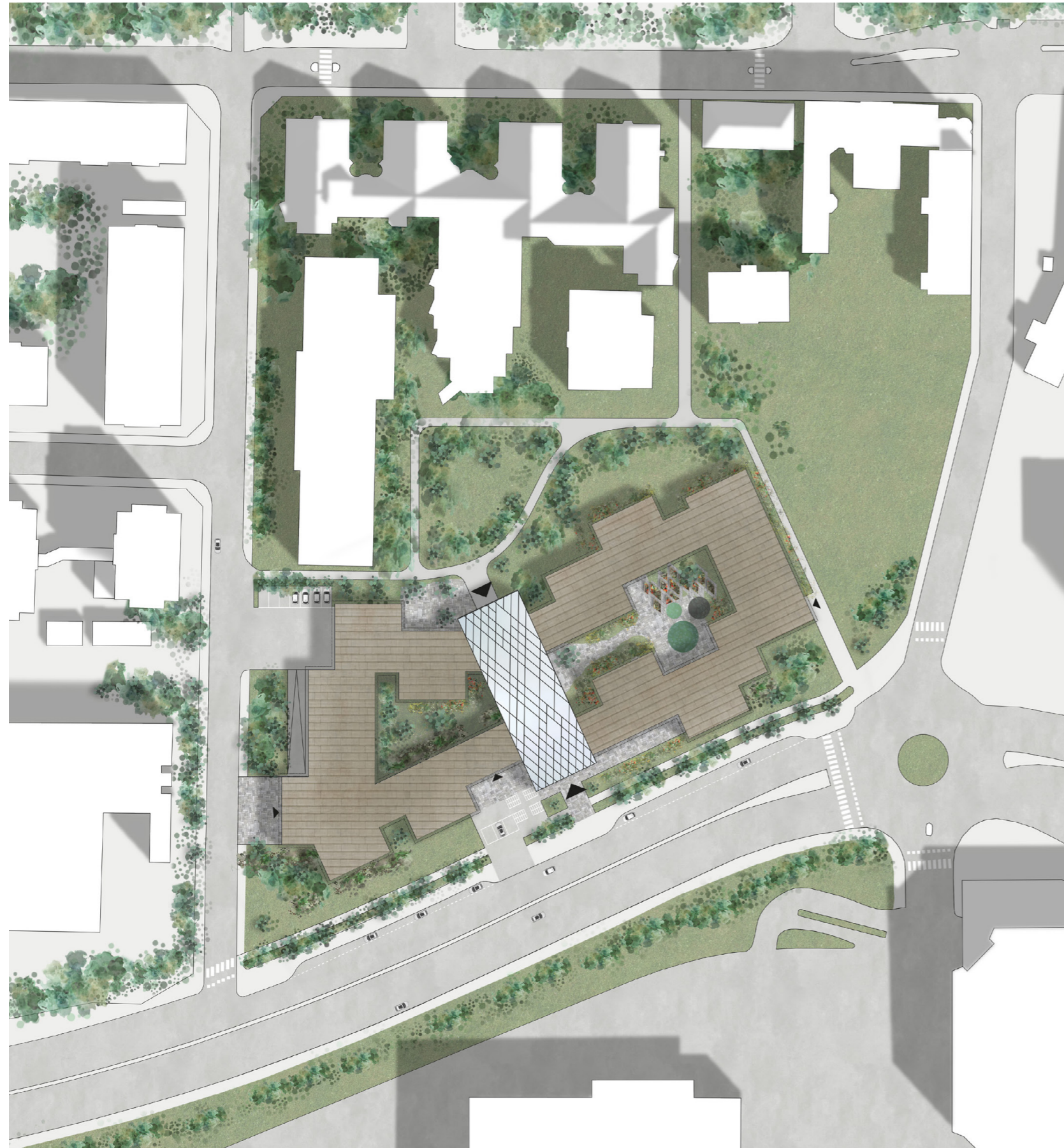
Courtyards



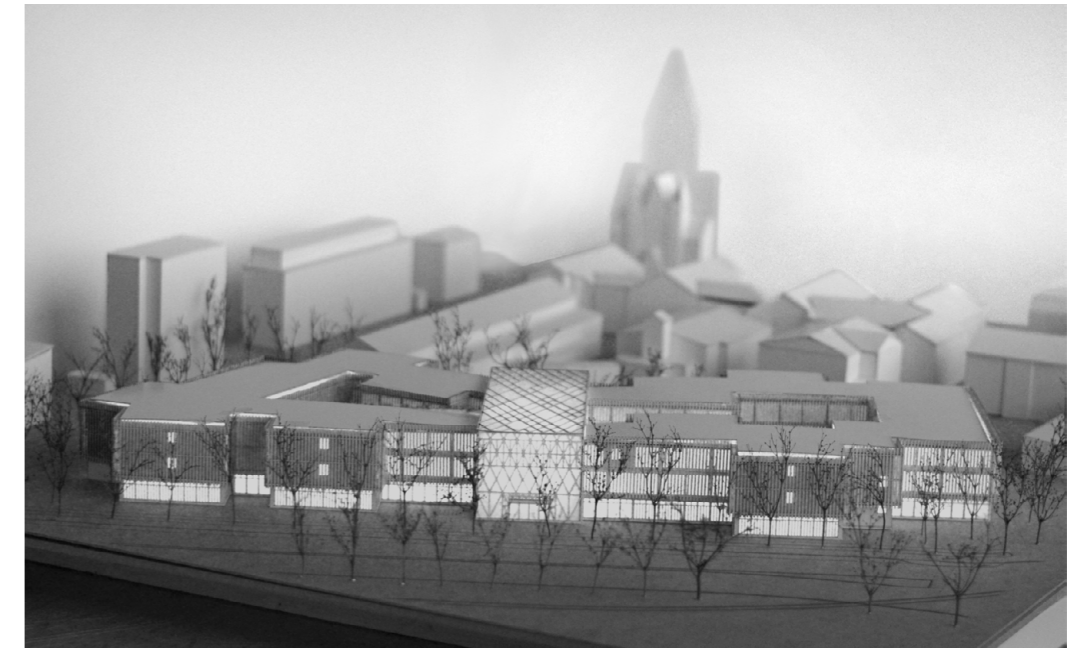
Module arrangement



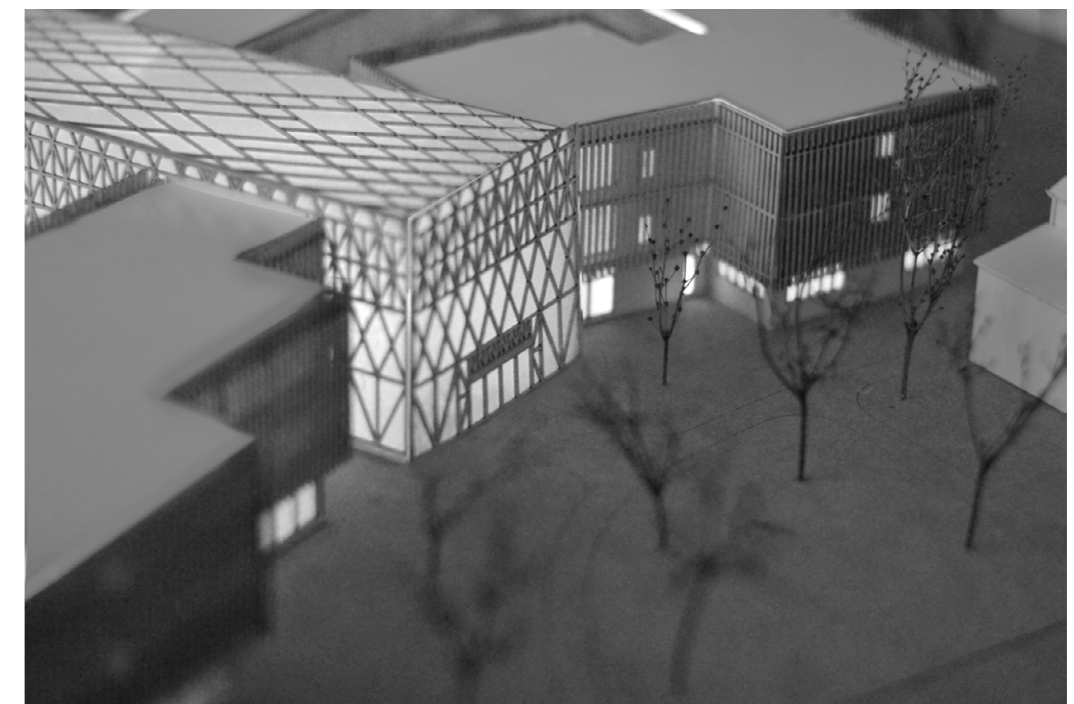
Community Lantern



Site Plan



Street Front, 1:200 model.



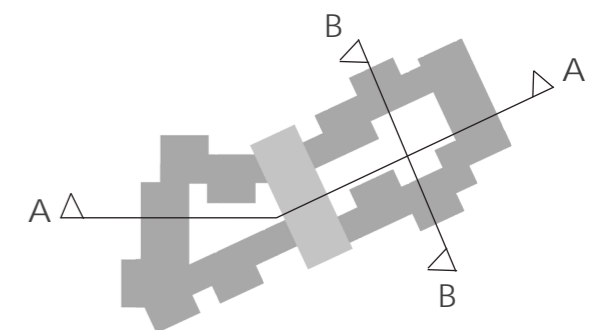
Back Entrance, 1:200 model.

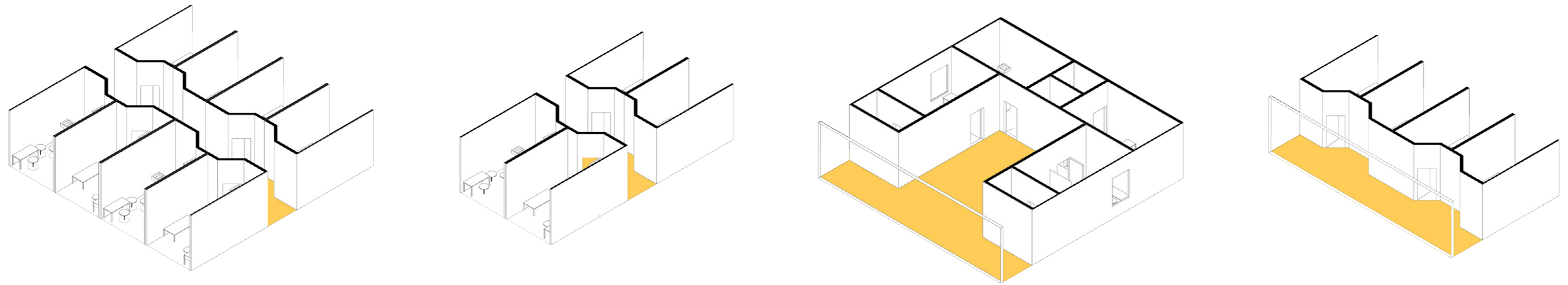


Section A, east facing, through lantern courtyard



Section B, north facing, through public courtyard



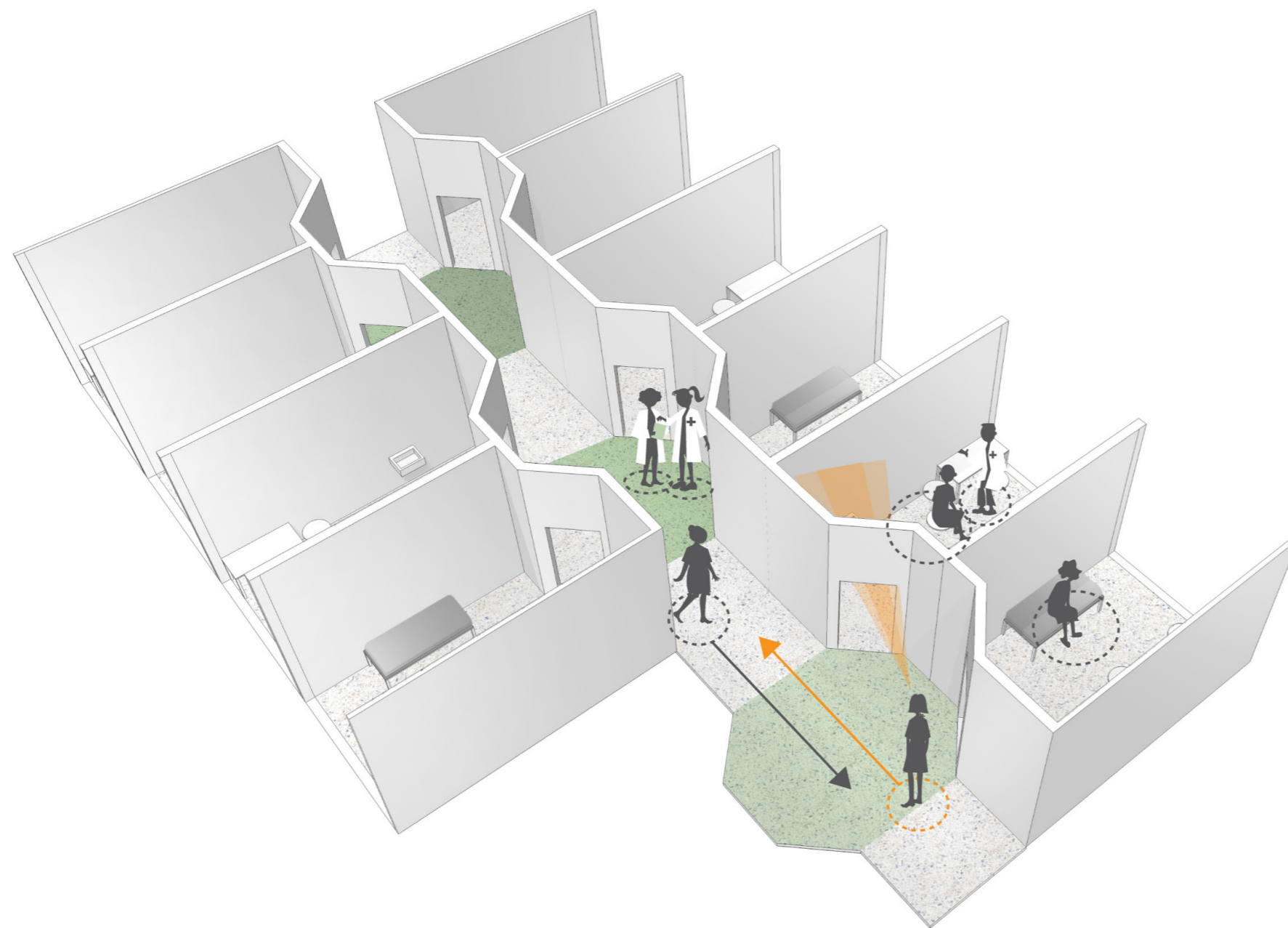


UNIT MODULES

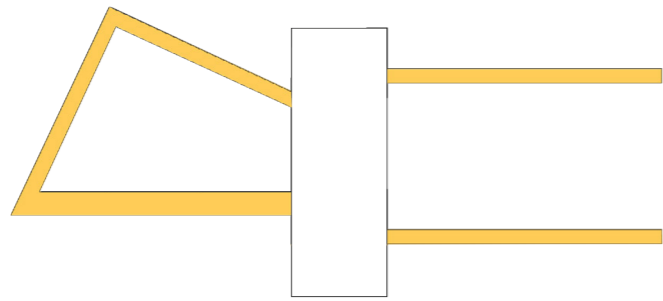
To create generality and flexibility within the building, two different modules of 15 x 15 meters were constructed. The modules are formed from one straight corridor through the module which when put together creates a clear and straight way for the patients. The first module has 4 examination rooms on each side of the corridor. To create a protection between the examination rooms and the corridor niches are created outside the doors. This positions the door at an angle which protects the view into the examination rooms and creates a privacy for the patient staying inside the room.

This model can also be extended or decreased giving us the possibility to use shorter modules with only 2 rooms on each side or to have examination rooms on only one side of the corridor.

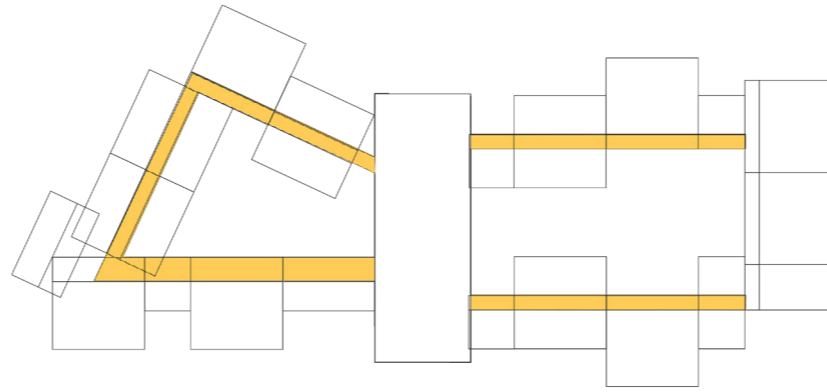
In the other module the corridor is placed along the side of the module. The module consists of four larger examination rooms along the other edges with a larger niche in between, protecting from views into the rooms.



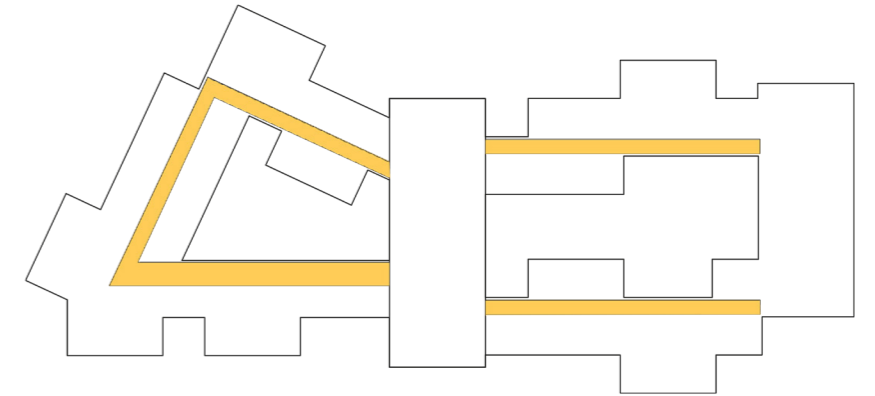
MODULE ARRANGEMENT



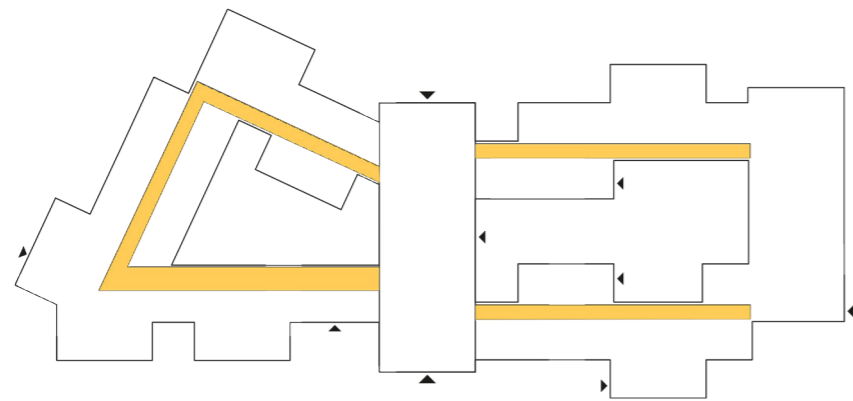
Circulation



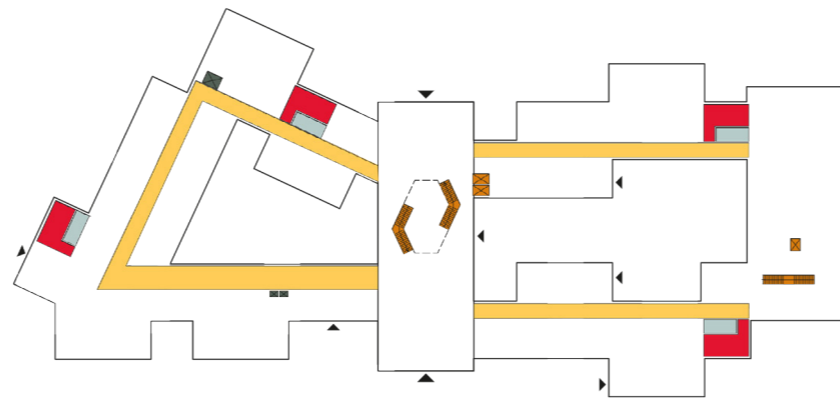
Circulation + modules



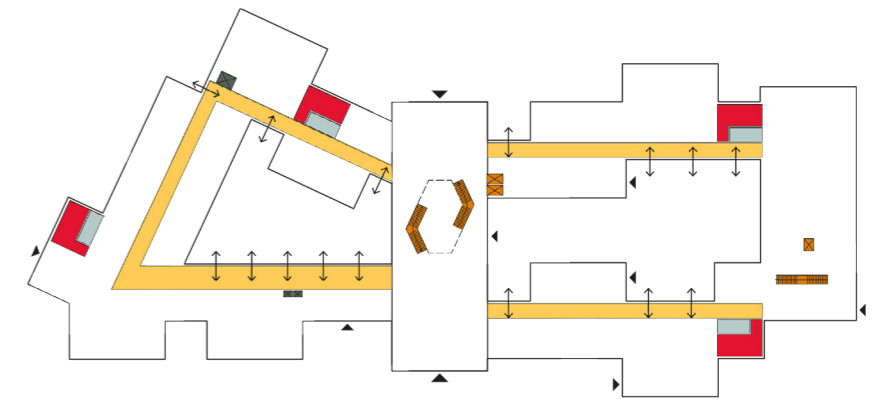
Outlines of the building



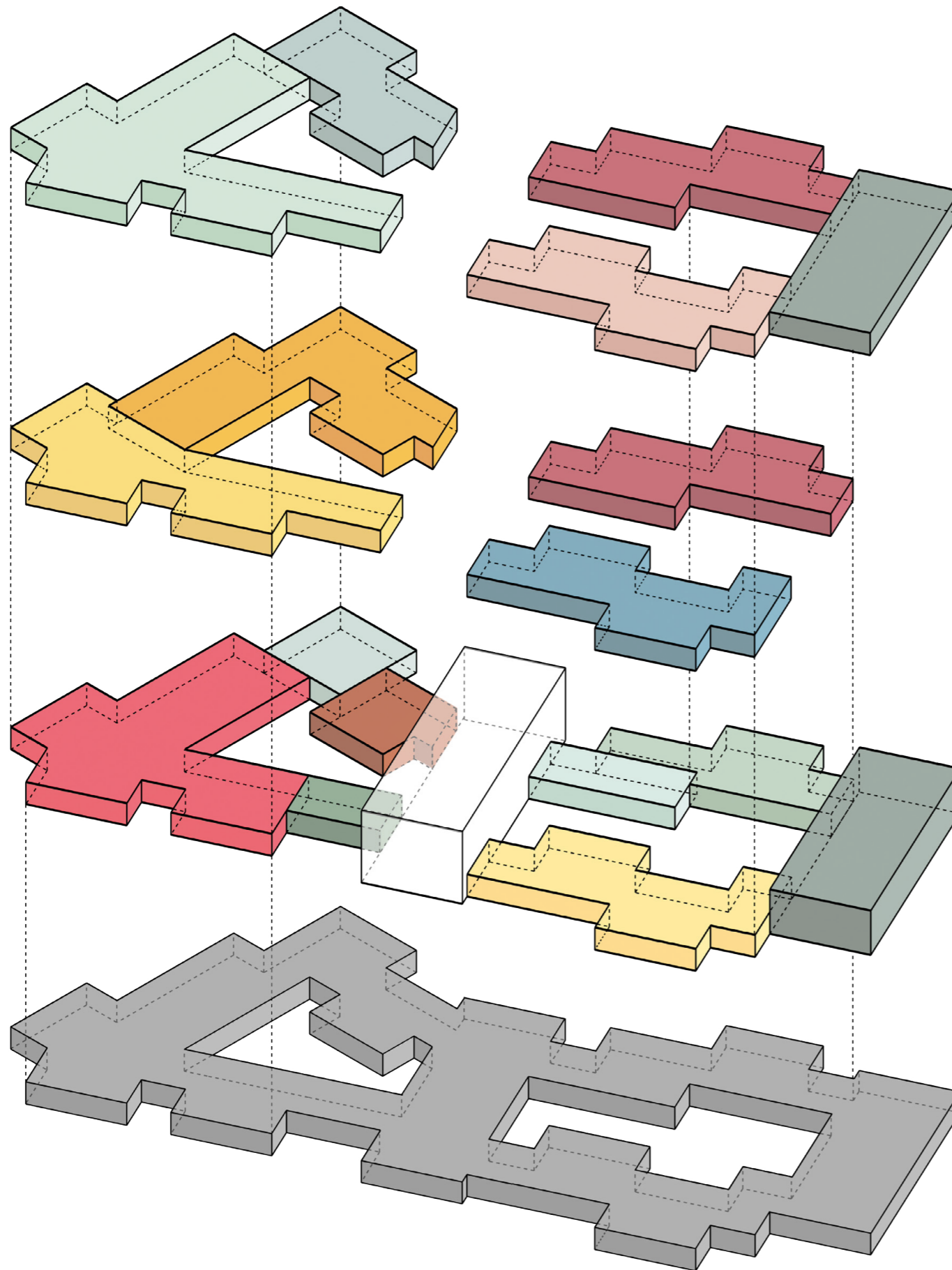
Entrances



Vertical flows

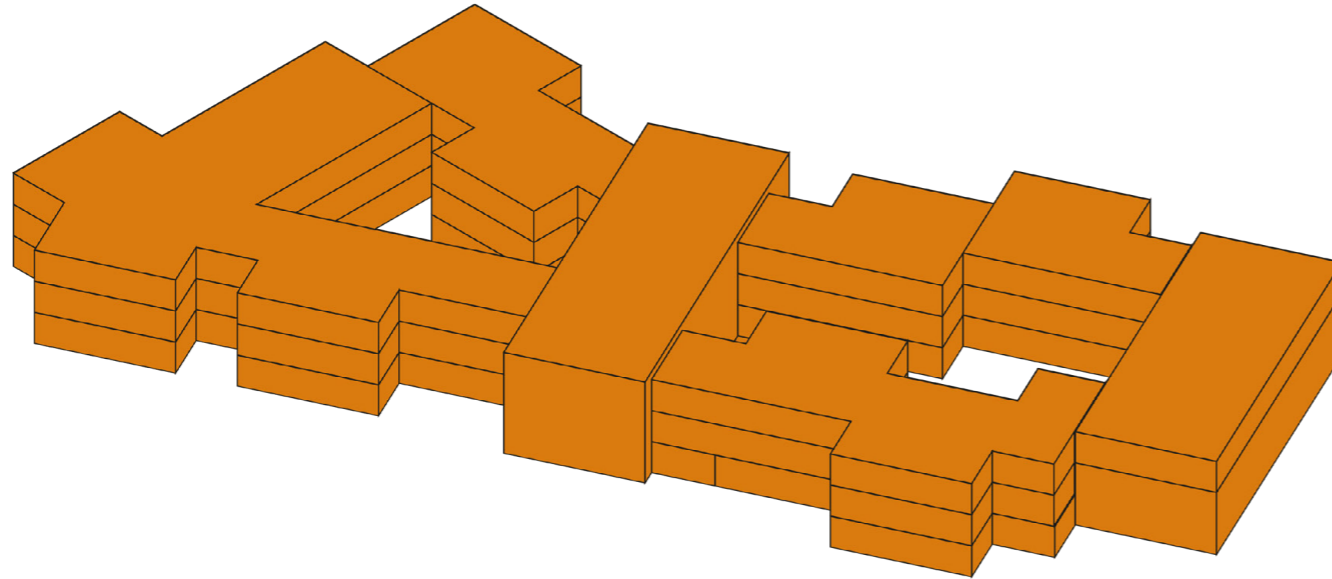


wayfinding - Relation to the outside

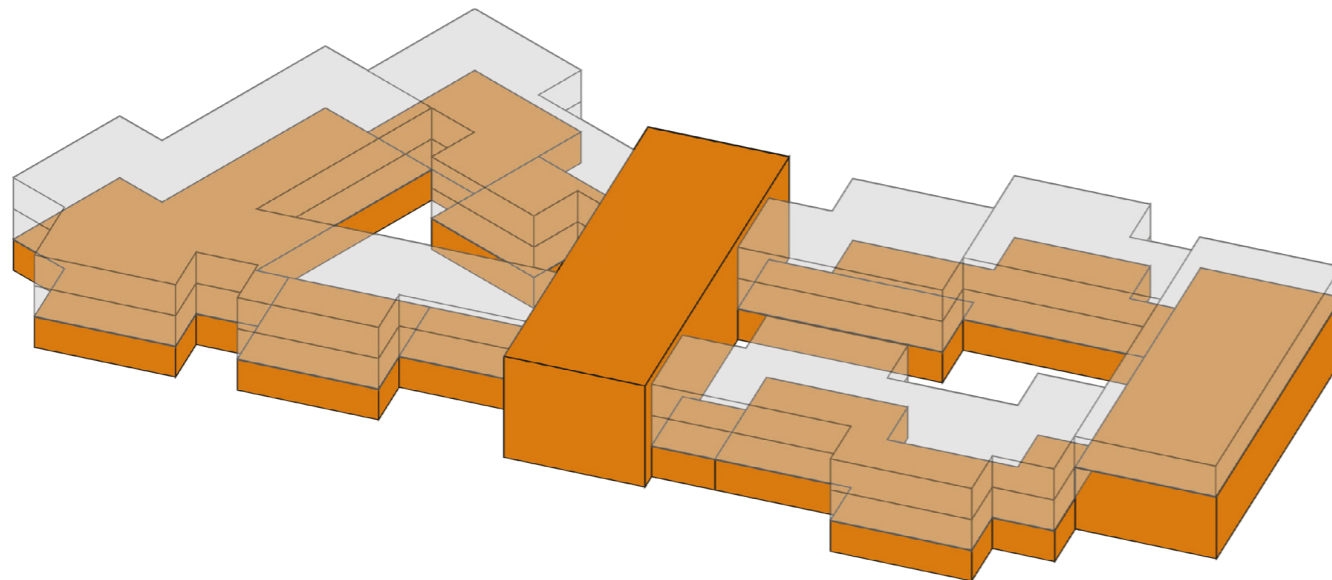


- | | | | |
|---|--------------|---|-------------------|
|  | DENTIST |  | PHYSIOTHERAPY |
|  | PSYCHIATRY |  | MATERNITY CARE |
|  | CLINICS |  | CLINICS |
|  | IMAGING |  | CHILDRENS CARE |
|  | SURGERY |  | SENIOR CENTRE |
|  | IMAGING |  | GYM |
|  | SURGERY |  | POOL |
|  | LAB |  | ÖPPEN FÖRSKOLA |
|  | PHARMACY |  | CAFÉ |
|  | RESTAURANT |  | OUTREACH CENTRE |
|  | MEDIA CENTRE |  | PHARMACY STORAGE |
|  | LOGISTICS |  | WASTE & RECYCLING |
|  | TECHNICAL | | |

OPEN DURING OFFICE HOURS

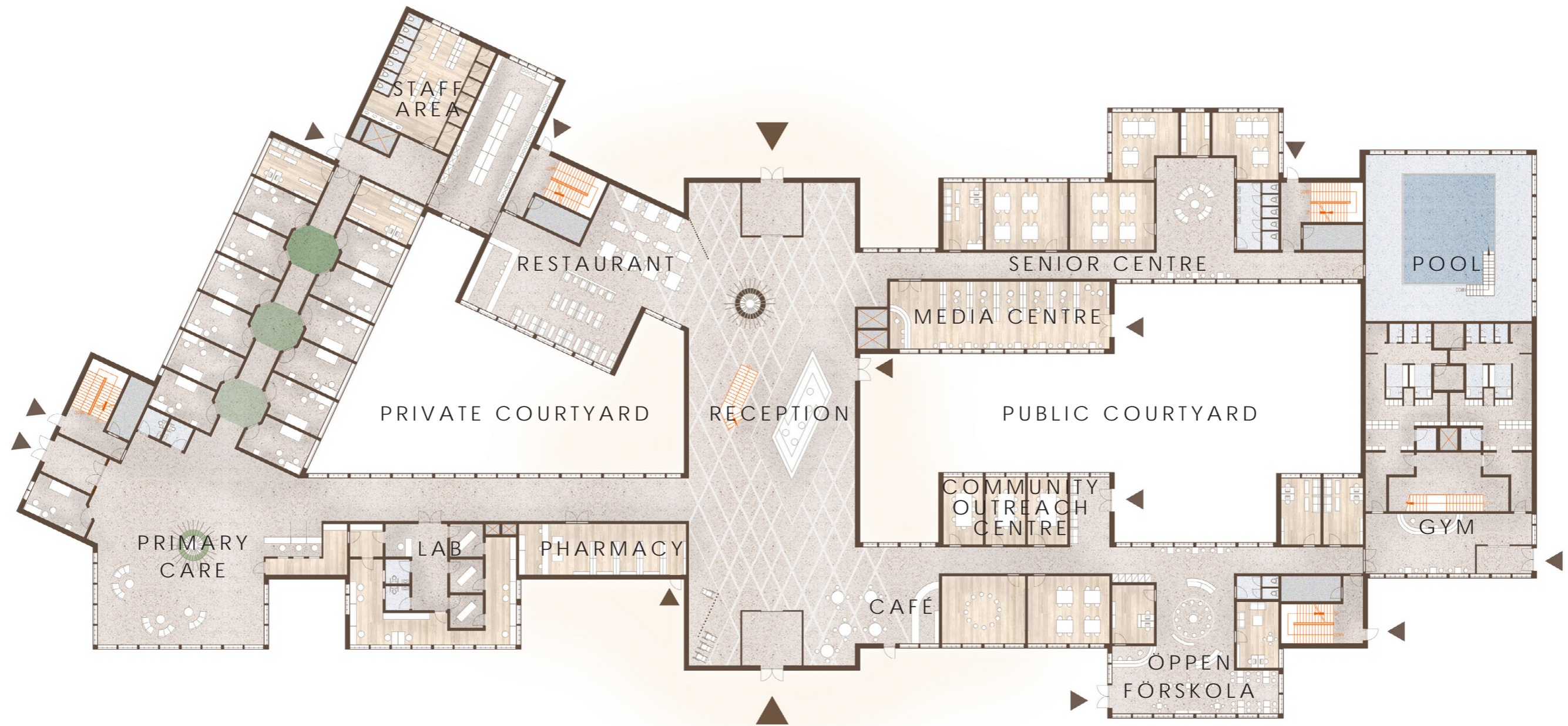


OPEN AFTER OFFICE HOURS

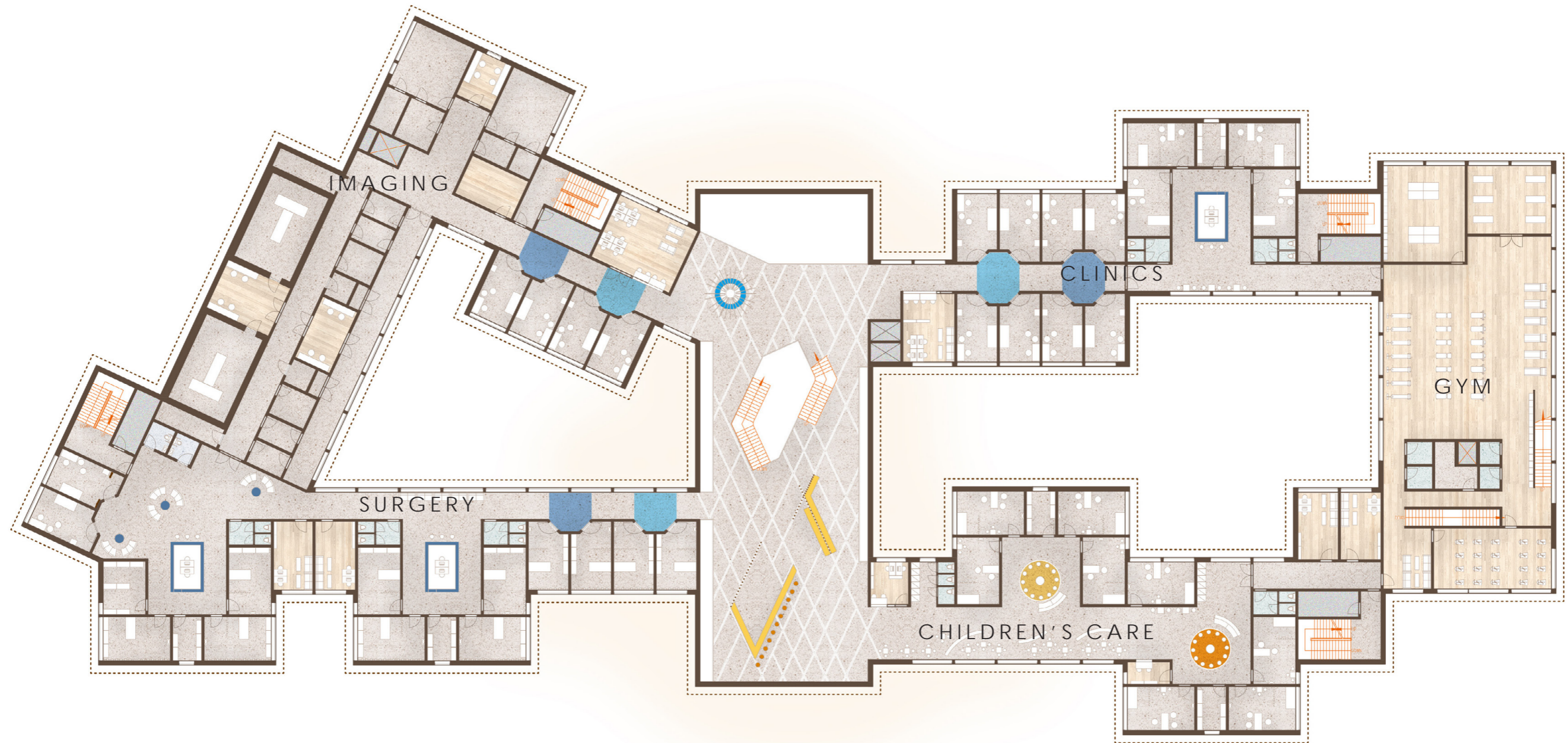


AREAS

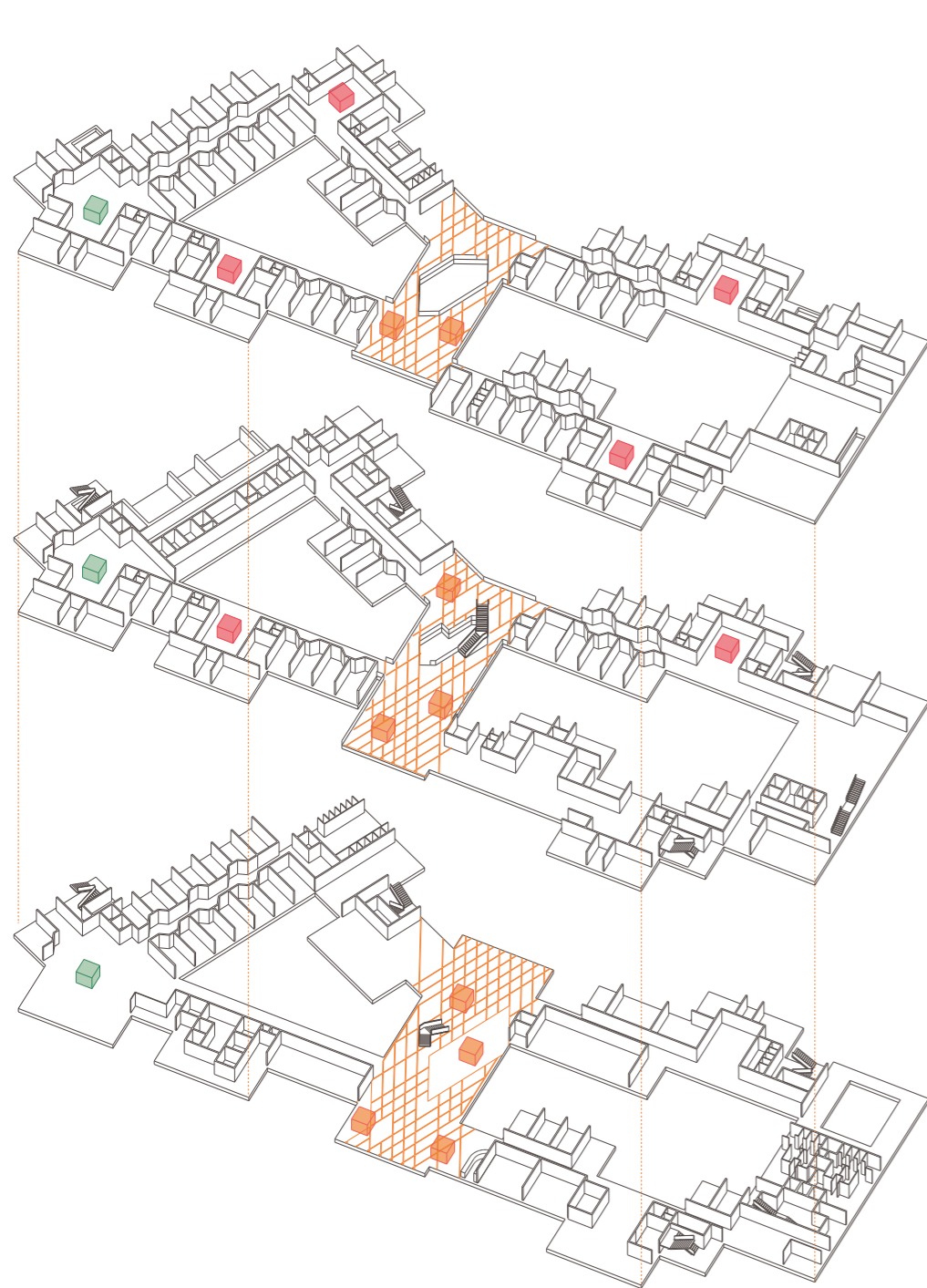
PRIMARY CARE	792
LAB	162
CHILDRENS CARE	510
MATERNITY CARE	510
PSYCHIATRY	356
IMAGING	627
SURGERY	750
PHYSIOTHERAPY	565
SENIOR CENTRE	256
GYM	1130
ÖPPEN FÖRSKOLA	189
GENERAL CLINICS	768
RESTAURANT	288
CAFÉ	48
DENTIST	1153
MEDIA CENTRE	121
STAFF	982
TOTAL AREA	16560



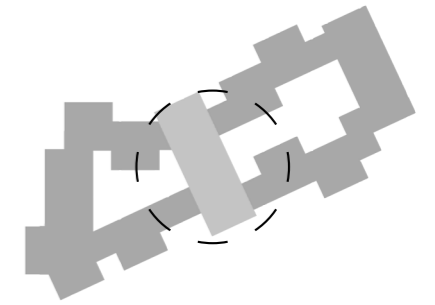
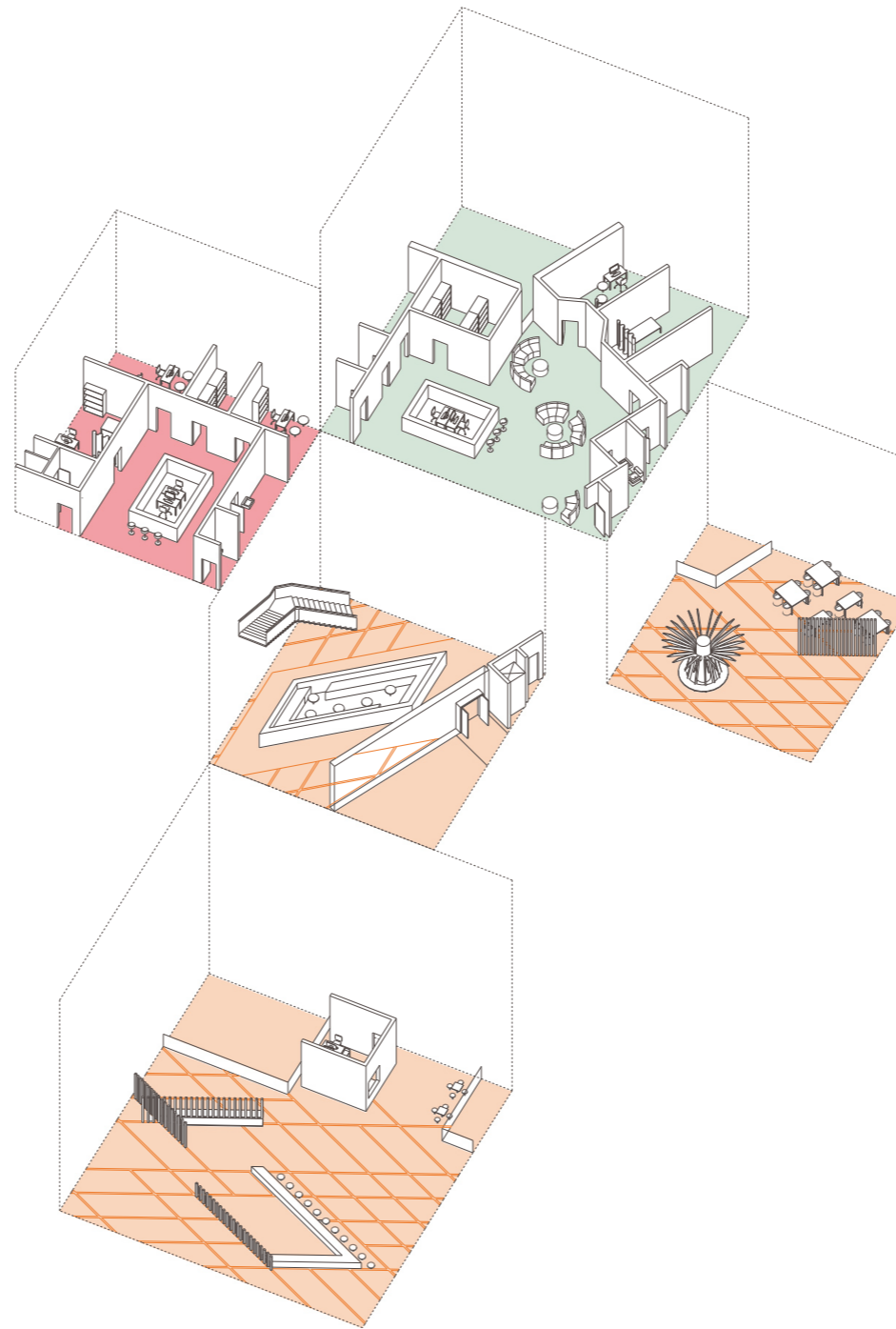
First Floor Plan 1:400



Clinic Floor Plan 1:400



Meeting points throughout the centre

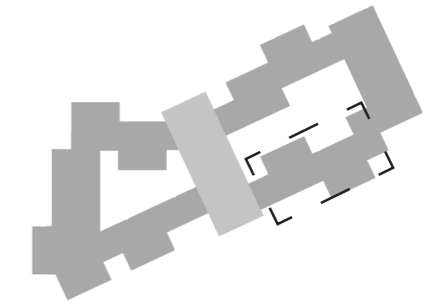


MEETING POINTS

Working with motility in the building the project explores the concept of *meeting points*. A meeting point is a substitute for the former waiting area. Instead of having one waiting area for the patient, several meeting points have been created on each floor. As technology moves forward, the patient has the possibility to check in to their appointment by using their personal mobile. When the time of their appointment approaches they will receive a notification and may then start to move towards the area of the meeting point where the doctor or nurse meet up and escort them to their room.



Meeting points within "The Lantern"



CONNECTING UNITS

The different units in the healthcare centre are arranged vertically while accessed horizontally from the core Lantern. The most public programs of each unit are located on the ground level, with more private functions on the upper floors. This design allows for some interaction between different social groups while still providing the seclusion each unit requires. The senior centre and family centre, for example, share public space in the courtyard with strong visual connections to one another. Their more private clinics, however, are located on upper levels and quite separate.

Unit Arrangement:
 1st Floor: Daycare and Family Outreach, 2nd Floor: Children's Clinics, 3rd Floor: Gynecology



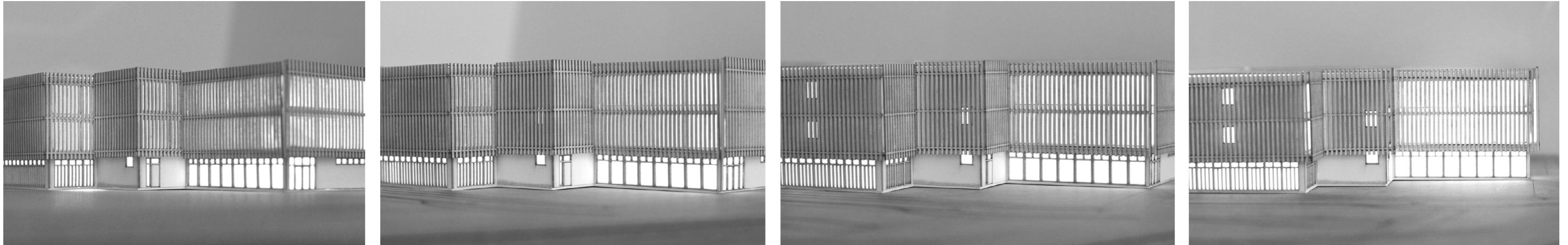
The Public Courtyard



Clinic Room, Private Space, 1:25 model



Media Library, Public Space, 1:25 model



The appearance and disappearance of the program along the façade, 1:200 model

FAÇADE

The façade is a direct illustration of the program, as it works to hide or celebrate certain functions of the building. As all of the public programs in the facility are located on the ground floor, the fenestration is light and open, illuminating the activities held inside.

Moving vertically in the building, the functions of the units become increasingly private and require more shelter from the public eye. Vertical wooden battens are held 700mm from the structure of the façade, creating a protective cloak that obscures the view of the interior from the street. Passing by the building, the clinics are only visible for a moment. From the interior, however, the light of the fully glazed window bathes the clinic in a soft, luminous atmosphere.



1:25 model



The Community Lantern

CVA: COURSE THEMES

THEME 1 : EVIDENCE BASED DESIGN

THEME 2 : HEALTHCARE AND ARCHITECTURE

THEME 3 : HEALTH PROMOTION

THEME 4 : FUTURE PROOFING AND SUSTAINABILITY

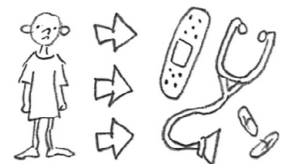
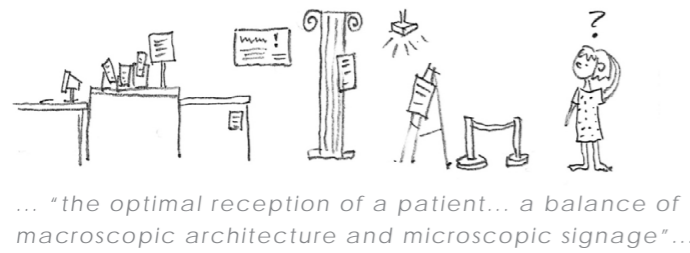
HEALING ARCHITECTURE: EVIDENCE BASED DESIGN

As the safeguarding of the patient's integrity is an essential component in salutogenics, the architecture of this healthcare facility is organized in layers of increasing privacy. The building is designed to optimize wayfinding and create a feeling of inner strength, as the patient understands their environment and is able to manipulate their surroundings to suit their needs.

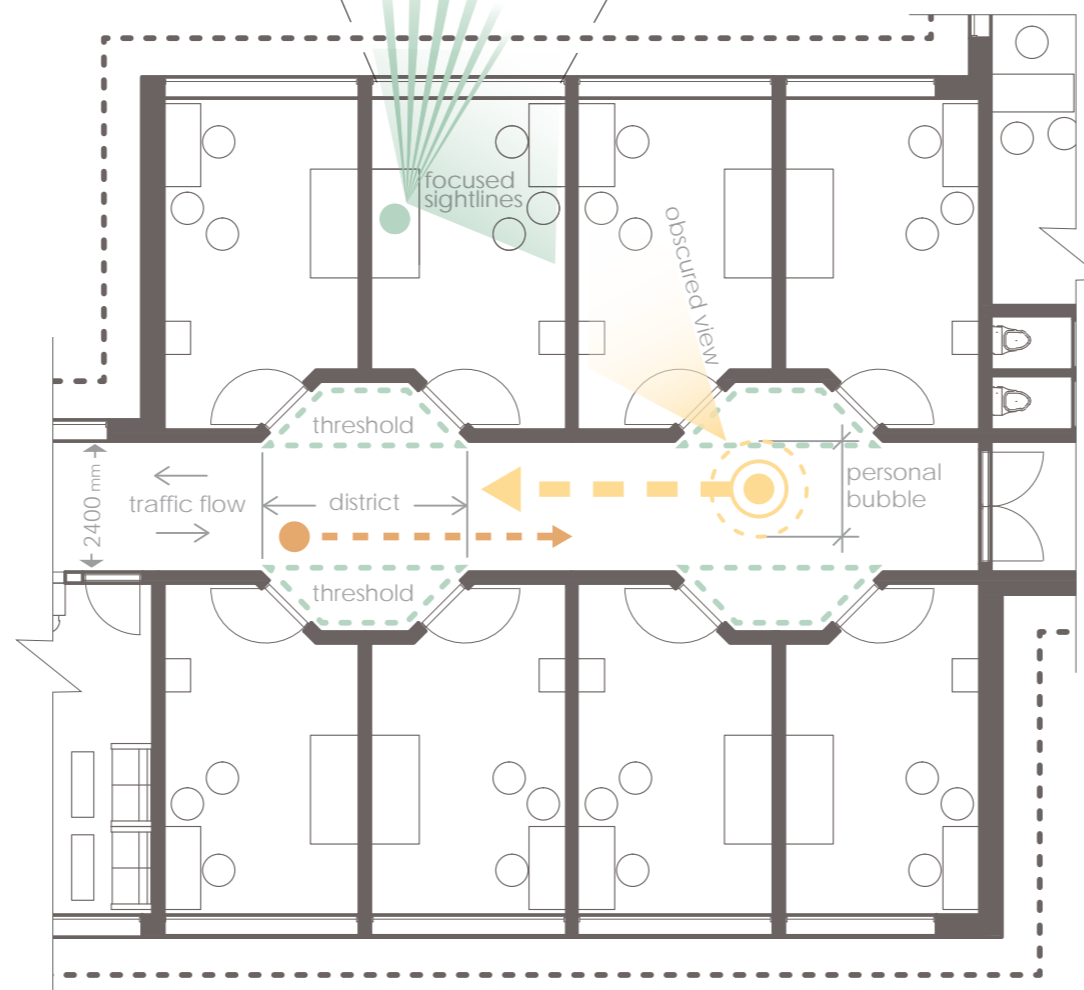
Considering the entire commute of the patient, from their home to the entrance of the healthcare facility, can be long and cumbersome, the main entrance to *The Community Lantern* shines as an obvious port of entry. Once inside, the patient is guided through the healthcare system with careful respect to their privacy, and the celebration of their own strength and motility.

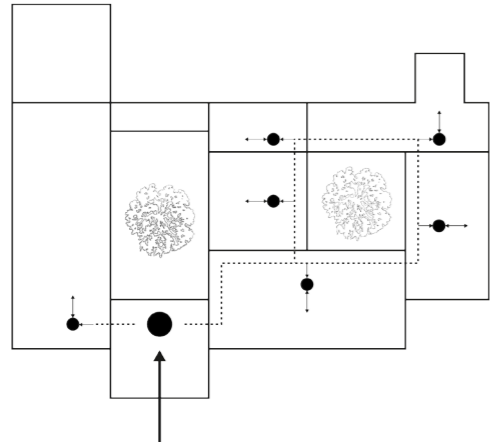
Research in waiting room design and patient privacy guide the design of the meeting points and corridors. Interior design elements, such as changes in floor pattern surrounding the welcome desk, act as way-showing and way-stopping tools. Patients are guided to specific meeting points and are then able to determine how much seclusion they desire as their own seating constellation. Because many care units share the same meeting points, the patient's privacy is maintained as bystanders are unable to identify the destination of the patient.

The corridors that take the patient from the meeting point to the clinic provide enough space for one patient to pass another while maintaining their personal space. The clinics are arranged in clusters, breaking the length of the corridor. Receded, angled doors create thresholds that add an extra layer of privacy between the clinic room and the traffic of the corridor.



Excerpts from "Enhancing Patient Experience Through Environmental Design, a Case-Study on Privacy" B.J. Bjorngaard, 2010



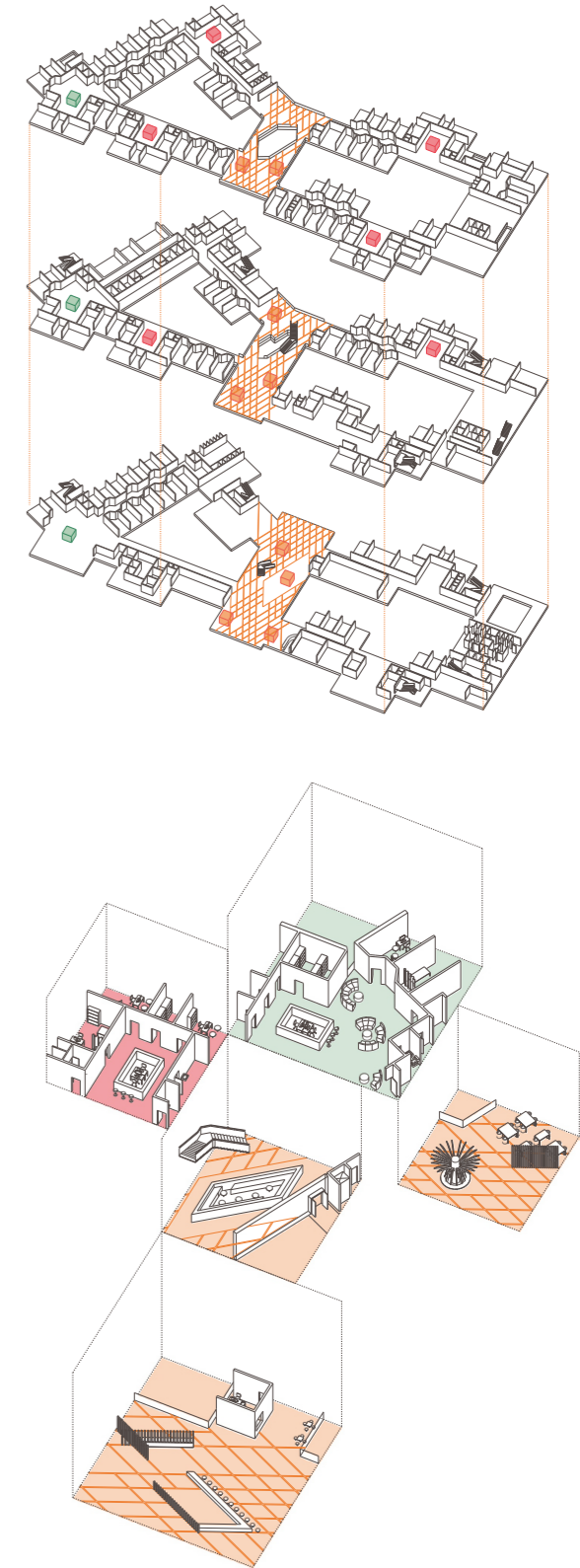
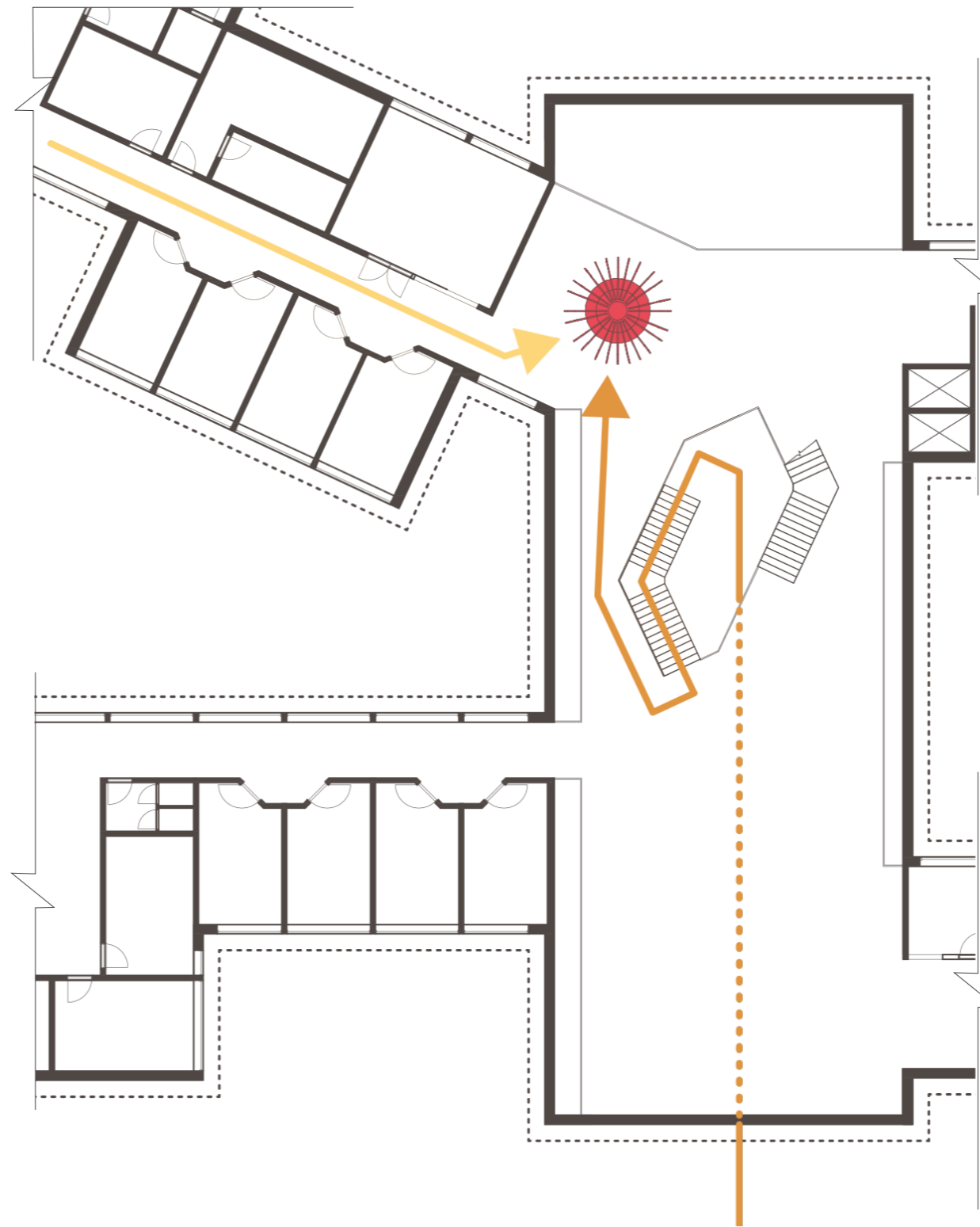


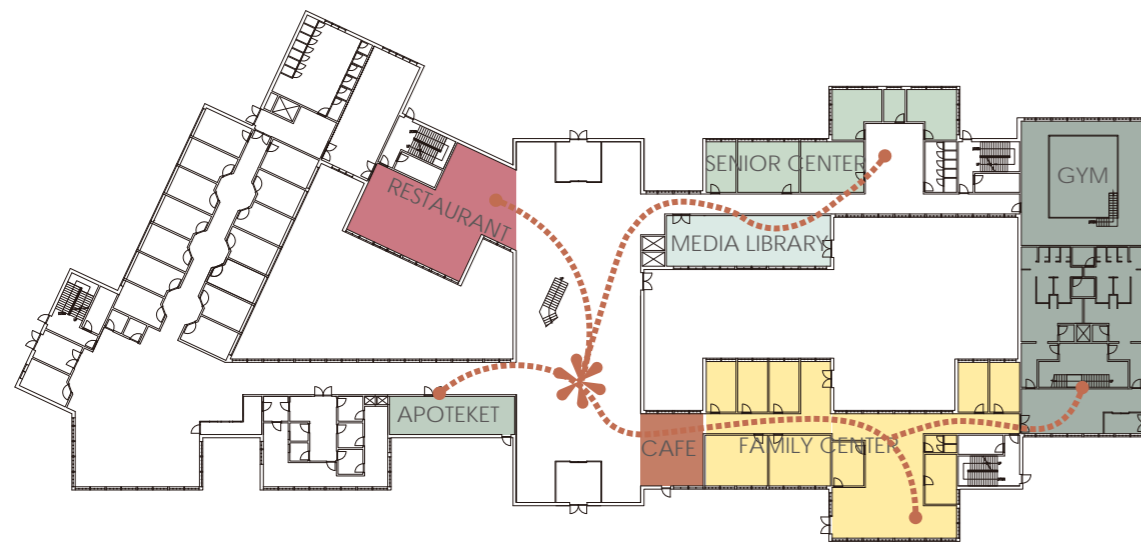
HEALTHCARE AND ARCHITECTURE

When planning the building, we have been working to make the architecture, and the organisation of the hospital, meet the development of technology today. Current technology is increasing the independence of the population. We use our phones and computers to book appointments, shop, communicate and to search for information.

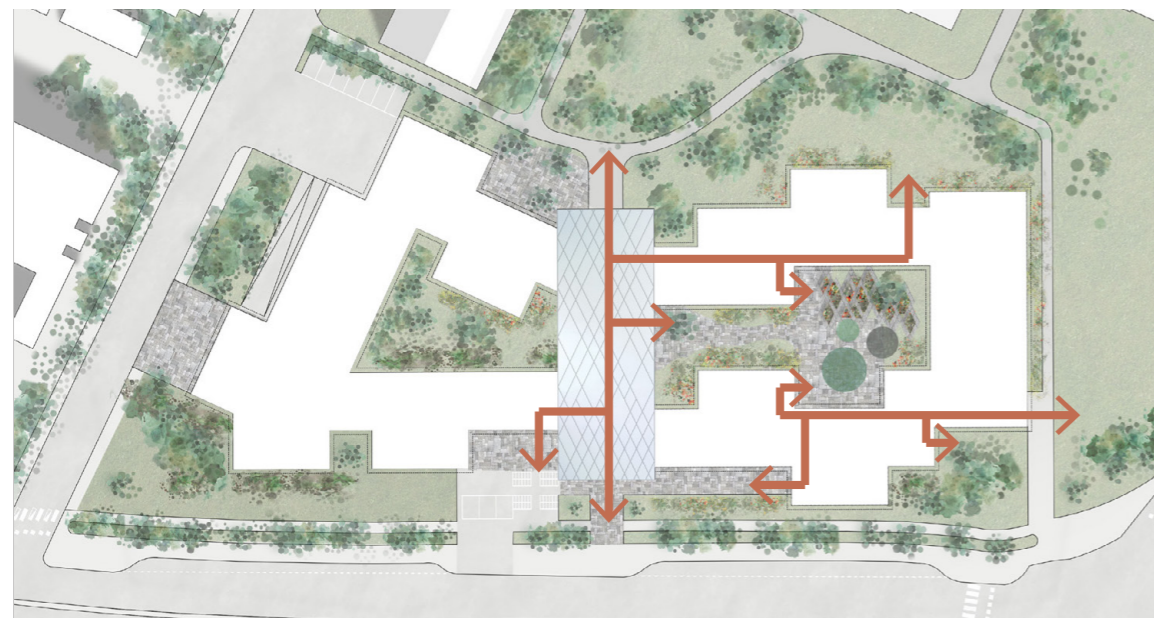
In healthcare the development isn't following the same speed as in the rest of the society, but we are imagining a future where with simply their phone, a patient can book their appointment, announce their arrival and meet up with his or her doctor without having to take a detour around receptions or waiting areas.

To accomplish this, we have replaced the waiting areas with a core that holds meeting points for all the different units. At the meeting points the patient and the staff meet up and take a straight and clear path through the clinic areas and into the exam room.





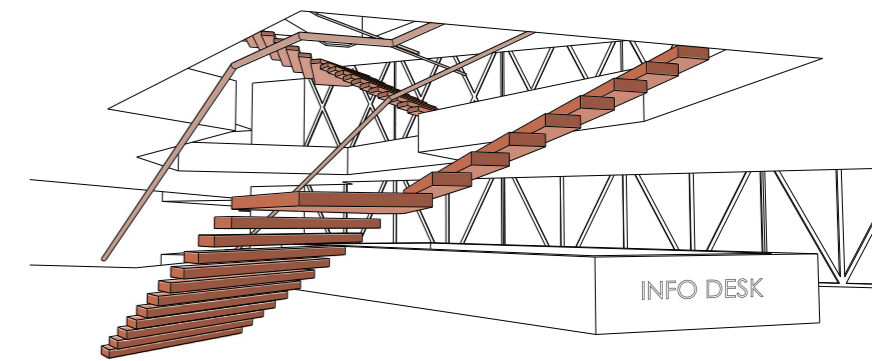
The healthcare facility contains different kinds of spaces to welcome different people. Taking a social and cultural perspective in understanding and responding to health issues and problems would contribute to health promotion.



Access to green areas helps patients in their healing process. The more often and the longer time people visit green environments the less stressed they feel. And the closer the green environment is to one's home, the more often people visit it.



Public buildings would provide the different ways of movement, while keep the people feel free and relaxed when moving and meeting with others. It is important to give specific characters for different spaces to show their function. This would protect privacy of specific groups and notice the others without more words at the same time.



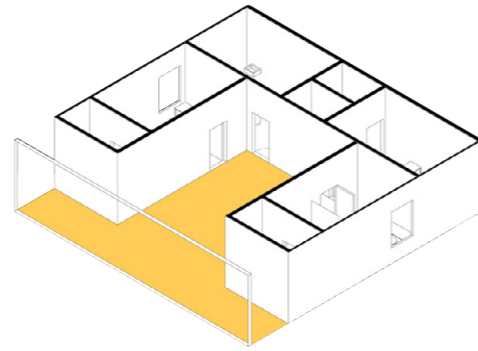
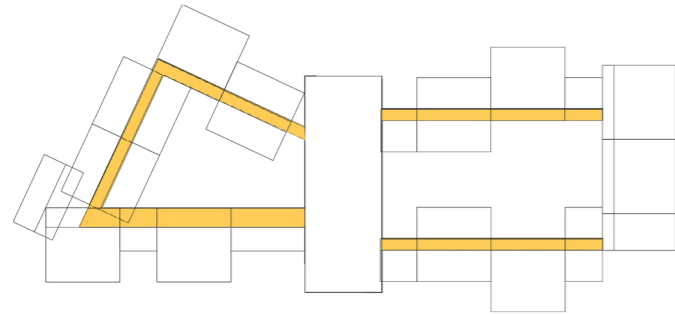
HEALTH PROMOTION

In the spirit of health promotion, the main stairs are located close to the welcome desk at the center of the entrance hall. Able-bodied visitors are encouraged to climb them to reach their meeting points, while accessible elevators are not too far off.

The Lantern's distinguishable pattern is replicated on the floor, illustrating the path visitors take to the many community programs available on the first floor.

Visible from the *Lantern*, the outdoor environments hold many health promoting activities. Greenery in the courtyards and gardens surrounding the facility create both community spaces and an added layer of privacy to the functions within the building. The two courtyards serve different functions. One of the courtyards offers daylighting to the basement functions and is accessible to staffs only. The other is shared by the programs on the main floor and accessible to the public, where people reading, planting and playing could meet together.

The garden space of the public courtyard is shared by the communities, the senior housing and the people in the healthcare center. It is also a type of healing environment including physical, mental, social and spiritual dimensions of health.



FUTURE PROOFING AND SUSTAINABILITY

To maintain efficiency in the event of future expansion, the entrance is placed the middle of the site. The general unit arrangement is easily replicable, making it possible to use the same layout pattern when expanding. The open ends of the corridors provide possible connections for future extensions, and the vertical generality makes it possible to expand by adding floors on top of the building if even more space is required.

Alternatively, should the healthcare facility require less space in the future, the central core of the building makes it easy for the clinic area to be decreased and to transform parts of the building to office space or similar.

The generality of the clinic areas and the exam rooms also makes it possible to change the sizes and locations of different departments. This in combination with the central meeting points also makes it possible for units to borrow exam rooms from each other if needed without creating too much confusion for the patient.

