

Avel eCare Emergency  
**Telemedicine in Rural  
ED Settings**

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# Speaker

**Kelly Rhone, MD, FACEP**

Vice President, Innovation and Outreach

Avel eCare

# Agenda

- Background on Avel eCare
- How Tele-Emergency Works
- Impact
- Q&A

# Background

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## Stats

**120** Hospitals have closed in the past **10** years

**31** states have seen at least one rural hospital shut down

**49%** of community hospitals report an operating margin of less than **2%**

\*Beckers Hospital Review



## **CHALLENGE: Workforce**

Over the past 10 years, ED visits are up  
**24.7%**

Average time spent waiting in ED before  
seeing a physician, NP or PA –  
**24 minutes**

Shortages exist in staffing

# Burnout

**96%** of Medical Professionals Agree that Burnout is an issue.

**65%** believe that it is a serious problem.

\* NEIM Catalyst



# Avel Telemedicine Guiding Principles

Since 1993, Avel experts have been pushing the boundaries of telehealth and expanding care to impact millions of patients in rural communities spread out across America. **We are a virtual health system that helps providers maintain, retain, and grow their services.**



**Improve Access  
to Care**



**Improve Care and  
Outcomes**



**Lower Costs**

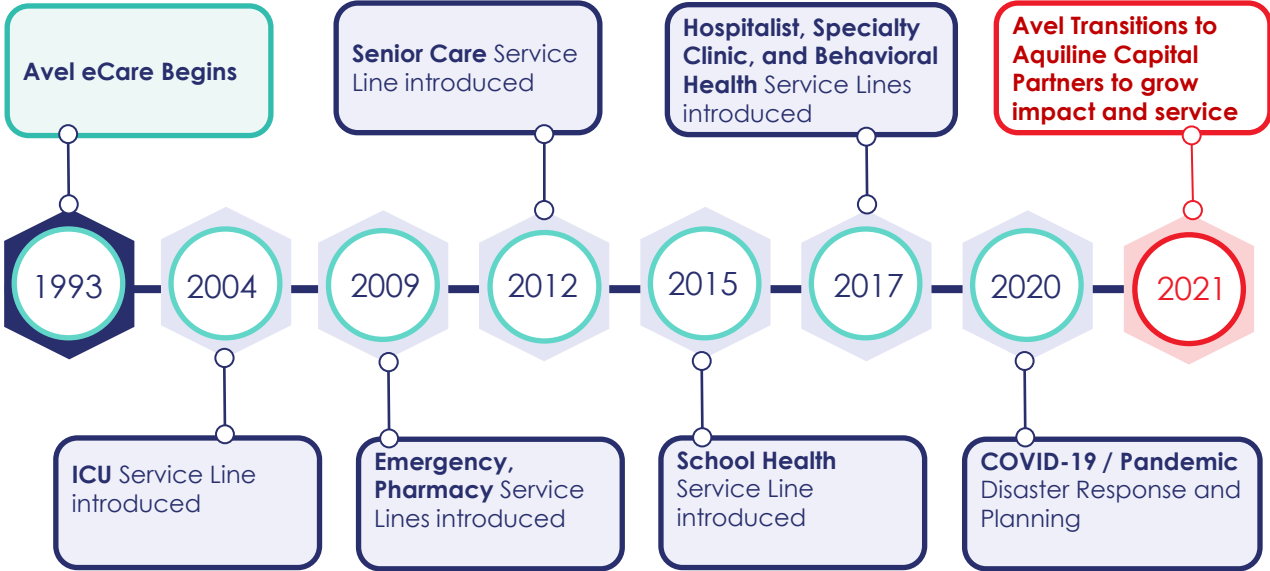


**Improve Workforce  
Sustainability**



# Avel: Three Decades as a Virtual Care Leader

## Evolution



## Future

Avel eCare has more than 27+ years of experience building virtual care service lines with a continued pipeline of new developments and innovations

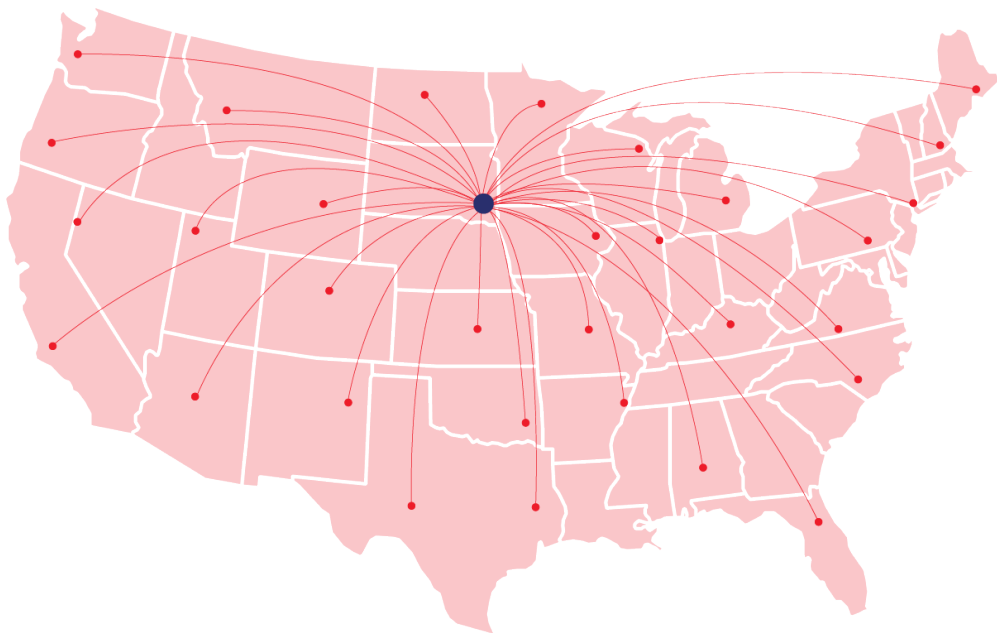
- Disaster Response
- Rural Primary Care
- Respiratory Therapy
- eCare BHS Mobile Crisis

# Stats (continued)

**25+ years**  
of Delivering  
Telehealth Services

Over **600 sites**  
in **32 states**

Serves **17%** of all  
Critical Access Hospitals  
in the nation



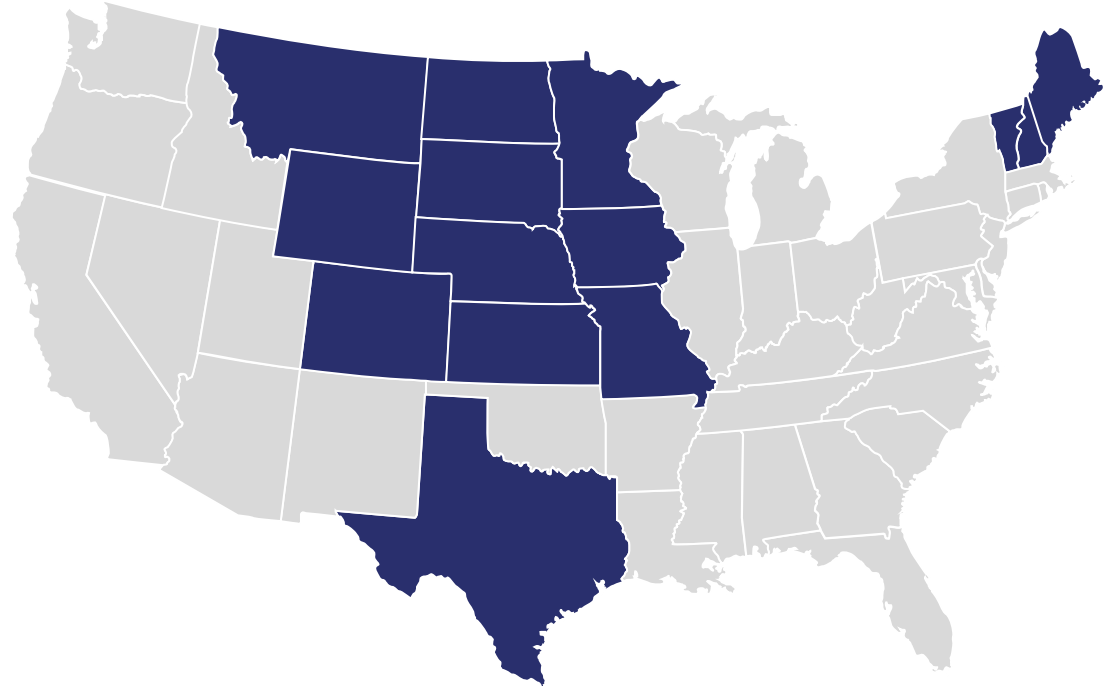
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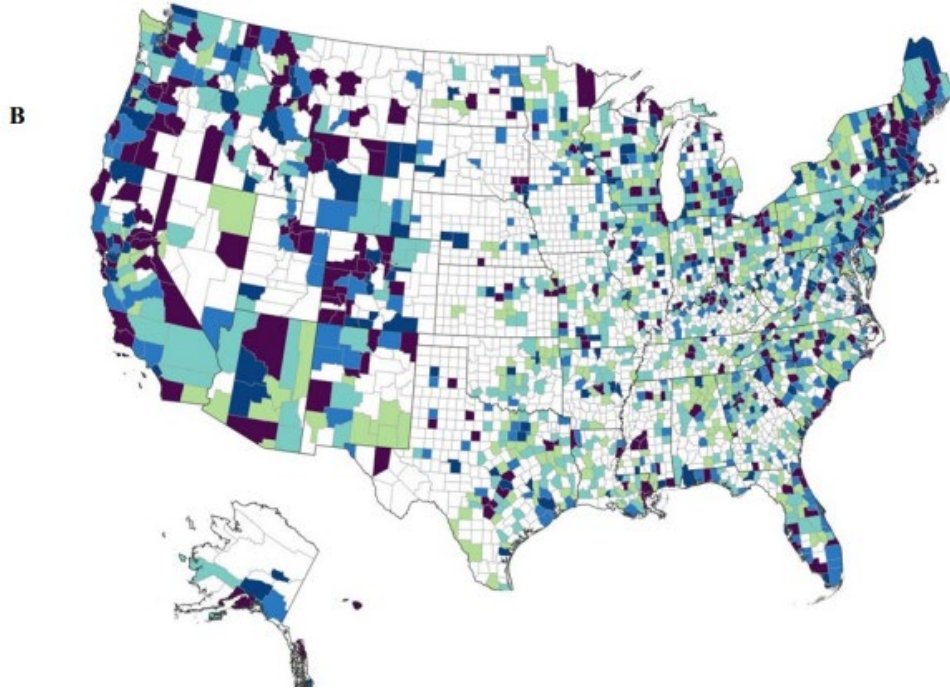
# Avel eCare Emergency Footprint

**14** States

**210** Total Hospitals



# Physician Density



Emergency physician density per 100,000 population by county. B: Emergency medicine-trained or emergency medicine board-certified emergency physicians

*ACEP Rural Emergency Care Task Force Report to Board of Directors, October 2020*

# How Tele-Emergency Works





# Video Access

Immediate video access to board-certified emergency physicians and nurses



# Technology





# Technology in Practice

## Technology Package includes equipment for 2 bays:

- (2) 32" HD TV's
- (2) Polycom HD cameras with 20x zoom
- Microphone/speaker
- Additional supporting equipment: King Vision Laryngoscope; GlideScope



Emergency Room  
Fixed Equipment



ALGO  
Speaker

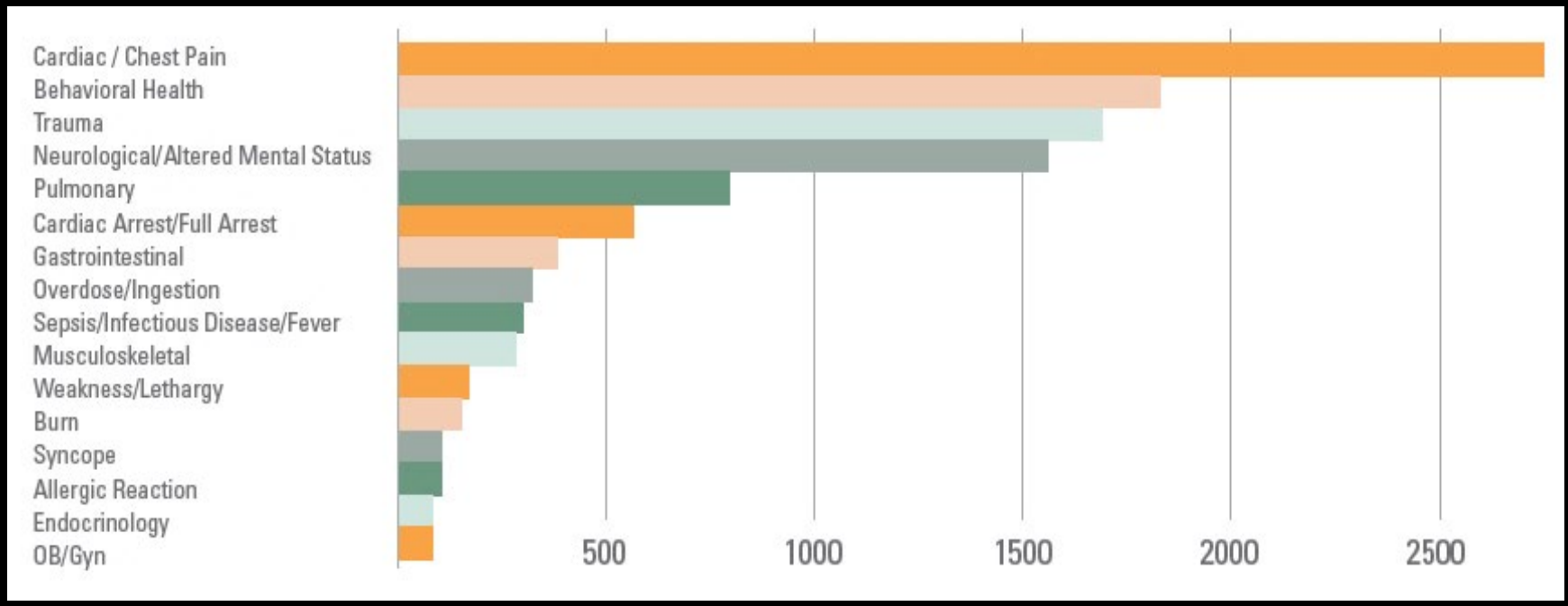


King Vision  
Laryngoscope



GlideScope

# Range of Services



# Benefits

## 24/7 Access

- Instant access to specialty support during difficult or multiple emergency cases
- Behavioral Health assessments
- Initiate diagnostic testing

## Collaboration

- Improve recruitment and retention by providing a collaborative partnership
- Leverage APP staffing model, if appropriate

## Immediate Support

- Enhance quality of care by timelier medical interventions
- Nursing documentation support
- Translation services

## Transfer Assistance

- Additional support with patient transfers or eliminate unnecessary transfers

# Benefits Continued

## Experience

**200+ sites**

Video Encounters  
Telephone  
Support  
Transfer Support

## Quality

Hub physician was  
available an  
average of

**17-21  
minutes\***  
sooner than the  
local physician

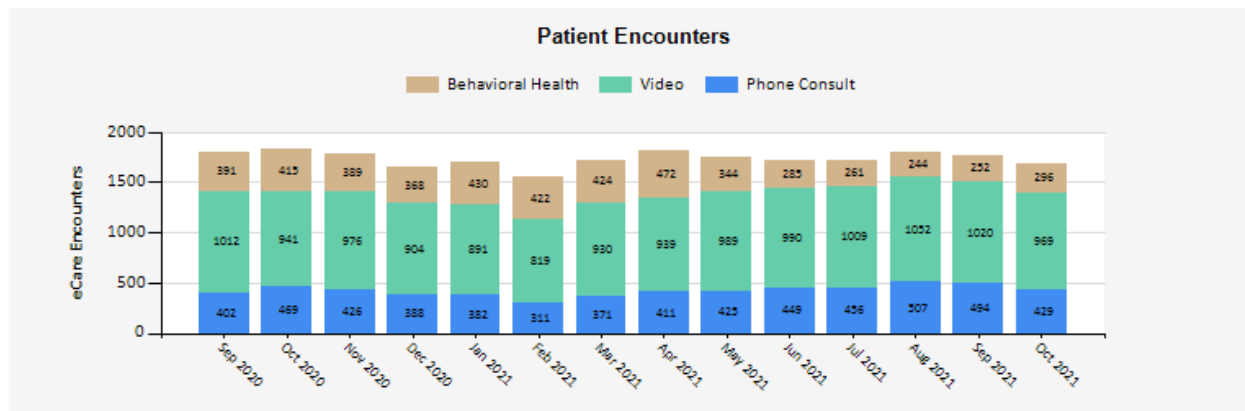
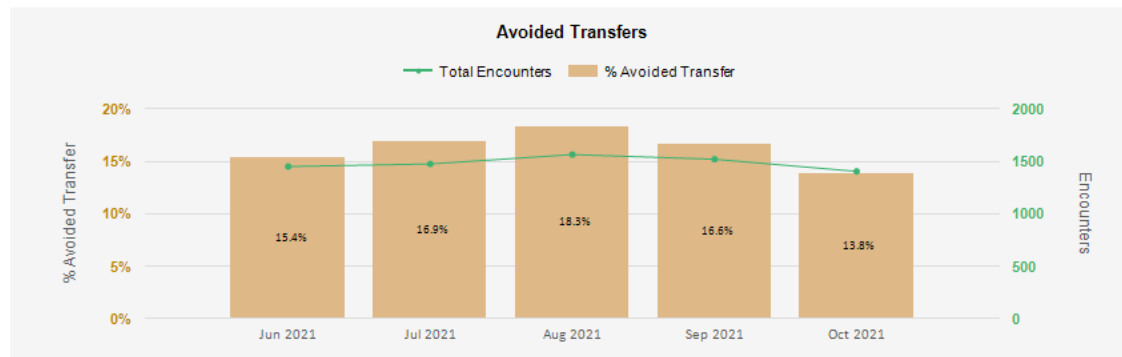
## Recruitment

**91.2% of  
clinicians**  
believe that eCare  
Emergency helped  
with recruitment  
and retention

Time to physician average results were collected from  
two research studies.\*

# Impact of Tele-emergency

# Avel Outcomes



The number of eCARE Emergency patient related encounters.

- Video - two-way video communication with eCare ED
- Phone Consult - non-video clinical consult
- Behavioral Health - Behavioral Health Assessments.

# Workforce Impact



Of those surveyed, **92.6% of providers using eCARE Emergency** agreed that **“the availability of tele-emergency helps with recruitment and retention of health care professionals in my hospital.”\***



**Physician recruitment costs per vacancy can be as high as \$88,000 and average approximately \$30,000.** Physician turnover rate is estimated at 6.1% per year.

# Nursing Shortage

For nearly a decade, the US has been facing a critical nursing shortage

Over **1 million** new registered nurses will be needed by **2030** to meet healthcare demands

The United States Bureau of Labor Statistics projects **175,900** openings for RNs every year until **2029**

## Understanding the American Nursing Shortage

[Facts and stats](#) | [Locations](#) | [Causes](#) | [Effects](#) | [Solutions](#) | [Takeaway](#)



The New York Times

### *'Nursing Is in Crisis': Staff Shortages Put Patients at Risk*

"When hospitals are understaffed, people die," one expert warned as the U.S. health systems reach a breaking point in the face of the Delta variant.



# Supporting the Rural Workforce

“Tele-ED helps us keep those young physicians here, where they still get to have a family life, time away, and not be tied to their phones.”

**92.6% of clinicians believe that eCare Emergency has helped with recruitment and retention**

**HCAHPS SCORES**

**INPATIENT CARE**

INCREASED FROM A LOW OF

**24% to 99%**

**HCAHPS SCORES**

**EMERGENCY DEPARTMENT**

INCREASED FROM A LOW OF

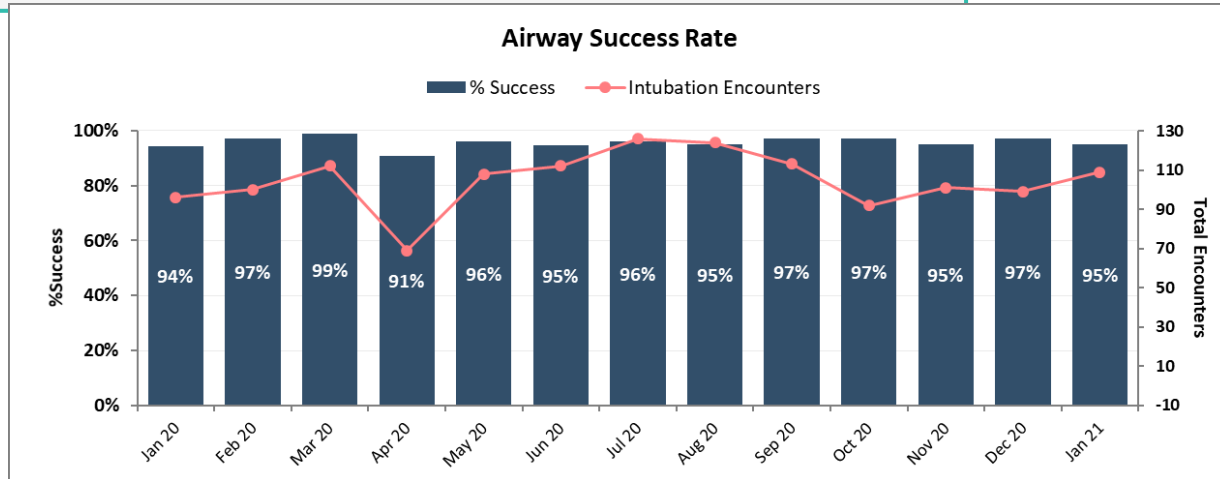
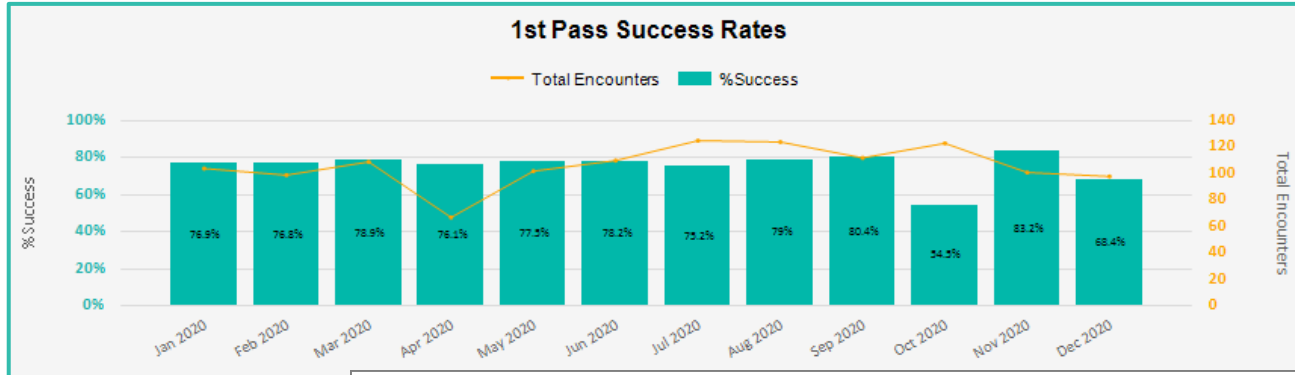
**60% to 95%**



**2x Increase in Daily Census**

**25% Reduction in ER Staffing Costs**

# Clinical Impact



# Real-Time Learning

- Rural ED providers and nurses perceived real-time learning during telemedicine consultations as hands-on learning
- **Training themes**
  - Learning occurs frequently
  - Training is spontaneous
  - Respect and explanation facilitate learning
  - Keeps rural practices up to date
  - Instills confidence
  - Improves performance



**Make Lives Easier**



# Quote

“I’ve got to admit, the two docs I’ve got on right now, ... both have made the statement to me directly that if it wasn’t for tele-emergency, they would not have come out here because they were not comfortable with it.”

– Hospital CEO





The future of  
telemedicine is  
bright

# Thank you!

Kelly Rhone, MD, FACEP

Vice President, Innovation and Outreach

