

# Reaching for Zero

Design interventions for  
eliminating cervical cancer



A Service Design Diploma, Spring 2019

By Ester Hauan Kaasa

Oslo School of Architecture and Design, AHO





## Reaching for Zero

A Service Design Diploma, Spring 2019

Institute of Design,  
The Oslo School of Architecture and Design  
(AHO)

Diploma Candidate  
Ester Hauan Kaasa

Supervisors  
Natalia Agudelo  
Steinar Killi

External Supervisors  
Berit Bringedal

Made in collaboration with the Norwegian  
Cervical Cancer Screening Programme,  
NCCSP





# Abstract

Every year about 300 women are diagnosed with cervical cancer in Norway. Cervical cancer can be eradicated. Reaching for Zero is a service design diploma made in collaboration with The Norwegian Cervical Cancer Screening Programme (NCCSP), which is part of The Cancer Registry of Norway. The project explores how design interventions can reinforce their services and aims to support them in reaching the goal of eliminating cervical cancer.

**The project attempts to identify opportunities within the service of the NCCSP, which can be intervened in order to increase the screening rates of young women.**

This diploma builds on the existing services of the NCCSP and focuses on young women and immigrants which are both groups with lower screening rates. It proposes new physical and digital letters, SMS notification, social media campaign, follow up and website guidelines. One of the letter proposals has been co created with the NCCSP and will be sent out to about 40 000 women this year. The project also provides an internal tool for the NCCSP which they can use when designing new information materials.

The project is approved by the Norwegian Center for Research Data and executed according to their guidelines.



# Personal Motivation

In 2017 a friend of mine was diagnosed with cervical cancer. Luckily, she beat cancer. Her bravery and openness to share her story inspired me to address the topic in my diploma. Cervical cancer can be eradicated and my motivation is to explore how service design can play a part in reaching this goal.

## **Preventative Healthcare and Service Design**

Last year I worked on a student project at Akershus University Hospital and I found working with service design in healthcare to be an interesting and challenging issue. Talking to patients and their relatives on how they struggle to navigate the complex world of public healthcare made a great impression on me. The gap between patients needs and service providers was evident. Also, the intricacy of healthcare heavily restricted by regulations made implementing change a difficult task. Therefore I wanted to challenge myself by aiming for a implementable design proposal bridging the needs of women and the NNCSF.

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# Introduction

# Project Overview

Every year about 300 women are diagnosed with cervical cancer in Norway. Cervical cancer is a severe illness which requires intense treatment. Even though one might survive cancer, cancer treatment often leaves the patient with life long pains such as fatigue, difficulty concentrating and digestive disorders. Cervical cancer can be eradicated and this project focuses on preventative healthcare and cervical cancer screening.

The project attempts to identify opportunities within the service of the NCCSP, which can be intervened in order to increase the screening rates of young women. It aims to provide interventions both as a source of inspiration as well as be implemented.

The project is a service design project and builds on the existing services of the NCCSP. It has a human centred approach and aims to identify the needs and barriers of young women. Needs, barriers and motivational factors were identified through a broad research phase. These findings were then translated into 6 six design principles. These principles were used when developing the design interventions. The design interventions consist of a letter proposal co created with the NCCSP. It also consist of an inspirational design proposal for letter, social media campaign, SMS notification and follow up. Additionally, a internal tool for the NCCSP containing the six design principles which can be used when creating new content.

The main contribution of this project is as step in the direction of bridging the needs, barriers and motivational factors of young women and the service provided by the NCCSP. Also, the co created letter will be sent out to all 25 year olds on Norway this fall.







# **Context**

This chapter describes the issue of cervical cancer and introduces the NCCSP, which is the collaborative partner in this project.

# Cervical Cancer and Preventative Healthcare

This section describes the issue of cervical cancer and the role of the NCCSP.

## Cervical Cancer

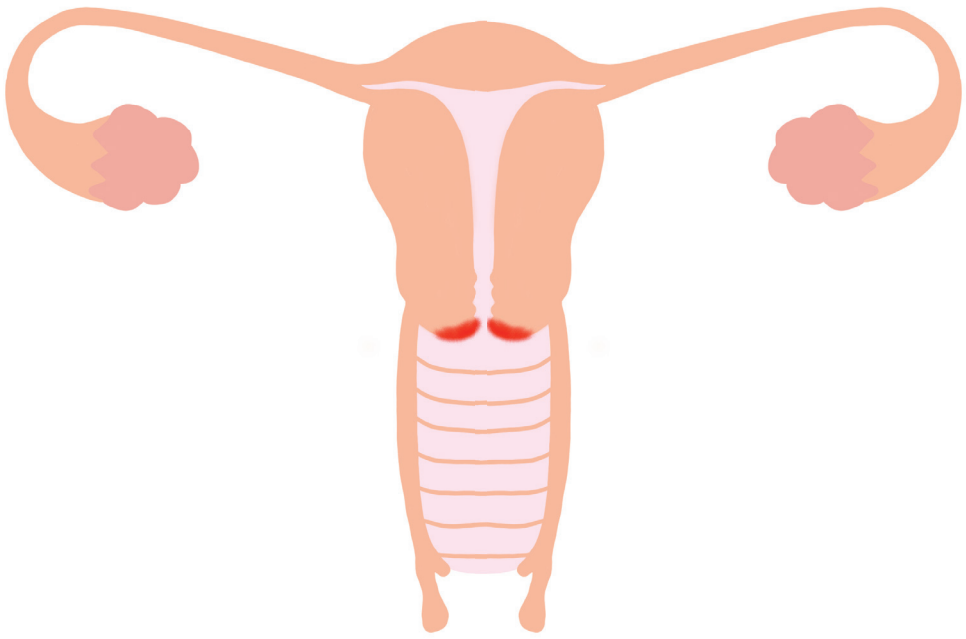
Annually, about 300 women in Norway are diagnosed with cervical cancer. Between 70 and 80 women die of the disease each year. (Kreftregisteret,2019) Cervical cancer is the third most common form of cancer for women aged 25 to 49. In most cases cervical cancer is caused by a chronic infection with the HPV virus. (Kreftforeningen, 2019)

## Cancer Screening and Preventative Health Care

Most cases of cervical cancer can be prevented by taking a Pap smear test every third year. The Pap smear is taken during a gynecological examination. The Pap smear uses a brush to retrieve surface cells from the cervix. The sample is then screened for cancer precursors. (Kreftregisteret, 2019).

## HVP

HPV is the abbreviation of human papillomavirus. HPV is the most commonly sexually transmitted infection. There are more than 100 different types of HPV. Most HPV viruses are harmless and don't cause symptoms. Still, a few HPV viruses are carcinogenic, which means that they can cause cancer. These are called high-risk HPV types. Most HPV infections are defeated by the body's own immune system within 6-24 months. Chronic infections with high-risk HPV types can cause cervical cancer within 10-20 years if the precursors are not detected and treated. Today, there is no cure for HPV. (Kreftregisteret, 2019).



Uterus

### **The NCCSP**

The NCCSP is part of the The Cancer Registry of Norway. The Cancer Registry of Norway collects data and produce statistics of the cancer prevalence in Norway, as well producing research. They are also responsible for Breast Cancer Norway, which is the breast cancer screening programme. (Kreftregisteret, 2019)

The NCCSP recommends women between 25 and 69 years of age to screen regularly. More than half of women diagnosed with cervical cancer have not attended screening as recommended. The NCCSP sends letters to women reminding them to take Pap smears every third year. In the near future women aged 35-65 only needs to take the pap smear every fifth year due to new screening methods. (Kreftregisteret, 2019)

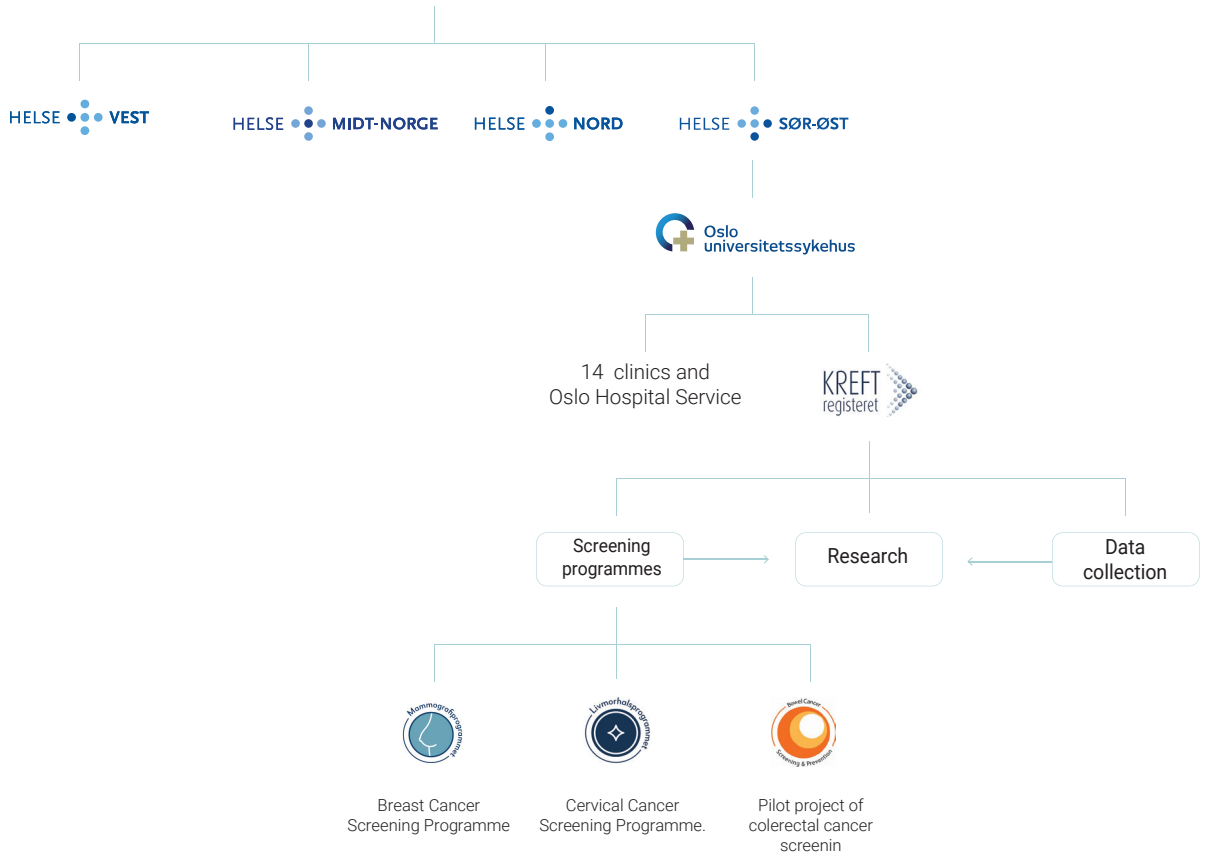
### **Cervical Cancer can be eradicated**

The World Health Organization (WHO) has launched a campaign aimed at eliminating cervical cancer. They define elimination as limiting the incidence to less than 4 new cases per 100,000 women a year. This means that the prevalence in Norway must be halved to 150 cases per year. In order to reach this goal at least 90 per cent of women must be vaccinated, and 70 percent of women aged 25-69 must attend screening regularly by 2030. According to Giske Ursin, the leader of the Cancer Registry, Norway has good conditions for preventing cervical cancer that we should be even more ambitious in the long term than “just” halving the incidence. (Kreftregisteret,04.02.019) The goal for Ameli Tropé, the leader of the NCCSP, is a participation rate of at least 80 %.



HELSE- OG OMSORGSDEPARTEMENTET

The Ministry of Health and Care Services (HOD) is responsible for providing good and equal health and care services for the population of Norway. (1)



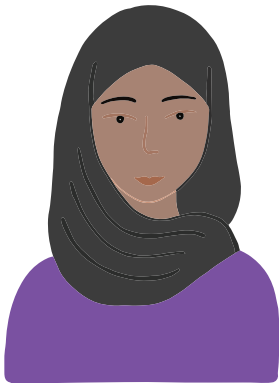
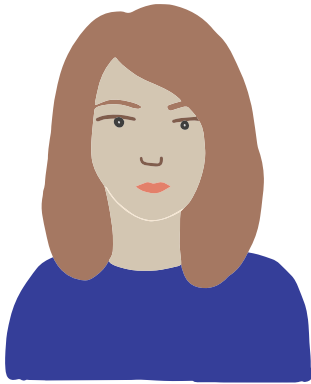
The diagram describes how the Cancer Registry and the NCCSP is placed within the Norwegian public healthcare system. (regjeringen.no, 2019)

### **Young women and immigrants**

Young women aged 25-29 is the group with the lowest screening rates. The screening rate for this group was 61,5% after 3,5 years, in the time period of 2013 to 2016. (Livmorhalsprogrammet Årsrapport 2016, 2018). According to Ameli Tropé little is known about why this group has a lower screening rate.

In addition to young women, immigrants also have lower screening rates. Different immigrant groups have different screening rates. The screening rates of immigrants varies with origin and where they live in the country, according to Ameli Tropé.







# **Approach, Process and Methods**

This chapter explains how the project has unfolded. It addresses the approach, the design process and the methods used.

# Approach - A Service Design Diploma

The approach, intention and brief of this project is described below.

## A Service Design Diploma

This project explores how cervical cancer screening works as a service delivered by the NCCSP and how the service is experienced by young women. It explores new opportunities with the intention of bringing needs and service. It has a human centred approach and has a particular focus on the needs and barriers of women who have lower screening rates.

In my first meetings with the NCCSP they shared their previous experiences with designers. The experience is that designers can deliver valuable projects, but that it can be very hard to convert that value into action when the designer is no longer there. Thus, a main objective of this project has been to create proposals that are implementable and to equip the NCCSP with tools for further development.

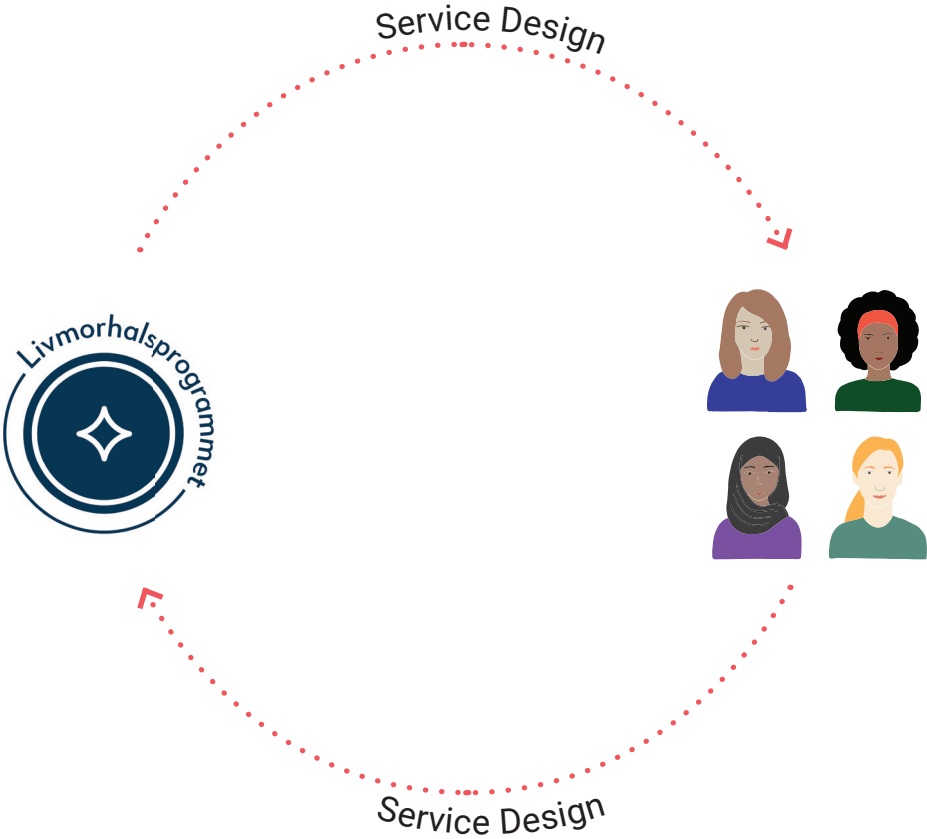
The final design proposals has been co created with key stakeholders with in the NCCSP. The intention of working closely was to give them a sense of the design process, design decisions and nurture a sense of ownership.

## Designing for Health literacy

According to the U.S. Department of Health and Human Services, Health literacy is the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions (Nielsen-Bohlman et al, 2014). Factors such as language, culture, and access to resources are all factors that affect a person's health literacy skills. Health literacy affects people's ability to for example understand health information and engage in self-care. (The Office of Disease Prevention and Health Promotion, 2019).

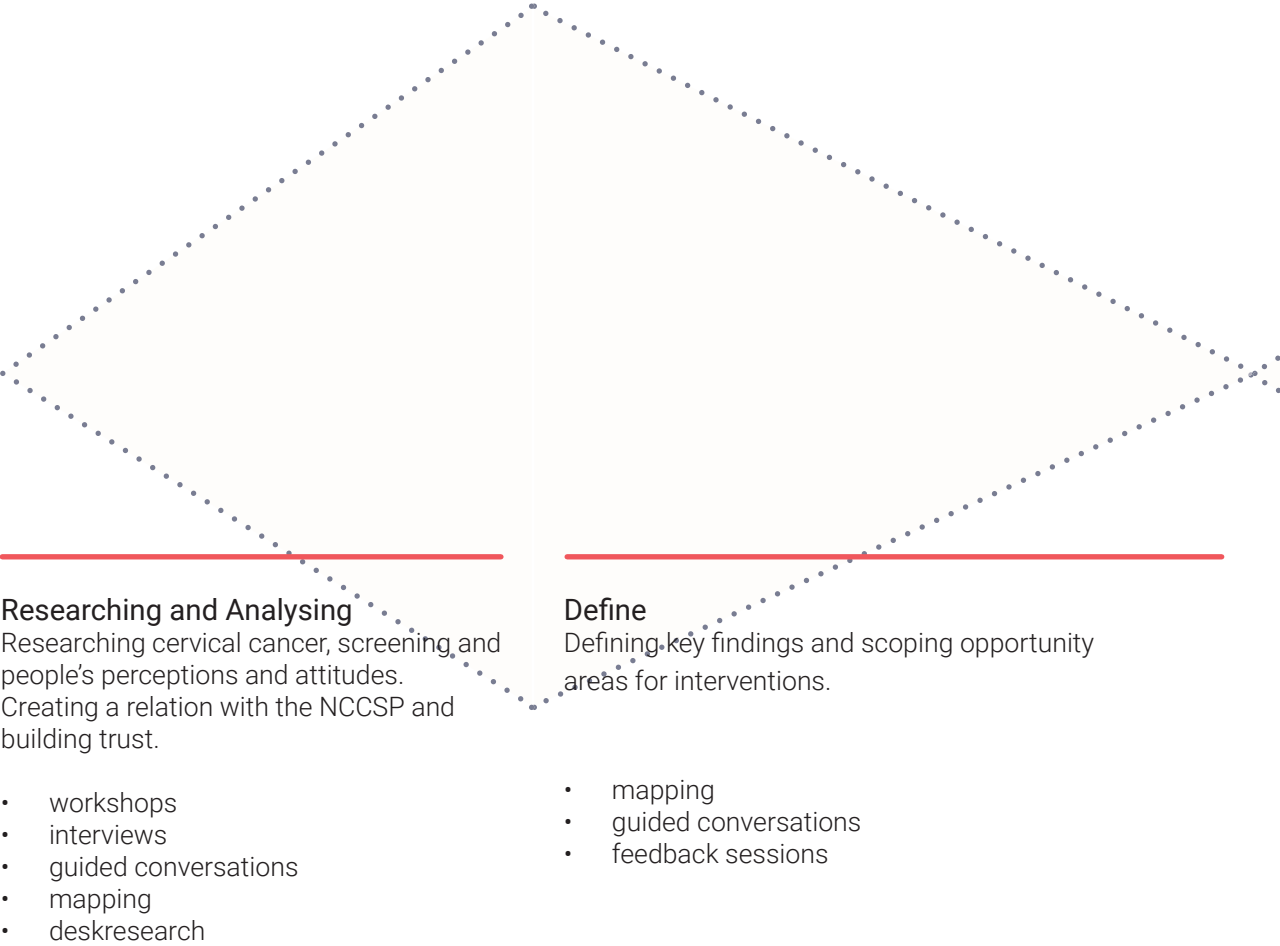
An important value which has influenced the process and the design decision in this project is equality and accessible healthcare for all. Designing for health literacy has therefore been an approach through this project.

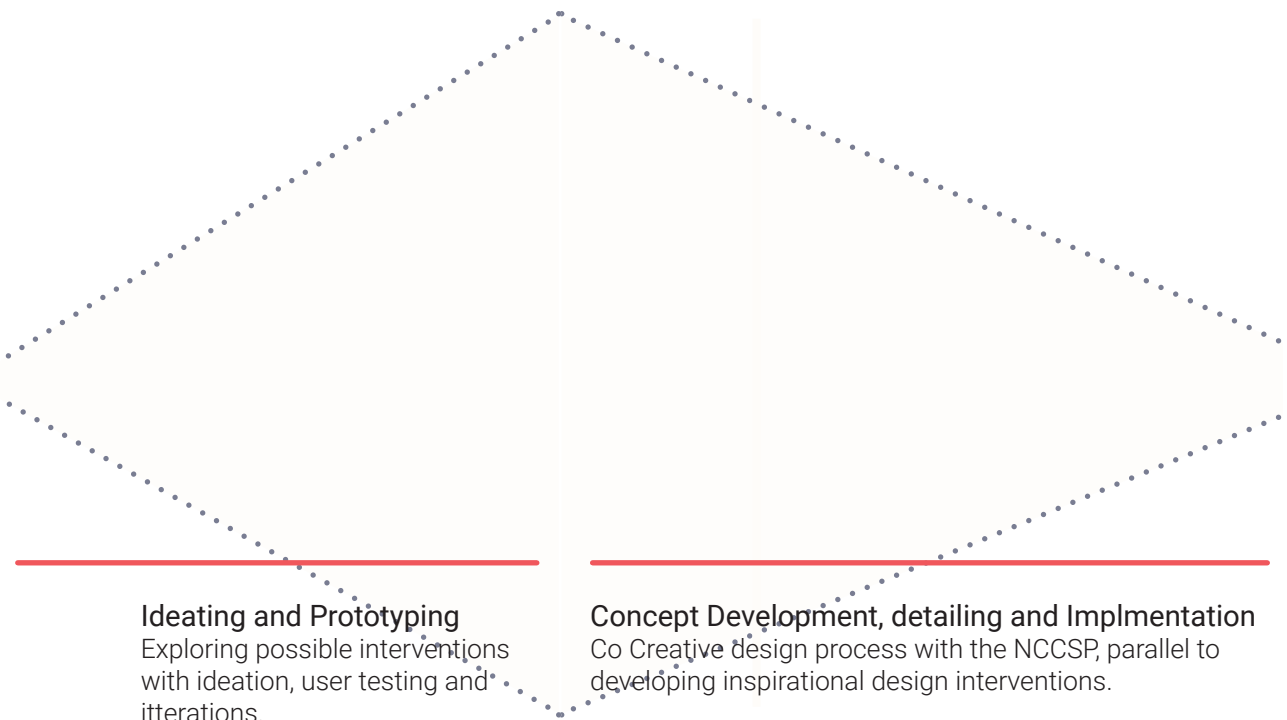
**The project attempts to identify opportunities within the service of the NCCSP, which can be intervened in order to increase the screening rates of young women.**



# Process

The design process follows a double diamond trajectory. The phases described in the following diagram and correlation methods described in the following text.





### **Ideating and Prototyping**

Exploring possible interventions with ideation, user testing and iterations.

- ideation workshop
- feedback sessions
- co creative sessions
- prototyping and user testing
- guided concersations

### **Concept Development, detailing and Implementation**

Co Creative design process with the NCCSP, parallel to developing inspirational design interventions.

- feedback sessions
- detailing sessions
- guided conversations

### Workshop

Workshop was used in the beginning of the project to gather information and generate discussions. A goal was to have participants representing different groups in terms of gender, background and nationality.



### Interviews and guided conversations

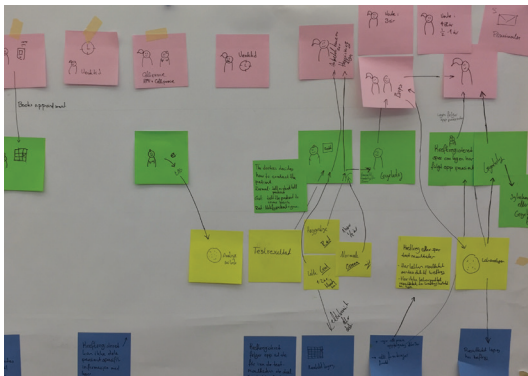
Interviews were mostly done when the interview was conducted on the phone. Guided conversations were semi structured conversations. Often with a prepared set of questions with extra time to let the conversation flow naturally.





## Mapping

Mapping was used a lot in the beginning of the project to analyse and to get an overview of different topics. It was also used during conversations.



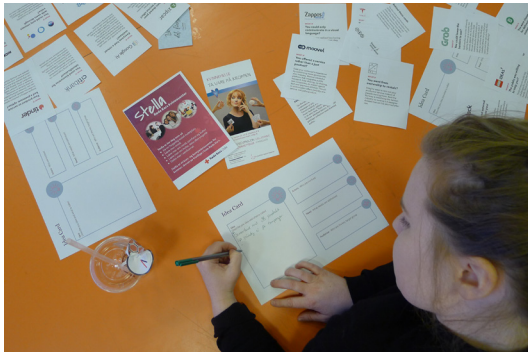
## Feedback Sessions

Feedback sessions with Ameli Tropé from the NCCSP discussing various design proposals.



### Ideation Workshop

In order to get a wide range of ideas an ideation workshop was held with both fellow students as well as other people.



### Cocreative sessions

Several co creative sessions with the NCCSP throughout the project and particularly in the final stages when finalizing design deliverables.



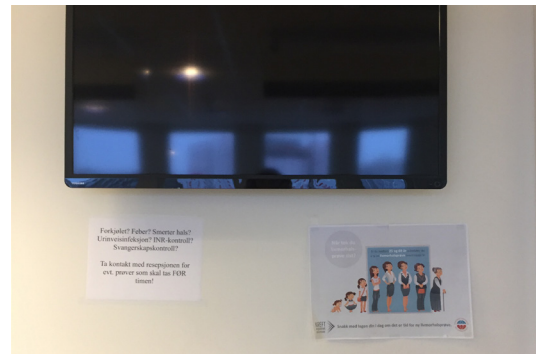
## User testing

User testing with women with various background, educational levels and language.



## Observation

Observing people in the waiting room to see if they took notice of information material such as posters and flyers.



## AB-testing

The NCCSP normally runs AB testing when implementing changes, where they send two different letters to different groups in order to measure the different effects. This is in order to be able to measure the effect for research purposes. Therefore there are two design proposals enabelig the NCCSP to run AB testing to measure the effect of a new design.

## Reflection

There are several methods which would have been useful, but has been challenging with this topic. For example shadowing and observation has been challenging because it is a sensitive topic. Also, since this is something women do every third year, the timing is challenging. Therefore all knowledge about going to the doctor or receiving the letter is based on women's recollections.

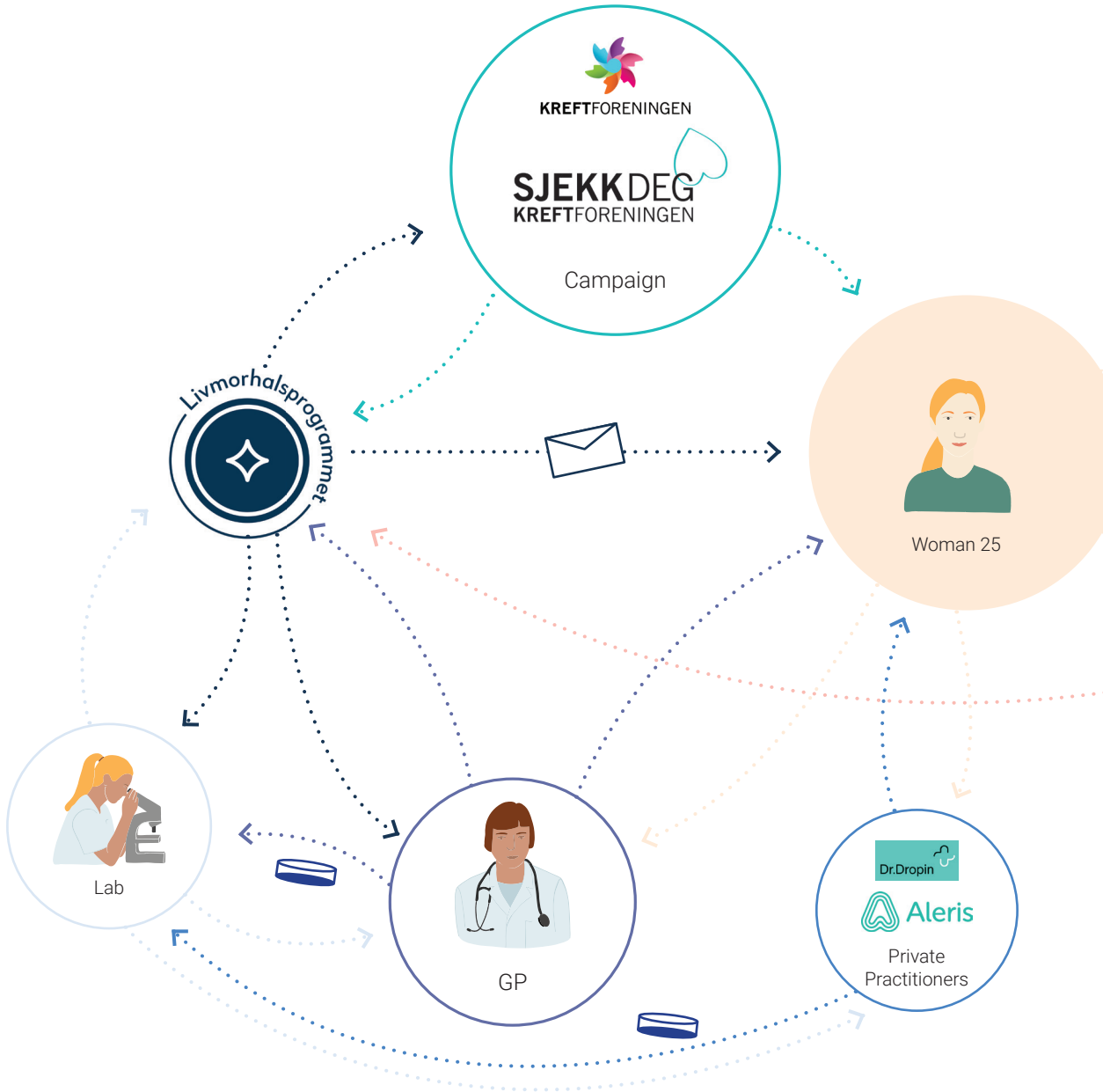


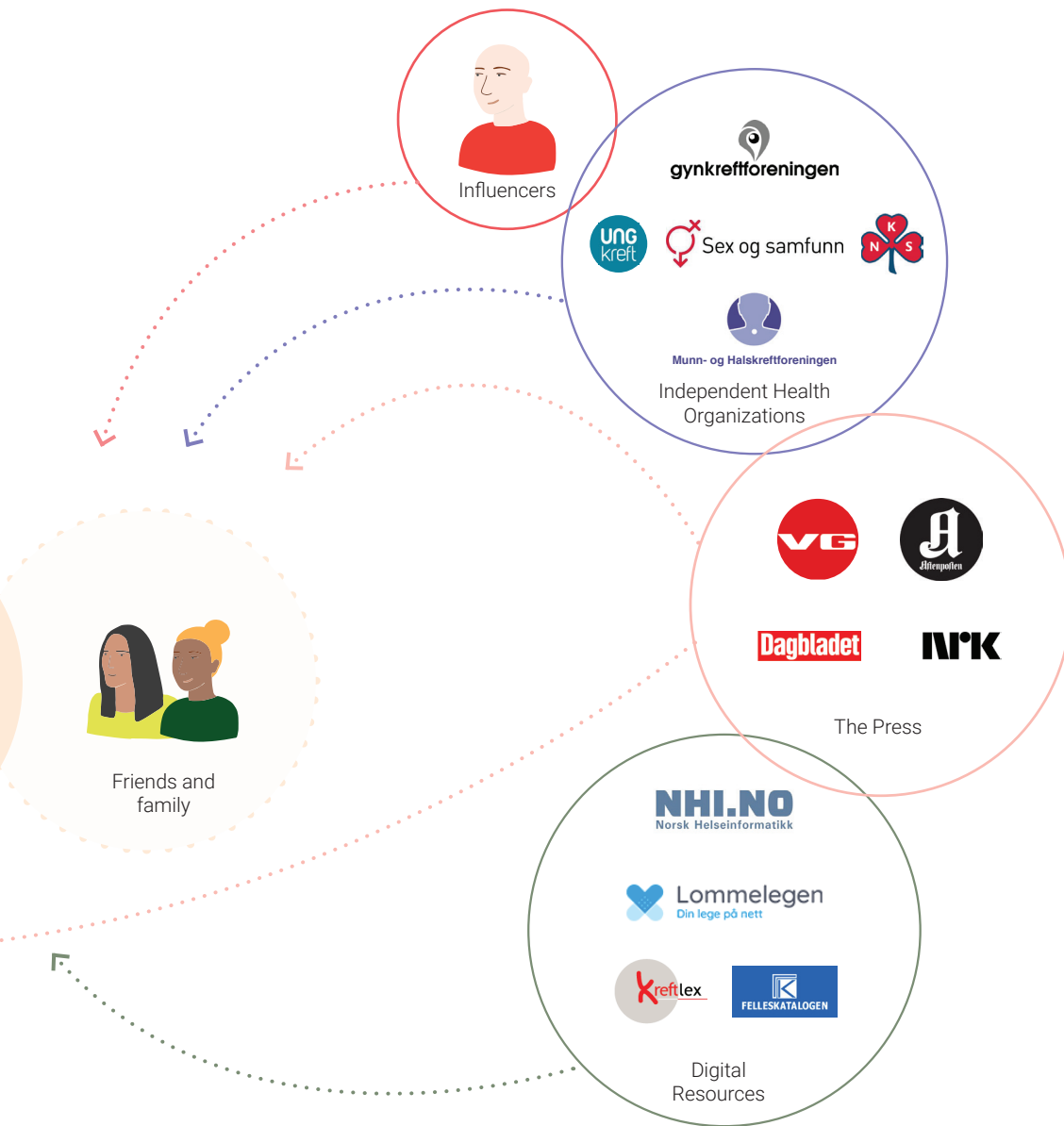
# **Research, Findings and Ideation**

This chapter describes the research, exploration, analysis and main findings. It also shows main ideation and scoping of the project. Finally the design principles are defined. The design principles are used when developing the design interventions.

# Stakeholder Map

The following map describes the most influential actors and the relation between them. In the following pages different areas are explored and main findings and opportunity areas are defined.

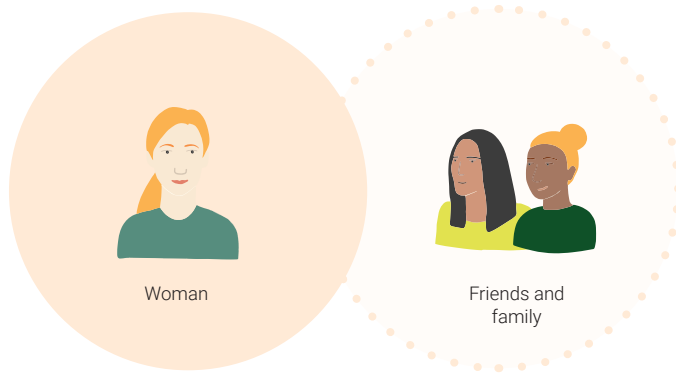








# Attitudes and Awareness



# Workshop

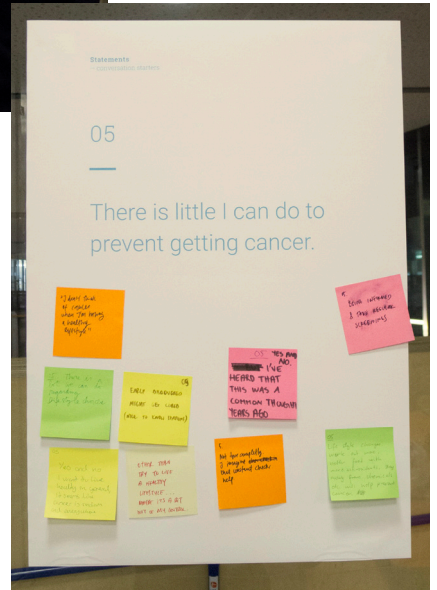
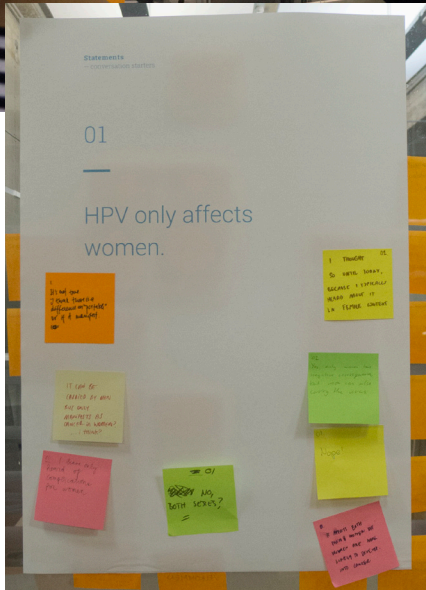
When it comes to preventative healthcare and cancer in particular, people's attitudes vary. The intention of the workshop was to discuss preventative healthcare, HPV and people's attitudes towards cancer.

The workshop was held at AHO with both male and female participants with different backgrounds. Some were born and raised in Norway and some had moved to Norway within the last few years. The participants were briefly introduced to the topic of HPV and cancer. Thereafter, they were introduced to different statements about HPV, cancer and preventative healthcare. They were asked to note down their thoughts. Afterward the different statements were discussed.

Main findings are that there are many misconceptions about HPV and particularly the correlation between HPV and cancer. Few of the participants were aware of how often it is recommended to screen for cervical cancer, what the cancer risk is, and what to do to prevent an HPV-infection. Also, friends and family are very influential for people's perceptions and knowledge.

## **Knowledge VS. Ignorance is bliss**

Some were more comfortable with screening while others were less comfortable with it as they were scared of being told they were at risk.



## Conversation with Johanne

Johanne was diagnosed with cervical cancer in 2017. Luckily she beat cancer. She shared her story and gave insight to what it's like to be diagnosed with a terrible disease and her journey to recovery.

Details from the conversation is kept confidential, but it provided an understanding and comprehension essential to the project.

She is a supporter of the #sjekkdeg-campaign and we discussed the campaign, how it works and how impactful it is.

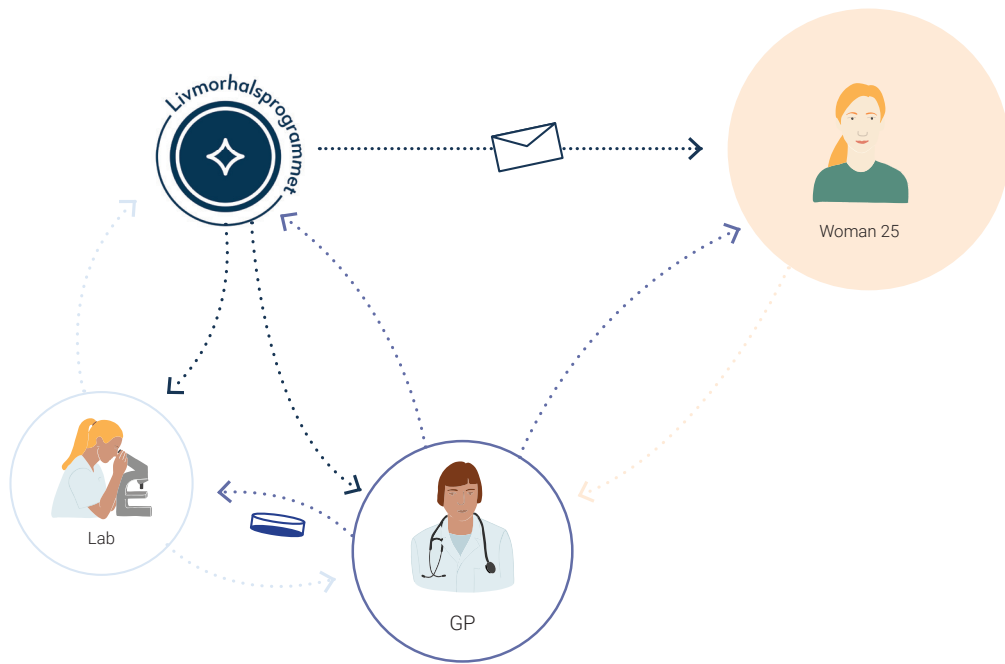
"Thea Steens story is powerful. Everybody knows her." Thea Steen was the founder of the #sjekkdeg-campaign and died from cervical cancer in 2016.

"I don't think I would have paid much attention to the poster in the waiting room at the doctor's office"





# Target Audience, Doctors, Labs and the NCCSP.



# Ameli Tropé, Leader of the NCCSP

Throughout this project I have had several meetings and conversations with Ameli Tropé. She is the leader of the NCCSP and a gynecologist with a doctorate on the topic of HPV viruses.

She has given insight to how they work as researchers and how they make changes in their services. An important finding which separates healthcare from other fields is how they make these changes. The NCCSP is legally responsible and makes changes with great caution. Small changes in information material, such as wording, colour, placement of a sentence can have huge influence on the target audience. For example, the letter which is sent out to 25 year olds is sent out to about 40 000 women. If the letter unintendedly makes these women make decisions which is contrary to the intention, it might have negative consequences both for women and for other healthcare services such as the GPs. Therefore, the NCCSP seldom do large changes without AB-testing and analysing the results first.

When it comes to preventative health care such as cancer screening, it's important to balance concern and over treatment, and she stresses that it is important not to make healthy women sick.

On the topic of immigrants, Ameli explains that immigrants is a challenging and resource intensive group to reach. Different immigrant groups have different needs, barriers and languages. This means that one thing that works for one group of immigrants does not necessarily work for another group.

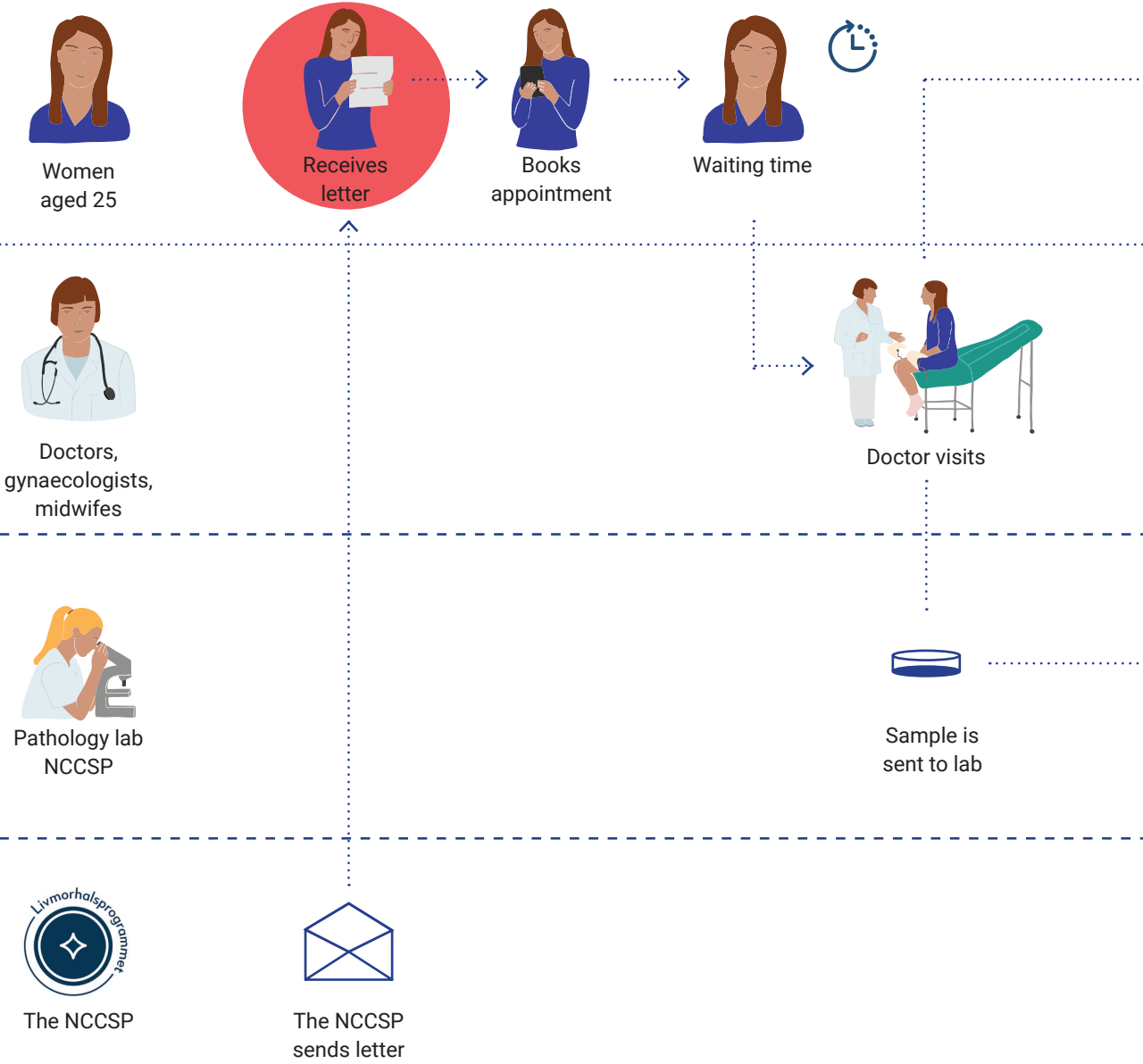




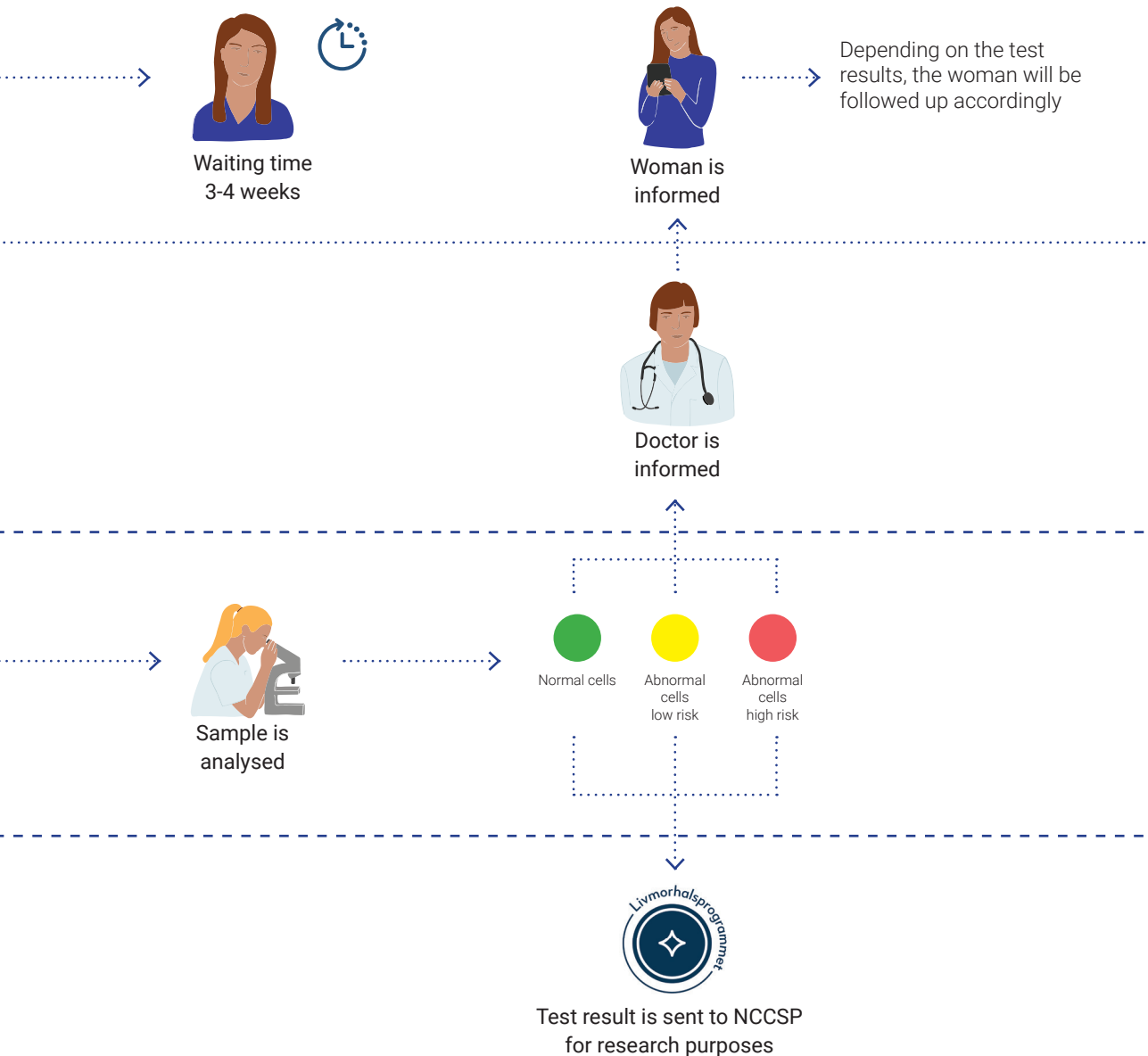
Mapping session with Ameli Tropé

# Intended Journey

The following diagram describes the NCCSP's intended journey. The NCCSP sends out letters both digitally and physically to women aged 25 with information about the screening programme and encouraging them to take a Pap smear. See appendix # for service blueprint.



A critical point in the journey is when the woman receives the information. If she chooses not to follow up according to the letter, the screening journey stops here.



# Information from the NCCSP



As mentioned on the previous page, a critical point in the journey is whether or not the woman follows up on the letter. Here is an overview over the elements and channels the NCCSP uses to send information to 25 year olds.

## Physical Letter

The main purpose of this letter is to inform about the NCCSP and to encourage women aged 25 to take the Pap smear test if they haven't already done so. The letter is sent to all women aged 25 at the same time, and it is the only letter which is not considered to be personal health information. This is because the letter is sent due to the age of women, and not based on previous test results.

## Digital Letter

Today, the digital letter is a PDF version of the physical letter. The digital letter is sent by Digipost or e-box, depending on what service the woman has chosen to use. Today, 50 % of the letters sent by the NCCSP are sent digitally.

**Viktig informasjon om livmorhalsprovet til deg som fyller 25 år i 2018**  
(Information in English [www.kreftregisteret.no/livmorhals](http://www.kreftregisteret.no/livmorhals))

For få jenter tar celleprøve fra livmorshalen for å unngå livmorhalskreft - en prøve som kan redde liv. Budskapet vårt er enkelt: Ring fastlegen. Ta celleprøve. Unngå livmorhalskreft.

<p>Du vil få informasjonen du trenger i dette brevet eller på <a href="http://kreftregisteret.no/livmorhals">Kreftregisteret.no/livmorhals</a>.</p>	<p>Bestill time hos fastlegen din før å ta celleprøve.</p>	<p>Ikke ta prøven når du har menstruasjon. Blod i prøven kan gi feil svar.</p>	<p>Unngå tamponger, fødselsvevstvist skum, vaginalt gelee, kremer etc. et døgn før prøven. Det kan gi feil svar.</p>
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TIPS! Det er mer lettvis å ha på kjole. Ta gjerne med deg noen hvis du ønsker.

En enkelt celleprøve hvert tredje år reduserer risikoen for at du får livmorhalskreft. Livmorhalskreft rammer jenter i alle aldre - 20 % er under 35 år.

Vennlig hilsen  
  
 Anshel Tropé  
 Leder for Livmorhalsprogrammet

Front

**Hvorfor er det viktig at du tar celleprøve, selv om du er frisk?**  
 Celleforandringer er ikke det samme som kreft og gir oftest ikke symptomer. En celleprøve kan oppdage alvorlige celleforandringer som kan behandles med et enkelt inngrep for å unngå utvikling til livmorhalskreft. Halvparten av kvinnene som får livmorhalskreft har sjelden eller aldri tatt prøve.

<p>Alvorlige celleforandringer og livmorhalskreft skyldes en langvarig infeksjon med Humant Papillomavirus (HPV), som overføres ved sex. HPV-vaksine beskytter bra, men ikke 100 %. Derfor er det fortsatt viktig å ta prøve selv om du er vaksinert.</p>	<p>HPV er den vanligste seksuelt overførbare infeksjonen. 70-80 % smittes i løpet av livet. 90 % går over av seg selv. Kondom beskytter kun delvis.</p>	<p>En tredjedel av alvorlige celleforandringer kan utvikles til kreft om du ikke får behandling. 4000 kvinner med alvorlige celleforandringer behandles årlig. 1000 av disse er mellom 25-29 år.</p>
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**Ved normal prøve**  
 De fleste har normal celleprøve, og tar ny prøve om tre år. Livmorhalsprogrammet sender brev med påminnelse dersom du glemmer å ta prøven. Oppretter du digital postkasse på norge.no får du varsel om påminnelsen på e-post og SMS. Ingen tester er 100 % sikre. Ta derfor kontakt med fastlegen din dersom du får uregelmessige blødninger, unormal utflod, og/eller smerter i forbindelse med sex.

**Hva skjer dersom du har celleforandringer?**  
 Ved lette celleforandringer kaller legen deg inn til kontrollprøve etter 6-12 måneder. Ventetiden kan kjennes lang, men ofte forsvinner celleforandringene av seg selv. Er celleforandringene alvorlige, vil du henvises videre til gynekolog som tar flere prøver. Noen kan føle engstelse og uro frem til svaret på prøven kommer. Dette er veldig normalt. Snakk med legen din om fordeler og ulemper ved screening.

**Reservasjon og personvern**  
 Kreftregisteret lagrer opplysninger om dine prøvesvar. Dette gjør at du kan få påminnelser om prøvetaking og annen informasjon fra Livmorhalsprogrammet. Du kan reservere dog mot at personopplysninger ved normale funn lagres i Kreftregisteret.

<p><b>Ring legen din eller oss hvis du lurer på noe angående celleprøven din.</b>                  Kontakt oss på tlf. 22 45 13 00 eller e-post <a href="mailto:livmorhals@kreftregisteret.no">livmorhals@kreftregisteret.no</a>                  Du finner mer informasjon på våre nettsider <a href="http://www.kreftregisteret.no/livmorhals">www.kreftregisteret.no/livmorhals</a></p>	<p><b>Vil du vite mer, last ned app og spill</b></p>
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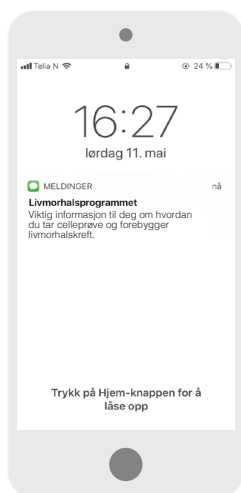
Følg oss gjerne på Facebook [www.facebook.com/kreftsjekken](http://www.facebook.com/kreftsjekken)

#SJEKKDEG

Back

## SMS

As the digital letter is sent, the NCCSP also sends an SMS reminding the receiver to open the letter. This is the only time the NCCSP can send an SMS directly to women in relation to a letter, because the information sent to women aged 25 is not considered to be personal health information.



## Email reminder

A few months after sending the letter and SMS, the NCCSP sends a follow up email to women who have not signed up for digital mail. The main purpose of the email is to encourage women to sign up for digital mail as well as an extra reminder about the NCCSP.

# The NCCSP Letters

There are three different letters sent out by the NCCSP. The following section describes the letters and user testing of the letters. The information is retrieved from conversations with Ameli Tropé and Randi Waage, responsible for sending letters.

The letters are sent by regular mail or by digital mailbox. The digital letter is a pdf of the physical letter. The infrastructure and databases keeping track of what letter to send to who, how and when, in very complex to say the least. This means that a small change in a letter requires a lot of work internally.

The first letter, as seen below, is sent the year women turn 25. The letters are sent in bulk, usually in April or May. The main purpose of this letter is to inform about the NCCSP and encourage women to take a Pap smear at their GP. A SMS is sent in addition to this letter. The other letters are not accompanied with an SMS as these letters are considered to be personal health information. The NCCSP is not allowed to share personal health information by SMS.

**KREFT registeret**

**Viktig informasjon om livmorhalsprøve til deg som fyller 25 år i 2018**  
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Unngå tamponger, fødselspreventiv skum, vaginale geléer, kremmer etc. et døgn før prøven. Det kan gi feil svar.

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En enkelt celleprøve hvert tredje år reduserer risikoen for at du får livmorhalskreft. Livmorhalskreft rammer jenter i alle aldre – 20 % er under 35 år.

Vennlig hilsen  
*Ameli Tropé*  
Ameli Tropé  
Leder for Livmorhalsprogrammet

Hvorfor er det viktig at du tar celleprøve, selv om du er frisk?  
Celleforandringer er ikke det samme som kreft og gir oftest ikke symptomer. En celleprøve kan oppdage alvorlige celleforandringer som kan behandles med et enkelt inngrep før å unngå utvikling til livmorhalskreft. Halvparten av kvinnene som får livmorhalskreft har skjedd etter aldri tatt prøve.

Alvorlige celleforandringer og livmorhalskreft skyldes en langvarig infeksjon med Humant Papillomavirus (HPV), som overføres ved sex. HPV-vaksine beskytter bra, men ikke 100 %. Derfor er det fortsatt viktig å ta prøve selv om du er vaksinert.

HPV er den vanligste seksuelt overførbare infeksjonen. 70-80 % av oss er infisert av det. 90 % går utes av seg selv. Kanskje beskytter kun delvis.

En tredjedel av alvorlige celleforandringer kan utvikles til kreft om du ikke får behandling. 4000 kvinner med alvorlige celleforandringer behandles årlig. 1000 av disse er mellom 25-29 år.

**Ved normal prøve**  
De fleste har normal celleprøve, og tar ny prøve om tre år. Livmorhalsprogrammet sender brev med påminnelse dersom du glemmer å ta prøven. Oppretter du digital postkasse på nettside får du varsel om påminnelsen på e-post og SMS. Ingen tester er 100 % sikre. Ta derfor kontakt med fastlegen din dersom du får uregelmessige blødninger, unormal utflod, og/eller smerter i forbindelse med sex.

**Hva skjer dersom du har celleforandringer?**  
Ved lette celleforandringer kaller legen deg inn til kontrollprøve etter 6-12 måneder. Vente tiden kan kjøpes lang, men ofte forsvinner celleforandringerne av seg selv. Er celleforandringerne alvorlige, vil du henvises videre til gynekolog som tar flere prøver. Noen kan føle engstelse og søe frem til svaret på prøven kommer. Dette er veldig normalt. Snakk med legen din om følelser og ulemper ved screening.

**Reservasjon og personelement**  
Kreftregisteret lagrer opplysninger om dine prøver. Dette gjør at du kan få påminnelse om prøvetaking og annen informasjon fra Livmorhalsprogrammet. Du kan reservere deg mot at personopplysninger ved normale funn lagres i Kreftregisteret.

**Ring legen din eller oss hvis du lurer på noe angående celleprøven din.**

Kontakt oss på tlf. 22 45 13 00 eller e-post [livmorhals@kreftregisteret.no](mailto:livmorhals@kreftregisteret.no)  
Du finner mer informasjon på våre nettsider [www.kreftregisteret.no/livmorhals](http://www.kreftregisteret.no/livmorhals)

**Vil du vite mer, last ned app og spill**

Følg oss gjerne på Facebook  
[www.facebook.com/kreftsjekken](http://www.facebook.com/kreftsjekken)

#SJEKKEG

This letters is a reminder to take a Pap smear. These letters are sent when it is time to take a new test, usually after three years.



**Nå er det tid for livmorhalsprøve – en prøve som kan redde liv**  
(Informasjon i Engelsk: kreftregisteret.no/cviva)

Det er legen din som tar livmorhalsprøven, og du må selv bestille time. Dermed du nøye har tatt prøve, kan du se best i få denne påminnelsen.

**Budsjetet vårt er enkelt:**

			
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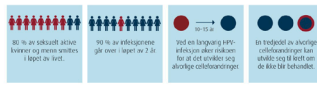
**Hvorfor er det viktig at du tar livmorhalsprøve, selv om du er frisk?**  
Regelmessige livmorhalsprøver kan oppdage alvorlige cellforandringer før de utvikles seg til livmorhalskreft. Cellforandringer er ikke det samme som livmorhalskreft og gir oftest ikke symptomer. Cellforandringer behandles med et enkelt angrep. Halvparten av kvinnene som tar livmorhalsprøve har sjelden eller aldri tatt prøve.

Livmorhalskreft rammer kvinner i alle aldre, derfor bør alle kvinner mellom 25 og 69 år ta livmorhalsprøve regelmessig.

Vennlig hilsen  
*Anneli Inge*  
Anneli Inge  
leder for Livmorhalsprogrammet

Uttøffende informasjon på side 2

**HPV er årsaken til livmorhalskreft**  
Alvorlige cellforandringer og livmorhalskreft skyldes en langvarig infeksjon med humant papillomavirus (HPV). HPV er den vanligste seksuelt overførbare infeksjonen.



**Hvordan tar du livmorhalsprøve?**  
Prøven tar litt tid og krever god samarbeid mellom deg og legen din. Det skal ikke gjøre vondt, men noen ganger kan det være litt ubehagelig. Prøven din blir deretter sendt til et laboratorie og blir undersøkt utvalgt for å oppdage eventuelle cellforandringer. Legen din mottar resultatet av prøven innen en måned. Ved usikkerhet eller symptomer kan legen anbefale å ta en annen livmorhalsprøve. Ved normale prøveresultater anbefales det å ta en ny prøve om tre år. Livmorhalsprogrammet vil sende deg en påminnelse når det kommer seg tid for ny prøve.

**Ingen screeningprøve er 100 % sikker**  
Regelmessige screeningprøver reduserer risikoen for å utvikle livmorhalskreft med ca. 90 %, men screeningprøven kan ikke oppdage alle cellforandringer av alle årsaker. Selv om prøveresultatene dine er normale, er det viktig at du fortsetter å ta livmorhalsprøven som en del av din regelmessige helseundersøkelse. Målingene etter samme eller annen screeningprøve, sannsynligvis vil oppdage eventuelle cellforandringer. Gå inn på <https://www.kreftregisteret.no/livmorhals> for å lese om utløper og budsjett med å ta livmorhalsprøve.

**Hvor kan jeg ta livmorhalsprøve?**  
Følgelsen tar prøven. En gjennomsnittlig tid for å ta prøven er 15 minutter. Etter at du har tatt prøven, kan du se best i få denne påminnelsen. Hvis du ikke har tid til å ta prøven, kan du se best i få denne påminnelsen.

**Hvordan forbereder jeg meg til livmorhalsprøve?**  
Ikke ta prøven når du har menstruasjon. Bliklig prøven kan gi feil svar. Unngå tamponger, fødebevarende skum, vaginalt gelé, krem, etc. ett døgn før du tar prøven og dette kan påvirke prøveresultatene.

**Reservasjon og personvern**  
Kreftregisteret lagrer opplysninger om dine prøver. Du kan reservere deg mot at opplysninger ved normale farn lagres i Kreftregisteret. Du har rett til å motta deg at Kreftregisteret deler din personlige med helsepersonell i samsvar med de tilknyttede opplysningene. Du kan se om du ønsker å reservere deg mot at opplysninger om deg i Kreftregisteret.

**Du finner mer informasjon på våre nettsider**  
Et du går i å spise? La det opp og har mer om HPV.

**Fight HPV**  
La det opp og har mer om HPV.

**Livmorhalsprogrammet #SJEKKDEG Kreftregisteret**

The third letter is for women who are part of a screening pilot. The new screening test is being piloted in Hordaland, Rogaland, and Trøndelag. With this test, women aged 35-69 will only need to take a Pap smear every fifth year.



**Nå er det tid for livmorhalsprøve – en prøve som kan redde liv**  
(Informasjon i Engelsk: kreftregisteret.no/cviva)

Det er legen din som tar livmorhalsprøven, og du må selv bestille time. Dermed du nøye har tatt prøve, kan du se best i få denne påminnelsen.

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**Gravitt innføring av ny testmetode**  
Livmorhalsprogrammet endrer nå opplysningene fra livmorhalsprøven til HPV test for kvinner mellom 35 og 69 år. En screeningprøve blir prøven din etter å ha blitt undersøkt utvalgt. Begge metodene tar som med å oppdage eventuelle forandringer til livmorhalskreft, og prøven tar i tillegg litt mer tid og krever god samarbeid mellom deg og legen din. Prøven din blir deretter sendt til et laboratorie og blir undersøkt utvalgt for å oppdage eventuelle cellforandringer. Legen din mottar resultatet av prøven innen en måned. Ved usikkerhet eller symptomer kan legen anbefale å ta en annen livmorhalsprøve. Ved normale prøveresultater anbefales det å ta en ny prøve om tre år. Livmorhalsprogrammet vil sende deg en påminnelse når det kommer seg tid for ny prøve.

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Et du går i å spise? La det opp og har mer om HPV.

**Fight HPV**  
La det opp og har mer om HPV.

**Livmorhalsprogrammet #SJEKKDEG Kreftregisteret**

# Analysing Letters

In order to get a better understanding of how the letters are interpreted by young women, several young women has been interviewed about the letter.

Women with different backgrounds and languages have been asked to read the letter and make comments, followed by a conversation about cervical cancer screening. The main findings are shown below:

- Kreftregisteret is unknown, but trusted.
- Link for english speakers, but the link goes to Norwegian page.
- Hard to apply information to their own lives.
- Little info on the test itself.
- The app is confusing.
- Not all medical terms are explained
- Different terms are used for the same test: Celleprøve/livmorhalsprøve/screeningtest





User testing original letter

# Analysing Webpage

The letters are referring to the NCCSP webpage and readers are guided here for more information. The webpage is used by both the audience and professionals. The following section describes a brief analysis of the webpage.

Main findings

- Info for women and professionals are mixed together
- Only language options are Norwegian and English
- Different words are used to describe the same thing.

## Hvordan bør jeg forberede meg



- Ikke ta livmorhalsprøven mens du har menstruasjon.
- Unngå helst samleie de siste to dagene før celleprøven.



## LIVMORHALSPROGRAMMET



*Kvinner mellom 25 og 69 år anbefales å ta livmorhalsprøve regelmessig. Livmorhalsprogrammet sender brev med påminnelse når det nærmer seg tid for ny prøve. Målet er å forebygge livmorhalskreft som rammer kvinner i alle aldre. Du må selv bestille time hos legen din eller hos gynekolog for å få tatt livmorhalsprøven.*

### Til deg som skal ta livmorhalsprøve

#### Ofte stilte spørsmål

- Dette skjer når du tar livmorhalsprøve
- Hva er celleforandringer?
- Hva er en livmorhalsprøve?
- Hva er HPV?
- Hva er HPV-vaksine?
- Fordeler og ulemper ved screening

- Informasjon og påminnelser Livmorhalsprogrammet sender ut
- Ny analysemetode er under innføring (primær HPV-test)
- Livmorhalskreft, behandling og oppfølging
- Deling av prøvehistorikk
- Reservasjon
- Personvern
- Innsyn



### Kontaktinformasjon

**Telefon:** 22 45 13 00

**Telefontid:** kl. 12-14.30

livmorhals@kreftregisteret.no

Vennligst ikke send helseopplysninger i e-post.

[Kontakt oss](#)

### Om Livmorhalsprogrammet

- Organisering

### Til helsepersonell

- Tips om prøvetaking
- Informasjon og svarbrev til kvinnene
- Årsrapporter
- Publikasjoner
- Screeningstrategi og nasjonale retningslinjer
- Informasjon til laboratorier
- Rapporteringer
- HPV-test på klinisk indikasjon
- Kvalitetssikring, evaluering, forskning
- Rådgivningsgruppen
- Kvalitetsmanual
- Fagdag

Sist oppdatert: 09.02.2018



Følg Kreftsjekken - screeningprogrammets side på Facebook

### E-læringskurs: Screening for livmorhalskreft



Livmorhalsprogrammet har nå i samarbeid med Legeforeningen laget et poenggivende e-læringskurs der leger får en grundig gjennomgang i hvordan livmorhalsprøven skal tas.

*Livmorhalsprøven- hva er egentlig legen på jakt etter?*

Velg digitalt!

Livmorhalsprogrammet sender påminnelser med lenke til digital opplæring på [www.kreft.no](http://www.kreft.no)



Info for women



Info for professionals

# Mapping Journey

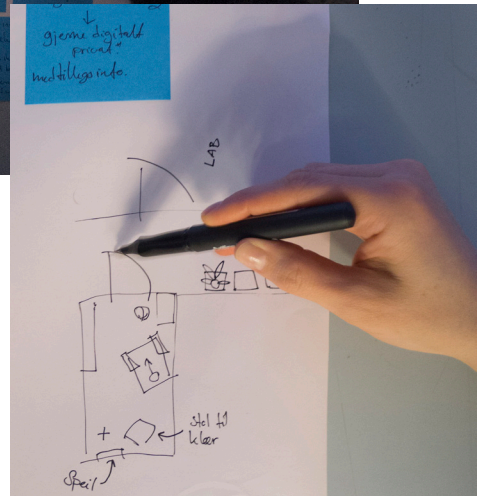
Interview with woman who have recently taken a Pap smear. Her experience was mapped as a journey: before going to the doctor, the visit and the follow up. The journey focused on the practicalities as well as the emotional aspect. The letter from the NCCSP was also discussed.

The intention was to get a better understanding of the thoughts and emotions women go through before, during and after a gynecological examination.

The woman was a Norwegian 29 year old. She is familiar with the screening programme and she had taken a pap smear before. Still, she was a bit hesitant to take the pap smear as it is uncomfortable.

An important finding is that it can be challenging to find another doctor if one is uncomfortable with the GP. It can be hard to find a good time to take the Pap smear as one should not take the test while menstruating. This might cause rescheduling of appointments increasing the risk of postponing the test.

Also, things such as what to wear, personal hygiene, wether or not to shave can make one insecure.



Mapping session

# A visit to the Gynecologist

As part of the research I went to the the gynecologist myself to take a Pap smear. I have taken the Pap smear several times at my GP (General Practitioner) and this time I went to a private

The intention of going to a gynecologist was to get a better understanding of the experience and the information provided by the doctor, the information material accessible, and the follow up.

Main findings was that the doctor provided little information unless I asked, given I knew what to ask for. Also, I would only get information about the test result if any abnormalities were found. I could get information about the normal test results if I requested it. In the waiting room there was information material from both the NCCSP and the NSC, but no one seemed to take notice of the material.





Information material at waitingroom

# Peter Netland, Dentist

Peter is a dentist who has a particular focus on patients with dental phobia. He approaches patients with empathy and thoughtfulness with intention of curing dental phobia.

The purpose of talking to Peter was to get a better sense of how to approach patients who don't like going to the dentist, and how to tackle a patient's anxiety and motivate the patient. It was interesting to discuss if some of his thoughts and experience could be transferred to women who don't feel comfortable having a gynecological examination.

An important finding is that information and a sense of control is important to tackle anxiety.

"Relatives, colleagues and friends can play an important role in getting people to go to the dentist."

"Ignorance is bliss - you don't have a dental problem until a dentist tell you that you have one. People tend to create their own logic. It can be hard to break through people's barriers."

Dentist are trained to look for possible symptoms and indications of mouth and throat cancer. When finding such indications, Peter is very cautious with the information he gives to the patient.

"Cancer has a very particular place in people's consciousness"





KURERER TANNLEGESKREKK: – Det er en bevisst strategi å bruke den minste sprøyten. Og så forklarer jeg alt jeg gjør, jeg forklarer veldig godt hva jeg gjør, sier Peter Netland, tannlege hos Oslo Tannlegesenter. Foto: Stig B. Fiksdal

## – Sprøyter, bor og alt som er spisst kan være en trigger til tannlegeskrek

Gründer

23. nov 2018

Av Ellen Dokk Holm

Intervju med Peter Netland, DNB Nyheter. Foto: Stig B. Fiksdal

# PESTEL Analysis

There are many factors influencing how the NCCSP operates. Using the PESTEL-analysis method many if the factors influencing the NCCSP were identified. As with public healthcare in general, there are many factors to consider.

Main findings from the analysis was the many legal factors restricting the decision making processes. Patient safety is crucial and the patient information is heavily protected. This means that even though there are many new technologies available which could be used for patient communication, the NCCSP is very restricted in what they can use.

Sharing patient information between institution is also heavily regulated. For example, the NCCSP can't share patient information with GPs and GP's can't share patient journals with the NCCSP.





# Target Audience, the #sjekkdeg-campaign and the NCCSP.



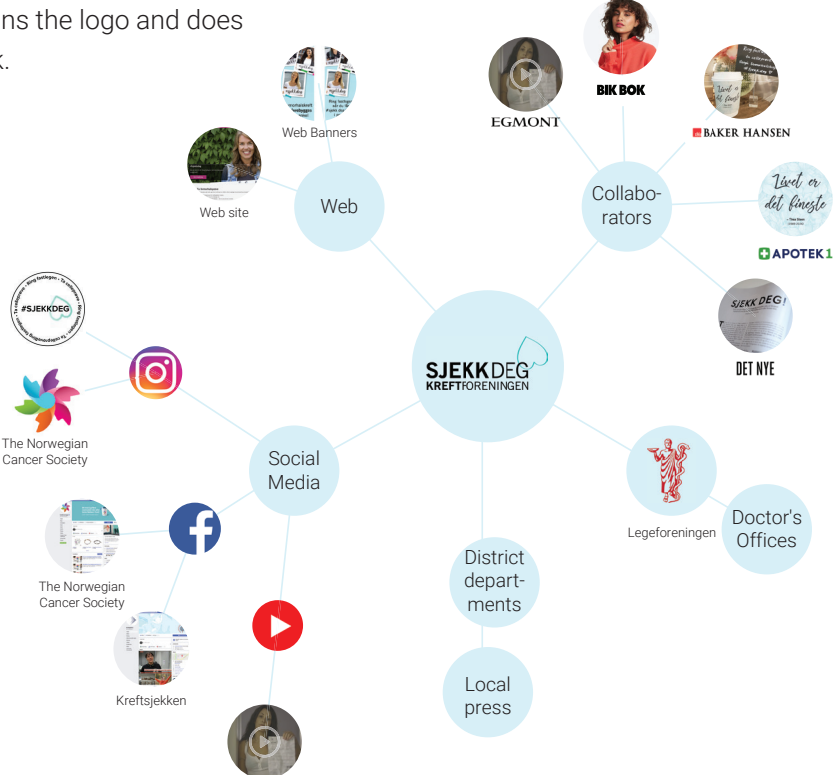
# Lill Thorsen, Kreftforeningen (NCS)

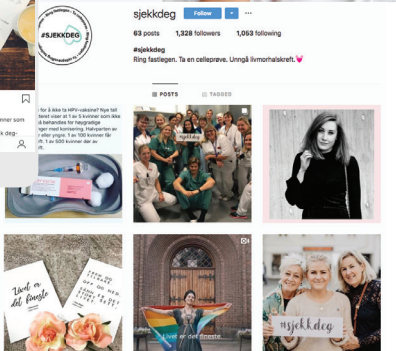
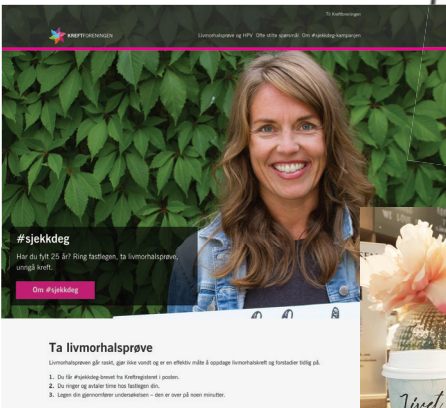
Lill Thorsen has a central role in the #sjekkddeg-campaign. She provided important information about the campaign and the great amount of work that goes into making it.

Thea Steen was diagnosed with cervical cancer and died in 2016. She initiated the #sjekkddeg-campaign in collaboration with the NCS, and the campaign was first launched in 2015. It runs the first week of September and has had a great impact by raising awareness about cervical cancer screening.

The campaign has been very successful and every women who have been interviewed as part of this diploma has been aware of the campaign and its message. In 2017 there were 72 000 more women taking the ap smear test compared with 2014, the year before the campaign started.

The NCS and the NCCSP alongside other organisations works together on the campaign. The NCS owns the logo and does the majority of the work.





The NCS is running other campaigns in addition to the #sjekkdeg-campaign. The most famous one is the Rosa Sløyfe-campaign for breast cancer. The aim of the Rosa sløyfe (pink ribbon) campaign is to show solidarity with breast cancer patients and survivors, increase breast cancer knowledge as well as support breast cancer research.

The movement originated in the United States where American women in the early 1990s demanded greater funding for breast cancer research. In Norway the campaign is a collaboration between The Norwegian Breast Cancer Society (Brystkreftforeningen) and NCS. The campaign has been organized in Norway since 1999 (Prosjektrapport Rosa Sløyfe, 2018).

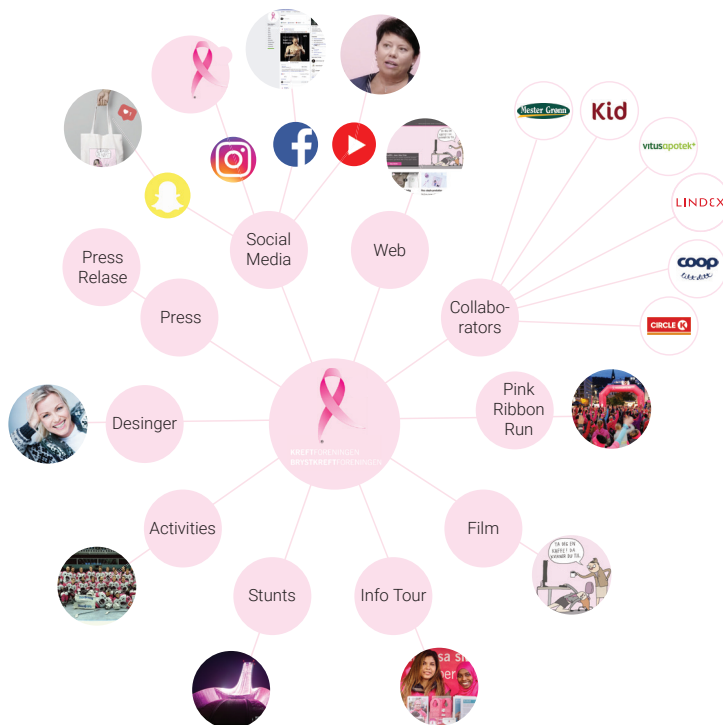


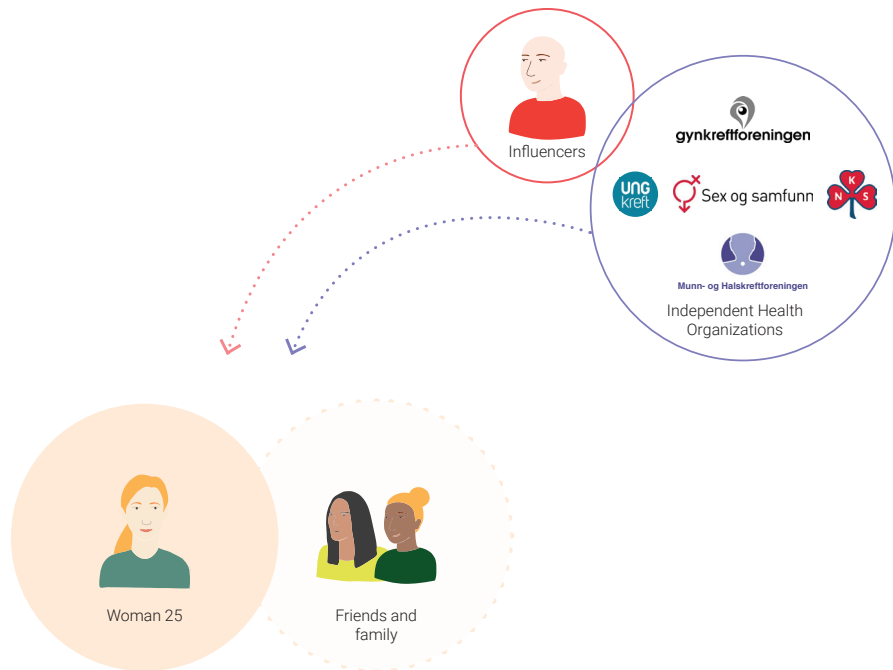




Photo credit: Steffen Aaland



# Target Audience and Independent Health Organizations



# Stella, Røde Kors Kvinnesenter

Last fall there was an event at Stella Kvinnesenter promoting cancer screening. Stella Kvinnesenter is an activity center offering courses and activities for minorities and is located in downtown Oslo.

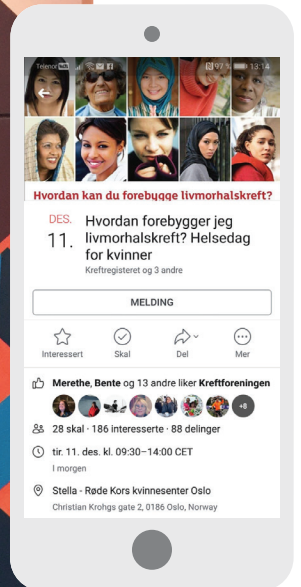
The theme of the event was cancer screening, both cervical cancer screening and mammography. There were several different organisations represented and talks in different languages.

About 30 women attended the event and talking to the organizers afterwards they wished that more women had participated. The event was promoted primarily through social media.

Some of the topics which were discussed:

- I don't want to take a Pap smear at my GP because he is a man.
- I don't speak Norwegian, how can I get help?
- I'm a Muslim, and Muslims don't get this disease.

A finding is that it takes a lot of resources and planning coordination between different organisations to arrange such events. It can also be challenging to make women attend.



Stella Kvinnesenter

## **Maria Røsok, Leader of Sex og Samfunn**

Sex og Samfunn is a non-profit foundation whose purpose is to work for sexual and reproductive health and rights, both at the individual and societal levels. Their focus is youth and they are located in downtown Oslo.

The intention of talking to Maria was to get a better understanding of how they communicate with their audience. They have many years of experience addressing health and sensitive topics. They have a “no shame” policy and have an open and inclusive approach. They have collaborated on projects with the NCS on promoting health to immigrants as well.

An important takeaway from the interview is that there is a lack of knowledge about HPV and there are many misconceptions. Particularly, within some immigrant communities the sexual and medical knowledge is very low. This can be a major barrier for cervical cancer screening.

When it comes to youth, she stresses that motivation comes from understanding. They won't do as they are told, unless they understand why, on an individual level.

Also, they do not have brochures or information posters in the reception area. By experience, visitors do not read these and the most important thing is wayfinding. Often the visitors want to be anonymous and rather look down on their phone. They are focused on the reason they visit Sex og Samfunn and are not very receptive to reading charts or taking brochures.



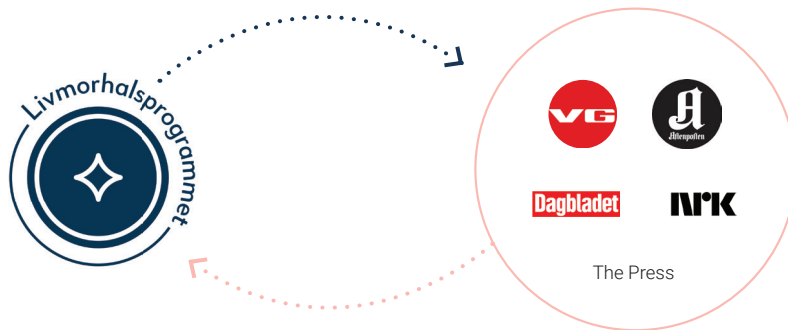


Sex og Samfunn





# The NCCSP and The Press



## **Brita Garden, journalist, NRK**

The press plays an important role for people's understanding and knowledge about the NCCSP. Therefore I interviewed Brita Garden, which is a journalist at NRK in order to get a better understanding of how the press works when covering stories about the NCCSP.

Brita Garden makes new stories for Ekko, a popular radio program. She has covered a story about the NCCSP and new screening procedures.

She added that the NCCSP had been very nice to work with and had been very helpful providing her with the necessary information.

The intention of talking to Brita was to get an understanding of how she choose stories to cover and how she works to investigate the topic.

There a a few main "criteria" for a topic to be covered:

- Newsworthy
- Is important
- Is relevant to many, though this is not necessary
- Elements of public education
- It is an advantage if there are professionals who are skilled and who are good to work with

# Livmorhalskreft kan bli utryddet i Norge, tror kreftspesialister

En ny virustest vil gjøre det enda enklere å oppdage sykdommen.



NY VIRUSTEST: De største endringene vil skje på laboratoriet.

FOTO: KRISTA LIEN INDREHUS / NRK



**Brita Garden**  
Journalist



**Tom Arne Moe**  
@moeta60  
Journalist

Publisert 8. feb. 2018 kl. 07:02  
Oppdatert 8. feb. 2018 kl. 12:00



Artikkelen er  
mer enn ett år  
gammel.

NRK article



# Ideation, Reflections on Findings and Defining Design Principles

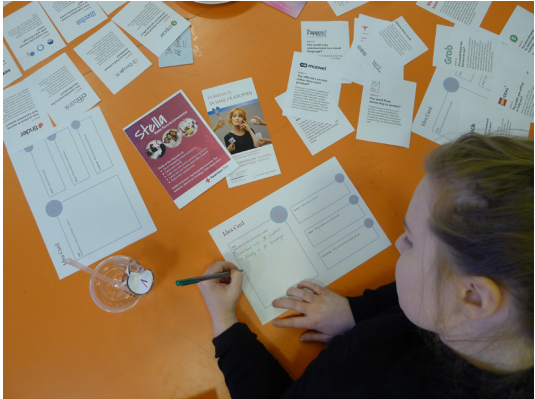


# Ideation

An ideation workshop was held in order to get a wide range of ideas. Fellow students and others participated. Victoria Allan, a creative with experience from working with the NCS before participated as well.

Several different ideas was proposed. The ideas was gathered and organized in categories. The most relevant ideas was further developed and presented for Ameli Tropé for feedback.

Some of the ideas discussed with Ameli Tropé are described to the left.





### SMS

Not allowed to share personal health info by SMS.



### Email

Not allowed to share personal health info by E-mail.



### Phonecall

The NCCSP covers nearly 1,5 million women; too many to call one by one.



### Portal

Log in to a Cancer Registry profile with personalised info.



### Direct from Doctor

The doctor can not access health information from Krefregisteret.



### App

An app that is active every third of fifth year seems unnecessary.



### Direct from Doctor

The Cancer Registry has a deal with DIFI, with uses digipost/ebox.

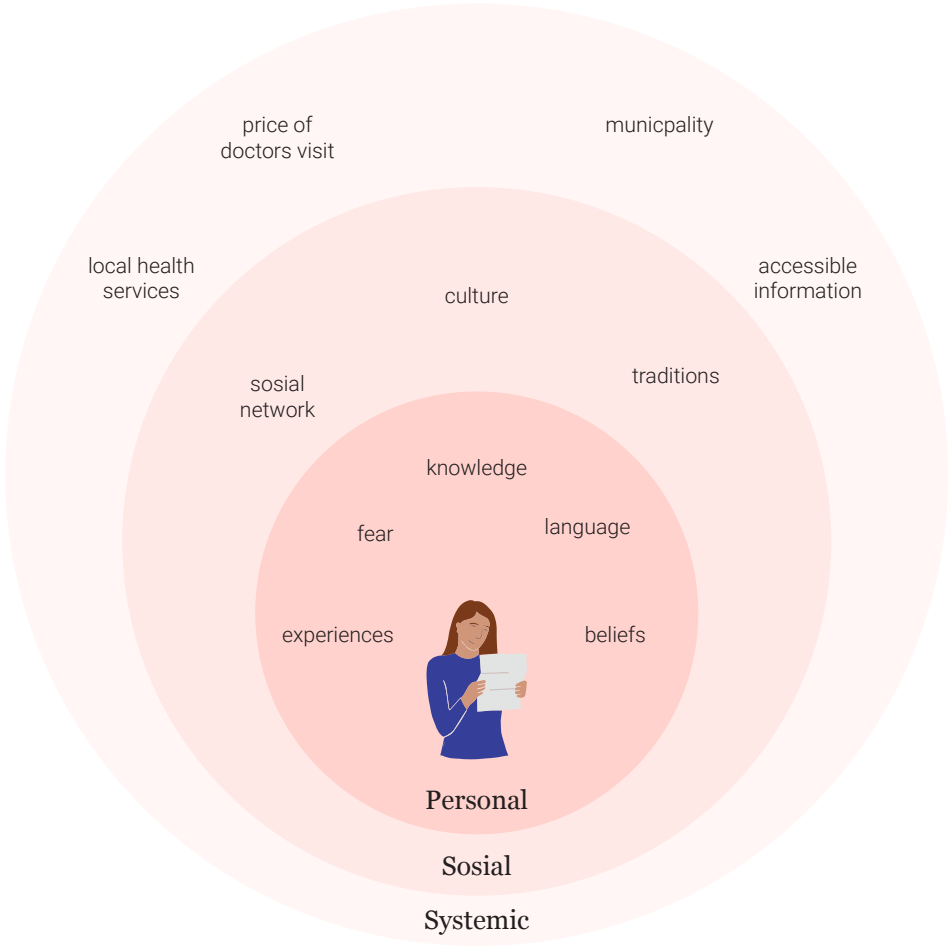


### Kjernejournal

The Kjernejournal should only contain acute information. Information from the screening is not considered to be acute.

# Barriers

Reason for not screening varies a lot. There are different barriers can be categorized into three spheres, personal, social and systemic.





As the barriers and needs are very individual, the project could move forward in two directions.

Reason for not screening varies a lot. There are different barriers, needs and motivational factors for different groups of women.

Focus on one specific group with similar barriers, motivational factors and needs.

Design for the existing service to increase impact for young women, as the system is working quite well with a 69% participation rate.

A value in this project is equal healthcare for all. Therefore this was the chosen direction

# Opportunity Area and Brief

A significant finding is the role the #sjekkdeg-campaign plays. Most women interviewed has been aware of the campaign and its message, and the campaign has had great influence in screening numbers of young women.

A significant opportunity area is therefore to strengthen the relationship between the information material distributed by the NCCSP and the #sjekkdeg-campaign. A finding is that written health information without context can increase awareness and improve intention, but not behavioural change. This means that the letter, in it self, might not have the impact intended. The campaign is therefore important as it provides a context for the letter.

Because the NCS is an independent organization and not a public health institution such as the NCCSP, they can be much more bold in their communication. Thus, they can play a role in creating awareness which the NCCSP can't. A stronger synchronization between them could for example be that they use the same wording (celleprøve/livmorhalsprøve/screeningprøve/sjekke seg), tone of voice, graphic style and content plans.

To explore this opportunity I attempted to facilitate a workshop between the NCCSP and the NCS. Unfortunately, the NCS was not interested.



The NCCSP is dependent on other organisations promoting their message. Still, this symbiotic relationship can make them vulnerable if these organizations choose to change their focus or terminate projects. Based on this finding, the direction for the project is to focus in the existing services of the NCCSP focusing on health literacy.

**How might the service of the NCCSP better accommodate the needs and barriers of young women and hereby increase screening rates?**

# Designing for Health Literacy

The six design principles are derived from the research. The principles addresses the most common needs, barriers and opportunities. They are used later in the project as guidelines for the design interventions.

The overarching intention of the design principles is to make sure women understand the information distributed by the NCCSP, is motivated by it and consequently takes a Pap smear. The principles are also intended to promote health literacy. Lixian Cheng, expert in health literacy at Oslo University Hospital has provided feedback and input on the principles.

**1**

## Make it Personal

Thea Steens story has had a great impact. It is a powerful story and people are able to identify with it. People's ability to identify with information, makes the information more impactful. The more generic the information is, the less personal it becomes.

**2**

## Consistency

The medical field is full of technical words and jargon that can be difficult to understand for people without technical background. Therefore, it is important to explain technical terms and use them consistently.

**3**

### **Address common myths**

There are many myths and misconceptions about HPV and its relation to cancer. These can act as barriers and it is therefore important to address them.

**5**

### **Reference to the #sjekkdeg-campaign**

The #sjekkdeg-campaign is well known and provides a context for the letters and other information provided by the NCCSP. Therefore, it is beneficial if the content refers to the campaign.

**4**

### **Design for Legibility**

Health information is often complex and can be hard to understand. Making the text easy to read by using easy-to-read fonts, generous spacing and bullet points.

**6**

### **Design for non-norwegian speakers**

Language is a barrier for non-norwegian speakers. Therefore it is important to have language options and that these options are easy to find.



# Design Interventions

This chapter contains descriptions of proposed design interventions for the NCCSP. The main aim is to encourage more women aged 25 to 30 take the screening test. The proposed design interventions builds on the existing service by altering and adding elements.

The chapter also describes a new tool for the NCCSP which they can use when creating new content. At the end, the chapter discusses the potential ripple effect of these interventions.





# Proposed Designed Interventions

The following text and diagram describes how the different touchpoints are coordinated and distributed.

The following page describes the proposed design interventions for the NCCSP. The interventions builds on the existing service and are placed within existing timeline. Some touchpoints are redesigned and some touchpoints are added.

The designs are made with implementation in mind so if the NCCSP chooses to use some of the touchpoints they will be able to do so within the legislation and restrictions they are operating within today. Still, some of the added touchpoints are meant solely as inspiration as they go beyond the possibilities of how the digital systems of the NCCSP operates today.

## Intention

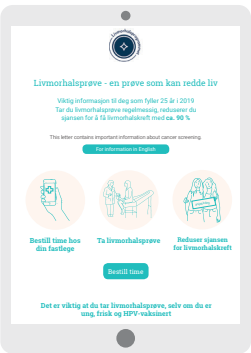
The intention of the design interventions is to explore how a redesign can make the touchpoints better accommodate for the needs of the audience. Of course, it is not realistic to accommodate all needs and address all the barriers defined in the research. The design is based on the six design principles rooted in the needs identified in the research.

# Designed Interventions Overview

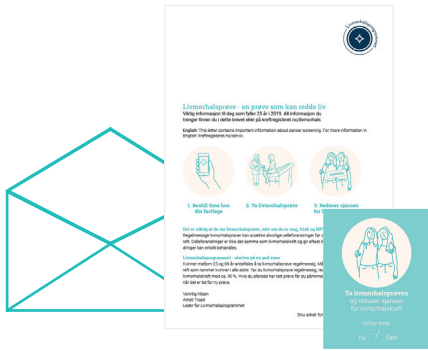
Overview of the design interventions. They are created based on the design principles. The design interventions are described in detail in the following pages.



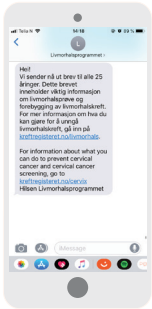
Co Created letter for 25 year olds. This letter will be used by the NCCSP



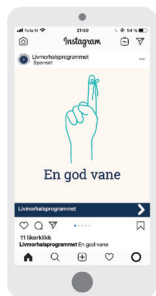
Proposed digital letter for 25 year old



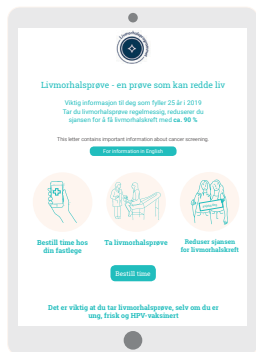
Proposed letter for 25 year olds



Proposed SMS



Proposed social media campaign



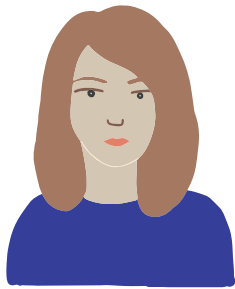
Proposed email follow up



Internal tool for content

# Target Audience

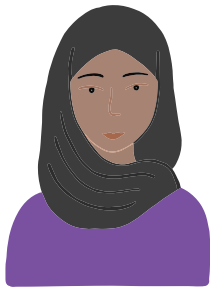
The target audience is as mentioned 25-30 year olds. The audience can be categorised into four main groups described below.



Non Norwegian speaker  
using digipost / e-boks



Norwegian speaker  
who don't use Digipost / e-boks



Non Norwegian speaker  
who don't use digipost / e-boks



Norwegian speaker  
using digipost / e-boks

### **Information for different touchpoints**

It is important that the information distributed by the NCCSP reaches the four groups as well as being comprehensible. It is also important that the different elements are designed and crafted in such a way that the receiver is capable to understand the connection between them.

Each element must also be able to function on their own in case a letter is lost in the mail, sent to wrong address or just never opened.

# Content Plan

The diagram describes how different touchpoints are distributed to the four different audience groups. The letters and SMS are usually sent in April/May. The follow up email is sent during the #sjekkdeg campaign which is the first week of September.

April / May



Non Norwegian speaker  
Digipost/e-boks



Receives digital letter



Receives SMS letter



Norwegian speaker  
Digipost/e-boks



Receives digital letter



Receives SMS letter



Non Norwegian speaker  
No Digipost/e-boks



Receives physical letter  
with link to English site



Receives SMS letter



Norwegian speaker  
No Digipost/e-boks



Receives physical letter



Receives SMS letter



**The Letter**  
The NCCSP sends out  
physical and digital letters

**SMS**  
The NCCSP sends  
out SMS

September



Receives social media campaign



Receives e-mail



Receives social media campaign



Receives e-mail

**Social Media**  
The NCCSP runs social media campaign

**Campaign**  
The NCCSP sends reminder email encouraging digital mailbox.

# Design Proposal Letter for 25 Year Olds

This section describes the redesign of the letter for 25 year olds as well as the design process and intention. This letter will be sent to all 25 year olds this year.

The letter for 25 year olds was in the process of being updated with new logo and content. As part of my diploma I have made a suggestion for a new design through a co creative process with the NCCSP.

## The intention

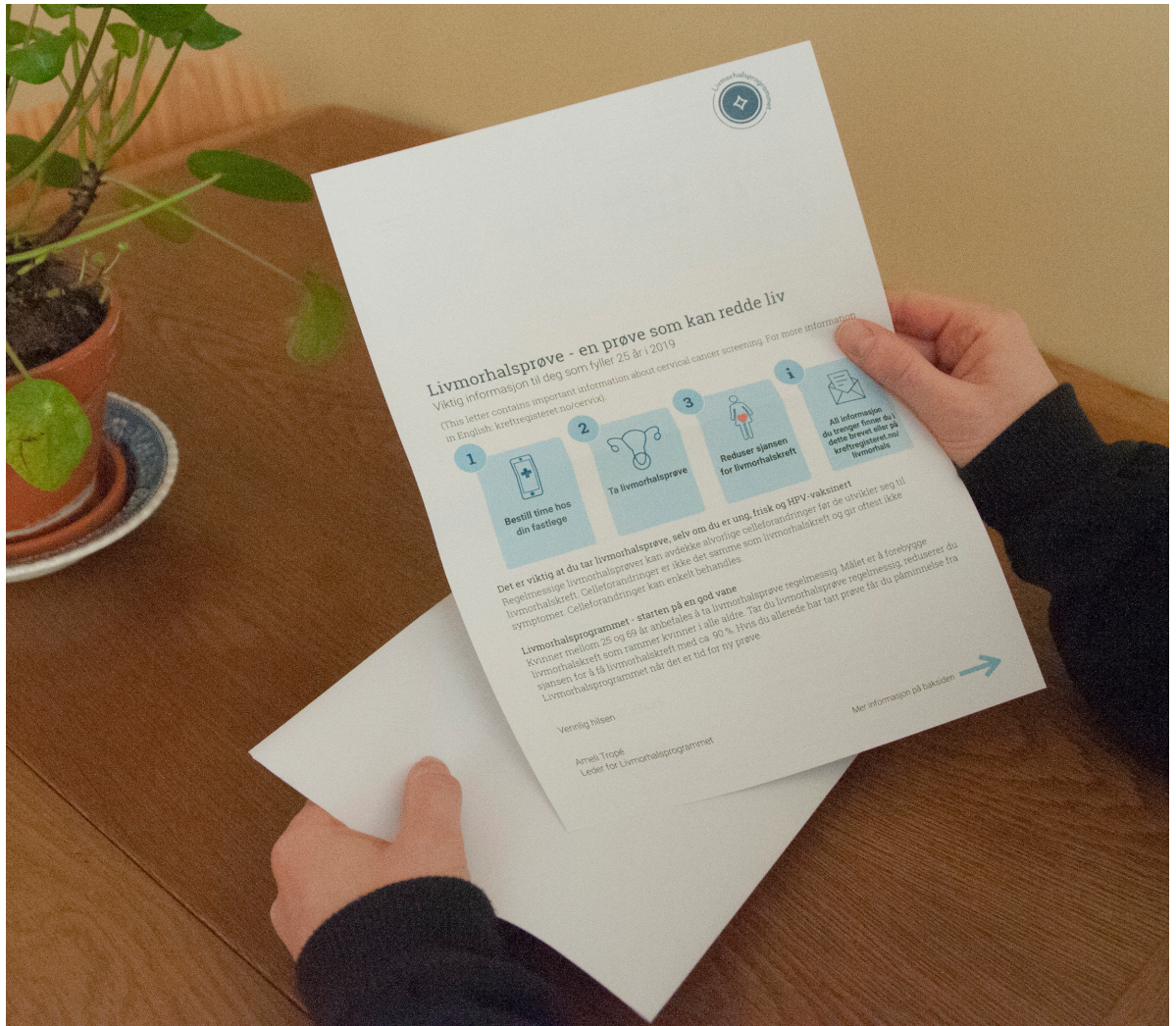
The intention of the redesign was to address the needs and barriers found in the research. It is important for the NCCSP that all the letters has a close correlation in terms of visual expression. This is to ensure that women receiving the letter sees the correlation between them.

## Designing with caution

When the NCCSP makes changes to their letters, they do so with great caution. They are accountable for the outcome and are therefore paying particular attention to anything that might cause unintended consequences. An example is that if they do not state early in the letter that the woman should contact their own GP, they have experienced that some women contact the NCCSP to book an appointment instead. It is also important to address the potential issues with cancer screening and that screening is no guarantee for avoiding cancer.

Therefore the NCCSP will not make dramatic changes to the letter without being convinced that the changes will have mostly positive implications. As a consequence, the redesign is very much in line with what the NCCSP is comfortable with.





Co created design proposal

# Design Process

## Co Creation

The letter was co created through several co creative sessions with Randi Waage who is in charge of the letters and Ameli Tropé. This co creative process has also proven useful in getting an understanding of the experience they have accumulated over the years using different letter designs.

As for the time being, the design is not finalized. In this report the latest draft is described.

## Health Literacy

Lixian Cheng, which is an expert in health literacy at Oslo University Hospital has also provided useful input on the design and wording.



Design session with Lixian Cheng

9 cm for space for address, barcode and logo.

---

#### **Design for non-norwegian speakers**

English sentence about the purpose of the letter for English speakers.

---

#### **Reference to the #sjekkdeg-campaign**

Step by step explanation in correlation with #sjekkdeg-campaign.

---

#### **Address common myths**

Women who are HPV vaccinated are not always aware that they should screen for cancer. If they feel healthy, screening might feel unnecessary. This is particularly important for 25 year olds as many of them are vaccinated.

---

Information about the NCCSP and that this is a programme that will follow women from the age of 25 until they reach 69 years of age.

---

#### **Design for Legibility**

Text is complemented by visualization.

---





## Livmorhalsprøve - en prøve som kan redde liv

viktig informasjon til deg som fyller 25 år i 2019

(This letter contains important information about cancer screening. For more information in English: [krefregisteret.no/cervix](http://krefregisteret.no/cervix)).

1



**Bestill time hos  
din fastlege**

2



**Ta livmorhalsprøve**

3



**Reduser sjansen  
for livmorhalskreft**

i



**All informasjon  
du trenger finner du i  
dette brevet eller på  
[krefregisteret.no/  
livmorhals](http://krefregisteret.no/livmorhals)**

**Det er viktig at du tar livmorhalsprøve, selv om du er ung, frisk og HPV-vaksinert**

Regelmessige livmorhalsprøver kan avdekke alvorlige celleforandringer før de utvikler seg til livmorhalskreft. Celleforandringer er ikke det samme som livmorhalskreft og gir oftest ikke symptomer. Celleforandringer kan enkelt behandles.

**Livmorhalsprogrammet - starten på en god vane**

Kvinner mellom 25 og 69 år anbefales å ta livmorhalsprøve regelmessig. Målet er å forebygge livmorhalskreft som rammer kvinner i alle aldre. Tar du livmorhalsprøve regelmessig, reduserer du sjansen for å få livmorhalskreft med ca. 90 %. Hvis du allerede har tatt prøve får du påminnelse fra Livmorhalsprogrammet når det er tid for ny prøve.

Vennlig hilsen

Ameli Tropé  
Leder for Livmorhalsprogrammet

Mer informasjon på baksiden



**Address common myths**

---

Repetition of the importance to take the cervical test even if one is HPV vaccinated.

**Design for Legibility**

---

Redesigned illustrations

**Design for Legibility**

---

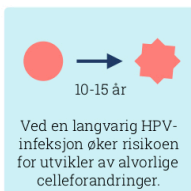
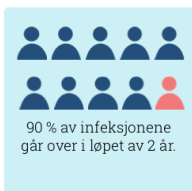
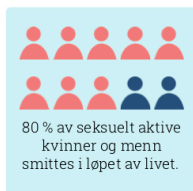
The text is complemented by icons.

Contact information is divided so that you are encouraged to contact your doctor first. Contact information for the NCCSP is gathered.

---

### HPV er årsaken til livmorhalskreft

Alvorlige celleforandringer og livmorhalskreft skyldes en langvarig infeksjon med humant papillomavirus (HPV). HPV er den vanligste seksuelt overførbare infeksjonen. Det er viktig å ta livmorhalsprøve regelmessig selv om du er HPV-vaksinert.



### En livmorhalsprøve tas ved en gynekologisk undersøkelse

Undersøkelse som tar noen få minutter. Det skal ikke gjøre vondt, men noen ganger kan det oppleves litt ubehagelig. Legen din får svar på prøven vanligvis innen en måned. Ved unormale prøvesvar har legen ansvar for å gi deg informasjon og henvise til videre oppfølging. Ved normale prøveresultater anbefales du å ta en ny prøve om tre år. Livmorhalsprogrammet vil sende deg en påminnelse når det nærmer seg tid for ny prøve.



### Du tar livmorhalsprøven hos din fastlege

Ønsker du å ta prøven hos gynekolog, kreves det i de fleste tilfeller henvisning fra fastlege. Noen jordmødre tar også prøver. Du må selv betale en egenandel for undersøkelsen.



### Slik forbereder du deg til prøven

Ikke ta prøven når du har menstruasjon fordi blod i prøven kan gi feil svar. Unngå tamponger, fødselsprekaltivt skum, vaginale geléer og kremer i et døgn før prøven fordi det kan påvirke prøveresultatet.

**Tips!** Det er mer lettvtint å ha på kjole. Ta gjerne med deg noen hvis du ønsker.



### Ingen livmorhalsprøve er 100 % sikker

Regelmessige livmorhalsprøver reduserer sjansen for å utvikle livmorhalskreft med ca. 90%, men alvorlige celleforandringer kan forbli uoppdaget av ulike årsaker. Selv om prøveresultatene dine er normale, er det viktig at du kontakter lege med en gang dersom du får symptomer som for eksempel uregelmessige blødninger, blødninger etter samleie eller etter overgangsalderen, unormal utflod eller vedvarende smerter i underlivet. Gå inn på <https://www.kreftregisteret.no/livmorhals> for å lese om ulemper og fordeler med å ta livmorhalsprøve.



### Reservasjon og personvern

Kreftregisteret lagrer opplysninger om dine prøvesvar. Du kan reservere deg mot at opplysninger ved normale funn lagres i Kreftregisteret. Du har rett til å motsette deg at Kreftregisteret deler din prøvehistorikk med helsepersonell som ber om det til bruk i oppfølgingen av deg. Du kan be om innsyn i opplysninger som er registrert om deg i Kreftregisteret.

Ring legen din eller oss hvis du lurer på noe angående livmorhalsprøven din.

Du finner mer informasjon på våre nettsider <https://www.kreftregisteret.no/livmorhals>

Kontakt oss på tlf. 22 45 13 00 hverdager fra 12-14.30 eller e-post [livmorhals@kreftregisteret.no](mailto:livmorhals@kreftregisteret.no)  
Vennligst ikke send helseopplysninger på e-post



## Graphics

The graphics are in line with the Cancer Registry's design guidelines and are inspired by the existing design of the letters. Here is an overview of the design considerations for the graphic style.

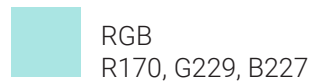
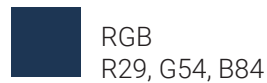
## Fonts

Headline and subheadings: Roboto Slab, bold  
Font, body text: Calibri, light

The font is the same as used on the NCCSP's website. The purpose of using the same font is to create a visual connection between letter and website.

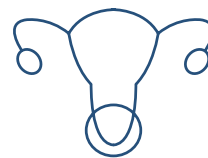
## Colors

The colors used are retrieved from the logo of the NCCSP and the #sjekkdeg-logo used by the NCCSP.



## Icons

The icons are not filled to give a lighter expression. The color is taken from the logo of the NCCSP.





# User Testing and Reflection

The letter has been user tested by asking women aged 25 to read the letter and provide feedback.

Before the letter was given to women, they were asked if they were aware of cancer screening and if they did what did they know.

Some women were surprised that they should take a pap smear even though they were vaccinated.

After reading the letter they were asked what they believed was the main message of the letter and what they thought of the letter itself.

Even though most of the interviewees knew about the #sjekkedeg-campaign, not all women were able to connect the letter to the campaign.

## Findings

One of the main findings of the testing was that none of the women reading the letter actually read the full letter.

The letter was perceived as somewhat clinical, impersonal and tekst heavy.

Still, the main message of the letter was understood.





# Inspirational Design Proposal

# Letter for 25 Year Olds

## Inspirational Design Proposal

When user testing the letter co created with the NCCSP, it was clear that there were still some room to explore how the letter could better accommodate for the needs of the user. This section describes a design proposal which exemplify how the principles can be used when redesign of the letter for 25 year olds.

### Intention

The intention of the inspirational design proposal is to explore how the letter might look like. In order to be more in line with findings from the research and feedback from user testing, it pushes the boundaries of the existing letter as well as the design guidelines of the Cancer Registry The letter is meant as inspiration and as an input for future designs of the letter and other content.

### Design Process

The design decisions are influenced heavily by the feedback form user testing, including the letter used now and the co created letter.



Inspirational Design Proposal

The phrase “All the information you need can be found in this letter (...)” has been moved to the top of the letter to provide more space for illustrations.

---

#### Personal

Icons are replaced with illustrations to give a more personal expression.

---

#### Reference to #sjekkdeg

---

#### Design for Legibility

Larger line spacing makes the text less compact and thus more readable.

---



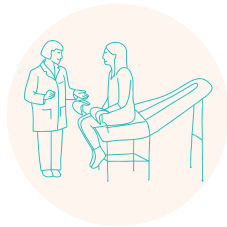
## Livmorhalsprøve - en prøve som kan redde liv

Viktig informasjon til deg som fyller 25 år i 2019. All informasjon du trenger finner du i dette brevet eller på [kreftregisteret.no/livmorhals](http://kreftregisteret.no/livmorhals)

English: This letter contains important information about cancer screening. For more information in English: [kreftregisteret.no/cervix](http://kreftregisteret.no/cervix).



**1. Bestill time hos din fastlege**



**2. Ta livmorhalsprøve**



**3. Reduser sjansen for livmorhalskreft**

### Det er viktig at du tar livmorhalsprøve, selv om du er ung, frisk og HPV-vaksinert

Regelmessige livmorhalsprøver kan avdekke alvorlige celleforandringer før de utvikler seg til livmorhalskreft. Celleforandringer er ikke det samme som livmorhalskreft og gir oftest ikke symptomer. Celleforandringer kan enkelt behandles.

### Livmorhalsprogrammet - starten på en god vane

Kvinner mellom 25 og 69 år anbefales å ta livmorhalsprøve regelmessig. Målet er å forebygge livmorhalskreft som rammer kvinner i alle aldre. Tar du livmorhalsprøve regelmessig, reduserer du sjansen for å få livmorhalskreft med ca. 90 %. Hvis du allerede har tatt prøve får du påminnelse fra Livmorhalsprogrammet når det er tid for ny prøve.

Vennlig hilsen  
Ameli Tropé  
Leder for Livmorhalsprogrammet

Snu arket for mer informasjon 

### Design for Legibility

---

Bullet points provide improved legibility.

### Personal

---

Illustrations complements the text. The Text explains what to do. and why.

### Address common myths

---

Illustration of heterosexual and lesbian couple to emphasize that HPV can affect both heterosexual and lesbians.

Repetition of important information, the test is taken at the GP.

---

Suggestions for using the #sjekkdeg-logo. Today, NCCSP is not allowed to use this logo as they do not have the rights.

---



### En livmorhalsprøve tas ved en gynekologisk undersøkelse

- Undersøkelse som tar noen få minutter. Det skal ikke gjøre vondt, men noen ganger kan det oppleves litt ubehagelig.
- Legen din får svar på prøven vanligvis innen en måned.
- Ved unormale prøvesvar har legen ansvar for å gi deg informasjon og henvise til videre oppfølging.
- Ved normale prøveresultater anbefales du å ta en ny prøve om tre år.
- Livmorhalsprogrammet vil sende deg en påminnelse når det nærmer seg tid for ny prøve.



Det er mer lettvisnt å ha på kjole.



Ta gjerne med deg noen hvis du ønsker.



Ikke ta prøven når du har menstruasjon fordi blod i prøven kan gi feil svar.



Unngå tamponger, fødselsprekativt skum, vaginale geléer og kremer i et døgn før prøven da det kan påvirke prøveresultatet.

### HPV (humant papillomavirus) er årsaken til livmorhalskreft



HPV er den vanligste seksuelt overførbare infeksjonen. 80 % av seksuelt aktive kvinner og menn smittes i løpet av livet.



90 % av infeksjonene går over i løpet av 2 år.



Alvorlige celleforandringer og livmorhalskreft skyldes en langvarig (10-15 år) infeksjon med HPV.

### Du tar livmorhalsprøven hos din fastlege

Ønsker du å ta prøven hos gynekolog, kreves det i de fleste tilfeller henvisning fra fastlege. Noen jordmødre tar også prøver. Du må selv betale en egenandel for undersøkelsen.

### Ingen livmorhalsprøve er 100 % sikker

Regelmessige livmorhalsprøver reduserer sjansen for å utvikle livmorhalskreft med ca. 90%, men alvorlige celleforandringer kan forbli uoppdaget av ulike årsaker. Selv om prøveresultatene dine er normale, er det viktig at du kontakter lege med en gang dersom du får symptomer som for eksempel uregelmessige blødninger, blødninger etter samleie eller etter overgangsalderen, unormal utflod eller vedvarende smerter i underlivet. Gå inn på <https://www.kreftregisteret.no/livmorhals> for å lese om ulemper og fordeler med å ta livmorhalsprøve.

### Reservasjon og personvern

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Ring legen din eller oss hvis du lurer på noe angående livmorhalsprøven din.  
Du finner mer informasjon på våre nettsider <https://www.kreftregisteret.no/livmorhals>

Kontakt oss på tlf. 22 45 13 00 hverdager fra 12-14.30, eller e-post [livmorhals@kreftregisteret.no](mailto:livmorhals@kreftregisteret.no)  
Vennligst ikke send helseopplysninger på e-post.

**SJEKKDEG**

**Kreft**  
registeret

## Envelope

Since the letter is only two pages, there is not a lot of room for extra information. This means there is no room for information in other languages than Norwegian and English. Therefore I am suggesting to utilize the backside of the envelope. There can for example be a short sentence in the most relevant languages, encouraging to visit the website for more information or ask the GP for more information.

The languages are based on recommendations from Lixian Cheng, expert in health literacy and advisor at the Section for patient safety and equal health services at Oslo University Hospital:

- English
- Somali
- Arabic
- Urdu
- Polish



Envelope with text

## **Illustrations**

As some of the text is removed from the top, it allows for the illustrations to be moved further up. This means that the illustrations will be across the folding line of the letter. This is intentional to make the letter look more intriguing when folded so that the reader will unfold the letter to see the full illustrations, which is the main message of the letter.



Folded letter

## Remember Card

Letters often end up in the letter pile on the counter. Addressing this, I am suggesting a small colourful card where the receiver is encouraged to write the date of their doctor visit. The colour will stick out in a white paper pile, and might even be placed on the fridge or in the wallet.

The remember card is intended as a small nudge encouraging action.



Front



Back





Remember card

### **New Reimder Letter**

It is important that the letters resemble one another. A propsal for a reminder letter wich is sendt out after the first letter can be seen on the following page.





## Tid for Livmorhalsprøve

Dette er en påminnelse om å bestille legetime for ny livmorhalsprøve.

English: This letter contains important information about cancer screening. For more information in English: [krefregisteret.no/oenix](https://www.krefregisteret.no/oenix).



1. Bestill time hos din fastlege



2. Ta livmorhalsprøve



3. Reduser sjansen for livmorhalskreft

### Det er viktig at du tar livmorhalsprøve, selv om du er ung, frisk og HPV-vaksinert

Regelmessige livmorhalsprøver kan avdekke alvorlige celleforandringer før de utvikler seg til livmorhalskreft. Celleforandringer er ikke det samme som livmorhalskreft og gir oftest ikke symptomer. Celleforandringer kan enkelt behandles.

### Livmorhalsprogrammet - starten på en god vane

Kvinner mellom 25 og 69 år anbefales å ta livmorhalsprøve regelmessig. Målet er å forebygge livmorhalskreft som rammer kvinner i alle aldre. Tar du livmorhalsprøve regelmessig, reduserer du sjansen for å få livmorhalskreft med ca. 90 %. Hvis du allerede har tatt prøve får du påminnelse fra Livmorhalsprogrammet når det er tid for ny prøve.

Vennlig hilsen  
Ameli Tropé  
Leder for Livmorhalsprogrammet

Snu arket for mer informasjon →

### Kologisk undersøkelse

Det skal ikke gjøre vondt, men noen ganger kan det oppleves litt ubehagelig innen en måned.

Var for å gi deg informasjon og henvise til videre oppfølging, du å ta en ny prøve om tre år.

En påminnelse når det nærmer seg tid for ny prøve.



Ikke ta prøven når du har menstruasjon fordi blod i prøven kan gi feil svar.



Unngå tamponger, fødselspreparativt skum, vaginale geléer og kremer i et døgn før prøven da det kan påvirke prøveresultatet.

### Skjult til livmorhalskreft



90 % av infeksjonene går over i løpet av 2 år.



Alvorlige celleforandringer og livmorhalskreft skyldes en langvarig (10-15 år) infeksjon med HPV.

De fleste tilfeller henvisning fra fastlege. Noen jordmødre tar også prøver under undersøkelsen.

Sjansen for å utvikle livmorhalskreft med ca. 90%, men alvorlige celleforandringer kan utvikles. Selv om prøveresultatene dine er normale, er det viktig at du kontakter legen din for eksempel uregelmessige blødninger, blødninger etter samleie eller etter overgangsalderen, unormal utflod eller vedvarende smerter i underlivet. Gå inn på <https://www.krefregisteret.no/livmorhals> for å lese om ulemper og fordeler med å ta livmorhalsprøve.

### Reservasjon og personvern

Krefregisteret lagrer opplysninger om dine prøver. Du kan reservere deg mot at opplysninger ved normale funn lagres i Krefregisteret. Du har rett til å motsette deg at Krefregisteret deler din prøvehistorikk med helsepersonell som ber om det til bruk i oppfølgingen av deg. Du kan be om innsyn i opplysninger som er registrert om deg i Krefregisteret.

Ring legen din eller oss hvis du lurer på noe angående livmorhalsprøven din. Du finner mer informasjon på våre nettsider <https://www.krefregisteret.no/livmorhals>

Kontakt oss på tlf. 22 45 13 00 hverdager fra 12-14.30, eller e-post [livmorhals@krefregisteret.no](mailto:livmorhals@krefregisteret.no). Vennligst ikke send helseopplysninger på e-post.



# User Testing

Both letters for 25 year olds were user tested by women within the target audience.

The feedback on the inspirational letter was that it was more appealing and friendly. The testers spent more time looking at the letter as well.

When both letters were put in front of the woman, the attention went first to the inspirational letter.



User testing redesigned letters





# Digital Letter

The following section describes a design proposal exemplifying how the design principles can be used for making a letter for the digital mailbox.

Digital letters are sent using the digital mailbox, which is a national public service for receiving and storing mail digitally. In Norway there are two public digital mailboxes, digipost and e-box (difi, 2019). Whether it is sent through digipost or e-box depends on the service the woman has chosen to use. When the digital letter is sent, both Digipost and e-box sends a notification on email. If the digital letter is not opened, digipost and e-box sends an SMS notification as well.

According to the Randi Waage, women who receives the digital letter has a higher screening rate. The digital letter has a low read-rate, and the hypothesis of the NCCSP is that the reminder on email and SMS is enough to remind women

## Intention

Today the digital letter is the same as the physical letter. The redesigns aims to take better advantage of the letter being digital and herby challenging the idea that the digital and physical letter should be alike. The content of the letters will be the same, only the layout and hierarchy are changed. A redesign of the digital letter might help increase the participation rate of women receiving the digital letter even more. The design proposal for the digital letter can be tested alongside the original letter to measure the effect of a redesign.



Woman reading letter from the NCCSP on digipost.

### Design for Legibility

Clear headline and space between the lines

---

### Design for Legibility

Introduction with highlighted text to emphasize the message

---

### Design for non-norwegian speakers

Clear button for information in English, with link to English website

---

Large illustrations

---

### Nudge

Direct link to your GP. This is not possible today, but can be of inspiration.

---

### Design for Legibility

Bulletpoins is used for better legibility

---





## Livmorhalsprøve - en prøve som kan redde liv

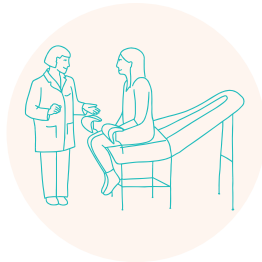
Viktig informasjon til deg som fyller 25 år i 2019  
Tar du livmorhalsprøve regelmessig, reduserer du  
sjansen for å få livmorhalskreft med **ca. 90 %**

This letter contains important information about cancer screening.

For information in English



**Bestill time hos  
din fastlege**



**Ta livmorhalsprøve**



**Reduser sjansen  
for livmorhalskreft**

Bestill time

### Det er viktig at du tar livmorhalsprøve, selv om du er ung, frisk og HPV-vaksinert

- Regelmessige livmorhalsprøver kan avdekke alvorlige celleforandringer før de utvikler seg til livmorhalskreft.
- Celleforandringer er ikke det samme som livmorhalskreft og gir oftest ikke symptomer.
- Celleforandringer kan enkelt behandles.

Design for Legibility

---

Generous line spacing for increased legibility

Design for Legibility

---

A lot of white space makes the letter lighter

Better space for illustrations

---

## Livmorhalsprogrammet - starten på en god vane

Kvinner mellom 25 og 69 år anbefales å ta livmorhalsprøve regelmessig. Målet er å forebygge livmorhalskreft som rammer kvinner i alle aldre. Tar du livmorhalsprøve regelmessig, reduserer du sjansen for å få livmorhalskreft med ca. 90 %. Hvis du allerede har tatt prøve får du påminnelse fra Livmorhalsprogrammet når det er tid for ny prøve.

### En livmorhalsprøve tas ved en gynekologisk undersøkelse

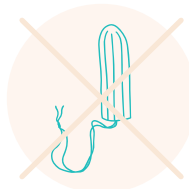
- Undersøkelse som tar noen få minutter. Det skal ikke gjøre vondt, men noen ganger kan det oppleves litt ubehagelig.
- Legen din får svar på prøven vanligvis innen en måned.
- Ved unormale prøvesvar har legen ansvar for å gi deg informasjon og henvise til videre oppfølging.
- Ved normale prøveresultater anbefales du å ta en ny prøve om tre år.
- Livmorhalsprogrammet vil sende deg en påminnelse når det nærmer seg tid for ny prøve.



Det er mer lettvent å ha på kjole



Ta gjerne med deg noen hvis du ønsker



Ikke ta prøven når du har menstruasjon fordi blod i prøven kan gi feil svar



Unngå tamponger, fødselsprevantivt skum, vaginale geléer og kremer i et døgn før prøven da det kan påvirke prøveresultatet

Centered text

---

Clear button to the right place on the NCCSP's website

---

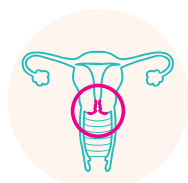
## HPV (humant papillomavirus) er årsaken til livmorhalskreft



HPV er den vanligste seksuelt overførbare infeksjonen. 80 % av seksuelt aktive kvinner og menn smittes i løpet av livet.



90 % av infeksjonene går over i løpet av 2 år.



Alvorlige celleforandringer og livmorhalskreft skyldes en langvarig (10-15 år) infeksjon med HPV.

### Du tar livmorhalsprøven hos din fastlege

Ønsker du å ta prøven hos gynekolog, kreves det i de fleste tilfeller henvisning fra fastlege. Noen jordmødre tar også prøver. Du må selv betale en egenandel for undersøkelsen.

### Ingen livmorhalsprøve er 100 % sikker

Regelmessige livmorhalsprøver reduserer sjansen for å utvikle livmorhalskreft med ca. 90%, men alvorlige celleforandringer kan forbli uoppdaget av ulike årsaker. Selv om prøveresultatene dine er normale, er det viktig at du kontakter lege med en gang dersom du får symptomer som for eksempel uregelmessige blødninger, blødninger etter samleie eller etter overgangsalderen, unormal utflod eller vedvarende smerter i underlivet. Lese mer om ulemper og fordeler med å ta livmorhalsprøve her:

[Les mer](#)

Line for breaking up the letter \_\_\_\_\_

Icons and button for direct mail or phone \_\_\_\_\_

## Ingen livmorhalsprøve er 100 % sikker

Regelmessige livmorhalsprøver reduserer sjansen for å utvikle livmorhalskreft med ca. 90%, men alvorlige celleforandringer kan forbli uopptaget av ulike årsaker. Selv om prøveresultatene dine er normale, er det viktig at du kontakter lege med en gang dersom du får symptomer som for eksempel uregelmessige blødninger, blødninger etter samleie eller etter overgangsalderen, unormal utflod eller vedvarende smerter i underlivet. Lese mer om ulemper og fordeler med å ta livmorhalsprøve her:

[Les mer](#)

## Reservasjon og personvern

Kreftregisteret lagrer opplysninger om dine prøvesvar. Du kan reservere deg mot at opplysninger ved normale funn lagres i Kreftregisteret. Du har rett til å motsette deg at Kreftregisteret deler din prøvehistorikk med helsepersonell som ber om det til bruk i oppfølgingen av deg. Du kan be om innsyn i opplysninger som er registrert om deg i Kreftregisteret.

[Les mer](#)

Ring legen din eller oss hvis du lurer på noe angående livmorhalsprøven din.

Du finner mer informasjon på våre nettsider



Kontakt oss på tlf. 22 45 13 00  
hverdager fra 12-14.30



livmorhals@kreftregisteret.no  
Vennligst ikke send  
helseopplysninger på e-post.

**SJEKKDEG**

**Kreft**  
registeret

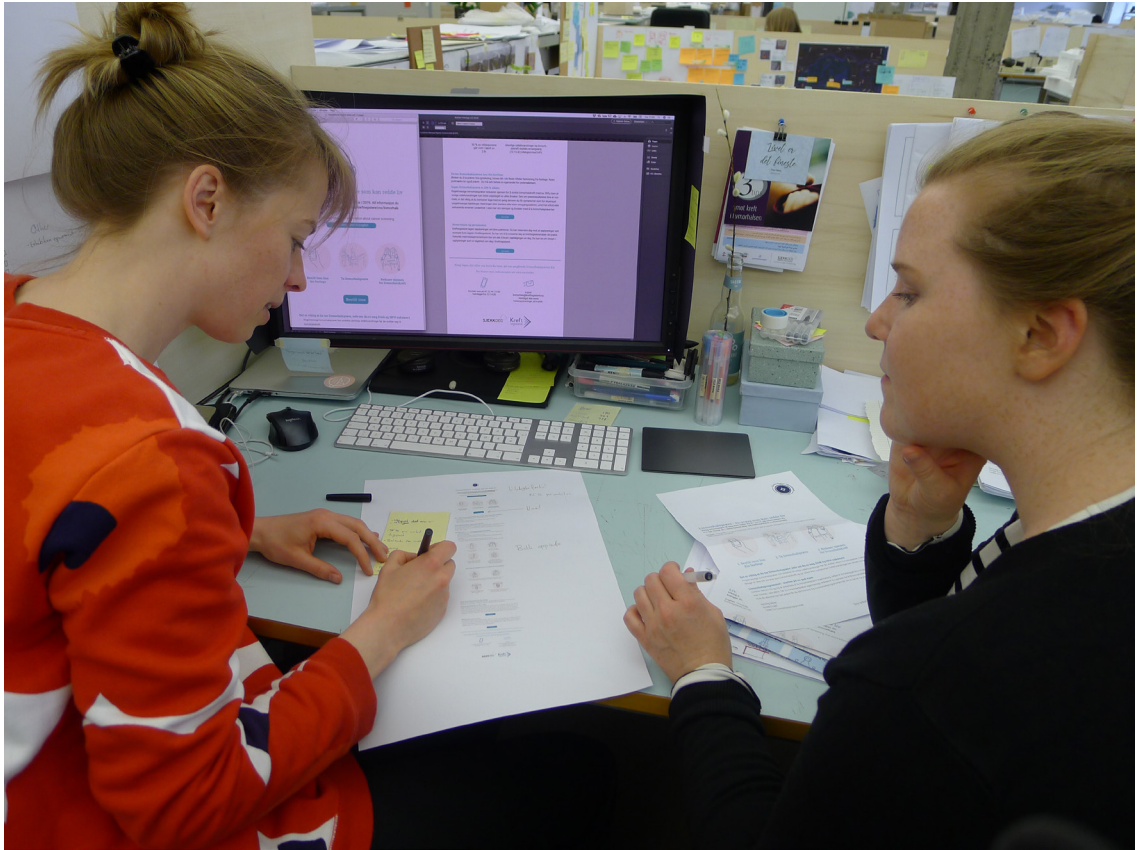
## **Design Procces**

When designing the digital letter I consulted Victoria Allan, social Media Advisor and Creative at Just Cruising Production (JCP). She provided feedback and input on how to design the digital letter in order to make it more catchy and fit the digital channel.

## **User Testing**

The design proposal for the digital letter has not been user tested on a digital platform. A way of user testing the proposal could be to AB-test it, meaning that the NCCSP can send out both an a pdf of the physical letter as well as a modified digital letter to two different groups. They can then measure the screening rate of the two different groups to see if a redesign has a positive effect on screening rates.





Feedback session with Victroia Allan, social Media advisor and Creative at JCP.

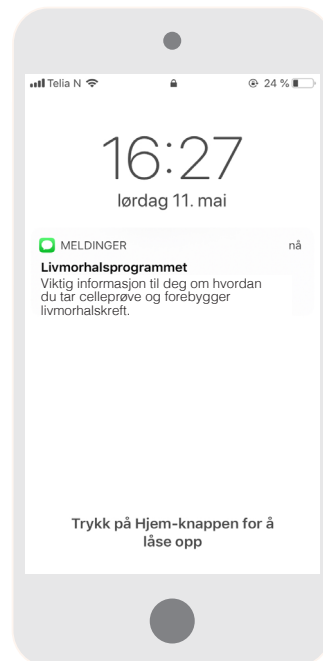
# SMS

The following section explores how the text in the SMS might be rewritten, with attention to non-norwegian speakers.

One of the findings from the research is that the SMS-notification is an important touchpoint. Some women over the age of 25 has no recollection of receiving a letter, but remember receiving an SMS.

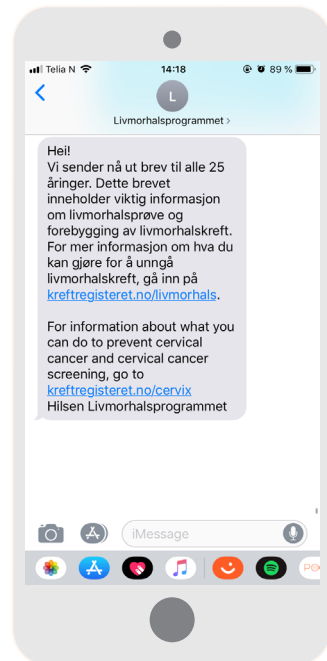
The text that is in the sms today is "Viktig informasjon til deg om hvordan du tar celleprøve og forebygger livmorhalskreft". This would translate to "Important information for you on how to take a cell sample and prevent cervical cancer".

The SMS does not contain any link to the NCCSP's website nor information in English.



The redesigned content of the SMS has more information as well as an explanation of what the SMS is regarding, and connecting the SMS to the letter. It also provides a link to the NCCSP's website.

It is also important that non Norwegian speakers has an option to find more information. The redesigned option has a link to the website as well as some english text.







# Social Media Campaign

The following section describes a design proposal exemplifying how the design principles can be used for making a social media campaign on Instagram.

Today, the Cancer Registry is using Facebook to promote the screening programmes. They have the page “Kreftsjekken”, which can be translated to The Cancer Test in English. The page promotes both the NCCSP and the Breast screening Norway. The page has 8000 followers.

Here is a proposal for a targeted campaign on both Facebook and Instagram. Facebook has almost 3,5 million users in Norway, with 53% female users. Instagram is also one of the most used social media services in Norway with 2,3 million users where 57% are female. The numbers are according to Ipsos, which specializes in social media usage (Ipsos, 2019).

Some of the less critical information in the letter is removed and could be content for the website and social media instead. This is to avoid information overload. Social media allows for spreading information over different touchpoints and using repetition over time through different channels.

## Intention

The campaign is meant to run while the letters are sent. The intention is to promote the message in the letter. According to an Ph.D. student researching the impact of written health information, written health information increases knowledge and improves intention, but does not necessarily lead to a change in behavior. Therefore it is possible to assume that the letter, no matter how well designed, might not have the desired effect on its own. The social media campaign is therefore meant as a complementary element that might make the message more personal and pronounced.

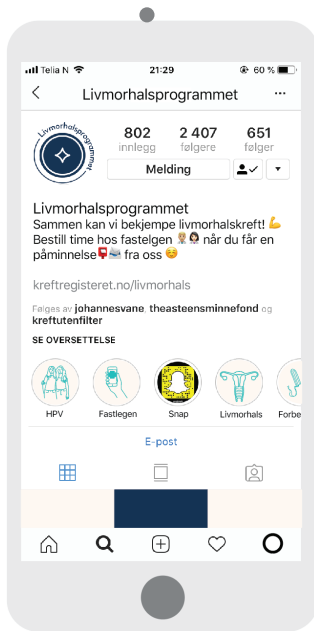
Contrary to the letter, social media allows for a dynamic communication where the audience can share, comment and ask questions on a platform they are familiar with. This requires that the NCCSP is able to follow up on potential questions and comments.

Additionally, social media also allows for targeted communication where they can use different languages and cultural references to impact different immigrant groups.



Sponsored post in Instagram

Here is a few examples of how an Instagram account managed by the NCCSP can look like. The graphic matches the letter and the content is the information from the letter as well as personal stories from women who have taken the Pap smear test.



A new Instagram account with the NCCSP's logo.



Information about the NCCSP as sponsored content targeted towards relevant audiences.



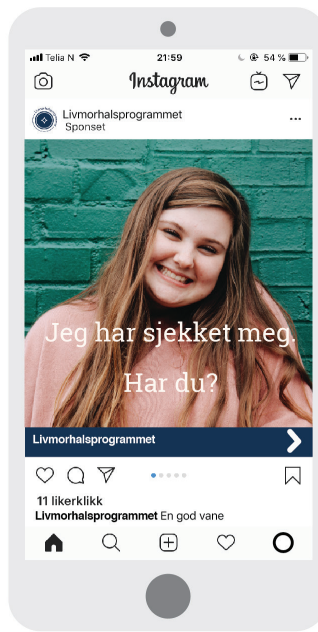
Information about HPV as sponsored content targeted towards relevant audiences.



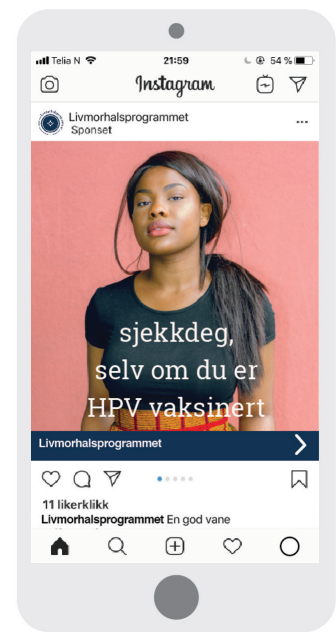
An important finding is that women who are familiar with the NCCSP often don't read the full letter as they "know" the content. Therefore, if there is any new information in the letter, this information is easily overlooked. Social media can be a channel to emphasize new and important information.



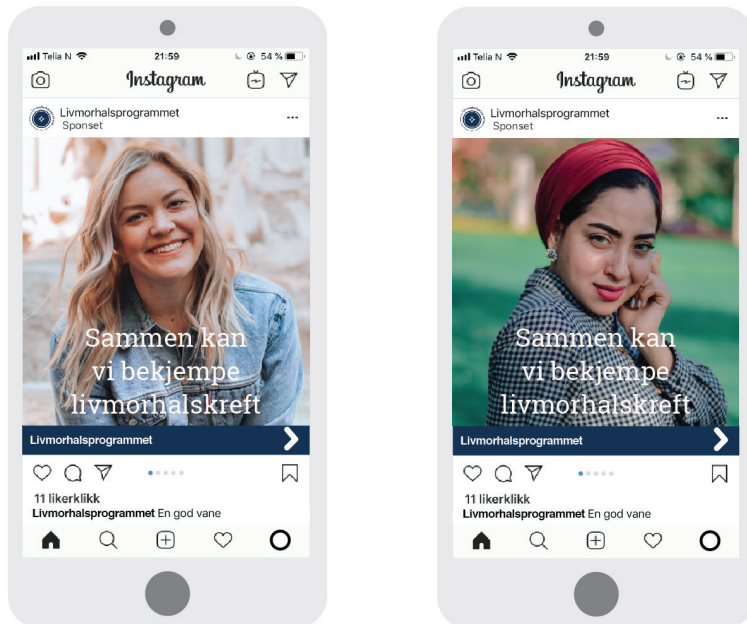
Information videos about HPV



"I have taken the test, have you?"

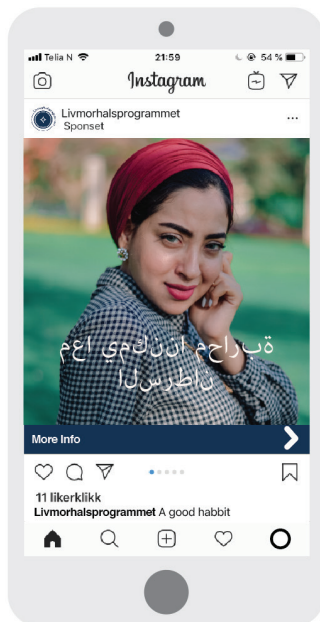


Sharing portraits of women who have screened to nudge by peer pressure. The women portrayed are representing different groups. The intention for this is for the woman seeing the post to be able to identify themselves with the content.

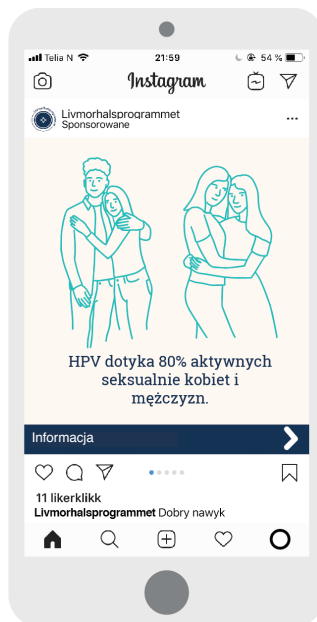


“Together we can fight cervical cancer”

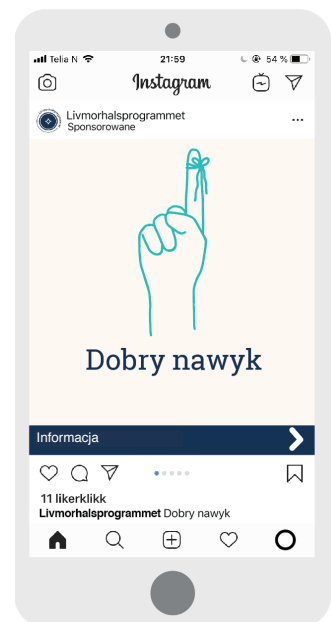
A finding from the research is that few women are aware of the fact that cervical cancer can be eradicated. The text of this post is to promote a sense of togetherness against cervical cancer and that we all can do something to fight it.



Different languages can be used for different audiences. Here is an example in arabic. The link goes to web page in the same language.



Example in polish







# Follow-up E-mail

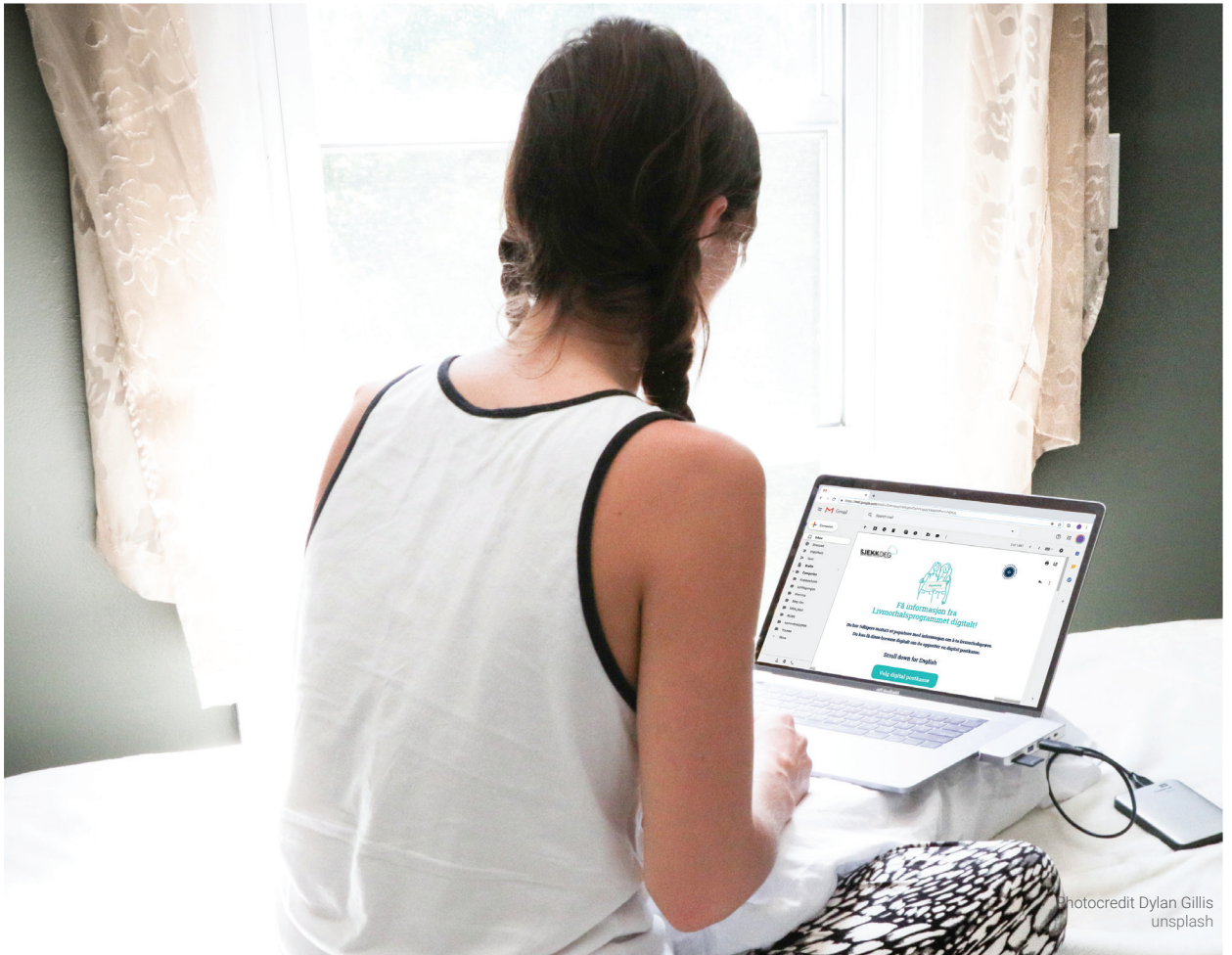
The NCCSP want more women to sign up for digital mailbox. In collaboration with the Agency for Public Management and eGovernment (Difi), the NCCSP sends out emails encouraging more women to sign up.

Today, 50% of the letters are sent digitally using Digipost or e-boks. As mentioned there are several benefits of sending the letter digitally, in addition to the lower cost and less paper usage. But in order for the NCCSP to send the letter digitally, women have to be signed up for either Digipost or e-boks.

Therefore, the NCCSP sends out emails to women who has not signed up to Digipost or e-box, encouraging them to do so. The e-mail is scheduled to be sent out after the summer of 2019. The following sections describes a suggestion for the e-mail, designed with the design principles in mind

## Intention

The intention of the redesign of the email is to explore how the email might look like. The email is planned to be sent out at the same time as the #sjekkdeg-campaign is running. My hypothesis is that if the email has the same graphical style as the campaign, the email might have an higher impact.



photocredit Dylan Gillis  
unsplash

Woman reading email from the NCCSP

### Referencing #sjekkdeg

---

### Personal

---

Illustrations from letter to make a graphic link as well as an eye-catching start of the email.

### Designing for Legibility

---

Large headline stating the intention with the letter.

### Designing for non-norwegian speakers

---

The English option is included in the email in order for lowering the threshold for reading the content.

Large button with link to Norge.no, where one can register for digital mailbox

---

### Design for Legibility

---

The benefits of subscribing to a digital mailbox in bulletpoints to make it more clear and easy to read.





## Få informasjon fra Livmorhalsprogrammet digitalt!

Du har tidligere mottatt et papirbrev med informasjon om å ta livmorhalsprøve.

Du kan få disse brevene digitalt om du oppretter en digital postkasse.

Scroll down for English

### Velg digital postkasse

- ✓ Få informasjonen **der du er**
- ✓ Du får **varsel på SMS** når det er tid for livmorhalsprøve.
- ✓ Flere offentlig brev **på et sted**
- ✓ Velg mellom Digipost eller e-boks
- ✓ Tjenesten er **gratis**
- ✓ **Miljøvenlig**

### Repetition

---

The most important content from the letter is repeated in the email.

### Personal

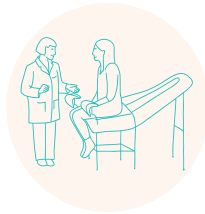
---

Illustrations to make the email more personal and intriguing.

## Det er viktig at du tar livmorhalsprøve, selv om du er ung, frisk og HPV-vaksinert



**Bestill time hos din fastlege**



**Ta livmorhalsprøve**



**Reduser sjansen for livmorhalskreft**

- Kvinner over 25 år anbefales å ta livmorhalsprøve regelmessig
- Tar du livmorhalsprøve regelmessig, reduserer du sjansen for å få livmorhalskreft med ca.90%.
- Regelmessige livmorhalsprøver kan avdekke alvorlige celleforandringer før de utvikler seg til livmorhalskreft.
- Celleforandringer er ikke det samme som livmorhalskreft og gir oftest ikke symptomer.
- Celleforandringer kan enkelt behandles.

Med vennlig hilsen Livmorhalsprogrammet og Difi Direktorat for forvaltning og IKT (Difi)

## Designing for non-norwegian speakers

---

The email is repeated in English.

## Get information from the Norwegian Cervical Cancer Screening Programme digitally!

You have previously received a paper letter with information about taking the pap test. You can receive these letters digitally if you get the digital mailbox.

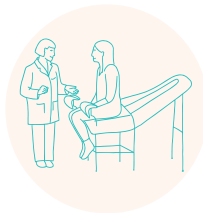
### Get the digital mailbox

- ✓ Receive information where you are
- ✓ You will receive SMS notification when it is time for a pap test.
- ✓ More public letters in one place
- ✓ Choose between Digipost or e-box
- ✓ The service is free
- ✓ Environmentally friendly

It is important that you take the pap test even if you are young, healthy and HPV-vaccinated.



**Book an appointment with your GP**



**Take a pap test**



**Reduce the risk of cervical cancer**

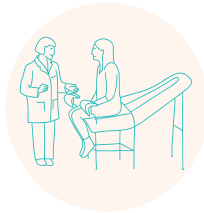
### Design for Legibility

---

Large icons completing the text  
making it easier to find help.



### Book an appointment with your GP



### Take a pap test



### Reduce the risk of cervical cancer

- Women over the age of 25 are recommended to take a pap test regularly
- Taking a pap test regularly reduces the chance of cervical cancer by about 90%.
- Regular pap tests may reveal severe cell changes before they develop into cervical cancer.
- Cell changes are not the same as cervical cancer and usually do not have symptoms.
- Cell changes can be easily treated.

Sincerely, Norwegian Cervical Cancer Screening Programme and The Directorate for Administration and ICT (Difi)

You cannot reply to this email address

For questions about the Cervical program see [www.kreftregisteret.no/livmorhals](http://www.kreftregisteret.no/livmorhals)  
For questions about digital mailbox, contact Difi Directorate for Administration and ICT.



80030300



[brukerstotte@difi.no](mailto:brukerstotte@difi.no)

# Graphic Style

The same graphic style is used for the different design proposals and are inspired by the #sjekkdeg-campaign. The graphics is intended to be calming and friendly in order to counter the cancer scare.

## Illustrations

The illustrations are designed to give a more personal expression. The color is taken from the new #sjekkdeg-logo.

## Fonts

Font, headline and subheadings:

Roboto Slab, bold

Font, body text: Calibri

The font is the same as the one used the NCCSP's website. If the woman chooses to go to the the NCCSP's website or click on a link there will be more of a resemblance.

## Colors

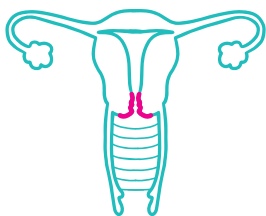
The colors used are taken from the logo from the latest #sjekkdeg-logo, to create a stronger visual connection between letters and campaign.



#sjekkdeg logo  
R32, G189, B190



Complementary color  
R225, G234, B214





# SJEKK DEG KREFTFORENINGEN



## FAKTA

### OM #SJEKKDEG OG LIVMORHALSKEFT

**Det er #sjekkdeg!**  
Et kampanje med mål om å få flere kvinner til å kreftforening og unngå kreftsykdom.

**Skreddersydd til #sjekkdeg!**  
Våren 2019 fikk Thea Steen kreftforening, sammen med Kreftforening og Det Norske Livmorkreftforbundet, som støtte for 2000 kvinner til å ta livmorkrefttest. Mange har sagt ja til test.

**Det er #sjekkdeg!**  
Her er 10 tips for deg som vil ta kreftforening, unngå kreft.

**Tip 1: Livmorkrefttest**  
Prøve om du har livmorkreft og om du har livmorkreft. Prøven kan du ta hos legen din, eller på posten.

**Tip 2: Sjekk deg!**  
For å bli mer opplyst om livmorkrefttest. Sjekk deg på livmorkrefttest.no

**Tip 3: Sjekk deg!**  
Sjekk deg på livmorkrefttest.no. Sjekk deg på livmorkrefttest.no. Sjekk deg på livmorkrefttest.no.

**Tip 4: Sjekk deg!**  
Sjekk deg på livmorkrefttest.no. Sjekk deg på livmorkrefttest.no. Sjekk deg på livmorkrefttest.no.

**Tip 5: Sjekk deg!**  
Sjekk deg på livmorkrefttest.no. Sjekk deg på livmorkrefttest.no. Sjekk deg på livmorkrefttest.no.

**Tip 6: Sjekk deg!**  
Sjekk deg på livmorkrefttest.no. Sjekk deg på livmorkrefttest.no. Sjekk deg på livmorkrefttest.no.

**Tip 7: Sjekk deg!**  
Sjekk deg på livmorkrefttest.no. Sjekk deg på livmorkrefttest.no. Sjekk deg på livmorkrefttest.no.

**Tip 8: Sjekk deg!**  
Sjekk deg på livmorkrefttest.no. Sjekk deg på livmorkrefttest.no. Sjekk deg på livmorkrefttest.no.

**Tip 9: Sjekk deg!**  
Sjekk deg på livmorkrefttest.no. Sjekk deg på livmorkrefttest.no. Sjekk deg på livmorkrefttest.no.

**Tip 10: Sjekk deg!**  
Sjekk deg på livmorkrefttest.no. Sjekk deg på livmorkrefttest.no. Sjekk deg på livmorkrefttest.no.



Livmorkreft kan forebygges med en enkel test



Ring fastlegen din når du sjekker deg i posten



Har du fylt 25 år?  
Ring fastlegen, sjekk deg, unngå livmorkreft.

#SJEKKDEG



SJEKKDEG  
KREFTFORENINGEN





# Tool for Backend

A booklet intended for the team working on the NCCSP letters.

For the employees at the NCCSP I have created a booklet describing the six principles. The booklet also contains the redesigns showing how the principles can be used when creating new touchpoints and content. It also contains input for the website. The booklet is intended as a helpful and inspiring tool for the NCCSP.

The booklet can be found as an attachment to the report.

# Tips, triks og inspirasjon

Utforming av brev som sendes ut til kvinner i forbindelse med Livmoralprogrammet.







# Result and Feedback

The design proposal co created with the NCCSP will be used and sent out to all 25 year olds this year. The NCCSP was also excited about the inspirational design proposal and would like to use it for AB testing when sending out letters next year. They would also use some of the input for the digital letter and the email.

Therefore, this project has succeeded in creating a design proposal which is relevant, inspiring and implementable. Still, there are many needs and barriers which are not addressed. Nonetheless, these design interventions will hopefully serve as a step towards information materials which accommodate the needs and barriers of women with various backgrounds.

*“Ester Kaasa har gjort en veldig god jobb med å sette seg inn i hvorfor kvinner ikke tar livmorhalsprøve.*

*Hun har gjort dette ved å lese seg opp om livmorhalskreftscreening og Livmorhalsprogrammet. I tillegg har hun intervjuet kvinner og ulike aktører som jobber med screeningprogrammet.*

*Ester har kommet med innspill om hvordan vi kan endre vårt informasjonsbrev til 25-åringene og hun har kommet med et helt nytt forslag. I år kommer vi til å bruke hennes innspill i vårt brev og til neste år vil vi mest sannsynlig bruke hennes nye forslag.”*

*Ameli Tropé leder for Livmorhalsprogrammet og Randi Waage Rådgiver og ansvarlig for informasjon i Livmorhalsprogrammet*





Feedback session



# **Conclusion and Reflection**

This chapter contains reflections on both the process and the design deliverables and the main contribution of this project.

# Reflection

## Reflection on design interventions

The impact of a **new letter design** will be known when the NCCSP can retrieve data about screening rates next year. Still, it is possible to assume that the co created letter design will have a positive impact. Added information in English and information on where to find more info will lower the threshold for non-norwegian speakers.

As mentioned the **co created letter** is not finalized are still being modified. The NCCSP has received icons and and guidelines for making changes, and we are still in dialogue. At this point of time, the biggest challenge is to make sure all sentences are according to research. Additionally, the letter is being tested by the IT-department to see if it is possible to make the letter the right size for digital distribution. If the letter is too large, it has to be modified.

Ameli Tropé and Randi Waage was very excited about **the inspirational letter** as well and would like to use it next year. The NCCSP have received InDesign-files, illustrations and guidelines if they would like to modify the letter. They will also contact Posten to discuss the possibilities of having text printed on the envelope. Two design proposals allows for AB-testing which the NCCSP requires when making changes in the letters.

**The social media campaign** is being evaluated. Creating a new account and managing it requires extra work for Randi, which already has her hands full. They would have to find the resources in order to launch the campaign.

**The inspirational digital letter** pushes the boundaries of the digital mailbox. The letter is a lot larger than the current, and in order for the letter to be used, the NCCSP has to allocate more money for the letter distribution. As the digital letter is often not opened, they would have to evaluate how to spend resources. It would also require more working hours to modify both a physical letter and a digital one. Still, important elements from the proposal such as language options and buttons can be used.

**The follow up email** will be sent out in collaboration with difi. Element from my inspirational design proposal will be used in the email.

**The SMS** is larger than the existing one which again requires more resources. This would have to be evaluated.

**The internal tool** contains input to the website, like for added language options. Translation of medical information is a complicated topic which the NCCSP is working on. Hopefully, this diploma will emphasise the need for language options. Organizing the information according to topic, instead of a long list of bullet points makes it easier for women to find the right information faster. Additionally, using medical terms consistently can reduce confusion and make women feel more safe and in control. This can help reduce anxiety.

Still there are many barriers and needs which are not addressed. Some are not addressed because it is impossible to address all of them and some are out of the NCCSP domain. Others are not addressed because the needs of women and the needs of the healthcare system are not compatible. For example an important finding is that many women are hesitant to take the Pap smear at their GP. Women might feel like its too private to have an gynecological examination done by someone they "know". Also, some women don't like their GP, but don't know how to find an alternative. Therefore they end up not taking the pap smear.

This particular topic was discussed with Ameli Tropé and one of the design proposal for the letter contained information about how to find alternatives. This was taken out in the final letter as it is important that the GP's take the Pap smears in order to get the necessary training. If GP's takes the Pap smears too seldom, the quality of the tests might go down. Also, there are no real alternatives within the norwegian healthcare system today.

All in all, the design proposals is a small step towards a service tackling health literacy. This, in itself, is not enough to eradicate cervical cancer. In the future, we will still see cases of cervical cancer. Hopefully, we will not experience women being diagnosed with cervical cancer because they don't speak Norwegian.

# Reflection

## Reflection on the design process

### Pushing the Boundaries

The NCCSP makes changes with great caution. They only makes changes if they can ensure there will be no negative consequences. The organization is deeply involved with research and everything they do is measured for research purposes. This has influenced the design process heavily. Still, with every iteration of the letter the boundaries of what was considered possible were pushed. In the beginning they were not enthusiastic about using illustrations instead of icons. In the end, they really liked them and were also open to use other colours than the ones defined in their design manual in order to create a reference to the #sjekkdeg-campaign.

Herby, the design proposal have broadened their perspective of what is possible with the mans they have. Still, I believed the boundaries could have been pushed even furter.

### #sjekkdeg

Even though I did not manage to have a workshop with both the NCS and the NCCSP, this diploma highlights the importance of the campaign.

A feedback from Ameli was that this diploma provided argumentation for keeping the campaign running and they will use this when negotiating with the NCS.

### Empowering the NCCSP

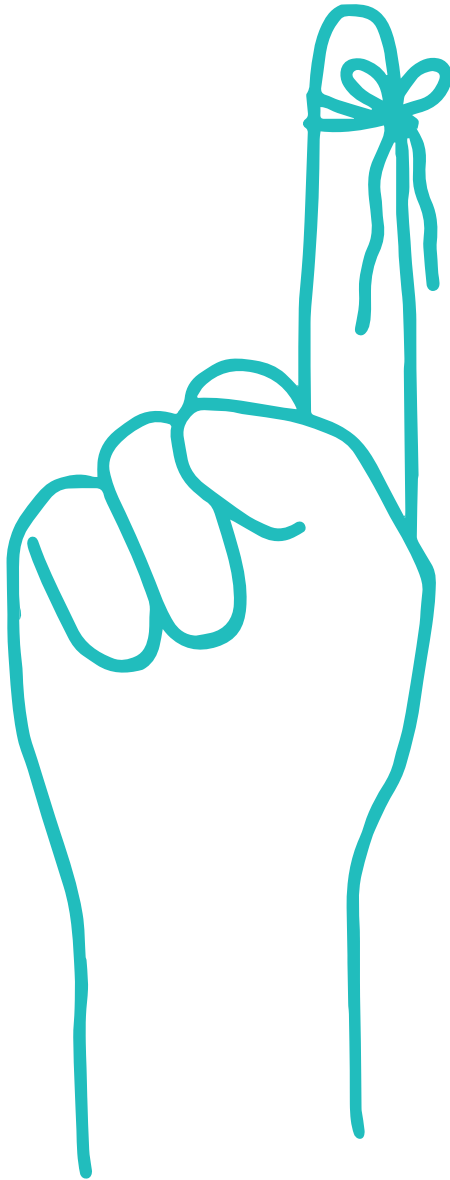
The proposed #sjekkdeg-campaign sparked a conversation within the NCCSP where they discussed possible campaign elements and collaborations. For me this shows that the design proposal has inspired the NCCSP to explore their own role and communication tools, if the #sjekkdeg-campaign was to be downsized.

### Close Collaboration

It has been a humbling experience to be allowed to work so closely with the NCCSP, and I can understand their caution when making changes as it is to ensure safe and secure health care services. On the contrary, I beleive that my goal of maiking something implementable has somewhat limited the scope of the project.

### Implementation

As mentioned, the co created letter will be sent out to all 25 year old this year. This proves that this diploma has made an implementable design.







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