### 2025 Telehealth Technology Trends

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### Who is TTAC?

TTAC is federally funded through the Office for the Advancement of Telehealth (OAT)

TTAC provides
Technology Assessment
services to the 12
regional TRCs as well as
the other national TRC.



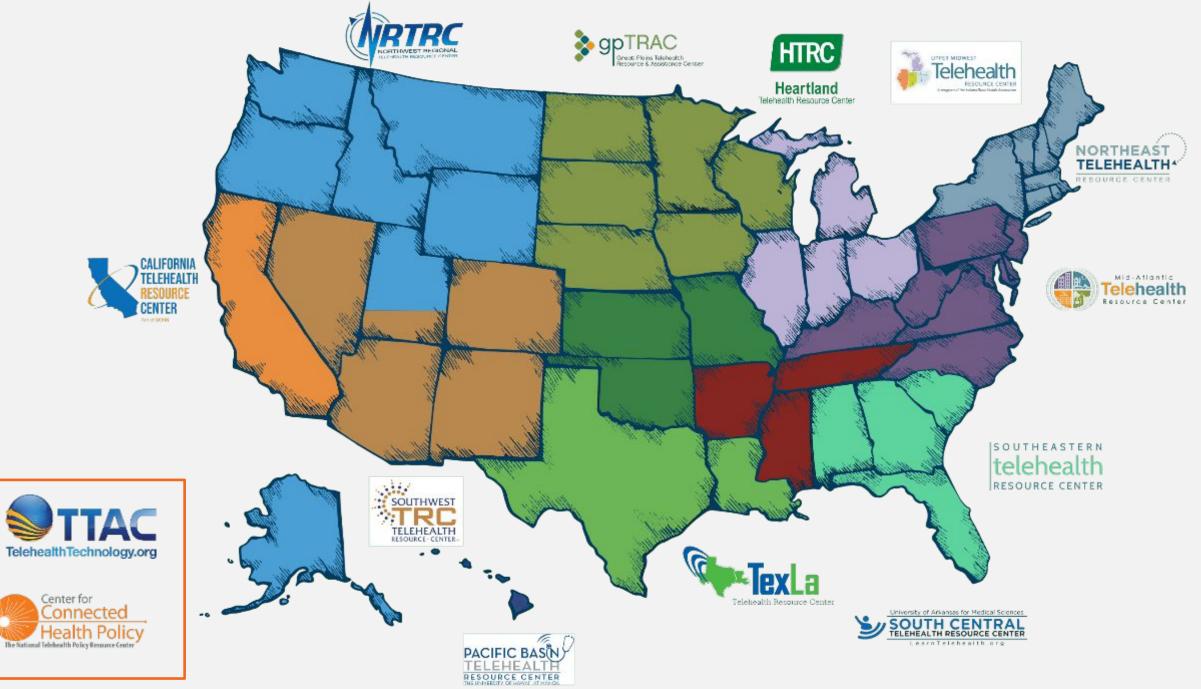




# National Consortium of Telehealth Resource Centers

Our website hosts many resources. If you can't find what you're looking for, contact your regional TRC:

www.TelehealthResourceCenter.org



#### What do we do?



**Technical Assistance:** 

Individual Organizational



Website Resources:

Innovation Watch
Technology Overviews
Technology Toolkits





Projects:

Telehealthbroadbandproject.com



**Technology Demonstrations** 

Virtual

**Technology Showcase** 



### What We're Watching: 2025 Telehealth Tech Trends

- Evolving Endpoints
- Al in everything- for better or worse
- Home and Hospital- Care Locations of the Future
- Connecting America- Broadening Broadband



## Al in everything- for better or worse

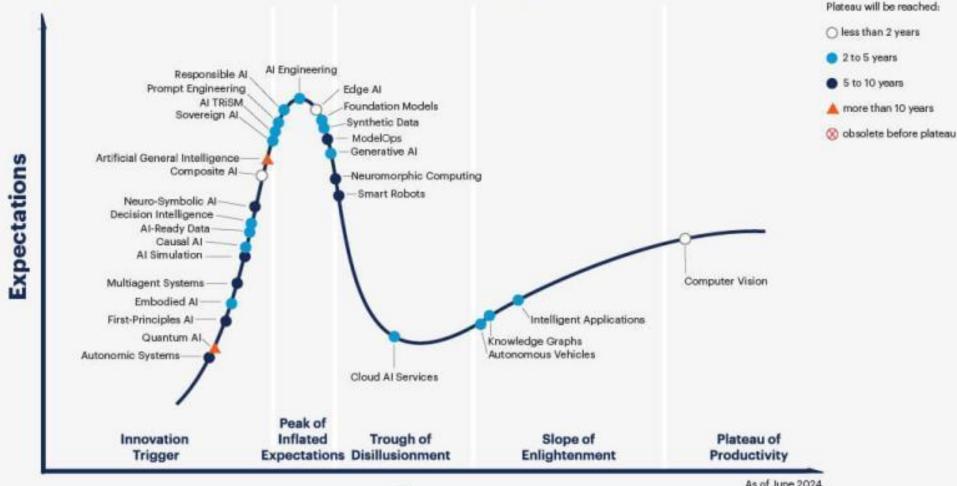
- "AI" in Everything
- Sales Buzzword
- Robotics and Al companions
- Al for Nursing and EHR workflows
- Edge Al for Audio
   Video







#### Hype Cycle for Artificial Intelligence, 2024

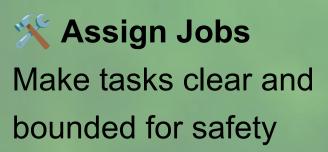


As of June 2024





Clarify what "Al" really means



Build Guardrails

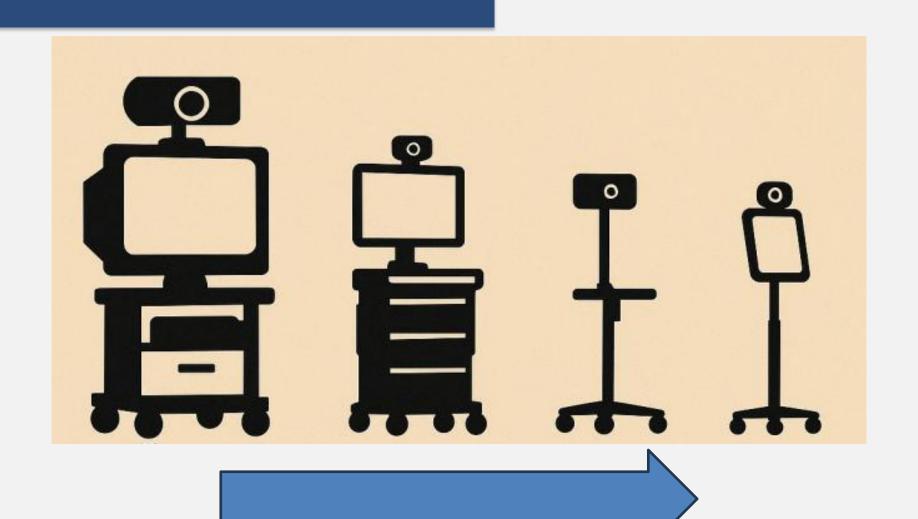
Data rules, human review

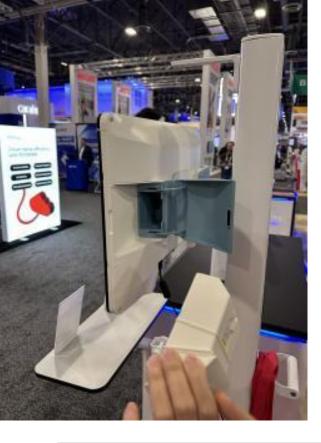
and transparency

#### Al Trends

- •"What do you mean by AI"
- Good Al's need well-defined jobs (for now)
- Policy and Data Governance need to race to keep up

### **Evolving Endpoints**









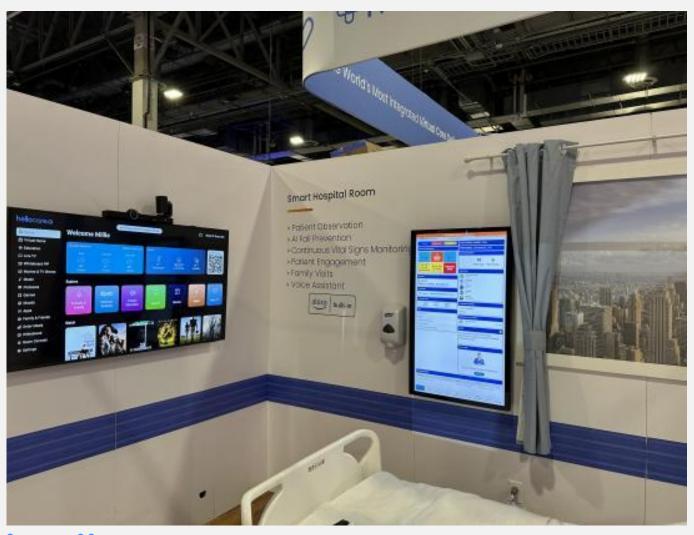


### Endpoint Trends

- Portability
  - Wireless, cellular, satellite connectivity
  - Non-outpatient care settings
- Reduced complexity
- Non-Cart form factors
  - Kiosks, Tablets, All-In-One solutions

### Home and Hospital – Care Locations of the Future

- Inpatient Telemedicine
  - Tele-sitting
  - Tele-ICU
  - Fall detection/prevention
  - Ambient Vitals Collection
- Products as Environments
  - Service on demand
  - Cloud based
  - Integration with EHR



hellocare.ai

AI-Enhanced impatient room with Alexa voice command

#### Home and Hospital – Care Locations of the Future

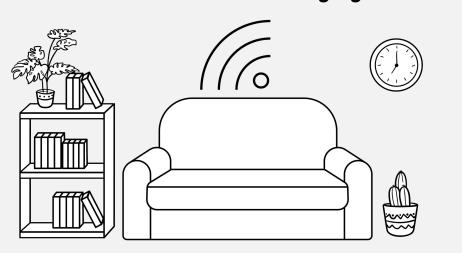


Last line of connectivity



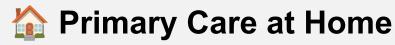
Bringing care to the patient











Care where patients live

## Consumer Health Tech & Improved Patient Data:

Patient-generated insights supporting clinical decisions.

#### Home and Hospital – Care Locations of the Future





FreeStyle Libre 3



Continuous
Glucose
Monitors
(CGM)

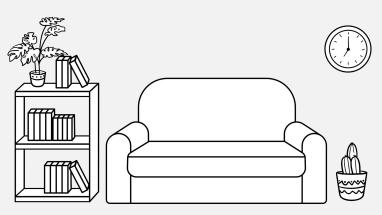






Dexcom Stelo (OTC)







# Home and Hospital Trends

#### Telehealth is expanding beyond traditional settings

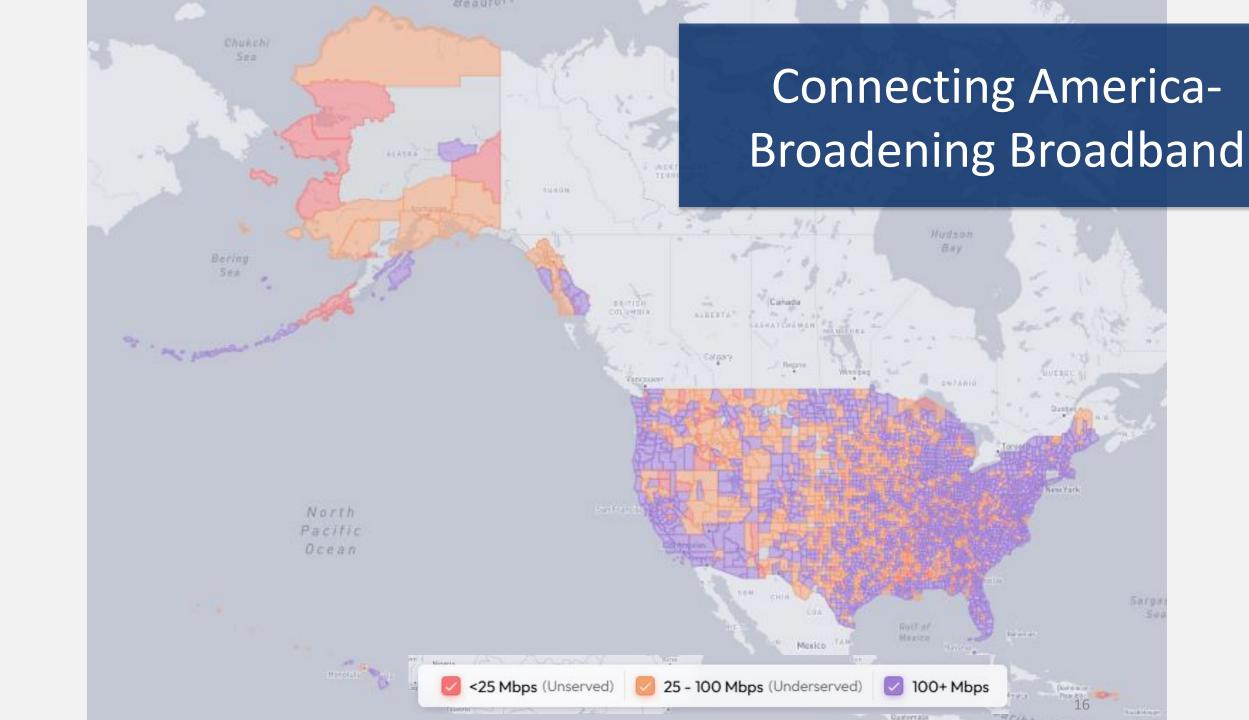
- Inpatient telemedicine adoption accelerating (Tele-ICU, smart rooms)
- Home and community-based care becoming standard practice

#### Technology Embedded

- Technology is increasing integrated into platform-based telehealth solutions (cloud, voice command)
- Mobile connectivity critical for patient access

#### Patient-generated health data is growing in quality and clinical importance

- E.g. Continuous Glucose Monitors (CGMs) provide meaningful, actionable patient insights
- Improved data visualization enhancing patient self-management and clinical care decisions



#### Common Broadband Challenges:

- High Latency (or "jitter")
- Rate Limiting
- Inconsistent speeds
- High packet loss
- Excessive outages
- Lower than expected speeds

Not every "experience" problem is network-caused.



#### Telehealth Usage

Telehealth is more widely adopted in areas with robust broadband.



#### **Community Opinions**

Varied satisfaction levels with broadband; some accept limitations, while others seek better options but can't find them.



#### Urban vs. Rural

Rural clinics are less likely to provide telehealth, limiting rural residents' healthcare options.



#### **Barriers**

Digital literacy, infrastructure reliability, and support shortages made rural telehealth less accessible.



#### Affordability

Cost barriers limit broadband access for many rural, low-income households, restricting reliable internet options.

- Infrastructure being deployed
- Consumers and communities may be left behind
- More work can be done to explain
  - The basics of broadband connectivity
  - How to get the most from the connectivity you have

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### What We've Seen: Summary

#### Evolving Endpoints

- Modular, portable, simplified tools
- Wireless, cellular, satellite connectivity expanding access

#### Al Integration

- Valuable when clear roles defined
- Governance must evolve rapidly

#### Care Locations: Home and Hospital

- Telehealth expanding beyond traditional clinic locations
- Technology increasingly platform/system based
- Patient generated data improving becoming more important

#### Connecting America- Broadband Access

- Connectivity is key to telehealth
- Closing Gaps with infrastructure and education



### Have Questions???

www.telehealthtechnology.org

Telehealth Technology.org

Busin Transition France of Technology Showcase

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INNOVATION WATCH

TECHNOLOGY SHOWCASE

RESOURCES

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3 Ask us your technology questions.

#### Thank You



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