

Designers and experts enthusiastic about
Healthcare Environment & Activity Design (HEAD) Games

Play together, build together

Designing (mobile) hospitals is complex. Equipment, staff, and patients: with space at a premium, everything has to interconnect with seamless precision, while one general overview is often missing. The Healthcare Environment & Activity Design Games provide greater understanding of this process. They not only promote dialogue among those involved, but facilitate co-design between designers and decision-makers.

From Haiti to Nepal, from China to Japan: the world is regularly struck by earthquakes and other large-scale natural disasters, leaving chaos in their wake. The many victims often rely on mobile hospitals for medical aid. “Because in most cases the infrastructure has been completely destroyed, the fastest way for a mobile hospital to reach the disaster site is by air”, says Julia Garde, university lecturer at the Design, Production & Management Department of Twente University. “It’s quicker than by road. But the downside is that you can’t take everything you need in a helicopter, because of the weight. Every kilo is really one too many.”

Three by three metres

As Garde points out, this makes designing mobile hospitals extremely complex. “The staff needs to be able to function optimally with the least amount of equipment and materials. Processes must run smoothly because every second counts. There are so many aspects to consider. The layout of the space, medical applications,

the composition of the team, general procedures: all these elements influence one another, while the knowledge is in the heads of the different people involved.” To facilitate dialogue and co-design between designers and decision-makers, Garde developed two so-called Healthcare Environment & Activity Design (HEAD) Games. “The first game is a large, physical game measuring three by three metres that participants – mainly designers and hospital experts – can play hands-on, and manipulate. The second is a digital game in which players can see how their plans work in a virtual setting.”



‘Initial scepticism makes way for enthusiasm’

Designers and experts

Garde recently put her HEAD Games to the test in different design workshops, and in the design of ‘ordinary’ hospitals, including Medisch Spectrum Twente. “This revealed, in a very tangible way, that designers and medical experts think, and do things, very differently. In workshops focusing on mobile hospital development, for example, designers decided to place crush barriers in front of the hospital. They also argued for a tunnel at the entrance to keep out the dirt, among other things. Designers also thought that a mobile hospital should be modular. Less urgently needed elements, such as a mortuary, could be delivered and connected at a later stage. In their turn, the medical experts wanted to install a cooling unit to serve as a mortuary and as a place to store blood products. The experts proposed a special tent for fatally injured victims who were beyond saving.”

Where the designers suggested appointing four staff members to take responsibility for the logistics relating to a patient, the experts didn’t share their conviction that extra personnel were needed. Garde: “In contrast to the designers, the experts were much more insistent on equipment and material. Interesting and very useful to know.”

All-embracing scenario

Garde notes that both sides responded positively to her HEAD Games. “Many players’ initial scepticism makes way for enthusiasm. During the workshop, people realised that usually, they literally talk at cross purposes. ‘Playing’ and thinking as a group helps to bring different perspectives together. Participants gain a better understanding of each other, which results in a plan that both sides support. Taking a holistic approach based on a tangible scenario also generates ideas that, as an individual, you might not come up with as quickly; or perhaps not at all.”

According to Garde, design games clearly have a future in the health sector. “Participation is becoming increasingly important in our society. Design games are a tool to allow different target groups to participate, in this case in designing a hospital. What’s more, games also enable hospital architects to respond to client requirements in a far more targeted fashion. Design games encourage people to come up with great ideas for tackling areas differently, together. Or, in other words, better.”

‘Designers and experts think and do things very differently’

