

Q&A: Samsung Chief Medical Officer helps us unpack the vision of future hospitals

Article

The pandemic accelerated the digital transformation efforts of US health systems, paving the way for smart hospitals across the country.

- The **majority (81%) of healthcare execs** said the pace of their organization’s digital transformation was accelerating, **per** January 2021 polling by Accenture.
- Meanwhile, **60% of C-level healthcare execs** in the US said their organization was adding new digital projects as a result of the pandemic, **according to** a January 2021 BDO USA survey.

To get more insight into how health execs are working toward their visions of the hospital of the future, we spoke with **Dr. Hon Pak**, Chief Medical Officer at **Samsung**, about the digital technologies making smart hospitals a reality.

We unpack the future of the US hospital landscape in our recently released report, [“Smart Hospitals: The Use Cases and Best Practices to Improve the Care Experience”](#)

The following has been edited for clarity and brevity.

Insider Intelligence (II): What makes a hospital "smart"?

Dr. Hon Pak (HP): Smart hospitals use technology to solve some of the most urgent challenges healthcare organizations face today and tomorrow. This includes leveraging digital tools to improve quality of care, patient outcomes and experiences as well as operations.

Truly “smart” hospitals focus on data, insights, and access to improve each stage of the patient journey—from when they first enter the parking lot to engaging patients at the bedside for education and entertainment, to seamlessly transferring and managing care when a patient is discharged.

II: Which smart patient room innovations are most important to patients and have the biggest impact on satisfaction/engagement?

HP: Bedside tablets and hospital-grade footwall displays are *the* biggest winners among patients. Patients can use their bedside tablets to make food selections or stream entertainment to the room’s hospital-grade UL-certified TVs. But these technologies do so much more by serving as a window into a patient’s schedule, medical team, care plan, lab results, health education, pain management, spiritual guidance, and more. Patients can also leverage these devices to connect with loved ones or even other patients going through similar experiences.

We’re also finding digital displays play a big role in reducing stress by making hospitals easier to navigate for patients and visitors. Queuing solutions can inform patients of estimated wait

times in crowded emergency rooms. Families can receive real-time updates on a loved one's surgery from digital displays in hospital waiting rooms. Wayfinding solutions with intuitive touch-screen maps help patients and visitors efficiently navigate the facility, which is especially crucial for people of different abilities. And outside each patient room, digital displays personalize the care experience by displaying information such as a patient's native language, fall-risk status, visual or hearing impairments, and allergies.

II: What are some best practices for hospitals looking to develop smart patient rooms?

HP: When we're talking with our customers about mobile solutions for hospitals, we usually focus on the following six steps to help them develop a roadmap:

1. Commit to hospital-owned devices and ensure there is flexibility in the mobile device approach to suit the needs of nurses, allied professionals, and physicians.
2. Hospital leaders need to ensure they're knowledgeable of clinical requirements, which can be accomplished with simple staff conversations. Hospital staff can be great resources to help streamline processes and ensure that approaches cover all workflow needs.
3. Plan to integrate apps and legacy technology, as IT needs to be aware of which apps clinicians already use and want to continue to use.
4. Along with clinical requirements, hospitals must consider IT requirements, specifically network coverage.
5. All devices that access or transmit patient information need to be secured and managed by the hospital, regardless of whether the hospital owns the device.
6. Once hospitals have a plan for moving forward with mobile, the final step before implementation is finding the right partners for the journey. That includes smartphone manufacturers, software vendors, and unified clinical communications providers.

II: How often are patients sharing wearable data with their physicians, and are physicians using the data to guide care decisions?

HP: We are working with large medical device companies to explore ways to add our wearables as a companion device to the existing diagnostic FDA-cleared devices for various conditions.

A great example of this is our recent partnership with LIVMOR (a digital health and remote patient monitoring company). We worked together to provide a fully integrated patient care platform for the United States Department of Veterans Affairs (VA) in the North Texas region. The solution combines Samsung mobile devices including tablets, wearables and handheld mobile devices with LIVMOR's Halo+ turnkey remote monitoring system.

The solution provides extended remote heart rate tracking through wearables and allows VA physicians to use Samsung tablets or smartphones to monitor patient data in real time. The doctors at the VA in North Texas have gathered millions of real-time data points across hundreds of cardiology patients. They credit this information as not only guiding care decisions, but actually helping prevent catastrophic events like heart attacks.