

# EMERGING TECHNOLOGIES TRANSFORMING HEALTHCARE

Free Your Healthcare Technology Management Team to Lead the Effort

## CRITICAL DECISIONS

### Understanding the Technologies Reshaping the Patient Experience

The COVID-19 pandemic showed just how rapidly technology can transform the way healthcare is delivered on both a day-to-day clinical and broader public health level. But the pace of technology change is only accelerating — and the next wave of transformative technologies promises to fundamentally reshape healthcare and redefine the patient experience.



#### Data Security

Healthcare tends to lag behind other markets in terms of defending against cyberattacks. But the proliferation of IoT technologies, coupled with the rapid growth of cyberattacks in healthcare, has more organizations elevating data security as a top strategic priority.



#### Artificial Intelligence (AI)

AI and machine learning will unleash new diagnostic and predictive capabilities that will greatly improve patient outcomes. AI is also unlocking new automation capabilities to alleviate tedious burdens, elevate roles and help fight burnout.



#### Wearables

There are now more than 320 million wearable devices being used by healthcare organizations to track everything from physical activity and vital signs to prescription consumption and more. Integrating — and securing — these devices will present an increasingly central challenge in the coming years.<sup>1</sup>



#### Augmented and Virtual Reality

The pandemic placed an increased focus on going digital and the need for remote collaboration tools. To meet the need, Augmented Reality (AR) and Virtual Reality (VR) will continue to grow at a rapid pace, with recent studies projecting more than 30% annual CAGR over the next four years.<sup>2</sup>



#### Robotics

Whether it's moving patients, transporting supply items or enabling remote examinations, robots are game-changers — particularly in light of intensifying talent shortages and turnover rates.



#### Quantum Computing

The amount of environmental, hereditary, behavioral and population health data pouring into hospitals is overwhelming. Making analytical use of it requires computing power and resources hospitals don't have yet.



#### 3D Bioprinting

This technology is rocketing forward faster than predicted. 3D printing appears to be on track for replicating organs for use in testing drugs — and, eventually, in actual transplants. Applications inside the hospital are far-reaching.



#### Machine-Human Integration

Robotic prosthetics are already disrupting the healthcare market with future technology being designed to receive brain signals. Full exoskeletons may even help paralyzed patients regain motor skills.

## WHERE TO INVEST?

### Healthcare Technology Management Experts Leading Tech Strategy

The role of Healthcare Technology Management (HTM) is rising to a strategic business level. HTM teams now play a central role in evaluating emerging technologies and identifying technology investments that align to top-level growth strategies.

## THE PROBLEM

HTM team members spend nearly half (40%) of their time on low-value tasks — searching for equipment, managing multiple vendors and servicing functional equipment due to operator error, etc. — leaving too little time for technology exploration and decision-making.<sup>3</sup>

**62% INCREASE**  
in bedside  
**MEDICAL EQUIPMENT**  
in the last 20 years<sup>4</sup>

The average hospital has  
**HUNDREDS**  
OF DIFFERENT VENDORS

**46%**  of HTM PROFESSIONALS  
ARE OVER THE  
**AGE OF 50**<sup>5</sup>

**85% OF**  
HTM PROFESSIONALS  
say their workload is  
**HEAVY OR EXCESSIVE**<sup>5</sup>

## THE SOLUTION

Alleviate the burden of low-value tasks so your Clinical Engineering team can deliver greater value to your hospital.



#### Eliminate Equipment Backlogs

Supplement your staff with on-demand technicians from a qualified provider to eliminate equipment backlogs, support recalls, handle demand surges and reduce equipment rental.



#### Offload Your General Biomed Equipment

Leverage outsourced technicians to handle your general biomed equipment, reducing equipment downtime and enabling your team to focus on high-value technologies and key business initiatives.



#### Decrease Administrative Burden

Consolidate service contracts through a risk-free vendor management service. Free your staff for more strategic tasks and dramatically cut service costs through consolidation, negotiation and right-sizing of coverages.

Contact Us Today to Learn More About Our Clinical Engineering Services

[agilityhealth.com/ce](http://agilityhealth.com/ce)



1. Deloitte - <https://www2.deloitte.com/us/en/insights/industry/technology/technology-media-and-telecom-predictions/2022/wearable-technology-healthcare.html>

2. Vantage Market Research - <https://finance.yahoo.com/news/105-mn-augmented-reality-ar-120400907.html>

3. Indiana and Purdue University Research. (2009, November 17). University Research Concludes Real Time Location Systems Can Transform Hospitals.

4. Horblyuk, R., Kaneta, K., McMillen, G., Mullins, C., O'Brien, T., Roy, A. (2012, July). Out of Control - little-used clinical assets are draining healthcare budgets. Retrieved from: <https://pubmed.ncbi.nlm.nih.gov/22788039/>

5. 24x7 HTM Salary Survey 2021 - <http://digitaledition.24x7mag.com/x7mag/diged/20220102/index.html>