

Breast cancer diagnosis at the Oslo University Hospital

Received via the European Commission

Published On: 03 June 2014

Organisation: Norwegian Design Council

Country: Norway

Level of government: Central government

Sector: Health

Type: Organisational Design

Launched in: 2013

Overall development time: 1 year

Link to the innovation's website

Like this innovation

0 persons like this innovation

Description

When a tumor is detected in a woman's breast for the first time by a general practitioner in Oslo, Norway, the patient has to wait in line for a diagnosis in order to decide if the tumor is malignant or benign. The waiting time used to be up to 12 weeks, where the patient would have to cope with all the uncertainties and strain. With an entirely new way of organising resources, the waiting time has now been reduced to 48 hours.

Why the innovation was developed

Response to the problem of long waiting times for diagnosis and the corresponding “inhuman” situation for all women concerned. Also, a response to a new long term strategy at the hospital where emphasis has been placed on listening to the patients in order to better meet user needs.

Objectives

Develop staff capacity, Improve effectiveness, Improve efficiency, Improve service quality, Improve user satisfaction

- At least 75% reduction of waiting times for breast cancer diagnosis, which at the time of project start-up was 12 weeks.
 - Reduction of women's anxiety, uncertainty and feelings of being forgotten.
 - Increased internal efficiency, seamless workflow and reduction of interruptions by telephones from anxious patients waiting in line.
-

Main beneficiaries

Families, General population

- Approximately 100 women are referred for diagnostic workups every week, a total of around 5 000 every year.
 - All professional medical staff involved in breast cancer diagnostics at the Oslo University Hospital, i.e. radiologists, pathologists, surgeons, oncologists, radiographers, nurses, secretaries and other support personnel.
-

Results

Efficiency

The waiting time from the point where a general practitioner determines a tumor in a woman's breast until diagnosis has been reduced by more than 90% (from a waiting time of 12 weeks to less than 48 hours).

Service quality

Accessibility:

The hospital is accessible for the patient within 48 hours after detection of a tumor by means of direct contact and appointment for diagnosis.

User satisfaction

User satisfaction has improved by avoiding a long waiting time, where in the past, the patient was left alone for 12 weeks with anxiety and unanswered questions.

Development

Design

The Norwegian Design Council has launched a Design-driven Innovation Programme, which issues yearly calls for grants for the industry and public sectors. The programme is financed by the Ministry of Trade & Industry. The aim is to encourage all sectors to execute innovation and ideation projects which utilise design methods and systematic need-assessment techniques. A top management representative, who was involved in the new user-oriented strategy at the hospital, applied for grants from this programme in 2012.

Design time: 4 months

Testing

Design-driven innovation process were used in the project, which includes testing in iterative loops throughout the project:

- Definition of a challenge.
- Corresponding systematic needs assessment, user-interviews and observation technics.
- Translation of user insight into numerous visualised solutions.
- Verification and evaluation of consequences.
- Choice of solutions/basis for implementation.

Testing time: 2 months

Implementation

Tools used:

- Service design facilitation by means of visualisation technics.
- Interdisciplinary co-production processes involving radiologists, pathologists, surgeons, oncologists, radiographers, nurses, secretaries and other support personnel.

Resources used:

Budget for the design-driven innovation process/ideation phase: EUR 100 000. No other investments were necessary regarding implementation, neither in buildings, offices, equipment or machines.

Implementation time: 4 months

Diffusion

- Press conference.
- Video.
- Publication.
- Seminars in health sector.
- Meeting with Norwegian government officials.
- Meeting with EU commission representatives.

Diffusion time: Ongoing

Challenges and solutions

Achieving a collective effort across all professions in order to reach a solution was a challenge, which was successfully obtained by service-design facilitation and management support.

Partnerships

Oslo University Hospital

Other Public Sector

There has been a continuous cooperation and exchange of information and support between the Norwegian Design Council and the Oslo University Hospital due to grants given through NDC's Design-driven Innovation Programme.

Private radiology centres in Oslo

Private sector

A contract has been established with two private radiology centres in Oslo. All routine follow-ups have been transferred, making sure the cross-functional teams in the hospital focus their attention on the diagnosis of new patients and their subsequent treatment. Additionally, a safety valve mechanism has been established so that if the number of referrals in any given week is higher than the hospitals' capacity, the private vendors will handle the overflow of new patients.

A service design agency

Other

Through the ideation, design and testing phase, a service design agency has been responsible for project management, user-involvement and facilitation of the project.

Lessons Learned

Lessons Learned

- Design-driven innovation methods can solve complex logistical and organisational problems which will result in higher user satisfaction and more efficient workflow in the public sector.
 - By means of service designers it is possible to facilitate processes where interdisciplinary cooperation and mutual agreement of scope is critical for finding new solutions to unsolved challenges.
 - Listening to patients/users by means of systematic needs-assessment can reframe a challenge/problem which nobody had thought about before and thus lead to a better solution.
-

Conditions for success

- Top management support and involvement.
 - Human and financial resources.
 - Stayer ability – on objective.
 - Open innovation ability – welcoming new partners and resources.
 - Determine a concrete and operational result as an objective for the project, not only aim for increased insight through research.
-

Other information

The innovation has been obtained through grants given by NDC's Design-driven Innovation Programme. The project would not have been executed without funding from this programme. Thus service-design would not have been introduced to Oslo University Hospital as a tool for coping with the waiting time challenge which has been reduced by more than 90%.

We would recommend that more countries and governments should study this programme scheme and evaluate its relevance in order to introduce new innovation tools within their public sectors.

<http://www.norskdigital.no/about-dip/category9128.html>