

# Freeing care to go where it's needed most

3 min read #AlandAnalytics #EdgeComputing #Security

To build a healthier world, we need to take healthcare to the people who need it the most. Lenovo partners with manufacturers to help bring life-saving medical equipment closer to patients.

Remember Dr. McCoy's medical tricorder from the Star Trek series? That handheld device which could, in one swift scan, measure a patient's vital organ functions, detect dangerous organisms, and diagnose medical conditions, has long been a dream of the medical community.

In their endeavor to turn that science fiction into fact, digital health innovators are reimagining vital medical equipment to untether it from hospital rooms and bring it closer to patients, wherever they may be.

Thanks to <u>edge computing</u>, <u>scalable data storage</u>, and <u>Analytics & AI</u>, all powered by a backbone of always-on infrastructure, medical equipment is now more mobile than ever. From X-rays and ultrasounds, to ventilators —IT experts are helping extend the reach of quality healthcare solutions to the remotest parts of the world.

Unlike full-size machines, the reimagined equipment can fit into smaller spaces and budgets. As a result, medical facilities can equip more rooms and attend to more patients, increasing access to care.

Real-time imaging allows doctors to provide timely diagnosis and gets patients more engaged in their treatment.

Portable X-rays and ultrasounds eliminate the risk of transporting vulnerable patients, by bringing imaging capabilities to the patient's location.

As a technology solution provider to over 3,000 healthcare organizations worldwide, Lenovo partners with medical equipment manufacturers and medical facilities to transform life-saving equipment, so that it can go where it's needed most. We are the end-to-end partner for <u>innovative</u>, <u>dependable OEM hardware and services</u>.

### Giving doctors the full picture

To take better care of you, doctors need a crystal-clear picture of your health. <u>COJE Displays in South Korea</u> enables just that. Their imaging devices and video monitoring displays for endoscopies and X-rays are powerfully mobile thanks to Lenovo tablets and workstations.

Elsewhere in Korea—as demand for medical imaging was rising—one major producer of radiography equipment teamed up with Lenovo to meet the challenge. Their solution? Embedding a customized Lenovo tiny workstation in their portable X-ray platform.

Of course, such tools generate massive amounts of sensitive data. Our high-performance servers, scalable data storage and customizable security solutions enable always-on secure access to such data.

## Early detection is the best protection

Oral diseases affect nearly 3.5 billion people, making it one of the world's most common medical problems and yet, most oral health conditions are largely preventable. To help tackle this, powerful Lenovo workstations arm dentists with CT scan processing to detect early-stage problems.

Another condition where prevention is possible? A billion cases of vision impairment. Researchers at the Barcelona Supercomputing Center teamed up with Lenovo to build and train an Al model that can enhance the accuracy and speed of retinal disease screening. Algorithms stemming from this research could one day be used to screen for visual impairments, with little more than a smartphone.

# The edge when it comes to cancer treatments

At <u>TechsoMed</u>, edge computing and Al-powered workstations are revolutionizing thermal ablation treatments. Al algorithms track the accuracy of tumor-removal processes in real time.

And with edge devices in the operating room, latency is at an all-time low — again, helping doctors get a clearer picture of patient response.

### Reliable support for reliable care

For healthcare tech designers, reliability is everything. Lenovo's supply chain mastery across 180+ markets means there's never a question of where parts come from, and whether they'll deliver without compromise. Plus, <u>Lenovo end-to-end healthcare services</u> are there to ensure everything comes together.

To build a healthier world, we need to take healthcare to the people who need it the most. The tricorder isn't here yet, but IT experts ensure medical technology today is more than ready to go the extra mile.

© 2022 Lenovo. All rights reserved.