Transforming Rural Health Care through Telemedicine Collaboration

Darcy Litzen, MS, BSN, RN, Business Development Officer
Avera Health

Avera is a health ministry rooted in the Gospel. Our mission is to make a positive impact in the lives and health of persons and communities by providing quality services guided by Christian Values.
Avera Health

33 Hospitals

80% Critical Access Hospitals
60 million rural Americans scattered over 95% of US landmass
Health care in rural America is critical to the communities overall wellbeing. It can comprise as much as 20% of the rural economy.
In an emergency, rural patients must travel twice as far as urban residents to the closest hospital. As a result, 60% of trauma deaths occur in rural America, even though only 20% Americans live in rural areas.
673 Rural Hospitals in Danger of Closing
Closed & Negative Margin Rural Hospitals
Impact of 673 Rural Hospital Closures

11.7 M Loss of Patient Encounters
99,000 Healthcare Jobs Lost
137,000 Community Jobs Lost
$277B Loss to GDP (10 years)
Geographic Expansion & Increased Access to Care

Growing Networks
Diversity of Expertise
Collaborate to Bring Care to Community
Health Care Sectors Most in Need of Disruptive Innovation

- Hospitals/Health systems: 65%
- Health care IT (vendor technologies such as EMRs and clinical decision support): 47%
- Primary care: 36%
- Pharmaceuticals: 34%
- Commercial payers: 33%
- Public payers (Medicare/Medicaid): 31%
- Specialty care: 18%
- Healthcare IT (consumer-based technologies): 13%
- Nonacute care: 13%
- Medical devices: 5%
- Services (e.g., strategic consulting): 3%
Virtual Care & Telemedicine

Access to Expertise

24/7 Collegial Support

Improve Quality & Patient Outcomes

Avera eCARE®
Benefits of Telemedicine

- Enhance access to care
- Prevent outmigration
- Enhance coordination of care
- Meet CMS requirements
- Reduce cost
- Provider support and satisfaction
- Patient convenience and satisfaction
- Increase revenue

Discover Avera eCARE
Avera Health

33 HOSPITALS

80% CRITICAL ACCESS HOSPITALS
60 million rural Americans scattered over 95% of US landmass
Over 440 sites in 20 states

1+ million lives impacted
What does collaboration look like?

- Hospitals & Health Systems (e.g. Independent, Specialty, CAH, I.H.S)
- Schools
- Clinics
- Accountable Care Organizations
- Group Purchasing Organizations
- Correctional Facilities
- Post-Acute Care Settings
Service Line Expansion

1993 Consult
2004 Pharmacy
2008 Senior Care
2009 ICU Care
2012 Emergency
2012 Correctional Health
2015 School Health
2015 AveraNOW
2017 Hospitalist
2017 Specialty Clinic
2017 Behavioral Health
2017 Acute & Post Acute Services
2017 Ambulatory Services

Discover
What does your telemedicine transformation look like?
SIOUX FALLS, SOUTH DAKOTA

View from the Bridge

Discover Avera eCARE®
Immediate, 24/7 Access to Board-Certified Emergency Physicians & Experienced Emergency Nurses
When your team needs emergency assistance, simply push a button to connect 24/7/365 and our staff will respond immediately from our virtual hospital hub.
eCARE Emergency Support

- Initiate Diagnostic Testing
- Eliminate Unnecessary Transfers
- Streamline Emergency Transfers
- Nursing Documentation Support
- Behavioral Health Assessments
- Leverage APP Staffing Model if Appropriate
## eCARE Emergency Collaborative Results

<table>
<thead>
<tr>
<th>EXPERIENCE</th>
<th>PATIENTS</th>
<th>QUALITY</th>
<th>RECRUITMENT</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>175+ sites</td>
<td>5,329</td>
<td>Hub physician was available an average of 17-21 minutes* sooner than the local physician.</td>
<td>81.5% of clinicians believe that eCARE Emergency helped with recruitment and retention</td>
<td>$30 million Estimated Cost Savings</td>
</tr>
<tr>
<td>Video Encounters</td>
<td>Telephone Support</td>
<td>Transfer Support</td>
<td>Potential Transfers Avoided</td>
<td></td>
</tr>
</tbody>
</table>

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

---

**Discover**

Avera eCARE®

© 2018
Avera eCARE
Pharmacy

Dedicated team of hospital trained pharmacists providing clinical and consultative support for 24/7 remote pharmacy services
Pharmacists remotely access your EMR to assist with:
• Remote-Order Review and Verification
• Clinical Pharmacy Services
• Video or Still-Image Pharmacy Services Support

AveraTrax:
• Web-based order management
• Clinical intervention tracking
• Policy and procedure tool with integrated reporting analytics
## eCARE Pharmacy Collaborative Results

<table>
<thead>
<tr>
<th>PATIENTS</th>
<th>EXPERIENCE</th>
<th>QUALITY</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,043,000</td>
<td>3,500,000</td>
<td>35,764</td>
<td>$95 million</td>
</tr>
<tr>
<td>Patients</td>
<td>Orders</td>
<td>Avoided Adverse</td>
<td>Potential Cost</td>
</tr>
<tr>
<td>Impacted</td>
<td>Reviewed</td>
<td>Drug Events</td>
<td>Avoidance from Avoided</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Adverse Events</td>
</tr>
</tbody>
</table>
Avera eCARE Hospitalist

24/7 access to board-certified internal medicine physicians and experienced nurses to support local care of adult general and surgical hospital patients

Discover Avera eCARE
• Physicians work in your EMR to place orders and write notes
• Maintain local care team integrity and summon assistance per your discretion for:
  • Admission support
  • Clinic efficiency
  • Questions that arise during rounding or discharge
  • Overnight patient needs
  • Potential to increase ADC
eCARE Hospitalist Collaborative Results

PATIENT OUTCOMES
Timely evaluation of changes in patient status

COST SAVINGS
Potentially increases average daily census, increasing hospital revenue

WORKFORCE SUPPORT
90% decrease in times local provider had to come in while on call or in clinic
Make Lives Easier
Our town is so small, we had to borrow a horse to make a one horse town.
Research: Recruitment & Retention

Finding: 81.5% of clinicians believe that eCARE Emergency has helped with recruitment and retention.

Conclusion: Results indicate that, all other factors being equal, tele-emergency increases the likelihood of physicians entering and remaining in rural practice.

Hospital CEO: “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.”
Case Study - Wagner Community Memorial Hospital

CEO Incentivizes nurses to become NPs or PAs and staffs heavily with APP model

Quality Scores:
• HCAHPS (Likelihood to recommend): Under the APP and telemedicine model
  **Inpatient**: Increased from a low of the 24 percentile to the 99 percentile (12 month rolling average) within the first three years of bringing on APPs and continued use of telemedicine.
  **ER**: Increased from a low of 60 percentile to the 95 percentile (12 month rolling average) within the first three years of bringing on APPs and continued use of telemedicine.

Cost Reduction:
• 2017 direct ER expenses, per the CAH cost report, reverted back to 2012, a reduction of almost 30%, while the number of visits have stayed consistent.
Case Study - Wagner Community Memorial Hospital

**Increased Census:**
- Full use of Avera eCARE Hospitalist with APP carrying 75% of the acute and observation care visits/rounds/admits started around 01/01/18.
  - Since 01/01/18, and full implementation of Avera eCARE Hospitalist, facility has effectively increased ADC from 1.89 to 3.69 a 95% increase.
  - “I truly believe that it’s the additional support received from eHospitalist, which increased the comfort level of both APP’s and Chief Medical Officer, Dr. Jeffrey Pinter MD, that has created the increased ADC results our facility is experiencing.”
    ~ Brian Slaba, CEO at Wagner Community Memorial Hospital
Stories of Teamwork
QUESTIONS?
RESOURCES

- National Rural Health Association (NRHA).  [www.nrha.org](http://www.nrha.org)
- Rural Health Information Hub [www.ruralhealthinfo.org](http://www.ruralhealthinfo.org)
- iVantage Health Analytics. [www.Ivantagehealth.com](http://www.Ivantagehealth.com)
- National Rural Health Resource Center. [https://www.ruralcenter.org/tasc/mbqip](https://www.ruralcenter.org/tasc/mbqip)
THANK YOU

Darcy Litzen, MS, BSN, RN | Business Development Officer | Darcy.Litzen@avera.org

Discover the possibilities at AveraeCARE.org

Avera eCARE | Visionaries in Virtual Health