

BEYOND THE PILOT



*Reflective
exploration
into connected
care in Larvik*

*A collaborative project
with Larvik Kommune
for our Service Design
Futures course at
The Oslo School of
Architecture & Design*

APRIL 2020



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OVERVIEW

Showing the context
of the project

This report is a summary of our collaborative process with Larvik Kommune for our Service Design Futures course at The Oslo School of Architecture and Design.

During 10 weeks, we worked alongside Helsehjelpen and Remote Care, two innovative pilot projects which are entangled in the complexities of Larvik's healthcare system*.

What

Helsehjelpen focuses on helping people help themselves by connecting them to the right healthcare services.

Remote Care provides assistive technologies and connectivity between patients and health service providers.

Why

To support awareness and a culture of exploration in Helsehjelpen & Remote Care.

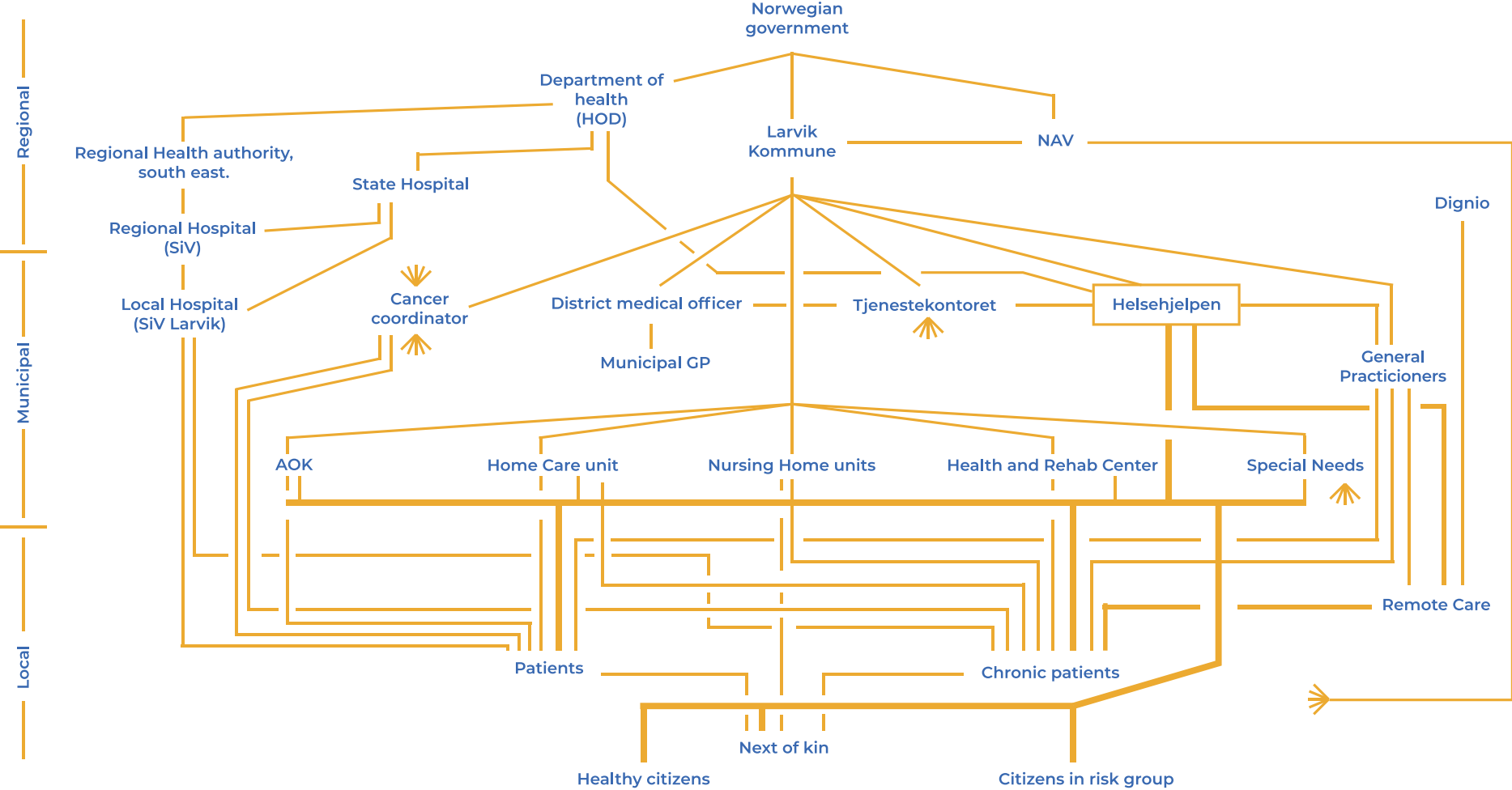
To support the ongoing evolution of the services and ultimately the service ecosystem.

How

We developed this project through field research, data analysis and designerly experimentation with multiple actors in Larvik's healthcare system.

**Participants have agreed to be photographed*

Service Ecosystem map



This system map is an approximation based on our interviews

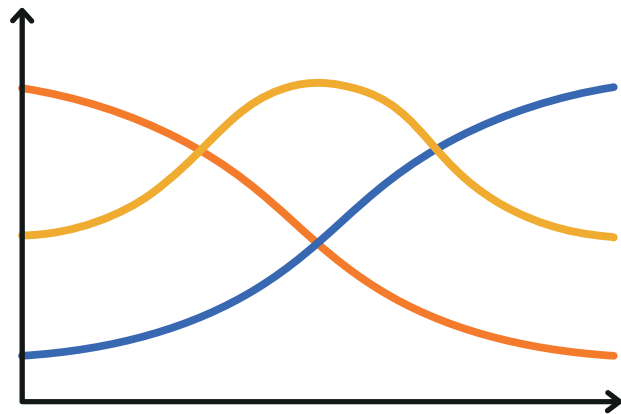
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APPROACH

Important
frameworks* for
our process

**A "lens" to see through, limiting
the approach and scope, creating
frames to work within.*

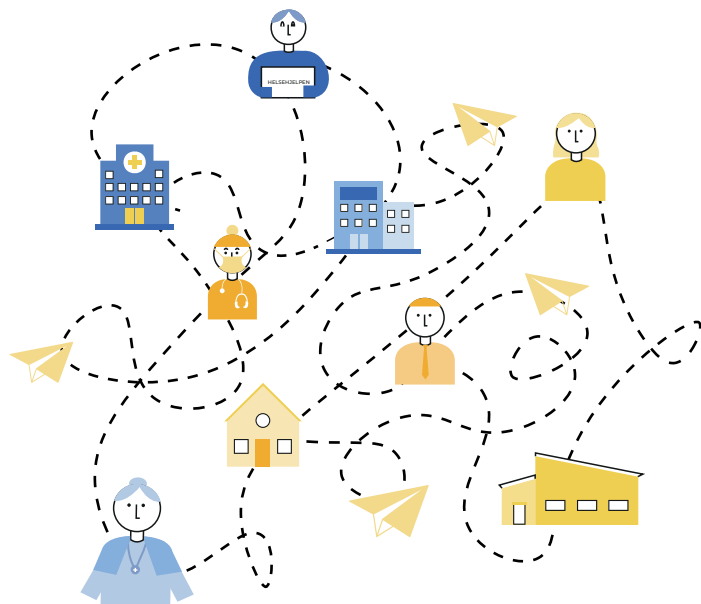
To start working within such a complex environment, we used certain approaches to help us untangle the situation.



1. THREE HORIZONS

A look into the current, future and transitional phases of a system. We used it to discuss Helsehjelpen and Remote Care's long-term vision and challenges in reaching it.

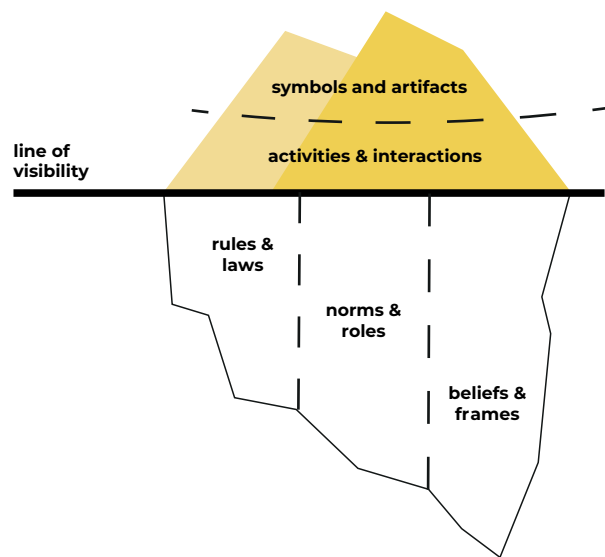
Curry, A. and Hodgson, A. (2008). "Seeing in multiple horizons: connecting futures to strategy". Journal of Futures Studies, 13(1), 1-20.



2. SERVICE ECOSYSTEMS DESIGN

An approach that focuses on the intentional, collective shaping of social structures to co-create value in a specific context. This approach helped us explore the relations between the different Larvik actors*.

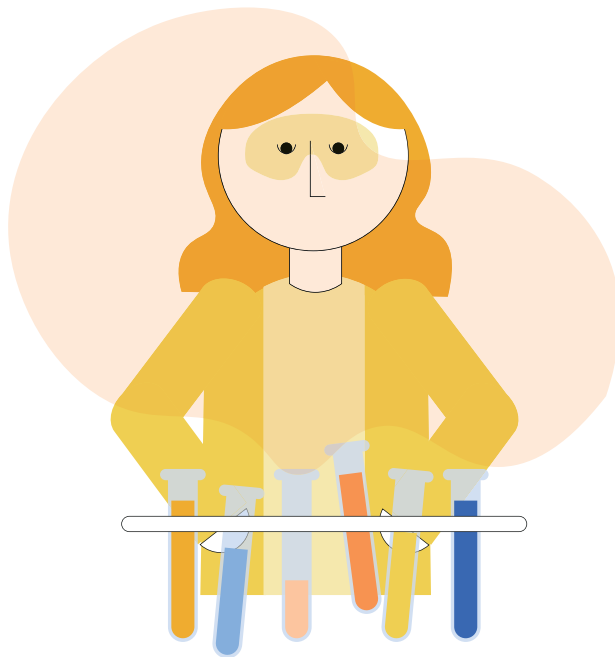
** A participant in an action or process. They can be an organization or an individual.*



3. SOCIAL STRUCTURES

People's shared rules, norms, roles and beliefs and their physical enactments. This was used to reveal the 'taken for granted' habits and thoughts the staff members in Helsehjelpen and Remote Care have embedded.

Vink, J. (2019). In/visible: Conceptualizing Service Ecosystem Design. PhD Dissertation, Karlstad University, Faculty of Arts and Social Sciences, Service Research Center.



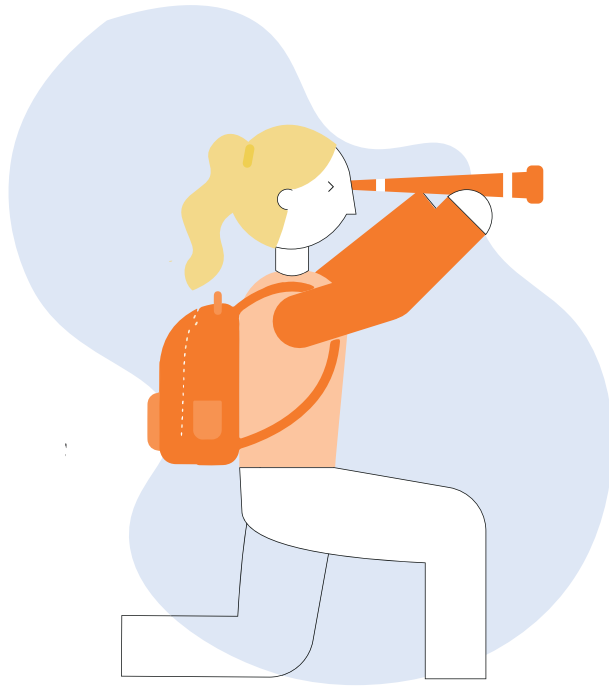
4. TINY TESTS

Simple experiments that help bring awareness to and test social structure changes. Through tiny tests we explored the underlying assumptions of the participants.



5. PARTICIPATORY SERVICE DESIGN

A service design approach which engages actors in a co-design process. The approach helped us gather rich data from all of the diverse actors we interacted with.



6. FIELD RESEARCH

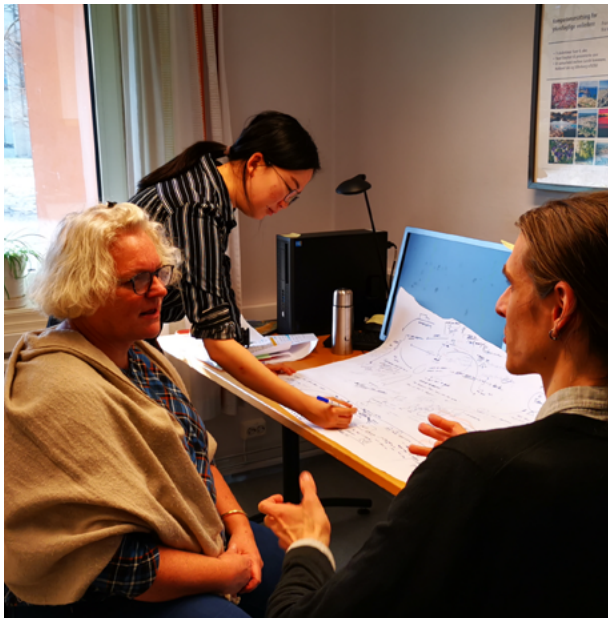
Our primary way of gathering data during the research period. We used structured and unstructured interviews, on-site observations, visualization and tangible tools to engage with the interviewees.

3

RESEARCH

Extracting and
analyzing the
gathered data

Interview Process



-  **46 Interviews**
-  **2 Days**
-  **Larvik Kommune**

Experience

In this first phase, we created guidelines and tools to help our interview process. For two days, we conducted field research with several actors from different organizations in the system. We also brought prompted activities into the field and used visual note-taking approaches in our interviews.

Learnings - Reflections

It was critical for us to be flexible and adaptive, as we faced unexpected situations and unforeseen changes that altered our plans. Holding constant sharebacks, making on-the-fly tools, and exchanging our findings in a rich work space helped to keep us up to speed and determine how to proceed with the next interviews.

Snippets from our **conversations**

"Remote Care is taking up so many resources many don't see the role of Helsehjelpen anymore"

"People don't know what Helsehjelpen is"

"We want to help patients own their own health"

"I need to know what is my actual responsibility or do I just feel a sense of moral responsibility"

"Typical of digital algorithms, sensors, s"

"We want to be easy to reach and low threshold"

"There is not one integrated system, but many different systems and you have to scroll through text and schematics forever to find the right information"

"I think we have too many departments"

"We are like potatoes"

Our interviewees included

Ambulant nurses / specialists / partners of patients / primary care doctor / politicians / cancer nurse / home services / organisational leaders / nursing home / occupational therapists / project leaders and more.

"Helsehjelpen is a good thing but no, I am not exactly sure what they are doing"

After gathering all this data, we needed to interpret and analyze it in a way that made sense, so we examined 4 focus areas. We later facilitated online workshops to dig deeper.

1. SERVICE ECOSYSTEM

Through the Service Ecosystem we wanted to get an overview of who were the actors across Larvik, as well as how they are related and connected across different levels of aggregation.

2. REMOTE CARE

We wanted to explore the future vision of Remote Care and the potential challenges they face to get there.

3. HELSEHJELPEN

We aimed to get a clear idea of how Helsehjelpen wants to define themselves in the near future and explore how they can get there.

4. EMERGING THEMES

We were looking to understand and explore the common themes that came up during our interviews with the different actors of the system.

Focus area 1 Service ecosystem



ANALYSIS

1 week

Citizen, patient and staff issues are connected with the bigger problems in the system. Some of the causes are limited infrastructure, limited workforce and increased complexity of patient needs.

There is a higher demand for Remote Care's services, which overloads the staff in the office. This has caused Helsehjelpen to have consumed energies and difficulties in defining itself strategically.

The overarching system pressures, along with the current communication systems, causes service gaps to occur with different actors. As a result, good and innovative ideas get dragged down in their process.

TOOLS

Quote Mapping

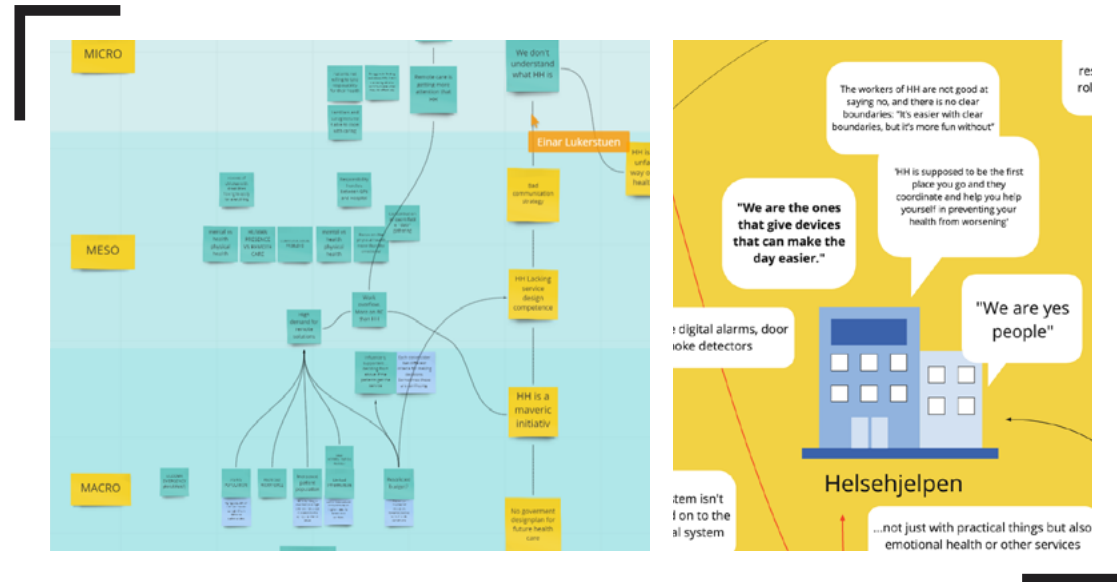
We mapped the interviewee's quotes to understand the connections between the actors. Through this approach we visualized the quality of relations between the actors.

Issue cause mapping

Using issues that we gathered from the interviews, we started to connect them to other causes we noticed from the data. It helped us see their interrelations & roots.

Story setting

We made a narrative to unravel some difficulties in the system. It helped open up problems like onion layers, making the the content relatable and the cause of problems easier to follow.



Focus area 2 Remote Care

ANALYSIS

📅 1 week

Based on our insight work and research, it seemed that remote care had the following 4 key goals: “let more people with chronic diseases live and spend more time at home”, “improve the experience of the patients”, “reduce cost for the healthcare providers” and “reduce the workload for healthcare professionals”.

There is a clear desire to work preventively, so we defined two additional goals: “discover and respond before the patient would have reached out for help” and “improve the health and wellbeing of healthy people”.

The Covid-19 outbreak added relevance to Remote Care as their patient group overlaps with the high risk population and their solutions can help provide support while social distancing. We proposed two goals related to crisis prevention and response: “build competence in remote healthcare delivery” and “protect vulnerable patient groups”.

TOOLS

Understanding the now

Actor mapping based on interviews, creating detailed profiles to represent the relevant actors and using illustration and storyboard techniques to understand the current situation.



Mapping insights on the 3 horizons

Using the 3 horizons framework together with specific themes and the big picture goals of healthcare to propose clear goals for Remote Care.

Feedback from participants

Letting participants select what themes are most and least important for the future of Remote Care, and also reflect on where it should belong in the healthcare system.



Focus area 3 Helsehjelpen



ANALYSIS

1 week

The role of the patient is currently passive. But their possible role in the future could be of a proactive partner in their own healthcare. To enable this, we need to switch the mental model.

Right now there is no clear role for Helsehjelpen. A possible way to solve this would be to have a dialogue with the whole service ecosystem on helsehjelpen and their tasks as a navigator.

There seems to be an identity crisis and lack of understanding as to what actually Helsehjelpen is. A branding and positioning exercise could prove to be quite useful for them.

WORKSHOP TOOLS

30 minutes

Zoom annotate tool

Brain-dump

What could be done to make the user more responsible for their health? Write any big, small, practical or far-fetched ideas!

Hypothetical service experience

Imagine Helsehjelpen was guiding a hike. What personality traits would it need? What tools would be useful? Why?

Metaphor exploration

What image is the best metaphor to express the identity of Helsehjelpen? Why? Which one do you not relate with helsehjelpen?

Who is Helsehjelpen?




A Helsehjelpens role
Distant protector

VOTE BY PUTTING A DOT



B Helsehjelpens role
Tour guide

XXXXXX



C Helsehjelpens role
Loving friend



D Helsehjelpen
Strategist

Focus area 4 Emerging themes



ANALYSIS

1 week

Helsehjelpen staff are “yes potatoes” who can do a broad variety of tasks. This is in many ways a strength as it provides a high level of flexibility, but at the same time this makes it hard for Helsehjelpen to define their boundaries.

Collaborations are a challenge for Helsehjelpen, not only because of technology and systems, but also because of changing roles and division of responsibilities.

Helsehjelpen could really benefit from doing more “self-promoting” work, reaching out to potential users. This also applies for possible collaborations with other health services - spreading the word could lead to better cooperation.

WORKSHOP TOOLS

🕒 30 minutes 🛠️ Zoom annotate tool

Mark on the line

Put a mark on the line where you think Helsehjelpen should be as a service - from flexible and undefined, to more strict and defined.

Importance ratings

Which of the themes do you find most important to focus on? Rate from 1-6, where 1 is most important.

A new description

Describe the “new Helsehjelpen” in one sentence. This helps to externalize our inner thoughts about the future direction of this service.

**Which of the themes do you find most important to focus on?
Rate from 1-6 where 1 is most important:**

<p>Vision of Helsehjelpen</p> <p>1 1 1 3 2</p>	<p>Collaborations</p> <p>3 1 3 5 3</p>	<p>Role</p> <p>2 4</p>
<p>IT-System</p>	<p>Policy and future</p>	<p>Commun</p>



TINY TESTS

Testing our
hypotheses with
small experiments

The emergent themes from our analyses drove us into three exploration realms for the upcoming designerly experimentation.

CLARIFYING & COMMUNICATING IDENTITIES

One of the things that surfaced in our observations is that it was difficult to communicate the desired identity and service offering to patients and providers in the system. We were curious about how uncovering different actors' points of view might help in shaping their identity a bit more.

FOCUSING THE SERVICE SCOPE

With such a novel and broad service offering, it became difficult to draw the line on where Helsehjelpen and Remote Care should fit in or not. We experimented how they could provide services in uncommon scenarios and help them reflect on what they want to do and what they can do.

SUPPORTING COLLABORATION

From the research, it was apparent that having good collaboration was critical for moving forward, but difficult to manage inside and across the organizations in the system. Since these collaborations are so important for the patient's services, we thought it would be valuable to spark conversation around this tricky topic.

Tiny Tests

WHAT

Tiny tests are small experiments that help explore and bring awareness to social structures. They differ from testing detailed prototypes because their value is not output centered; rather, their value is mainly centered on the insights provided by the process and how they inform directions for long-term change.

WHY

Tiny tests were used in this phase because they help bring awareness to social structures in a quick, accessible and iterative way. We used them as a method to explore the participant's social structures under specific situations. Through the tests we also examined our own hypotheses and assumptions.

HOW

The tests were performed by focusing on which rule, norm or behavior to challenge; setting a specific goal and task to explore it; and reflecting on the experience. This way the participants can feel what it is like to do something differently, talk about something in a new way, or notice roles and norms they wouldn't usually think about.

Tiny test 1 A letter from Helsehjelpen

🕒 30 minutes 📎 Zoom + MIRO 👥 3 Participants

Task

In a facilitated discussion, the Helsehjelpen team built a letter that could be sent to all the residents of Larvik.

Aim

Aim - The aim was to portray Helsehjelpen in the right way, and to create a dialogue between Larvik citizens and Helsehjelpen.

Social structure

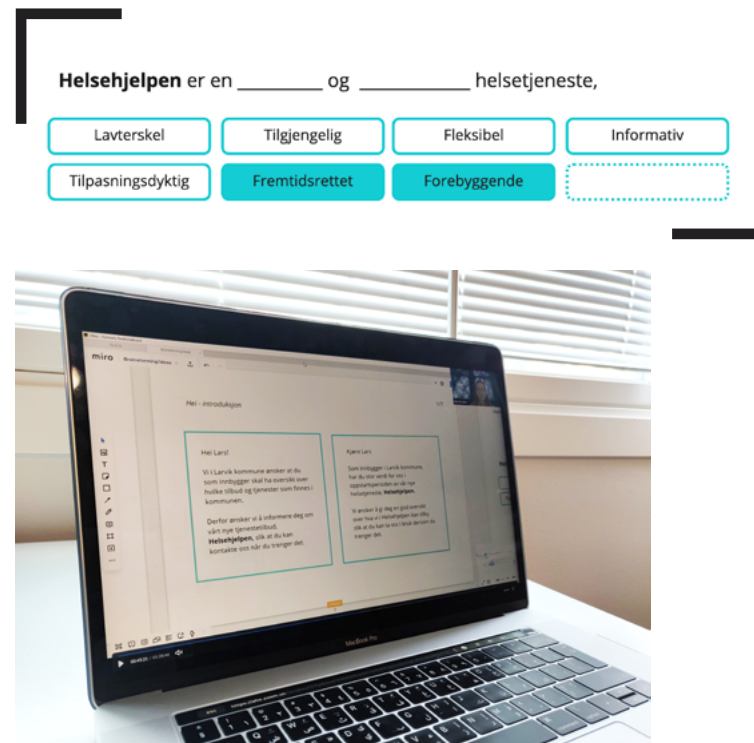
Introducing a new norm

Learnings + Reflection

There was an ongoing and interesting discussion going on around not only words, but also: why are words important? What is the purpose of the letter itself?

There was common agreement around moving from a formal, typically “public sector language”, to a more emotional engaging and personal language, to help increase the feeling of ownership. It is important that the users feel ownership to the service, this can be done through thoughtful use of language.

“I think that “to offer” something, is words that are creating distance, it’s something that we use when we talk about goods and services, not people.”



Tiny test 2 Care Postcard Prompt

🕒 1 hour 📞 Phone call, postcard, email 👥 1 Participant

Task

A call was held with a helsehjepen member to discuss about a set of postcards as a visual prompt that could be sent to remote care patients. The designs explored and supported care-oriented conversation, more than physical health.

Aim

The aim of the discussion was to explore how Larvik could thoughtfully and effectively support patients' feelings and emotions during the COVID-19 outbreak by using visual storytelling.

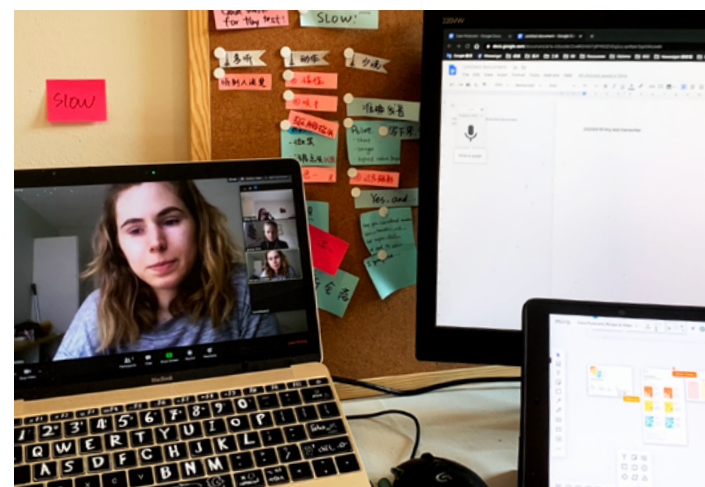
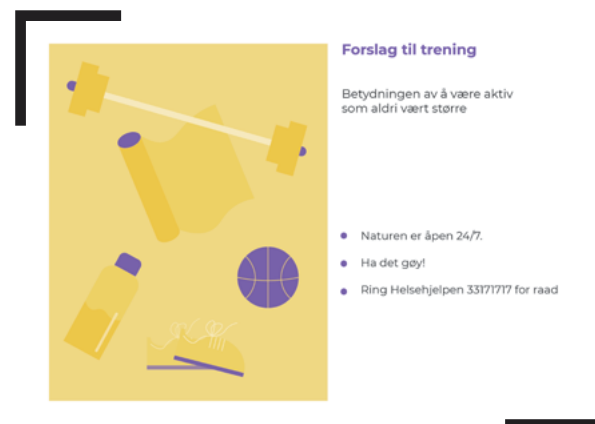
Social structure

Assumptions on health care

Learnings + Reflection

The tiny test didn't go as expected, due to technical problems and quality issues of the cards. Anyway, the experience was rich of understandings. We learned how it is challenging to manage unexpected issues in a proactive way and the importance of language when working within healthcare. Iteration could have been valuable, since we could have received deeper feedback. Both the patient and staff member had a positive impression on the value of our postcards, which led us to the question of how we could leverage a more positive conversation through visual storytelling.

"It was a positive experience. And a good way to start the conversation about this topic."



Tiny test 3 **Alternative Identities**



🕒 30 minutes

📺 Video + Google form

👥 6 Participants

Task

The participants had to watch movies of three different prototypes of a Helsehjelpen website. Afterwards, they had to answer a few questions about how the tone of voice, graphic design and service offering reflects their idea of Helsehjelpen's identity.

Aim

Uncover ideas of Helsehjelpens identity and how they differ from each other or match.

Social structure

Beliefs, frames and roles

Learnings + Reflections

The respondents suggest a broad scope, with emphasis on Helsehjelpen as the door, guiding the user through the healthcare system. "Help to self-help" seems to describe a repeating vision: active and preventive users with ownership of their own health. The impression is that there are disagreements on the visuals and layout, but more alignment on the service offerings.

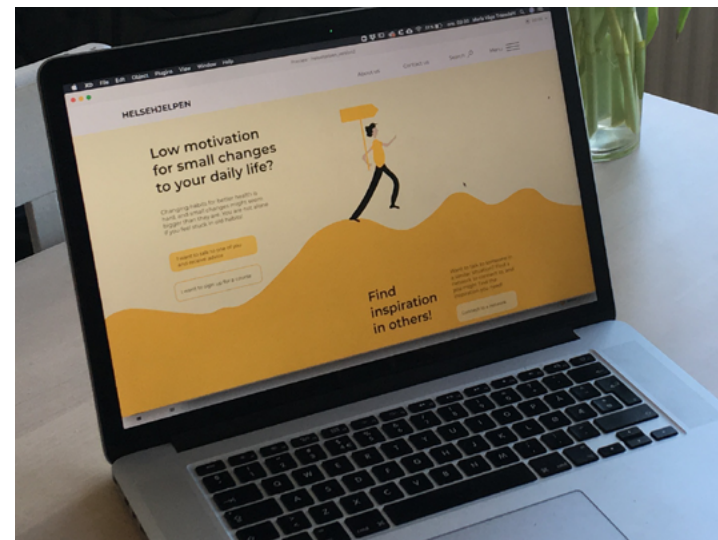
"I don't think this page fits Helsehjelpen, as I think it focuses too much on what Helsehjelpen can do for citizens instead of actively involving citizens."

Det forebyggende aspektet, og at innbyggeren må ta ansvar for eget liv og helse.

I LOVE this idea, I really think this website is the core of HH and the future of HH service. I really like how it is the user/citizen that is in focus, and that the theme in the page is how the citizen have to be active in their life. The idea with "clicking" through options to figure out what I need. Even though yellow is not my color, I like the theme in the pictures and illustrations. It's as though the focus is more daily life and activities, rather than hospital, nurse/doctor in the blue example. With a layout like this, I don't feel the need of having HH contact info as visible as I felt in the blue example.

I like the boxes you have to click on, they are easy to understand and a good way for the inhabitants to find the right path for them depending on what they are answering. This setup makes inhabitants independent and making their own decisions about what they want to do, and gives them the information on how to do it.

Like idea of custom service adapted to peoples need



Tiny test 4 Retiree phone-in

🕒 A Day 📞 Zoom, phonecall 👤 1 Participant

Task

We roleplayed a recently retired man calling Helsehjelpen after receiving a card that prompted him to do so. This was followed up by questions and reflections.

Aim

We aimed to explore how fit Helsehjelpen is at offering preventive help, what differences this may pose for them, and testing a specific example of preventive help.

Social structure

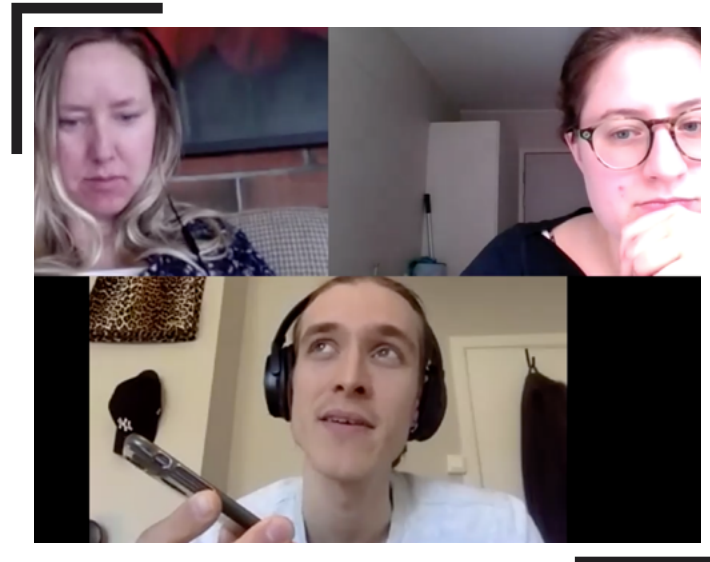
Patient norm - people come to healthcare

Learnings + Reflection

Helsehjelpen seemed ready and fit for this type of preventive help. Recent retirees could be a good group to actively reach out to. The suggested offerings depended on the personal knowledge of the person answering the call.

Mapping out relevant offerings, and finding appropriate ways to reach out could be the first steps. If successful this approach could be scaled to other groups too.

“What is it that leads to good health? It doesn't necessarily have to be a walk in the forest to get the heart pumping, it can be other things as well that gives you good health.”



Kevin plays the role of a recent retiree and calls Helsehjelpen

🕒 15 minutes 📄 Interactive PDF, email 👥 2 Participants

Task

Helsehjelpen employees were asked to read and answer a potential future user call and afterwards reflect on it. The user was intentionally one that did not have a specific medical need but was struggling with the current COVID-19 situation.

Aim

Give Helsehjelpen the opportunity to reflect on their role of connecting the user and the rest of the health system in Larvik, and what resources they would need in the future when having the phone call as this one channel into Larvik's health system.

Social structure

Patient ownership, "The doctor knows best" belief

Learnings + Reflection

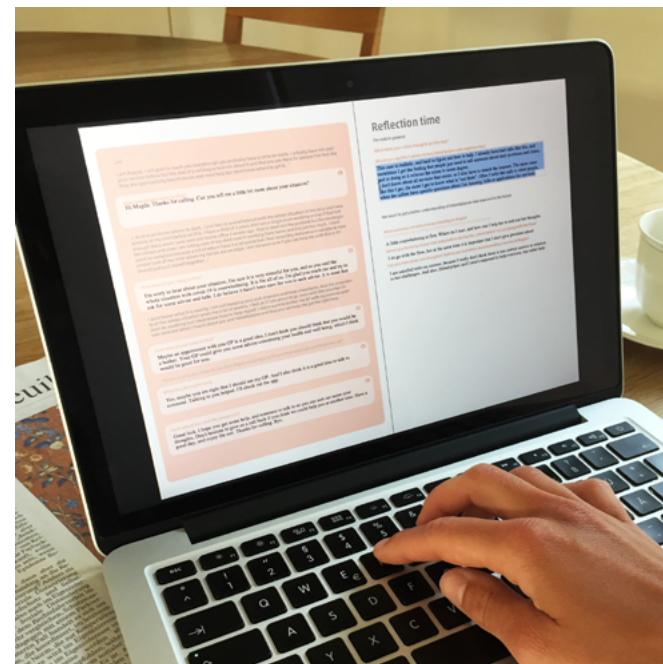
The initial inspiration for the test were slight disagreements within the HH team on their position and role within the system. The results that were generated did show that they share a common understanding of their role but still differ slightly in the extension of support they are offering to the user. Ideally the test triggered thoughts around how to further define their future position & structure their service, as well as reflect on the needed resources (human, temporal and system overview).

"This was a good task that can help us in the future when we are getting these types of phone calls - I can think back to this task and how I answered it."

I dont know what it is exactly, I am not sleeping very well anymore and have a headache. Also the uncertainty of the whole situation gives me a lot of anxiety. I feel as if I am about to go crazy with this situation if I dont do anything but I dont know how to help myself. I didnt want to bother my GP with my sorrows and I was relieved when I heard about you and Helsehjelpen and that you can help me get the right help.

How would you reply to this?

Maybe an appointment with you GP is a good idea, I don't think you should think that you would be a bother. Your GP could give you some advice concerning your health and well being, which I think would be good for you.



Tiny test 6 Together apart

🕒 6 hours 📄 Printables + Reflection tools 👥 3 Participants

Task

The staff was divided into two teams during the workday: Helsehjelpen and Remote Care. The rule was to not interfere with the other team's tasks during the experiment, if they did, they had to mark it on paper.

Aim

The aim was to bring awareness to how the participants handle their work routines during the day and reflect on how these routines affect the organizations and the staff.

Social structure

Staff Roles

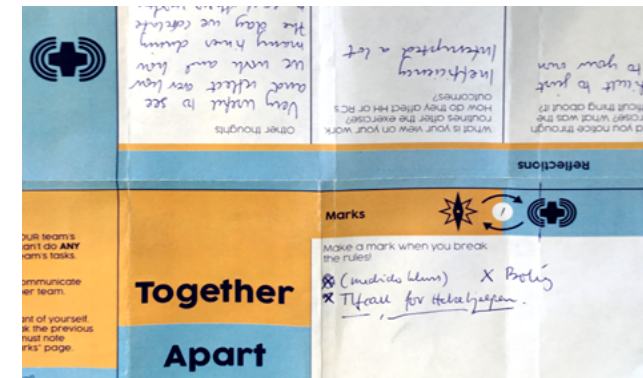
Learnings

The staff's work is affected by their own habits, interdependence, working space and difficulties in prioritizing. They can't just "separate" themselves from the other's tasks because of their interdependence.

Reflection

Exploring mindful and structured work routines can be an accessible intervention with strong, long-term effects.

"I think if Remote Care was to be separated from Helsehjelpen that would be a really big issue because you need someone to talk to. Remote Care on it's own would be no good, it would have to be connected with primary care (or) the walk-in clinic."



Tiny test 7 Remote care rethink

 30 minutes

 Zoom, presentation

 3 Participants

Task

The participants had to figure out what needs to happen before a cancer patient can receive remote care. They also needed to react to organizational questions and figure out how the monitoring would happen if done by the cancer department.

Aim

Provoke reflection on what structural changes need to be organized before expanding remote care into other sectors of the Larvik health care system.

Social structure

Related Social Structures: Staff roles, organizational collaboration

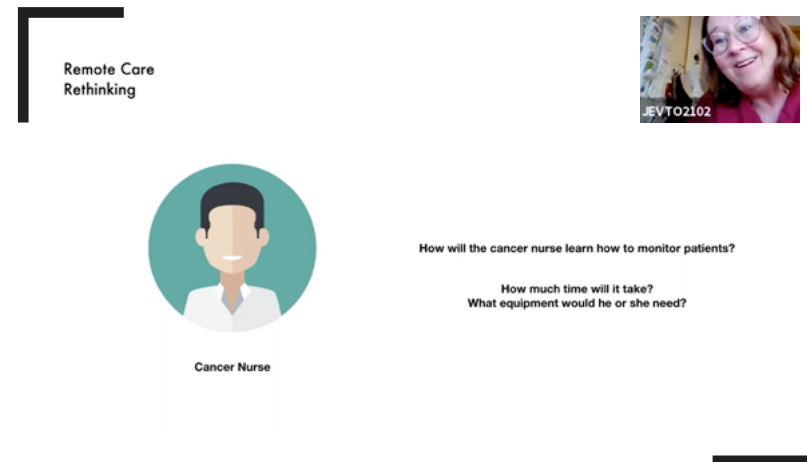
Learnings

Both groups want to provide remote care for cancer patients before their conditions decline, in palliative cases, the service would be for next of kin. There was a focus on getting palliative patients remote care so they can die at home instead of at the hospital.


Reflection

It seems that both parties need room to thoroughly discuss the collaboration. This could be beneficial for other actors as well.

"Helsehjelpen har den tekniske biten, vurderingene ligger hos onkologisk avdeling eller hos Tone"



Remote Care Rethinking


Cancer Nurse

How will the cancer nurse learn how to monitor patients?

How much time will it take?
What equipment would he or she need?

"One of the reasons why this is so important right now is that people would like to die at home because if they go to the hospital when they deteriorate they cant have any loved ones visiting them"

Conversation snippet

Tiny test 8 Tiny Game Show

🕒 3 days 🖨️ Print outs, SMS, phonecall 👥 4 Participants

Task

Based on a topic, anonymous contestants write down what is most meaningful to them and their co-contestants. Then they switch answers and the host calls them individually for a reflective dialogue. The talks were held in “episodes”.

Aim

Tiny Game Show aimed to explore and reflect on the perceived role differences across hierarchy and organisations while supporting honesty in a playful but mediated context.

Social structure

Actor roles and shared assumptions.

Learnings

Even though the participants “feared” the result of the test, people wanted to join, most likely because of their own curiosity and suspense.

Reflection

Suprisingly, there was a lot of agreement within the episodes, even if they were different from each other. This might show that actors are trying to please each other, even if it's anonymously.

“We should blow the minds of bureaucrats!”



5

REFLECTIONS

Discussing our
findings and
concluding thoughts

Through our tiny tests we received mixed results that revealed learnings about the process, results and the big picture.

PROCESS

Keeping it tiny

In conducting these tests we experienced the value of keeping the test “tiny”, low threshold and playful. Doing this helped the tests be engaging, understandable for the participants and insightful.

Engagemement

By having different test types to work with, it was interesting to notice that the engagement of the participants varied per case, especially between the digital and physical formats.

Participants

The amount of participants varied from individuals to small groups. In our experience both are equally valuable to get insights.

Being Flexible

When the participants are reflecting on the test experience, it is important to ask open questions related to the task while still remaining flexible and observant of what we don't expect.

RESULTS

Always a lesson

There is always a lesson to be extracted. If the test goes as expected or not, the result will still reveal something about the participants and the social structures that guide them.

It's good to think: "If the test was not successful, what does it tell us about the surrounding social structures?"

Testing assumptions

The tests were also useful to check our initial assumptions. In this sense, some of our findings were contradicted, reinforced and diverged from the data we gathered before.

Worth the time

It is also important that the participants feel that the tests are relevant for them.

Some participants expressed that the tests were useful in making them aware of things they take for granted in everyday work and routines.

BIG PICTURE LEARNINGS HELSEHJELPEN + REMOTE CARE

Challenges

Even though Helsehjelpen and Remote Care are originally two pilots, they are now deeply mixed in their tasks and routines, which affects their work structures and roles. These challenges are reinforced by the staff's work ethics and their excessive amount of work.

Vision

The Helsehjelpen team seems to be on the right path towards a common vision of what their service offerings and focus are, but they currently express it in different ways.

Communication

By surfacing the different visions of what and who the team should be, they can quickly become even more aligned and communicate a clear message to the right people.

Ownership

Patient ownership is a core element of Helsehjelpen's service offering, this can be reinforced in the use of the communicated language. We see the phrase "Help to self-help" as core to the future of Helsehjelpen and Remote Care.

Conclusion

Our project deliverables are not focused on typical service design outputs like service blueprints or journey maps, but instead on lessons and reflections from the whole process.

We recognize that the processes we went through, from research through to the tiny tests, only scratch the surface of the Larvik healthcare system.

However, by supporting the already existing culture of exploration with more intention and thoughtfulness, we hope the staff at Remote Care and Helsehjelpen can proactively study and shape their collective and individual social structures through small-scale actions, and ultimately inspire the bigger system to make a difference for the citizens of Larvik.

6

TAKK!

Acknowledging
the people that
helped us

Acknowledgements

This project would not have been possible without the support of a lot of inspiring and wonderful people.

To Josina Vink, Manuela Aguirre & Alberto Soriano

Thank you for providing us with thoughtful feedback, critical guidance and keeping us reflective throughout all of the process, it was absolutely critical in every step we took. Josina, thank you especially for entrusting us with this project and being an excellent, thoughtful mentor and facilitator.

To the staff at Helsehjelpen & Remote Care

Thank you for being so engaged, responsive and willing to test new grounds with us. Your high spirits and passion for what you do has been incredibly inspiring.

To all the people we interviewed in Larvik & to every participant of the workshops & tiny tests

Thank you for sharing your precious time and knowledge with us, it was super valuable to our understanding and real-world practice. It's been lovely to talk and share with all of you.

To Andrew Morrison, Jonathan Romm, Liz Sanders, Natalia Agudelo, Palak Dudani and Sofie Lourdes Bang Jensen

Thank you for supplementing our knowledge with your insightful presentations and workshops. They helped us push the boundaries of our practice.

To everyone we met during our week in Sweden:

Cheryl Akner-Koler at Konstfack, and the teams of Experio Lab (SÖS) in the Stockholm hospital and Förnyelselabbet, thank you for sharing your valuable and inspiring knowledge with us. It was super enriching to learn from all of your amazing work.

To the SD2 classmates: Miriam Civiero, Xifan Cui, Kevin Ehrenberg, Ann Kristin Eriksen, Greta Hohmann, Ida Lahm, Angel Lamar, Einar Lukerstuen, Chiara Pasetti, Anne Marthe Serigstad, Ameesha Timbadia and Maria Våge Traahsdal
Thank you for being supportive and together during this special time and sharing all the jokes, silly drawings, amazing food and hiking.