



**PHILIPS**

Healthcare

Experience Solutions

## Public-private collaboration to improve the psychiatric care environment

Norrland's University Hospital, Umeå, Sweden

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### Who/where

The psychiatric clinic at Norrland's University Hospital in Umeå, Sweden, is the largest clinic in the Västerbotten County Council and in Northern Sweden. It serves as an inpatient and outpatient clinic for about 6,600 people with mental illnesses per year.

### Challenge

The County Council faces a number of challenges in modernizing the outdated physical environment and way of working at its psychiatric clinic in Umeå, which was built in the 1960s. Issues include overcrowding, high staff turnover and readmissions, long patient stays and limited patient activities.

### Solution

The County Council formed a novel public-private collaboration with Philips Healthcare to test if more effective solutions could be co-developed to address the big healthcare challenges. Ward 2 at the psychiatric clinic was chosen as a pilot project to test new solutions that could improve the existing environment and provide better care for patients. The renovated Ward 2 will open in 2017, and the learnings from this project will be used to create an optimal new psychiatric care facility planned for 2020.

### Results

New spatial designs have been developed and approved and are being implemented to make the ward more attractive and suitable for patients, staff as well as visiting relatives. In addition, changes have been made to the clinical processes and way of working in the ward.

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Västerbotten County Council and Philips Healthcare have formed a novel public-private collaboration with the purpose of creating effective and innovative solutions to meet the challenges of the healthcare sector. One of the focus areas for this collaboration is psychiatric care. A pilot project has been initiated with the aim of improving the care environment and processes for patients, family and staff at the largest psychiatric clinic in Northern Sweden.

# Joining forces to tackle big challenges

This project began as a dialogue between political commissioners from Västerbotten County Council and representatives from Philips Healthcare, says Emilie Erhardt, Senior Consulting Manager at Healthcare Transformation Services (HTS). “We discussed the fact that public and private sectors are starting to partner up as a better way of tackling the big challenges in healthcare. Speaking for Philips, we were eager to collaborate differently with the County Council. Not as a supplier trying to sell our products and services, but as a stakeholder who could sit down, discuss the challenges and work with other stakeholders to tailor solutions that would be as effective as possible in addressing the issues.”

After an intensive inventory of the major healthcare challenges in the county, psychiatric care was chosen as the first test area for the partnership. Like many countries in Europe, psychiatric care has not been a big priority in Sweden in the last decades so investment in new facilities has lagged behind. In the last few years, however, there has been an enormous increase in demand for psychiatric care in Västerbotten County, especially from young people studying at Umeå University. The main psychiatric facility in Umeå was built in the 1960s and is in great need of renovation. The renovation of the existing department has already been planned for 2017, and in a few years, a modern new psychiatric clinic will be built to meet the increasing demand for psychiatric care.

To test new solutions that could improve the existing psychiatric environment for patients and staff and provide better care for patients and staff, the County Council and Philips decided to carry out a pilot project at one of the wards of the existing facility. The goal is to use learnings from this project in the development and creation of the new psychiatric care facility. Both partners realize that this is a long-term collaboration that aims to have a much broader impact beyond the physical environment as well as on the processes outside the ward. This stepwise approach allows the partners to develop a way of working with each other and see what really works on a small-scale before investing in big changes.



## Psychiatric clinic at the University Hospital of Umeå

- Treats adult patients over 18 years-old over a population of 120,000
- Inpatient clinic has 4 wards and 1 forensic ward. Treats 1,600 patients per year (20,000 bed days per year) and average length of stay is 12.92 days
- Outpatient clinic treats 5,000 patients per year and has 73,000 visits.
- Research department
- Around 400 employees (145 at inpatient clinic and 250 at outpatient clinic)

# Project approach



## Strategy - Research and interviews

Insights gained from the Experience Flow Mapping showed a clear need to change the clinic's way of working to improve psychiatric care. Philips consultants interviewed experts in Sweden and other parts of the world to collect successful practices for the relevant patient group.



## Value model development

Since this type of collaboration was new for both partners, they both invested a great deal of effort in building a new type of partnership model so that both partners share an equal amount of risk and reward. A financing and reimbursement model for public and private partnerships is currently being defined.



## Concept and process development

Based on all the information gathered, Philips consultants developed concepts for improving the patient experience and way of working for staff.



## Experience Flow Mapping

Experience Flow Mapping is a unique and structured methodology to provide an insights-based view of the patient journey and clinical processes, and the most impactful opportunities for improvement. We map-out the data points and insights gained from deep data analysis as well as stakeholder interviews and workflow observations. Pre and post-intervention study

Based on the key performance indicators defined, researchers from Umeå University will carry out a pre and post intervention study. The data collected in these studies will provide an objective evaluation of the impact of the changes implemented.

## Some of the most important objectives of this project for the County Council are:

- Decrease length of patient stay
- Reduce number of readmissions
- Reduce overcrowding due to rising demand for psychiatric care
- Reduce number and time of isolation of patients
- Improve patient and staff satisfaction
- Develop a new partnership model between public and private sector

## Ward 2 today



## Ward 2 in the future?





# New perspectives

The project was kicked off in April 2015 with a visit to the GGzE (Dutch Association of Mental Health and Addiction Care Eindhoven) in the Netherlands. Philips and the GGzE have been collaborating on Ambient Experience concepts to improve mental healthcare for several years.

Erhardt says, "I think the visit to GGzE was the beginning of the whole change for them. They brought not just their management team, but also the nurses and the carers from the ward so they could see how another facility addresses similar issues which had a huge positive effect. They could see how it could impact and improve their working life."

After the GGzE visit, the Philips consultants took a holistic approach to developing a new concept for the psychiatric services at the clinic. They started by doing desk research and interviewing experts all over the world to collect examples of successful ways of working and effective processes in psychiatric care for this type of patient group.

## Insights into needs of staff and patients

The research phase was followed by a classic Experience Flow Analysis in May 2015. A team of designers and local consultants stayed at the ward for a week. They shadowed patients and staff and interviewed key stakeholders (management, nurses, carers, patients and relatives not only in Ward 2 but across the whole clinic to get a better picture of the processes at the psychiatric clinic and an overview of psychiatric care in general. The team also did quite a lot

of role playing to better understand the full patient journey (from the ambulance to the reception into the clinic and to admittance to the ward).

At the same time, a Spatial Analysis of the different areas in the ward was carried out to identify improvement opportunities based on the current floor layout and interior.

All of the information gathered was placed on an Experience Flow poster to create a shared understanding of the current situation and to identify opportunities for improvements. Based on all the insights generated, the Philips team developed concepts that were discussed with the Västerbotten team.

The Head of Ward 2 said, "I'm amazed at how easy going and professional you all are. You have done excellent work and have captured all aspects possible. You have interviewed the patients and the staff in a very humble way. You have not judged us and I am really looking forward the next phase. It would be great if you could stay here and do more work with us."

"I'm impressed with the respect you showed and how you listened to us (staff) and also the patients. I feel very inspired. It is very nice with the quotes in the experience flow, it makes the results more living and visual," said a nurse from Ward."

After the Experience Flow Analysis and Spatial Analysis many different improvement opportunities were identified. These improvements were clustered into five focus areas and a new 2D and 3D design of the ward was created.

## Five focus areas were developed as a result of the analysis phase:

Together with the Västerbotten team, five key focal areas were selected to improve the patient and staff experience:

### 1. Activities for patients.

One of the identified areas for improvement is the activities area. The gathered data showed that there are a limited number of physical and creative activities at the ward, which can create boredom for the patients. Studies show that physical activity is especially beneficial for improving the physical and mental health and thereby the recovery of psychiatric patients. The new floor plan includes an activity room, which can have a positive impact on the daily life of patients, and can also affect the staff's way of working.

### 2. Staff routines, culture and behavior.

The team at Ward 2 is made up of committed individuals who are truly passionate about the patients. Helping staff better handle the demanding situation with an overload of patients and a shortage of staff, requires good routines, as well as a change in culture and behavior. The new design will change the work routines and habits of staff. For example, staff currently spend time working in a large staff room with work computers, isolated from patients. In the new design we have created a more open layout, placed open work stations on the ward and replaced the large staff room with a very small computer room where staff can sit if they need to be in a separate room.

### 3. Involvement of patients and relatives.

The patients in Ward 2 require tailored, individual treatment. Due to the patient overload and the current ward layout, it is sometimes difficult to accommodate these needs. The new floor plan has more spaces for one-to-one interactions which can be beneficial in engaging both patients and staff.

### 4. Security and safety on the ward.

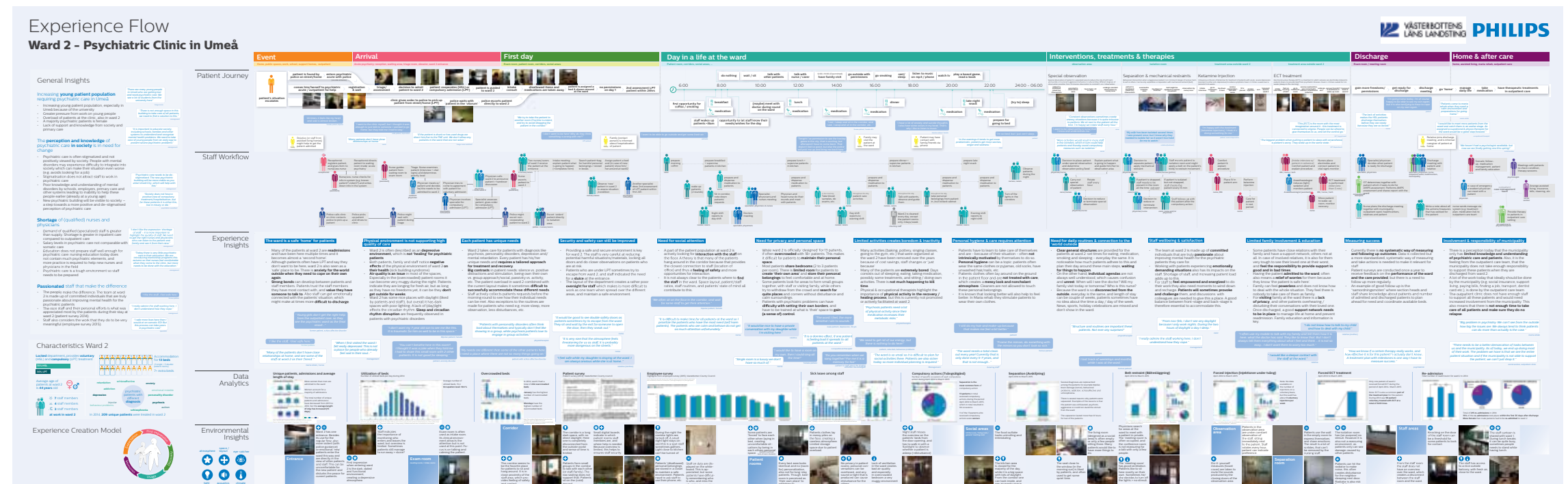
The ward's new design with additional rooms and a more open layout makes staff more visible to patients. New routines will be introduced to provide a safe environment and secure usage of the additional rooms.

### 5. Outcome measurement and service effectiveness.

Critical elements to address to improve patient care and quality, as well as manage capacity. Today the ward collects data, but the system for measuring and following up outcomes on a regular basis is insufficient. The team is looking at carrying out pre and post intervention surveys to collect objective data on the impact of the changes implemented.

## Some of the experience insights gathered in this process showed:

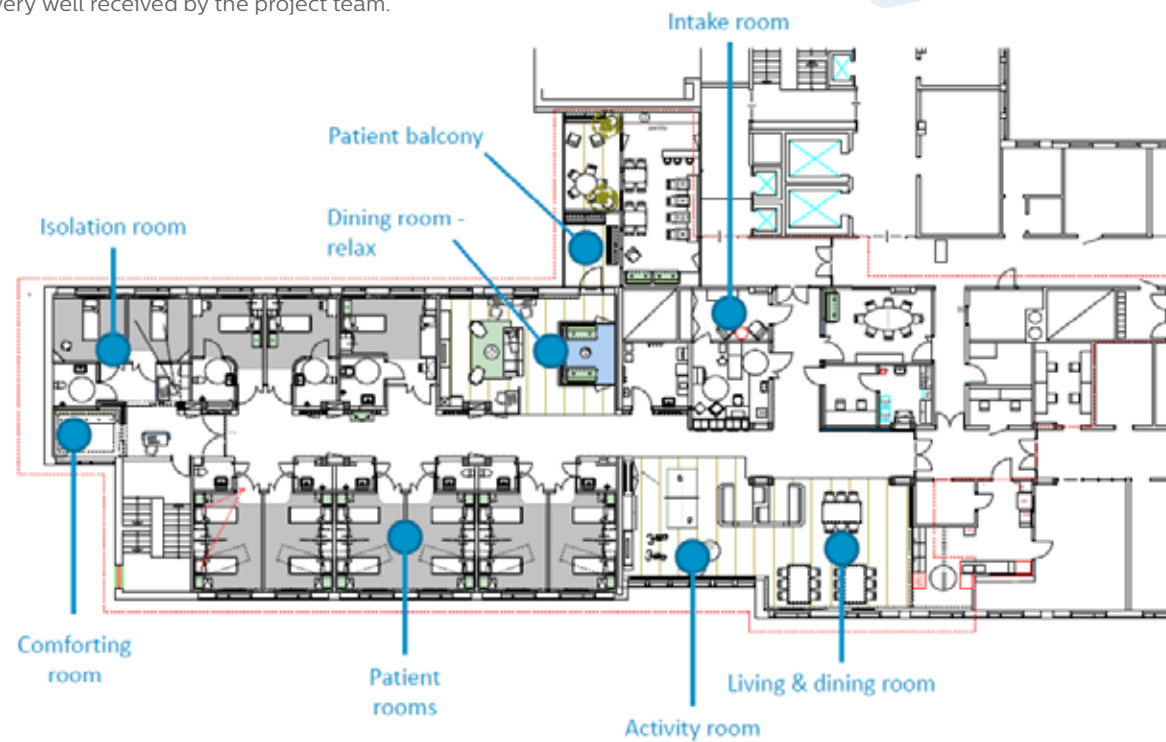
- That the ward should be a safe home for patients
- That the physical environment can be improved to support a high quality of care
- That each patient has unique needs, for privacy and personal space
- That security and safety can be improved
- The need for social interaction and activities
- The need for daily routines and a connection with the "world outside"
- The importance of staff well-being and job satisfaction



Experience Flow: A team of designers and local consultants shadowed patients and staff and interviewed key stakeholders to create an Experience Flow of the clinic's processes.

### New floorplan and interior design

Based on the Spatial Analysis of the ward, several design concepts were created and discussed with the relevant stakeholders. After several multi-disciplinary sessions a final design was developed that creates a ward that is more attractive and suitable for the patients and staff. This design was very well received by the project team.



The new layout provides options for how different rooms can be adapted to meet different needs and that had a positive impact on the team.



Open work stations and a more open layout

Activity room

Comforting room



Intake room

Retreat room

The new designs for the ward will have an impact on the daily routine of patients and staff.

### Reactions from staff and next steps

The management of the Västerbotten facility was very positive about the experience and results achieved.

“You did great work together with the staff. I’m surprised that you have managed all this in only a few days. I hope we can have something great coming out of this. I’m looking forward to the implementation. The [Philips] team is very professional,” Said the CEO of the clinic.

... Manager at the Ward said, “Really good work, you have worked at our ward with open eyes, integrity, and a lot of communication with our patients. Great work, a big and important work.”

My insights are not just from today, but are also about how thoroughly you have gone through everything this week.”

The project has already contributed to a further strengthening of the commitment by both partners to the long-term collaboration. It has also provided useful input as to how a partnership should be established.

At the moment the remodeling of Ward 2 is being carried out and is expected to be finished by Q2 2017. In the months following the new design, the use of new technology and way of working will be evaluated by staff and patients. The feedback and learnings from this pilot will be used in the design in the new psychiatric clinic that will be built.

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