



Envisioning the future cath lab department at Amsterdam UMC

Challenge

Two academic hospitals have merged into Amsterdam UMC, making the centers a leading academic hospital in the Netherlands. As a result of this merger, Amsterdam UMC is combining two cath lab departments into one location. Having this department in a single location is part of developing a new heart center facility for 2023-2024. Amsterdam UMC turned to Philips to translate their vision into a concrete design that would set the correct starting points and inspire their staff to work in the new cath lab department.

Solution

Philips consultants collaborated closely with management and staff of the recently merged cardiology departments to define the requirements for the design of the new cath lab department. In just eight weeks, the consultants completed the entire project through virtual meetings – from analyzing data, interviewing key stakeholders and conducting online workshops to creating a concept design and 3D animation of the new department.

Amsterdam UMC is a leading academic hospital in the Netherlands, with more than 16,000 professionals who provide accessible and integrated care. The focus is on complex patient care and highly specialized treatment of rare diseases. At Amsterdam UMC, young professionals are trained to become doctors, specialists and nurses. Additionally, internationally oriented scientific research is conducted in eight research institutes.

Results



Concept design with detailed floor plan



Improved staff collaboration



3D animation

“How do we translate our vision for better heart care into a workable plan for the cath lab department that will inspire our staff and meet our future challenges?” This was the assignment given to Philips by Amsterdam UMC when they asked for support in designing their new cath lab department.

A monumental undertaking

The new cath lab department will be part of a new heart center and combine two locations into one. The team will perform about 7,500 interventional cardiology, electrophysiology and structural heart procedures a year. The cath lab department will span 3,000 square meters and house 8 cath labs and an interventional MRI—making it one of the largest cath lab departments in the Netherlands.

Amsterdam UMC has a clear vision for the new cath lab department, but faces several challenges:

- Keeping staff who have undergone a merger and face pressures of staffing shortages enthusiastic about their future
- Translating their vision into a concrete floor plan and workflow processes
- Designing a care environment that can be easily adapted to future demands

“Most hospitals need help in translating a high-level vision to the work floor,” says Fenna Janssen, Sr. Healthcare Consultant at Philips. “Our customers usually start with requirements, like excellent care, collaboration or bigger rooms and efficient walking routes, but for facility management it’s hard to draw based on that. This is where we come in. We can make this big process tangible, putting it into a patient flow that stakeholders can talk about. Our experience with clinical workflows, healthcare technology and the constraints of daily practice enables us to do that.”

Clarifying, prioritizing, thinking ahead

The Philips consultants first interviewed members of the management and cardiology staff to clarify their vision of the future of the heart center. In parallel, they gathered and analyzed detailed information about the current performance at each cardiology department.

After the initial orientation, the consultancy team brought staff from all the departments involved together in several virtual co-creation workshops to discuss and define the actual design requirements for the cath lab department. “Through the workshops we gained a better understanding of how the staff works at the two locations”, says Fenna Janssen. “As the participants considered each phase, we asked questions like, “Let’s say this is 2024, how would you want this to happen?” This helped the participants consider different ways of improving their workflows. And having the future workflows in front of them certainly assisted in defining the requirements”.





Insights and ideas to improve heart care

Changing from ward care to same-day outpatient care

Currently, a patient is admitted to a ward, located on a separate floor from the cath labs. However, interventional cardiology procedures are increasingly performed as same-day outpatient care, and new technologies allow patients to leave the hospital sooner. In the new design, the holding area and waiting lounge are much larger than in the current situation and are located next to the cath labs. This will make it easier to optimize the use of the cath labs and reduce the waiting time for new patients that arrive in the cath lab.

Lowering barriers for collaboration

Research plays an important role at Amsterdam UMC, and the new heart center should make it easier for researchers and students to collaborate with the teams in the cath labs. The Philips team included several concepts in the design that stimulate collaboration, such as a central core area between the cath labs. In the central core, researchers and students can work while still being close to the action; they can attend a procedure when it's valuable for their research or education. Another example is that the team included rooms with viewing screens next to cath labs so they can follow procedures without disrupting the workflow in the rooms.

Creating a workplace that fits staff needs

Making the new workplace feel more like home for staff was important because there is a lot of competition for scarce medical professionals, and this can make Amsterdam UMC an appealing employer. During the co-creation workshops, the Philips consultants helped the staff articulate their specific needs during a shift. In the design, much attention was paid to creating different areas, such as a relaxation room, where staff can take a power nap or de-stress after a difficult case.

Designing future flexibility into the care environment

In the past year, the cardiology teams have experienced the necessity of having greater flexibility in the usage of their care environments. The Philips consultants also took this into consideration and designed the new department so that certain areas will be multi-functional.



Practical details and inspiring ideas

The cath lab requirements were translated into a first concept design, in which the Philips consultants provided a detailed floor plan that facility management can use for further development. The consultants also created a 3D animation of key areas that gives the staff an impression of what the new cath lab department might look and feel like to work in. Amsterdam UMC was very happy with this animation, for it provided an important source of inspiration and motivation for staff to stay on until the new heart center opens. An important element, since these professionals are in high demand in the Amsterdam area.

Going forward, the consultants helped Amsterdam UMC to take over the development of the design, by setting up a core team and several work groups. The work groups will address different themes and questions about the future way of working, that were raised during the workshops. The core team will collect their input and with that input, facility management can edit the design where needed.

Our partnering approach

To help realize your goals we offer a broad range of expertise relevant for cath lab management. Through a collaborative and people-focused process we uncover deep insights and define actionable and sustainable solutions, to help you achieve clinical excellence, operational efficiency and improved care delivery for your patients.

Learn more

www.philips.com/integrated-cardiovascular-solutions

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