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EXPERT INTERVIEW

## Want to build a better hospital?

### It starts with better communication

Volker Merker, a noted German hospital architect and planning consultant, explains why establishing a shared language and project vision for all the involved stakeholders in a hospital development venture is an essential first step.

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It's no secret that the different professional groups that join forces each day to deliver healthcare in the hospital environment typically bring very different perspectives to their work, despite their shared healthcare mission.

It is precisely this diversity of perspectives that underlies an essential challenge in new hospital developments: How to get the divergent groups represented by physicians, nursing staff and the hospital management onto the same page – and speaking the same language – when it comes time to handle the exceedingly complex and elaborate step of creating a new physical environment in which to provide medical care. This is a challenge that Volker Merker, Germany, has made a particular focus in his planning work.



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Volker Merker, head of the architectural and planning firm Merker Architektur Management GmbH in Lübeck, Germany

## Creating a basis for mutual understanding

Because each group has a critical contribution to make to the overall task of providing healthcare in the hospital environment, it is essential that all of their views are incorporated into the design process. But at the same time, each group is coming to the design project with perspectives that are so different from each other that they often are not able to communicate effectively with each other in connection with setting and pursuing project goals. A further problem arises for all of these groups on the hospital side to fully understand the involved planning and architectural specialists, who have their own particular style of communication and technical vocabulary.

There is thus an inherent risk of failed communication in the execution of such projects. As Merker recounts from his own experience: "After many years in (hospital) planning, it became clear to me that a kind of communication was occurring where people simply did not understand each other." And Merker also found, not surprisingly, that the consequences of such failed communication were inevitably negative.

## A remedy: Integrative dialogue-orientated project work

In response to such experiences, Merker and his firm have developed a project management technique that he calls “integrative dialogue-orientated project work”. This involves conducting a range of discussions and learning experiences for the development team of a hospital design project to address issues of communication and cooperation – and finally to establish a clear vision of project goals through an intensive process of requirements planning. With this approach, a number of critical elements for a successful design project should be established.

### 1. Making sure that architects and planners are understood

A basic first step is to make sure that the medical personnel of the project development team fully understand what the architects and planners are really talking about as the project unfolds. As highly trained and self-confident professionals, physicians and nursing staff sometimes are reluctant to speak up when they don't understand what architects and planners are saying. To counter this, Merker says, “We want to conduct a dialogue in this early phase where the construction workers are not yet participating and the other planners are not yet there so that a kind of learning process can take place and the doctors and nursing personnel and everyone from the hospital side can become familiar with architectural language and learn how to understand floor plans and the material that the architect will bring to them.” This is a necessary prerequisite for all the work that will follow.

### 2. Developing a shared vision of best practice

Another critical piece of the project groundwork that Merker wants to put into place early on is for the development team to work out a shared vision of hospital best practice that goes beyond the immediate demands of daily medical activities.

Merker explains that it is important to first distance the involved persons from their daily work processes in which they are talking about specific patients and specific medical challenges in the context of an existing institutional hierarchy. Instead, he aims to establish a dialogue where key participants in a given process – say, a physician, a hygiene expert and a nurse, for example – are talking about the relevant process at an abstract level – solely with the aim of seeing how it could be improved. The input from Merker and his planning team does not concern the details of the process (as he says, “I am not a doctor or a nurse.”) But the workshop environment creates a situation where the people can begin to really communicate with each other about what might be possible and can undertake a process of requirements planning that essentially serves as a vision of best practice. As Merker describes it: “We remove ourselves from the here and now. That's the most difficult. We need to get away from the existing situation and develop an idea of best practice...an ideal model... so that everyone can say: Yes, that's how we could work best.” At this early stage, the medical manufacturers could also come into play, contributing their knowledge and experience from past projects.



Merker makes clear that the ideal is not what will ultimately be built. It is always necessary to scale down to a realisable level. But it is an essential starting point. “One needs to know what one has scaled down from and why. Otherwise later in the project someone will come and say, why didn't you do it this way, it would have been much better... And that can be a major stumbling block.”



### 3. Integrating input from diverse expert sources

The integrative dialogue process that Merker favours to unite stakeholders in a shared project vision also depends on input from a range of expert sources. This input can work to counter two strong tendencies found in the group behaviour of many institutions (with hospitals being no exception) – top-down decision making and a basic resistance to change.

As a profession medicine is shaped by strong hierarchies. Merker points out that there are good reasons for this. Finally, decisions are being made with life and death implications which are thus not “topics for a parliamentary democracy or a discussion group”. But to get to the best design possibilities another less hierarchical type of interaction is necessary.

## All views from inside and outside the hospital need to be heard

The different groups that are participating in the “integrative dialogue-orientated project work” that Merker advocates may well be speaking to each other at length and on an equal footing for the first time ever. This brings new perspectives and allows for new insights. And it reflects a crucial aspect of the design challenge in planning for a new hospital – the fact that all of the groups involved in delivering healthcare play an important role in serving the needs of the most important person in the process, namely the patient. All of their divergent concerns and requirements need to be considered together and brought into alignment in this initial phase of getting a clear best-practice view of different processes for the patient's ultimate benefit. No single view should necessarily be privileged above others as it often is in the hospital's existing institutional structure.

Mixing up the hierarchies and getting the concerns of all the involved parties onto the table is essential. But in addition to this, there needs to be a readiness for change, quite apart from who typically gives orders to whom. As Merker remarks, “We all tend to want to do things like we've always done them, and that tendency needs to be overcome.” Expert input from outside the single hospital institution, e.g. from hospital planners and their external consultants, can play a very positive role here.





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## Consulting with other hospitals and testing different scenarios

Merker points to the benefits that can come from visiting other hospitals and seeing how things are done there. Having discussions with specialised personnel at other hospitals who have already adopted new practices can help a project team to see the benefits that might come to their own facility through making substantial changes in a new hospital structure. “When a dialogue occurs between nursing staff of two hospitals or between the physicians of two institutions, that is very different from when I as the architect say - it should be done like this.” It can provide crucial insights about how processes can be improved and what kind of hospital design is necessary to support those processes. Another option to improve workflows is to simulate medical environments in a physical mock-up outside a hospital. In this way, nurses and physicians can test the design under nearly realistic conditions, without interfering in daily hospital operations.

## Advice from medical technology manufacturers

Critical insights and new perspectives can also be provided by the medical technology manufacturers which will be providing the devices and the equipment for a newly designed hospital. Merker identifies two reasons why their input can be particularly important. First, there are clearly areas in the hospital – diagnostics, the ICU, device-supported surgery – where the equipment they deliver and its arrangement in a specific workflow plays a central role in what happens in the activities of physicians and nursing staff with patients. “The ones who know these devices very exactly and the technology that is being employed need to be integrated at an early point into the (design) process.”

Second, the staff working in a given hospital have often been there for years and can sometimes benefit from finding out about practices at other hospitals. With their extensive knowledge and experience in designing medical environments from

other projects, medical manufacturers can provide exactly this type of input. “Medical technology manufacturers... bring in a perspective from outside. From a multitude of different projects. They can show how the devices have been used in different hospitals and what the benefits have been.”

Merker specifies his expectations regarding the input of medical technology manufacturers in the design process as follows: “My expectation of medical technology manufacturers is that they would make a contribution in verifying the medical requirements that the users and the involved hospital personnel have identified (in the design project). With all the neutrality that one must certainly have in the planning process, this kind of input can be an important component in achieving a quality result.”

Finally, the aim is to find the best possible interaction between the devices and their design around the patient bed so that workflows are smooth and efficient.



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## IMPRINT

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