# How the pandemic is transforming healthcare

By Wayne Miller

15 Apr 2021

Despite the many challenges of 2020, healthcare organisations have gained considerable insights and experience that will transform the sector well into the future. Today, hospitals are already adopting technologies that are helping them realise critical cost-savings and productivity benefits. These advancements promise to become mainstream after the pandemic is a distant memory. Here are some of the trends you can expect in 2021.

Wayne Miller, Zebra Technologies

**1. Focus on the supply chain**

Even before the pandemic, supply chain inefficiencies cost hospitals billions each year. The pandemic further exacerbated those shortcomings. Ventilators and basic supplies needed to keep patients and clinicians safe, such as hand sanitiser and personal protective equipment (PPE), were hard to come by.

In 2021, we are seeing hospitals increasingly embracing technologies such as barcodes, radio frequency identification (RFID) and real-time location systems (RTLS) to gain unprecedented visibility and control of their supply chain and inventory management systems. These visibility enhancements will also help hospitals reduce inventory waste due to unused and expired supplies.

## 2. Streamlining patient care

Beds also became a scarce resource at many hospitals in 2020. Now, more hospitals will explore new ways to move patients through the system faster. Hospitals can use both location technologies and mobile computers to track and streamline treatment throughout a patient's stay. Using these technologies, hospitals can create an "electronic whiteboard" that records everything from specimen analysis and x-rays to physical therapy.

Hospitals can then monitor precisely how long each treatment takes and identify where workflow bottlenecks exist. For instance, is it difficult to find a wheelchair to transport a discharged patient? Are there regular backups in x-ray, laboratory testing, social services or other areas that affect patient care?

Technology has proven highly effective in improving patient turnaround times and hospital workflows. Real-time location system (RTLS) tags, for example, can be added to wheelchairs so that nurses can locate them quickly to speed patient discharge. Once the patient is wheeled out of the room, nurses can use their purpose-built mobile devices to notify housekeeping that the room is available for cleaning.

Research shows that technologies like RTLS can result in up to 50% faster bed turnover times and as much as a three-hour reduction in patient length of stay. In a 275-bed hospital, cutting just four hours off the average hospital stay is the same as adding 10 new beds.

## 3. Making healthcare professionals' jobs easier

Staff burnout became a huge issue in 2020 with hospital facilities and their clinicians struggling to keep up. One way to decrease burnout is to make clinicians' roles easier. To accomplish this, many hospitals are again turning to technology to facilitate better clinician communications and improve workflows.

Purpose-built mobile devices that allow nurses and doctors to communicate better and streamline workflows effectively reduce stress for providers while also improving patient care. At the same time, handheld mobile computers help mitigate alarm fatigue by sending alerts directly to the right caregiver. Nurses can use those same mobile devices to enter vitals directly into a patient's electronic health record (EHR) while at the bedside, thus reducing the amount of time they spend on charting and reducing errors.

Doctors and nurses armed with mobile devices can be notified immediately when a patient gets test results – and can quickly communicate how those results might affect patient treatment. No wonder surveys show that 97% of bedside nurses and 98% of physicians foresee relying on mobile technology by 2022.

## 4. Stemming the spread of infections

"Sanitise everything!" became a mantra in 2020 as Covid continued to spread. But the need for sanitisation in healthcare organisations has always been critical, given that healthcare-acquired infections affect an estimated 1.7-million patients each year, according to the Centres for Disease Control and Prevention.

However, in 2020, some hospitals found that their non-rugged devices could not withstand repeated cleaning and sanitising because they were not built with healthcare-grade plastics. In 2021, we will see more hospitals adopt mobile computers, printers and handheld scanners that are purpose-built to withstand repeated wipe downs with approved cleaning agents to reduce the spread of infection.

## 5. Telehealth will continue to grow

When telehealth became more accepted in 2020, some hospitals used technology to create virtual doctors by mounting rugged mobile tablets on IV poles that allowed specialists to interact with patients via video. Many hospitals found that this virtual solution resulted in faster care for patients because specialists could handle multiple consults without wasting time travelling between rooms or hospitals. Going forward, more hospitals will rely heavily on virtual patient consultations for more efficient patient care while also keeping both patients and clinicians safe.

## Looking forward

There is no doubt that the pandemic of 2020 will have a lasting impact on healthcare. The good news is that these lessons learned will have a positive impact on the way healthcare facilities manage their inventory and workflows going forward.

## ABOUT THE AUTHOR

[[https://www.linkedin.com/in/wayne-miller-6890817/?originalSubdomain=uk Wayne Miller]] is the director, EMEA healthcare practice at Zebra Technologies