

Healthcare Innovation on Display

An exploration of the digital display and technology trends influencing the future of healthcare



Increased Confidence. Better Care.

Did you know that in the United States, approximately 10% of women are contacted for further testing after an initial breast cancer screening?¹ Of that 10%, however, only 0.5% receive a cancer diagnosis. That leaves 9.5% of tested women with a false positive exam—often accompanied by undue financial and emotional burdens.

At least, that's how it used to be.

With the latest high-end medical display technology, physicians can analyze mammogram images with complete confidence and reduce the risk of false positives. Powerful diagnostic display solutions, like the LG 12MP Resolution Diagnostic Monitor, act as a second set of eyes for radiologists and physicians—offering extraordinary image clarity that brings out even the smallest detail.

But this is just one of many emerging tech opportunities for the healthcare sector. In this report, we'll share several trends on track to change the future of healthcare. Dive in or choose your topic below:

Healthcare Tech Trends

**Virtual Health Tools
& Telehealth**

Medical Imaging AI

Remote Radiology

Cloud Migration Solutions

LG Medical Monitors



¹ National Cancer Institute. "PDQ Summary." June 7, 2023.



The Pulse of Virtual Health Tools

Virtual health tools have the potential to elevate how physicians care for their patients. But as the world continues the shift towards telehealth and telemedicine, some physicians worry that virtual care is too impersonal. Others are left feeling stuck—unsure how to best use virtual health tools. Despite these hesitations, patient demand for virtual healthcare options has continued to grow, with more than 40% of patients citing a desire for continued telehealth options²

Why Do Patients Want Telehealth?



Reduced risk of getting sick from contact with others



Faster access to preventative care and medicine



More convenient and flexible appointments

Making Telehealth Human

To bridge the gap between patient expectations and physician confidence, virtual health tools must be intuitive enough for patients and physicians to easily use and innovative enough to maintain the human element of preventative care. The right virtual health tools—including powerful medical displays for accurate image analysis—can transform care delivery, patient experiences, and operations across healthcare facilities while increasing patient access to essential preventative care.

[Discover Next-Level Medical Monitors](#)

Medical Imaging AI

When it comes to patient care, accuracy and clarity are paramount. False positive diagnoses cause emotional stress and financial strain for patients, hardships that can often be avoided with more powerful display technology.

Emerging Artificial Intelligence (AI) technologies can help physicians improve diagnostics and craft treatment plans with confidence. Take mammography, for example. In a recent study of thousands of mammograms, AI algorithms outperformed the standard clinical model for predicting five-year breast cancer risk. When evaluating women in the top 10% of risk, AI predicted up to 28% of cancers compared to 21% predicted by the Breast Cancer Surveillance Consortium (BCSC).³ Similar algorithms have also been used to predict risk for advanced kidney failure, up to 48 hours in advance.

Using AI for Predictive Medicine

DeepMind Health researchers at Google² designed an algorithm to predict the risk of advanced kidney failure with impressive accuracy:



**56% accurate overall
across at-risk patients**



**90% accurate for severe
cases requiring dialysis**

Stronger. Clearer. Earlier.

Medical imaging AI works to render stronger images for clearer diagnosis and earlier detection. On top of life-saving potential, these solutions can offer economic benefits by significantly reducing healthcare costs. In the United States alone, McKinsey and Harvard University studies estimate that AI adoption in healthcare can save the country between \$200 and \$350 billion per year. Another study conducted by an insurer found that digital health technology reduced emergency room visits by 9% and inpatient admission by 17%, resulting in an overall savings of \$641 per member each month.²

[Explore Medical Display Solutions](#)



Remote Radiology

Out of all healthcare departments, radiology is uniquely suited for a hybrid model. With the right technology in place, radiologists can securely examine diagnostic images from anywhere using a cloud-based Picture Archiving and Communication System (PACS). Doing so not only affords more flexibility to the radiology team, but improves the speed in which images are analyzed. For example, medical images that traditionally took several days to render, examine, and return could be completed in as little as a few hours.

As a result, tech companies are innovating to provide hybrid radiology departments and labs with the power they need—while also adhering to the highest security standards for protecting sensitive patient data and information.

Clarity When Every Detail Counts

For remote radiology to be successful, access to powerful visual technology is imperative. In June of 2023, the National Cancer Institute reported that invasive breast cancer was present but undetected by mammography (false negative) in 6% to 46% of exams.¹ By deploying stronger medical display technology across remote or hybrid radiology teams, healthcare facilities can experience sharper image quality—reducing the risk of a false negative breast cancer screening and getting patients access to essential treatment faster.

[View Display Solutions for Radiology](#)

Diagnostic Display Keys to Success

To thrive in a hybrid model,
radiologists need:



**Lightweight monitors
with seamless
connectivity**



**A secure cloud
system to run
PACS programs**



**Enhanced image
clarity for
confident analysis**



3 Radiology. "Comparison of Mammography AI Algorithms with a Clinical Risk Model for 5-year Breast Cancer Risk Prediction: An Observational Study." June 2023.



Cloud Migration Solutions

Moving patient files from cabinets to digital folders streamlines operations across healthcare facilities. But did you know it can also help to significantly reduce operating costs? According to Deloitte⁴, a leading healthcare provider was able to save \$50 million (20% of its annual total operating budget for IT) by migrating to the cloud. And that's just the tip of the iceberg.

By unlocking all the opportunities that accompany cloud migration, this healthcare leader was able to support new care channels such as at-home diagnostic testing, manage health data in a secure automated environment, create digital processes to boost agility and efficiency, and even use advanced analytics and AI to revolutionize patient care. In the cloud, the opportunities for operational excellence are astounding. Perhaps that's why so many healthcare organizations plan to make the switch.

Go Digital with a Trusted Partner

LG Cloud Computing Solutions for Healthcare are designed to protect your critical files and data at every turn. Our LG Thin Client solutions provide medical facilities with an endpoint that delivers seamless performance and protection through a secure, reliable virtual desktop experience. Plus, shift changes are simple with dual-band RFID, which allows multiple users to log in and view their personalized virtual desktop.

[Learn More About LG Cloud Computing](#)

Healthcare is Moving to the Cloud

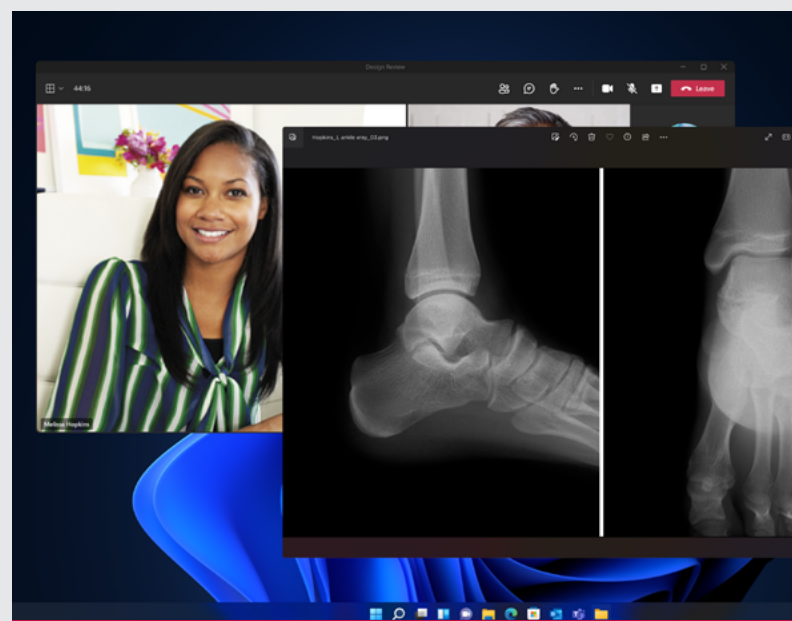
A survey of 400 health executives across 6 countries found:



67% plan to move to the cloud within 1 year



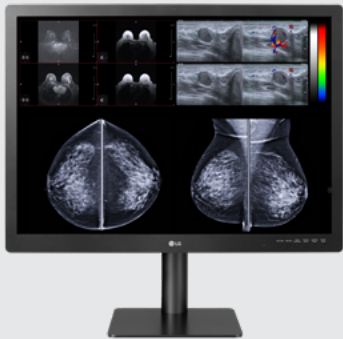
96% plan to move to the cloud within 3 years



⁴ Deloitte. "Unlocking enterprise innovation in the cloud."

Every Detail in Brilliant Resolution

LG Medical Monitors are engineered to elevate patient care and physician confidence with ultra-reliable visuals from radiology to the operating room.



LG Diagnostic Monitors (Model 31HN713D 12MP Resolution)

Designed for breast imaging, this 31-inch 12MP IPS display produces crisp, sharp image quality and offers focus view capabilities to support accurate, efficient diagnoses.

- World's first IPS black diagnostic monitor, delivering deep black levels for sharp expression.
- Highest visual contrast ratio of 2,000:1 for easy analysis.
- Features multi-resolution mode for adjusting and optimizing across devices.
- Equipped with Pathology Mode for realistic detail and color reproduction.



LG Digital X-Ray Detector (Model 14HQ701G)

Examine clear X-ray images fast with the LG Digital X-Ray Detector, wrapped into a lightweight carbon-fiber and magnesium body for ultimate durability and portability.

- High transmission speed renders full images in 2 seconds or less.
- Features local storage to fully digitize X-ray image analysis.
- Dust tight and water resistant, even when immersed under pressure.
- Long-lasting battery for extended operating times (up to 7.5 hours).



LG Surgical Display Monitors

Improve operating room efficiency with the detailed picture quality of LG Surgical Display Monitors, complete with wide viewing angles and mirror & rotation modes for surgeon convenience.

- Durable and easy to clean, offering maximum protection in the operating room.
- Flicker Safe technology for a more comfortable workday.
- Offers brightness stabilization and vivid color reproduction for surgeon confidence.
- Automatic failover input switch in case of a power interruption or outage.



See Clearer for Yourself

Experience the vital image clarity of LG Medical Monitors by requesting a demo. Get started today at lgsolutions.com/medical-monitors.



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