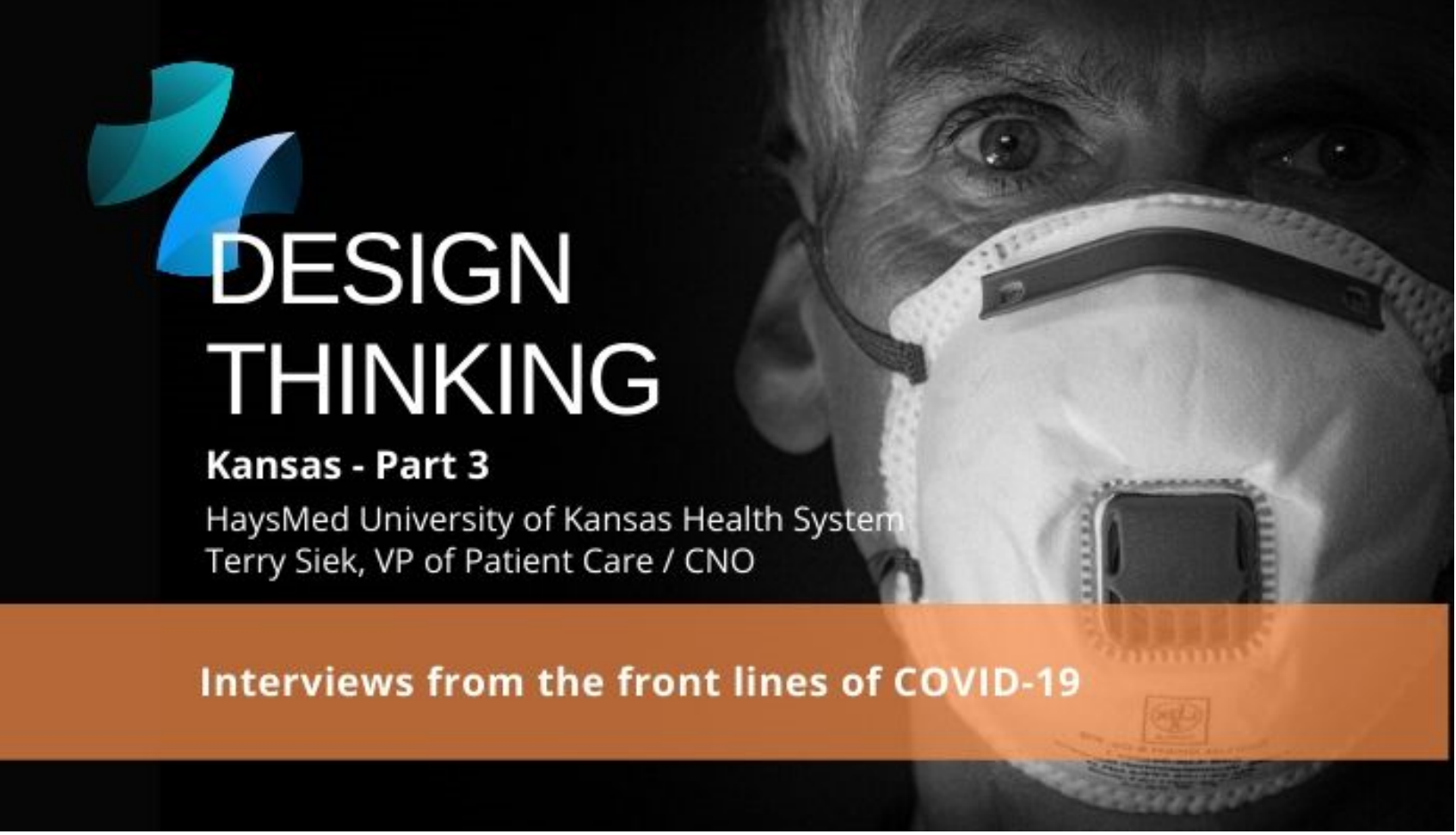

HFG architecture

Design Thinking Interview

Terry Siek – Hays, Kansas
Vice President of Patient Care / CNO
HaysMed, University of Kansas Health System

Steve Lewallen, founder and Chief Executive Officer of HFG Architecture, spoke with Terry Siek, about his experience to COVID-19. Terry is the Vice President of Patient Care/CNO with HaysMed, University of Kansas Health System, in Hays, Kansas. He is responsible for all aspects of nursing care at the medical center including inpatient, outpatient and clinics, as well as, PT/OT/ST, Chaplains, Pharmacy, Hospitalist group and ED provider group. Terry has been with the hospital for 31 years in a wide variety of positions and holds both MS and BS degrees in Nursing.

Response to COVID-19
Terry Siek, VP of Patient Care / CNO
HaysMed, University of Kansas Health System

1. **How has the COVID-19 impacted normal operations such as staffing patterns, training, maintenance, etc.?**

   The last few weeks have been like getting ready for a party, then there is no party, but then there may be in the near future. Where do you assign personnel? The pandemic has created problems related to staffing different units. Now, the new question becomes phasing in services again while making sure we can still cover every scenario.

   Surgery has resumed but it may be a much slower process in the future. Each patient will need to be treated as if they are a carrier of the virus. The patient would be placed in the OR suite and the anesthesia team will come in for the intubation process. Twenty minutes after intubation the surgeon and the rest of the team would enter the room to begin the operation. After the procedure, the surgical team would exit. The anesthesia team would extubate and wait 20 minutes before moving to the recovery room. The result may add as much as 40 minutes to a surgery except when advanced testing can be done to clear each patient. This is a lesson learned resulting from shared information from the health system.

2. **What is the one thing you've learned from this pandemic and hope to improve from as you move into the future? (what insights have you gained?)**

   Emergency departments are needing to retrofit space in the midst of a pandemic for a new triage area or using their garage or bringing in temporary trailers, for example. These space challenges will need to be better addressed in the future (for receiving Pandemic patients) by having a clearly defined area which is not at the main entrance of the ED. This additional space, accommodating triage, Isolation, and decontamination, is now very important. Also, entrances to the ED and the hospital need to be better at being able to be selectively controlled.
   A big picture lesson, looking in hindsight, is that something disruptive happens every five years and healthcare professionals, administrators, and facility managers need to be in a constant state of preparedness.

3. **What are your expectations for the future of healthcare design directly resulting from this pandemic?**

   Hospitals should require planning to meet these needs as a part of their normal design planning process. There are examples right now where hospitals are making decisions based upon a need for negative air flows that would have been made differently originally had they been looking at design with pandemic situations in mind. Now that we are here in the midst of a pandemic, looking forward, it seems appropriate to do this beforehand.

4. **Do you think people will view healthcare differently going forward? Will how healthcare delivery change?**

   Prior to the pandemic, our ED used to have 30 visits per day, now it is around 15. Our walk-in clinic previously had 35 patients per day which is down to about 15. Maybe people are just hesitant right now and maybe a bit scared to be at the hospital. Currently, they are not coming in for every ache and pain. I am hopeful this is not a permanent shift in thinking resulting in people not getting the treatment they need as a result of this pandemic.

   One change that is already occurring is the increased use and acceptance of telemedicine. Finally, a foothold and here to stay, we think. Telemedicine saves patients and providers time because it is more efficient. Cardiologists had been particularly resistant to telemedicine before. Now, with the situation requiring telemedicine, these physicians are seeing its value. Previously, these doctors would travel two to three hours one way to see patients in rural locations. While the need to see new patients in-person still exists, follow up visits done remotely are saving a lot of road time. Physicians can move seamlessly from traditional clinic visits to a telemedicine visits throughout the day creating more convenience for the rural patient and the physician. Telemedicine is another change that needs to be part of our future for healthcare design.

5. **What will you do now to prepare for another potential future outbreak?**

   I would encourage more education throughout hospital organizations on their buildings and how they actually operate. Negative air pressure was an issue here at our hospital as we anticipated the arrival of COVID-19 patients. So, having the ability to easily create negative pressures in appropriate spaces is important. And, knowing how to do it in advance, is a priority. Also, in the future we will look at a more permanent solution to accommodate the drive up testing we experienced at our facility. We used a tent but a physical building structure out of the elements is clearly preferred.

6. **Were there specific practices or facility advantages that allowed your hospital to quickly adapt to treating COVID-19 patients? What were the barriers that hindered necessary changes?**

   One of the advantages was the preplanning done for Ebola that we did a few years ago. Because of that, our organization had a place from which to start. Research had been done to increase the number of rooms that could be made into negative air rooms. Also, appropriate procedures and protocols to deal with the situation were developed to meet these potential needs. We also had a facilities staff who were able to act swiftly during the preparation.

   We were better prepared but negative air flow was still the challenge. Our staff took an existing orthopedic unit and retrofit it with separate negative air units. The difficulty for smaller hospital facilities is that they cannot always make needed changes given their size, varied physical building situations, or because of staffing capabilities.

   Having a limiting number of anterooms is a disadvantage that needs to be examined and prepared for in the case of another pandemic. More anterooms are needed as a space for the donning and doffing of PPE in these environments to insure protection.