





Telemedicine
The New & Innovative Healthcare Delivery System

High quality, **team-based** approach to care

- Increases access to healthcare services, while reducing travel
- Utilizes evidenced-based protocols across the entire network
- Allows for expanded use of NPs and PAs by having an MD readily available
- Improves safety with earlier intervention and reduction of costly transport (LTC, Prison)
- Care is not dependent on the location of the provider, better workforce distribution

Avera logo in the bottom right corner.

Rural Challenges

Rural Physician 2013 Job Description

13,000 Diagnoses
6,000 Medications
4,000 Procedures
On Call 25% – 50% of the time



- Workforce shortages
- Geographic isolation
- Diminishing community economics
- Low healthcare margins
- Difficulty recruiting physicians
- Increasing dependence on specialists
- Expensive technologies
- Demand for quality

Know it all, No Mistakes

Gawande, A. (2011). Cowboys and Pitcrews. Harvard Medical School Commencement Address. May 26, 2011



Telemedicine Supports the Workforce

- Access to colleagues & support for all healthcare practitioners
- Availability of collegial consultations similar to residency training
- Retention of existing staff – burnout prevention
- Extension of physician practices through mid-level providers
- Recruitment tool

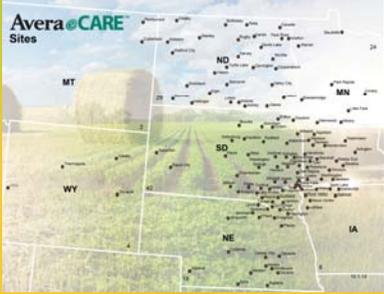


Avera eCARE Services

Avera eCARE					
eConsult	Avera eICU CARE	ePharmacy	eEmergency	eAccess / Long Term Care	eAccess / Correctional Facilities
111 Sites	31 Sites	53 Sites	85 Sites	8 Sites	4 Sites
Nov 1993	Aug 2004	Nov 2008	Oct 2009	Jan 2012	Apr 2012



Avera eCARE Impact



153,240 patients touched
165 hospitals and clinics served
1,000 providers impacted system wide
495,000 square miles covered (7 states)
\$60M in health care costs saved



eHelm

A new frontier in "eHealth" medicine...

The goal of the "eHelm" is to improve healthcare quality and patient outcomes; decrease costs related to health care service delivery; and most significantly, improve health care access for rural populations.




What is eEmergency?

Innovative concept linking two-way video equipment in rural emergency rooms to emergency trained physicians at a central hub, 24 hours a day, seven days a week.



How eEmergency Works

- Immediate access
- Mounted, two-way, interactive video units
- Provides oversight until the physician arrives
- Local provider always serves as primary




eEmergency

Service Description:
Provides rural communities immediate access to Board Certified Emergency Physicians and emergency nurses 24x7.



Value:

- Provides support and a collegial partner to rural clinicians in the delivery of treatment and care decisions
- Reduces door to physician wait time
- Reduces unnecessary patient transfers, maintaining patient care and treatment at the local community
- Reduces delay in diagnostics and treatment
- Serves as a second medical team



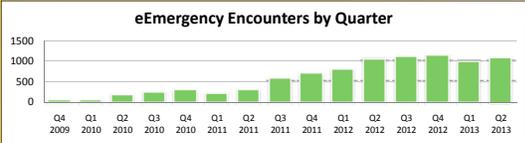
eEmergency

- 85 Sites Live
- Over 495,000 Square Miles Covered
- More than 9,500 Patients Treated
- Over 11,500 Transfers Arranged
- Over 1,150 Transfers Avoided
- Estimated \$9.17M in Transfer Savings

Chief Complaint



eEmergency Encounters by Quarter



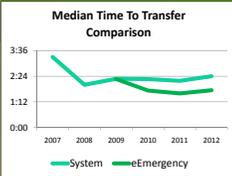
eEmergency

In 25% of all eEmergency cases, the hub physician was available prior to the local physician. In these cases, the hub physician was available an average of **19 minutes** sooner than the local physician.

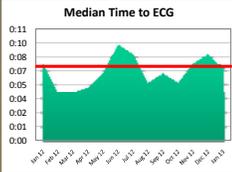
Use of eEmergency to assist in the management of cardiac chest pain and AMI has resulted in:

- A statistically significant improvement in Median Time to ECG from 12 to 8 minutes
- **100% compliance** with aspirin administration. Patients were more than twice as likely to receive aspirin.
- An **18 minute improvement** in door to t-PA for eligible patients
- An **36 minute improvement** in mean door-in, door-out time (time to transfer)

Median Time To Transfer Comparison



Median Time to ECG





Questions?

Thank you!

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