Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences

Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners (<u>Examencommissie-BK@tudelft.nl</u>), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

Personal information	
Name	Lara Tjoa Li Ling
Student number	4213424
Telephone number	Known to mentors
Private e-mail address	Known to mentors

Studio	
Name / Theme	Health@BK lab
Teachers / tutors	Dr. C.J. van Oel; ir. J.S.J. Koolwijk
Argumentation of choice of the studio	The healthcare sector is a substantial and dynamic sector in the Netherlands, and has competing financial and social interests. There are many challenges regarding the relation between real estate and healthcare, which attracted me to join this lab.
	Besides this, the lab has a multidisciplinary character. Working together with students from other disciplines within the faculty broadens the perspective and reflects the daily practice later in life.

Graduation project				
Title of the graduation project	Better together: Spatial clustering of short term care			
Goal				
Location:	TU Delft Main case in a municipality with a population of around 100.000 in the Randstad			
The posed problem,	Intermediate care ('het eerstelijnsverblijf') as a form of short term healthcare was introduced in 2015 as the missing link in the chain for elderly care.			
	Collaboration within the healthcare chain is essential to delivering intermediate care. How the location and design of the healthcare facilities can contribute to improved collaboration and feasibility of			

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	providing intermediate care has not yet been researched.
	As real estate is only a means to an end, support amongst stakeholders needs to be created as well. For the main case of this research, commitment should be created in order to gain support for the plans of an intermediate care facility.
research questions and	Main research question: In which way can (spatial clustering of) real estate facilitate collaboration and feasibility of intermediate care?
	Sub-question 1: Which forms of collaboration with both healthcare providers and forms of healthcare exist regarding intermediate care?
	Sub-question 2: How can the lay-out of the building in which an intermediate care facility is housed, stimulate collaboration with other healthcare providers and forms of healthcare?
	Sub-question 3: Where should healthcare facilities be situated relative to an intermediate care facility, in order to positively impact collaboration and feasibility?
	Sub-question 4: How can real estate optimise the financial situation and the use of healthcare providers?
	Sub-question 5: How can commitment for intermediate care be created amongst healthcare professionals and other involved stakeholders?
design assignment in which these result.	The research design is of qualitative nature. Research starts with a literature study about the concepts. Two cases will be studied through interviews. They are selected based on a number of criteria, for example the perspective from which the facility was set up: commercial or social.

In addition, small questionnaires and evaluation interviews will be organised amongst stakeholders involved in the development of the main case. Further, observations during meetings will be made, and additional interviews with experts will be conducted.

[This should be formulated in such a way that the graduation project can answer these questions.

The definition of the problem has to be significant to a clearly defined area of research and design.]

Process

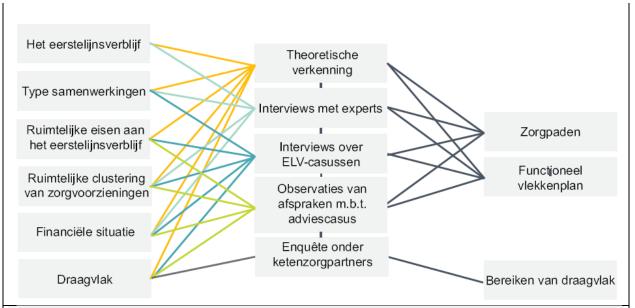
Method description

The following conceptual model shows that research will be conducted on how real estate can facilitate collaboration and feasibility of intermediate care. With the word 'real estate', multiple scales are meant. Scales ranging from the lay-out of the building to the region are seen as part of 'real estate'.



In the figure on the next page, lines between elements of the organizational and spatial aspects show the relation to the chosen research methods.

In order to understand what types of collaboration take place on an organizational and spatial level, the care path method will be used. Through multiple interviews, a typical care path will be set up for each category of intermediate care. Based on this and other interviews and observations, a spatial map will be drawn which shows the spatial clustering of intermediate care. Recommendations for commitment amongst stakeholders will also be made.



Literature and general practical preference

Scientific literature

In general, research published in journals is used in this thesis.

For collaboration, multiple sources are used which when combined give an overview of the broad interpretation of the concept within the healthcare sector.

For the care path methodology, the key theory comes from the PhD research from Vanhaecht (2007;2012).

For spatial clustering, the key theory comes from research by Porter (1990; 1998).

General literature

Information from research agencies and healthcare institutions (f.i. Verenso, NZa, Actiz) are used in the problem analysis and theory about intermediate care. It is also used to get a good idea about the context of the main case (policy documents, data about the population et cetera).

Interviews

Both interviews with experts on healthcare and real estate issues are conducted, as well as interviews with the initiators of existing intermediate care facilities.

Observations

Observations during meetings about the main case are done. This will result in a thorough stakeholder analysis, which says something about the interests and means of the involved parties and the level of commitment they have towards intermediate care.

Reflection

Relevance

From a scientific standpoint, the main goal of this research is to clear up the situation around intermediate care. It adds information about the types of collaboration and the relation between intermediate care and real estate.

This research is part of three bigger themes: 1] how to manage the aging society in the Netherlands, 2] how to effectively organise the 'first line' of healthcare, and 3] how collaboration in the healthcare sector should be organised.

From a societal standpoint, this research is relevant because it advises a healthcare organisation which wants to know more about intermediate care. If they decide to develop facilities for this type of care, this means a link in the chain for vulnerable elderly in a region in the Randstad is added. If done well, this results in a provision of better care.

Time planning

The full time planning can be found in the appendix. From January onwards, there are no other courses or examinations that need to be taken. Interviews, questionnaires et cetera are scheduled to be finished before the P3 (end of April). Between P4 and P5, the individual report and presentation will be finalized, as well as the group recommendations in collaboration with the Health@BK lab students.

An important issue is that during the P4 weeks, I am not available to present my findings between the 24^{th} - 30^{th} of May. Therefore, the P4 date with my teachers is set on the 22^{nd} of May.

Reflection: what is the relation between your graduation topic, the studio topic, your master track and your master program?

Relation graduation topic and master program/track:

In order to make decisions about suitable locations and real estate requirements for an organisation, one needs to understand the way that organisation operates first. This will be achieved through researching care paths and collaboration between healthcare organisations.

Based on this advice, a spatial map can be drawn up, which can function as input for the strategic real estate manager of the company which will receive this advice (a healthcare institution working regionally in a part of the Randstad). Together with a financial feasibility analysis, this can lead to more informed decisions for the location of an intermediate care facility, and in which vicinity this facility should be in relation to other types of healthcare.

Stakeholder management is an important part in (complex) developments, which is a major part of the master program. Learning about how to deal with stakeholders provides valuable lessons for later.

Relation graduation topic and studio topic:

The studio topic is healthcare in general, with a focus on end-users (elderly in specific).

Intermediate care is mainly used by vulnerable elderly, and therefore fits the studio topic.

The end-users that are targeted in this thesis are the elderly because they benefit from good care, but also the healthcare organisations because their financial situation or competitive advantage could improve when they provide intermediate care.