

# Essential Digital Transformation in Medical Education

## 5 Tech Trends to Look for in 2021

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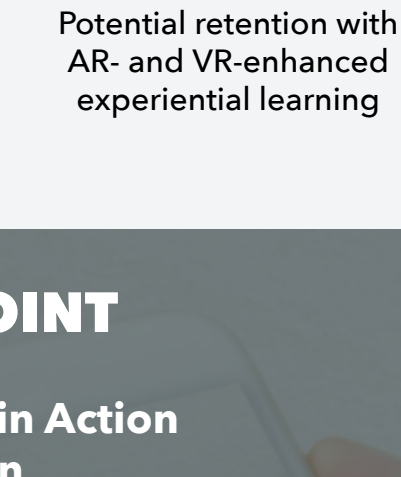
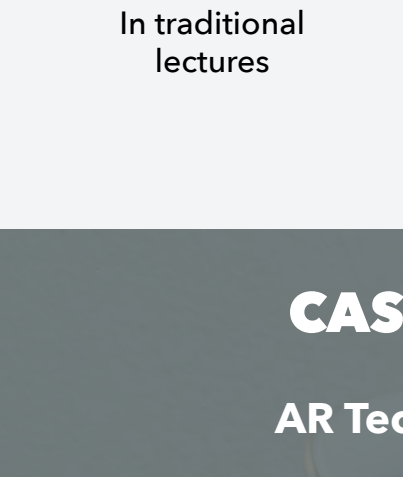
### AR Is Finding its Role in Healthcare and Education.

AR, VR and mixed reality solutions are being deployed across healthcare sectors, as well as clinical training, demonstrating a great deal of potential use cases.



Extended reality tech (XR) is an umbrella term encompassing virtual reality, augmented reality, and mixed reality. To date, these immersive technologies have been implemented in 38% of hospitals.

**According to a study by University of Nebraska Medical Center, the retention rates of student knowledge dramatically increase with immersive learning.**



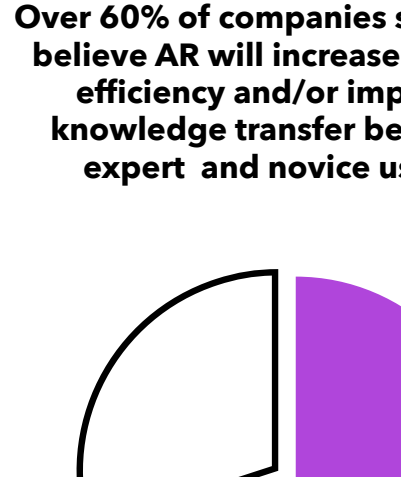
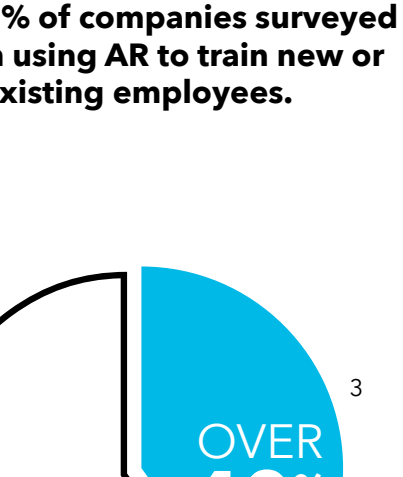
### CASE IN POINT

#### AR Technology in Action

##### AccuVein

AccuVein is using AR technology to make both nurses' and patients' lives easier.

A handheld scanner projects over the skin to show nurses and doctors where veins are in the patients' bodies.



### AR's biggest use case is going to be in training.

Over 40% of companies surveyed plan on using AR to train new or existing employees.



Over 60% of companies surveyed believe AR will increase worker efficiency and/or improve knowledge transfer between expert and novice users.

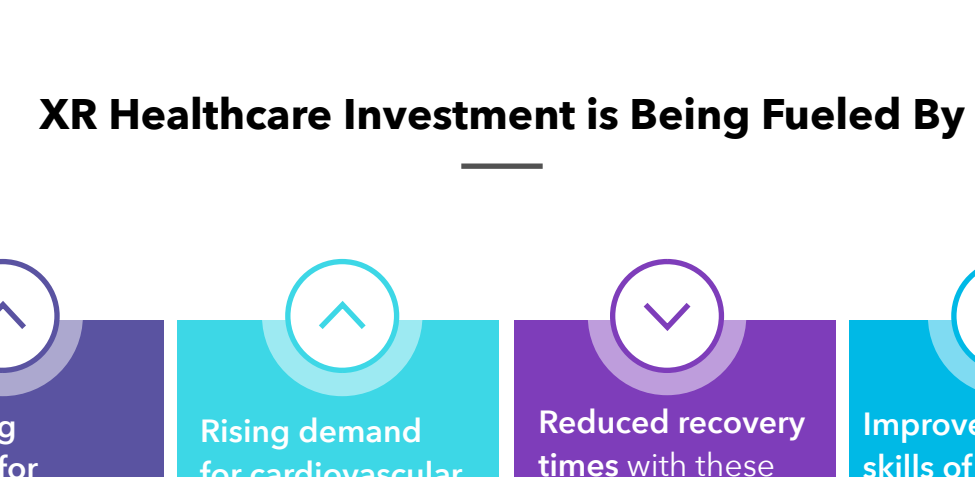


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### Investment is pouring into XR technology.

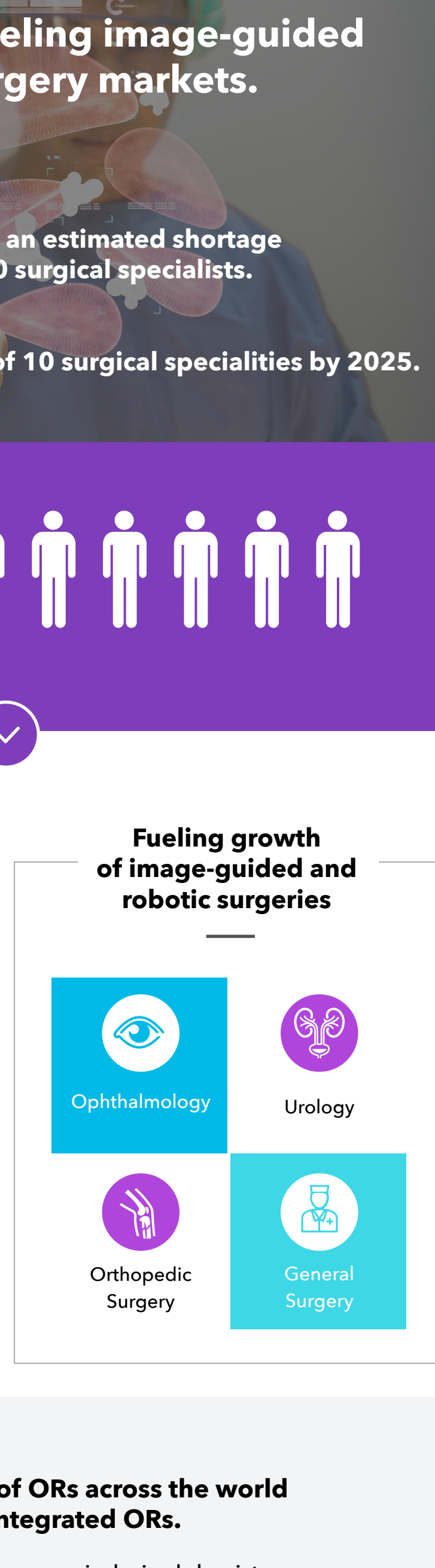
Projected investment in commercial use of AR and VR technology worldwide in 2024

Investment in billion U.S. dollars



By 2025, Goldman Sachs predicts that the XR investment in the enterprise and public sector will be \$16.1B. Healthcare will lead the way at \$5.1B, followed by engineering (\$4.7B), real estate (\$2.6B) and retail (\$1.6B).<sup>1</sup>

**Q:** In which sectors do you expect to see the most disruption by immersive technologies in the next 12 months? (Outside of the gaming and entertainment space)<sup>6</sup>



### XR Healthcare Investment is Being Fueled By

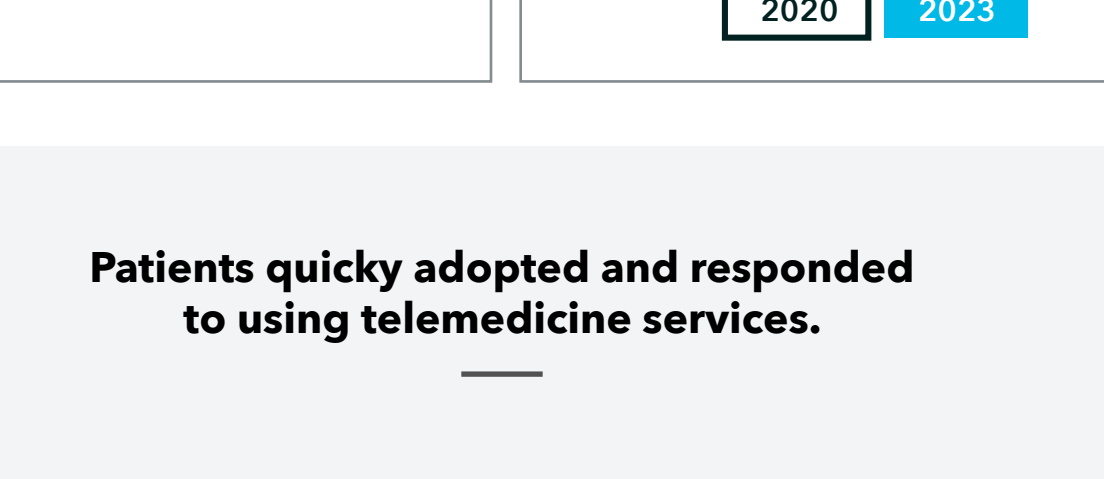


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### COVID-19 is fueling image-guided and robotic surgery markets.

By 2032, there will be an estimated shortage of 14,300 to 23,400 surgical specialists.

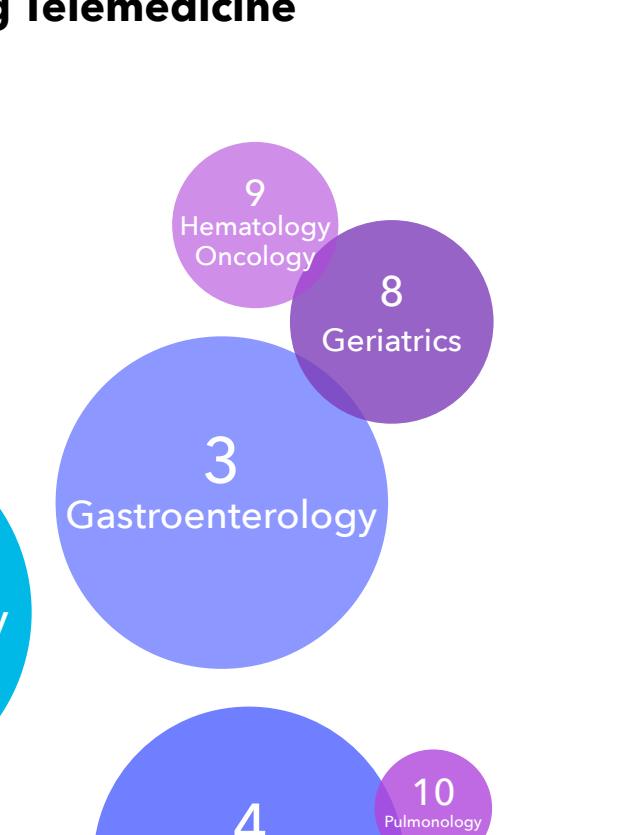
Shortages are expected in 9 out of 10 surgical specialties by 2025.



### Shortages Leaving the Door Open for Opportunities

- Over half of surgeons exhibit signs of burnout
- Shortages of up to 23,400 surgeons by 2032
- Current events like COVID-19 leading to a huge backlog of elective surgeries

### Fueling growth of image-guided and robotic surgeries



### By 2022, 35% to 45% of ORs across the world will become integrated ORs.

The operating room (OR) is transforming from a seemingly gray box into a technology-powered, infection-free and sleek surgical environment. The new-age OR will be able to utilize intelligent and efficient delivery options to improve the precision and predictability of the services offered. This can be made possible through robotic-assisted surgery devices (RASD), which will greatly help drive the \$4.50 billion USD and EU5 hospital OR products and solutions market toward \$7.04 billion by 2022.<sup>9</sup>

4

### COVID-19 has significantly accelerated the adoption of telehealth services by patients and physicians alike.

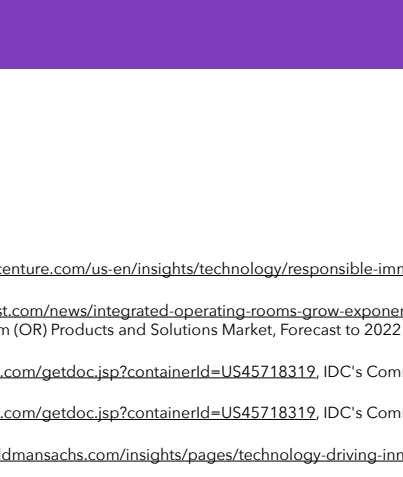
53% of U.S. healthcare practitioners now use telemedicine due to COVID-19 who did not use it prior to the pandemic.



### CASE IN POINT

Doximity researchers estimated that more than 20% of all medical visits were conducted via telemedicine in 2020, which represents \$29.3 billion of medical services. Going forward, researchers predict that up to \$106 billion of current U.S. healthcare spend could be virtualized by 2023.

### Total U.S. Medical Visits in 2020



### Predicted Telehealth increase by 2023



### Patients quickly adopted and responded to using telemedicine services.

**Q:** Prior to the pandemic, how many of your healthcare visits had been conducted via telehealth annually?



### Top 10 Specialties using Telemedicine



5

### COVID-19 Ushers in More Connected Patients, New Preferences.

U.S. consumers' use of wearables are increasing due to health conscientiousness and improvements in efficiency and convenience.<sup>10,11</sup>

Use of wearables increased from 9% to > 33% from 2015 to 2019



### Healthcare devices made up 64.3% of the wearables market



### Touchless technologies are preferred by consumers due to the pandemic.



Whether the requirement is building and deploying 70+ manufacturing processes training courses for one of the top three largest pharmaceutical companies in the world or supporting surgeons and global sales staff with rapid response training on equipment for emergency preparedness, CGS can help.

**Learn more**

**About CGS**

Quality and speed are essential to meeting new expectations in efficiency and agility from customers, staff, patients, and suppliers. CGS supports and scales learning needs around onboarding, compliance, content development, instructional design of medical content and AR-Enabled solutions for global training, remote guidance and assistance.

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Source:

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