A network diagram consisting of interconnected nodes and lines, overlaid with various medical and healthcare icons such as a heart, a pulse line, a pharmacy, a plus sign, a person, a speech bubble, a star, and a building.

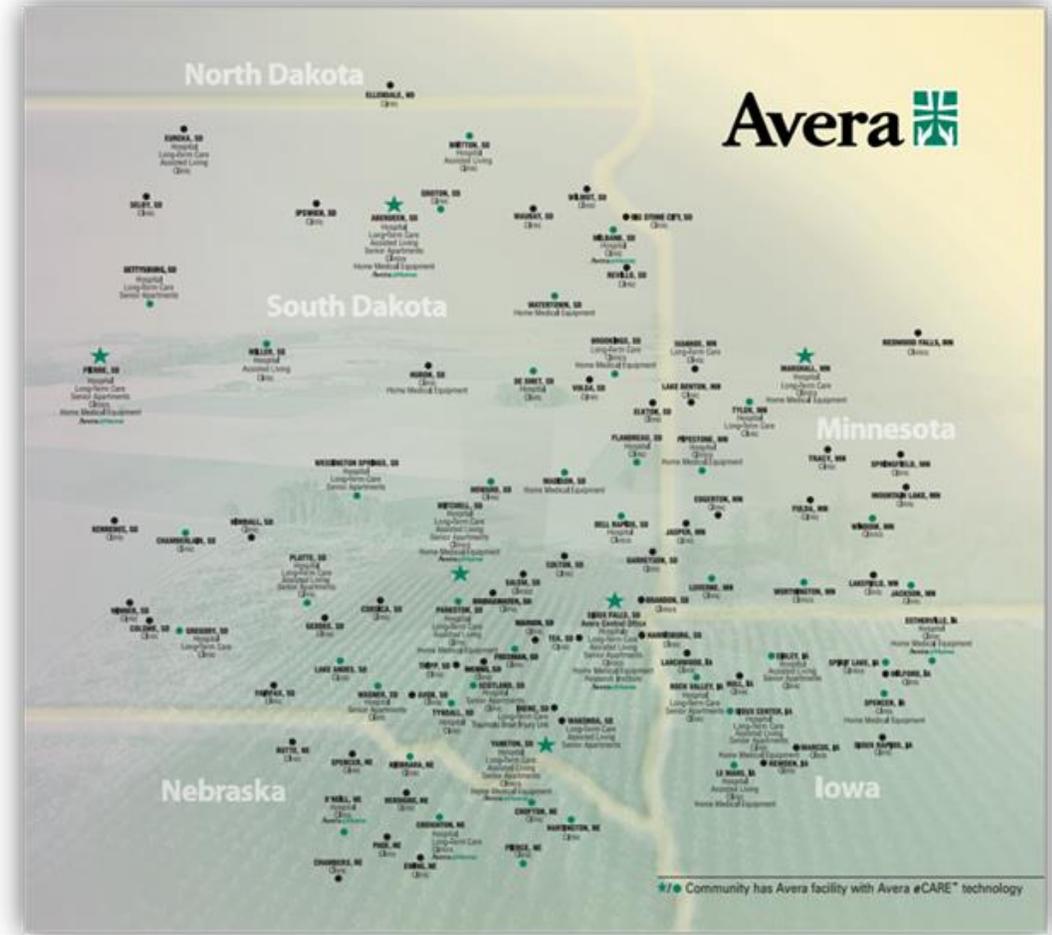
Transforming Rural Health Care through Telemedicine Collaboration

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

BACKGROUND

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. ”



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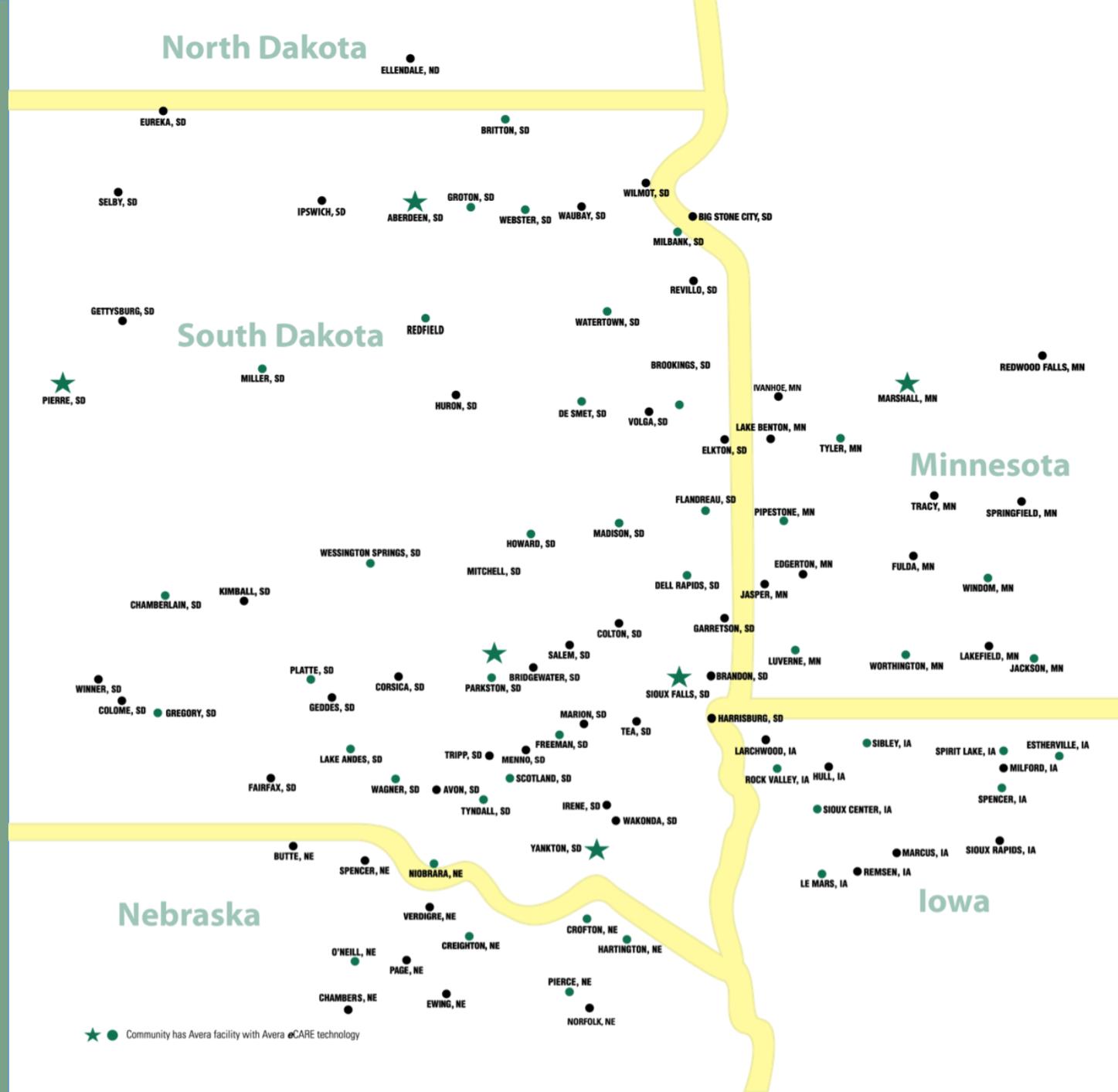
Avera Health

33

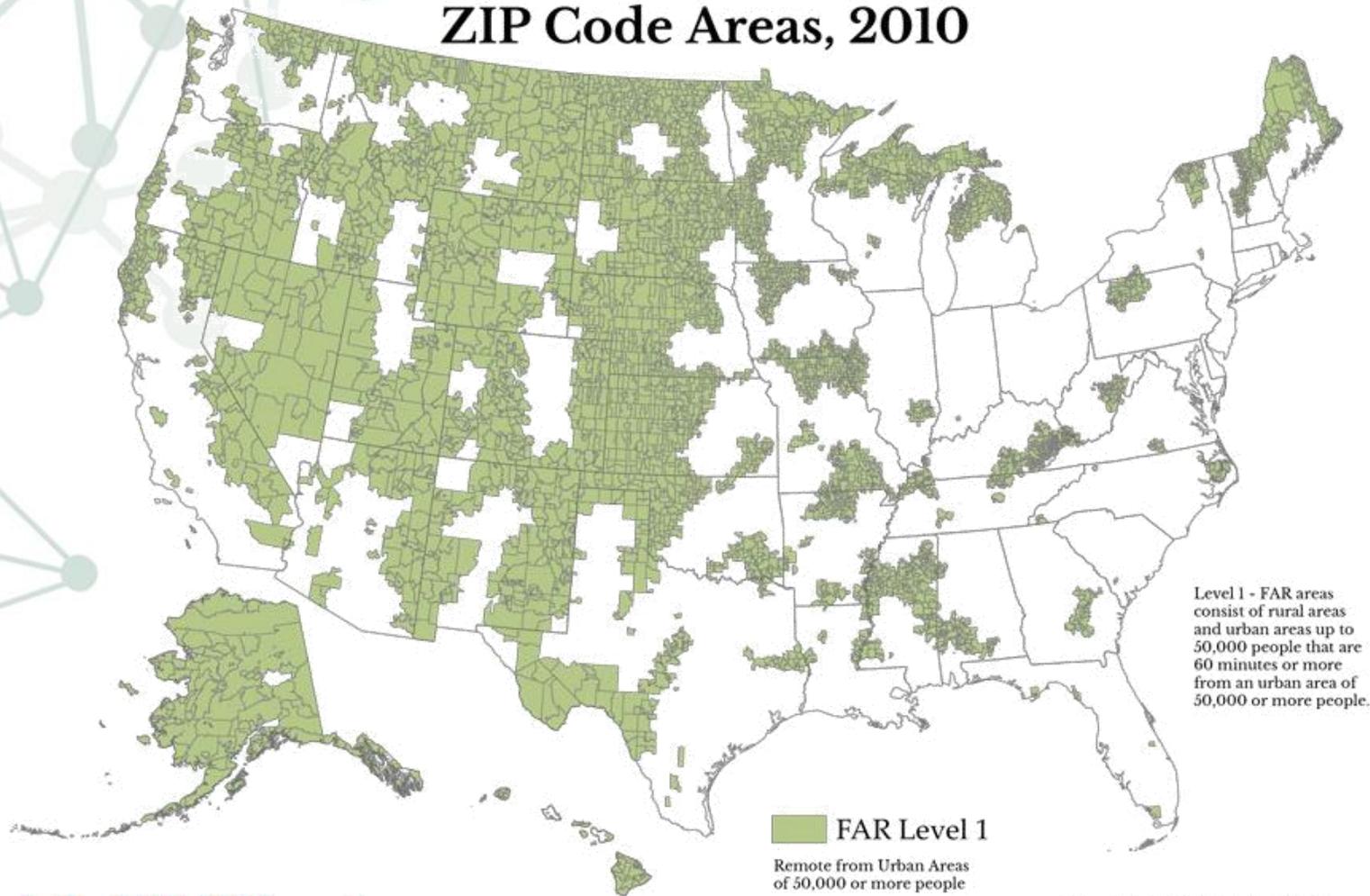
HOSPITALS

80%

CRITICAL ACCESS
HOSPITALS



Frontier and Remote (FAR) Level 1 ZIP Code Areas, 2010



60 million
rural Americans
scattered over
95% of US
landmass

A decorative network diagram in the top-left corner consisting of light green nodes connected by thin lines, resembling a molecular or social network structure.

Health care in **rural** America is critical to the communities overall wellbeing. It can comprise as much as **20%** of the **rural** economy.



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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.



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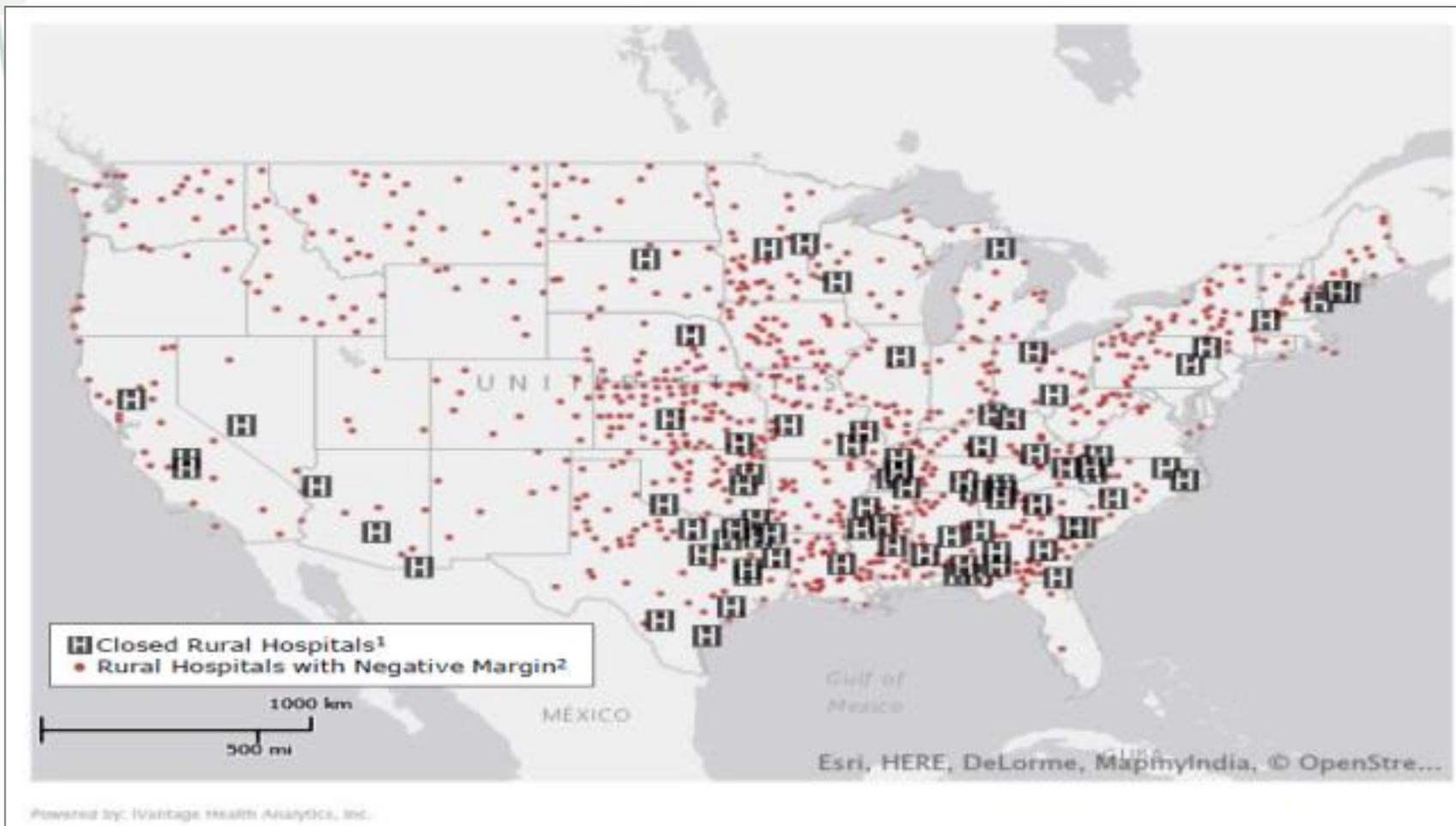


673 Rural Hospitals in Danger of Closing

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Closed & Negative Margin Rural Hospitals



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Impact of 673 Rural Hospital Closures



11.7 M

Loss of Patient Encounters



99,000

Healthcare Jobs Lost



137,000

Community Jobs Lost

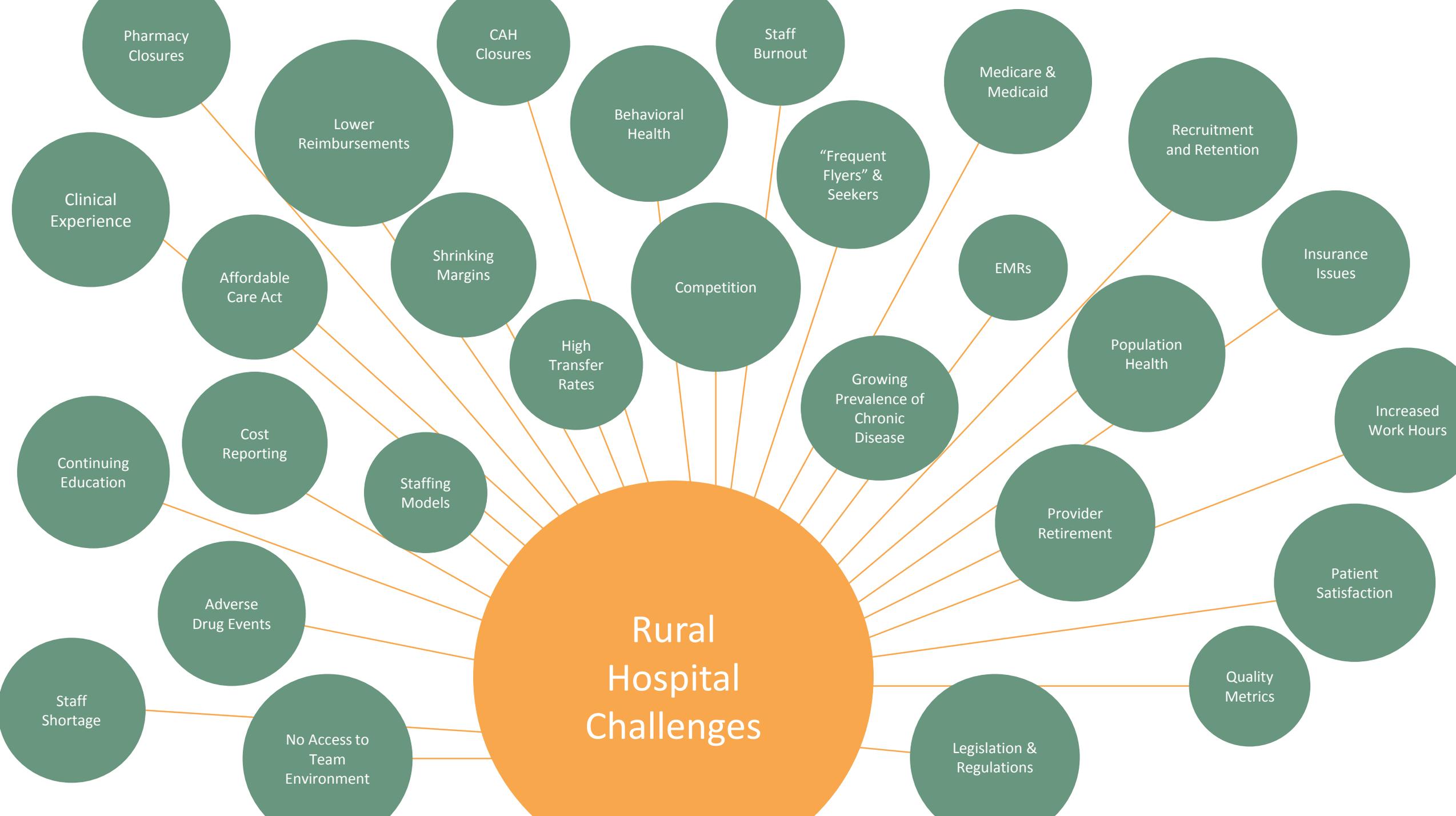


\$277B

Loss to GDP (10 years)

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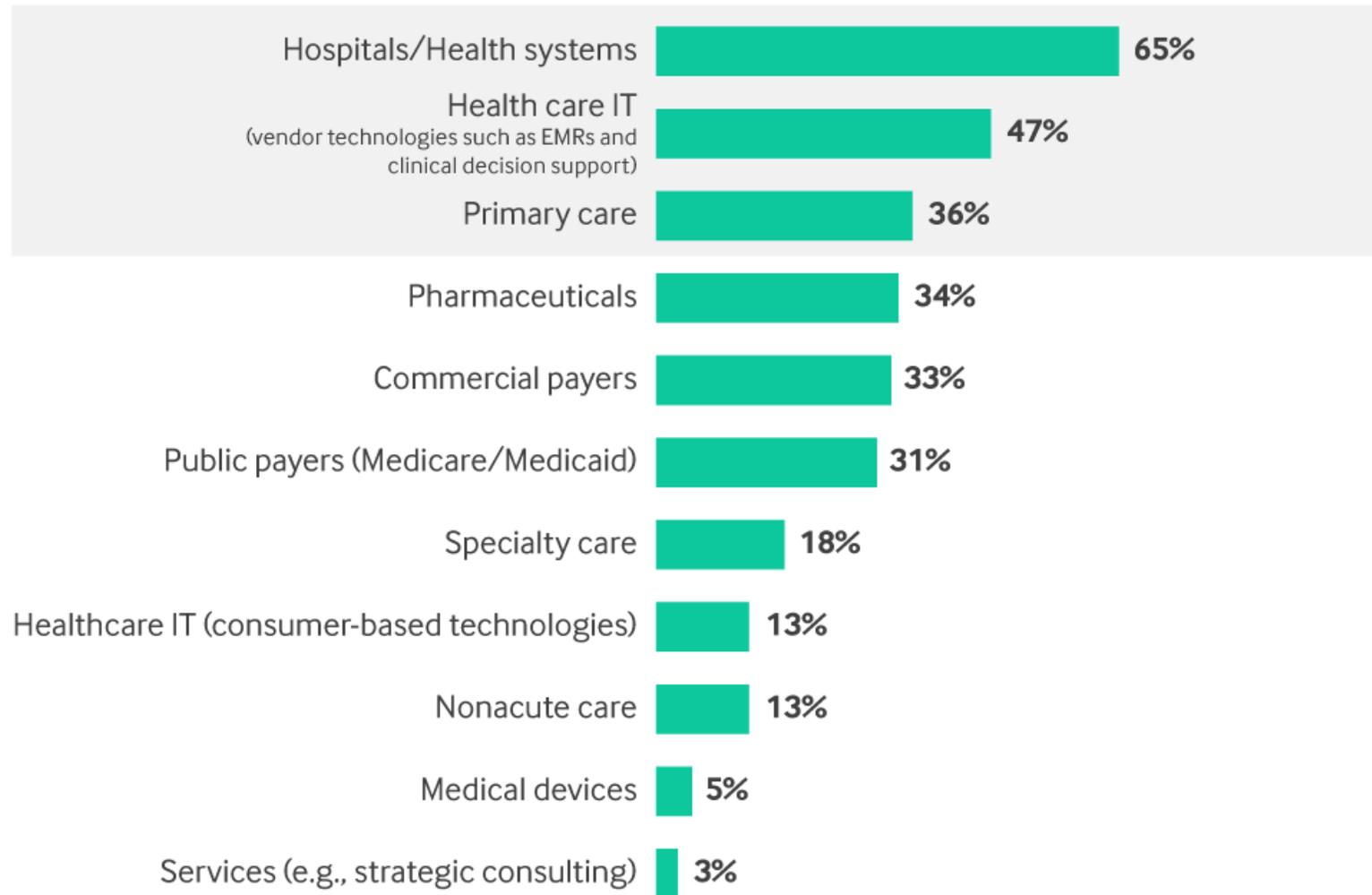
Geographic Expansion & Increased Access to Care

Growing Networks

Diversity of Expertise

Collaborate to Bring
Care to Community

Health Care Sectors Most in Need of Disruptive Innovation



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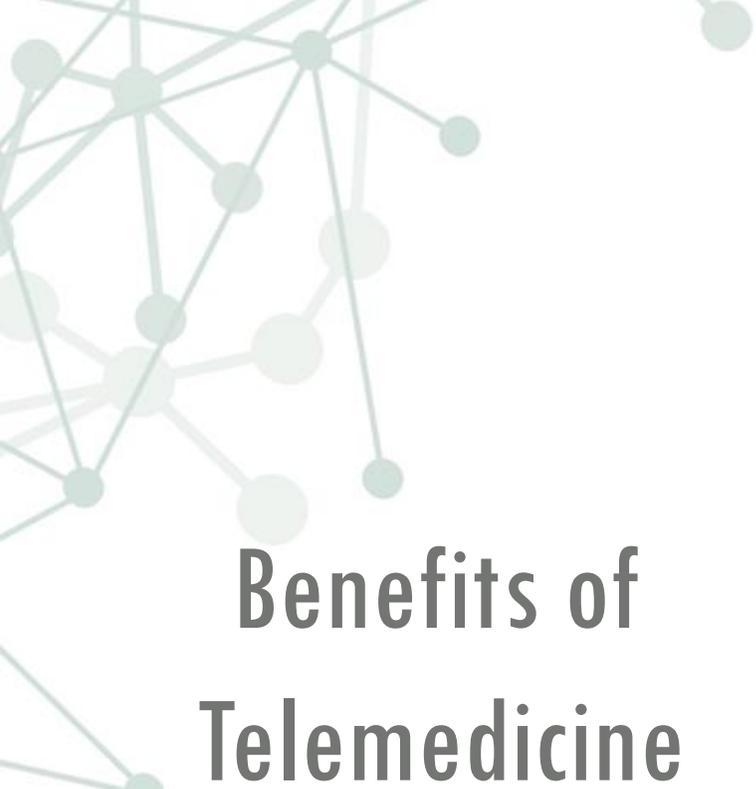


Virtual Care & Telemedicine

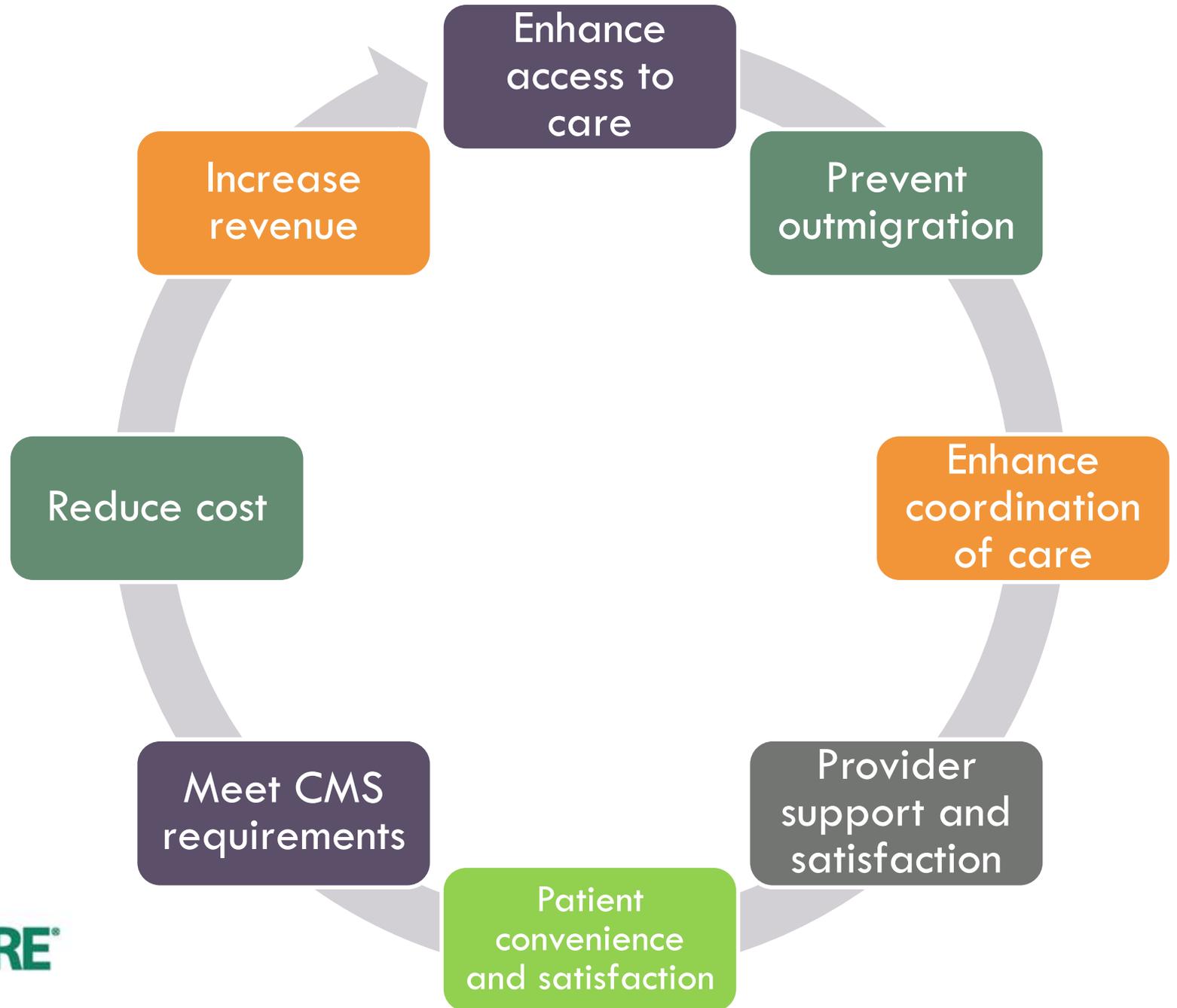
Access to Expertise

24/7 Collegial Support

Improve Quality & Patient Outcomes



Benefits of Telemedicine



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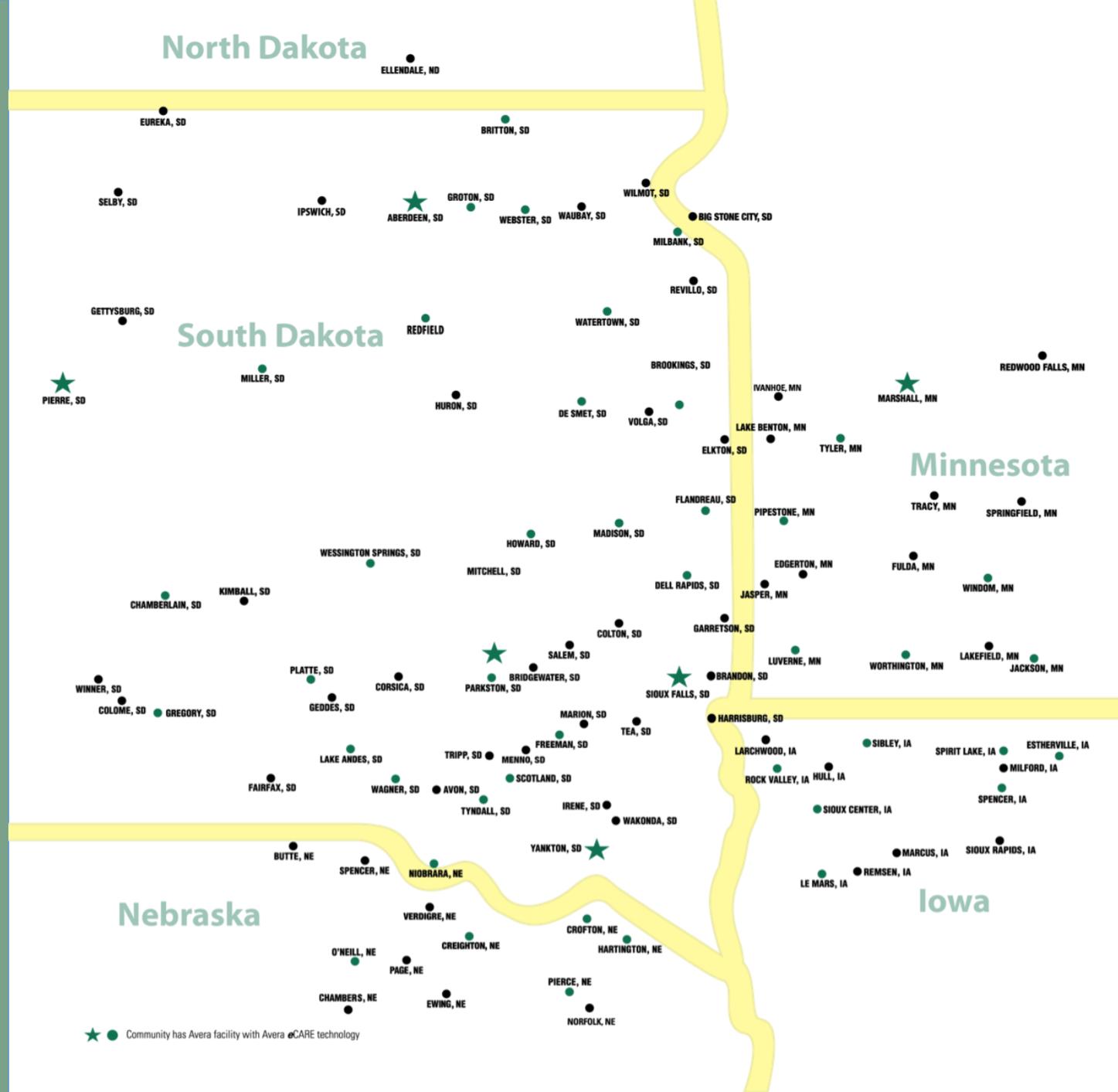
Avera Health

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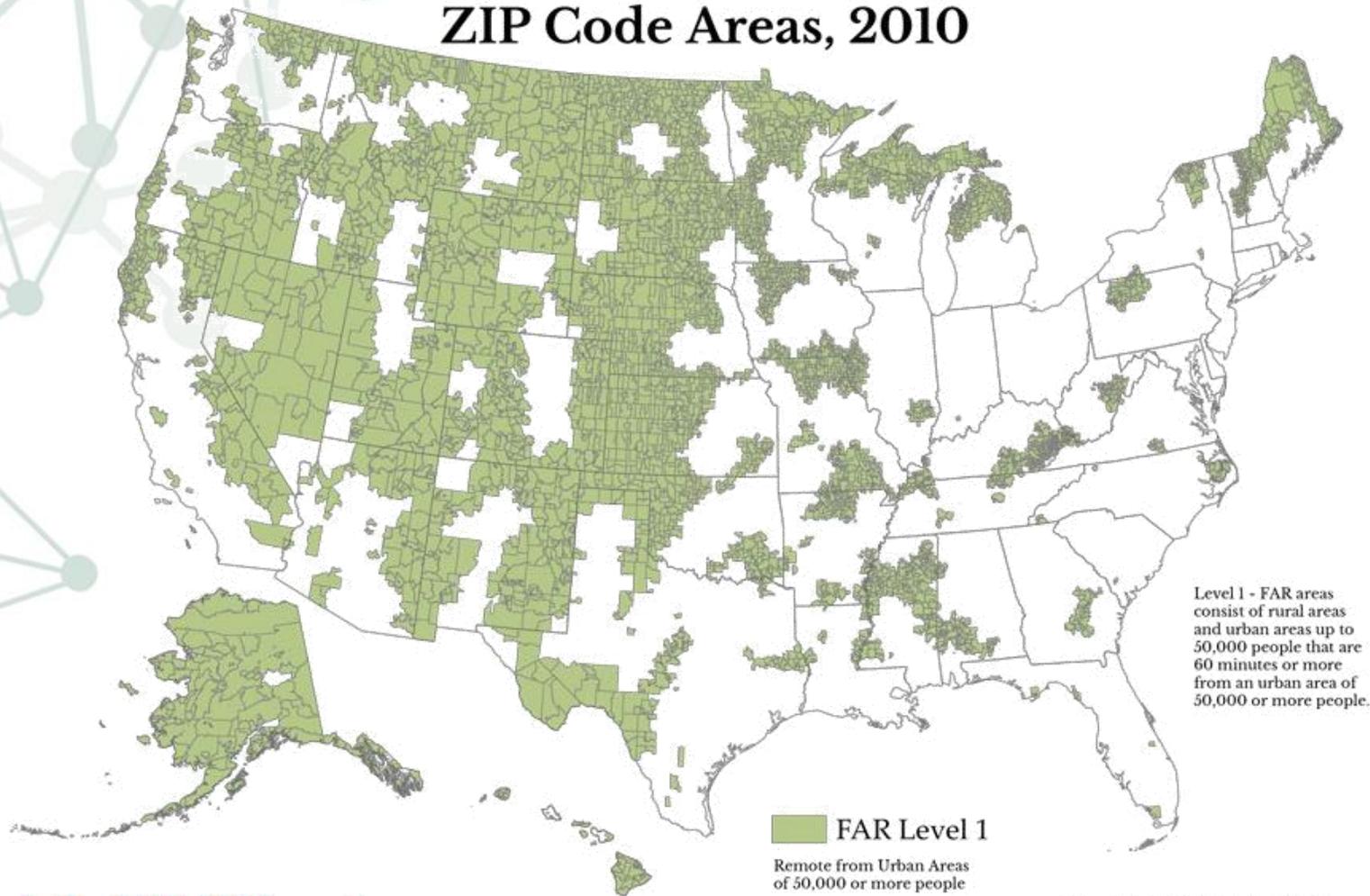
HOSPITALS

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Frontier and Remote (FAR) Level 1 ZIP Code Areas, 2010

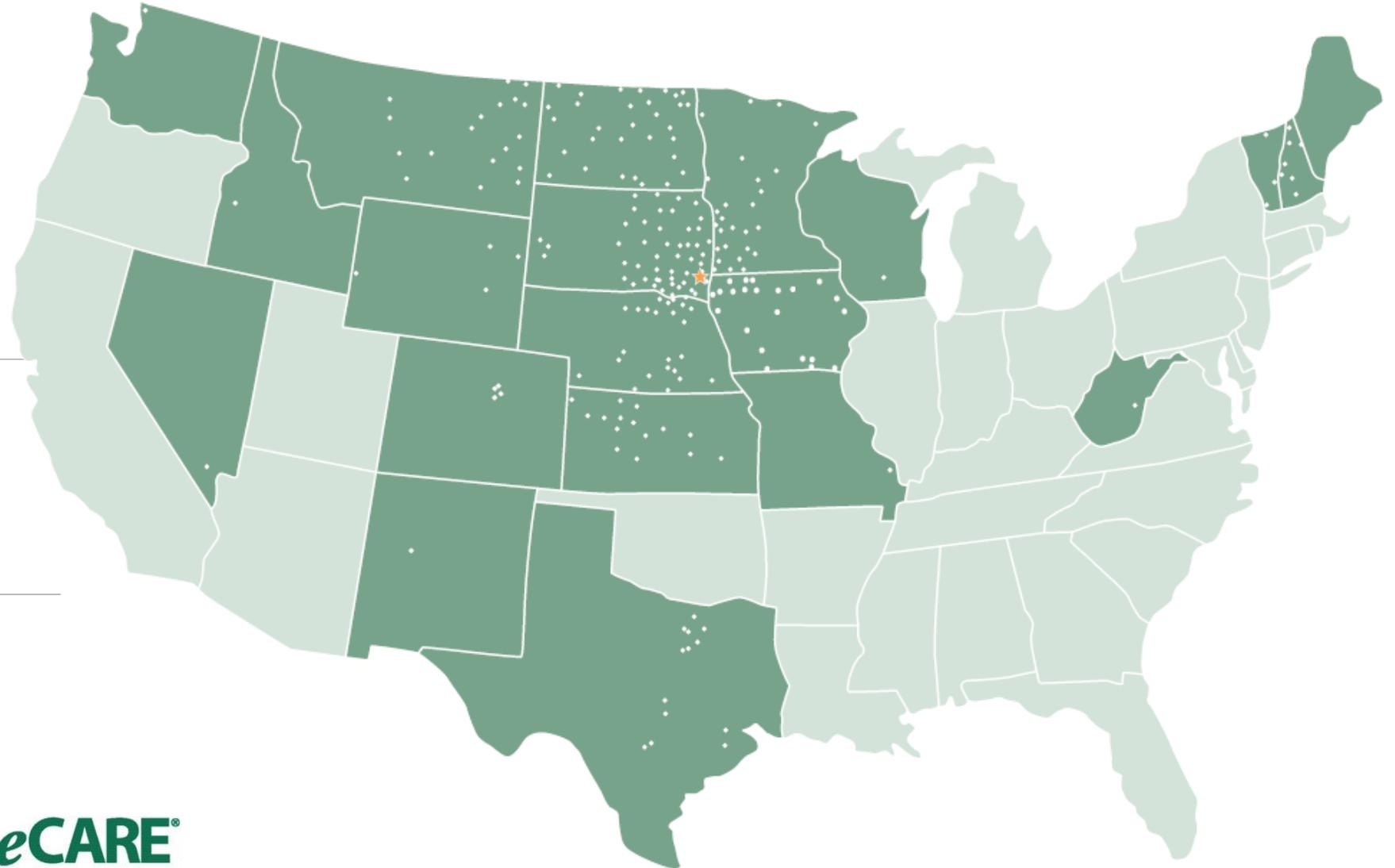


60 million
rural Americans
scattered over
95% of US
landmass

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Over **440** sites
in **20** states

1+ million
lives impacted



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Hospitals & Health Systems (e.g. Independent, Specialty, CAH, I.H.S)



Schools



Clinics



Accountable Care Organizations



Post-Acute Care Settings



Correctional Facilities



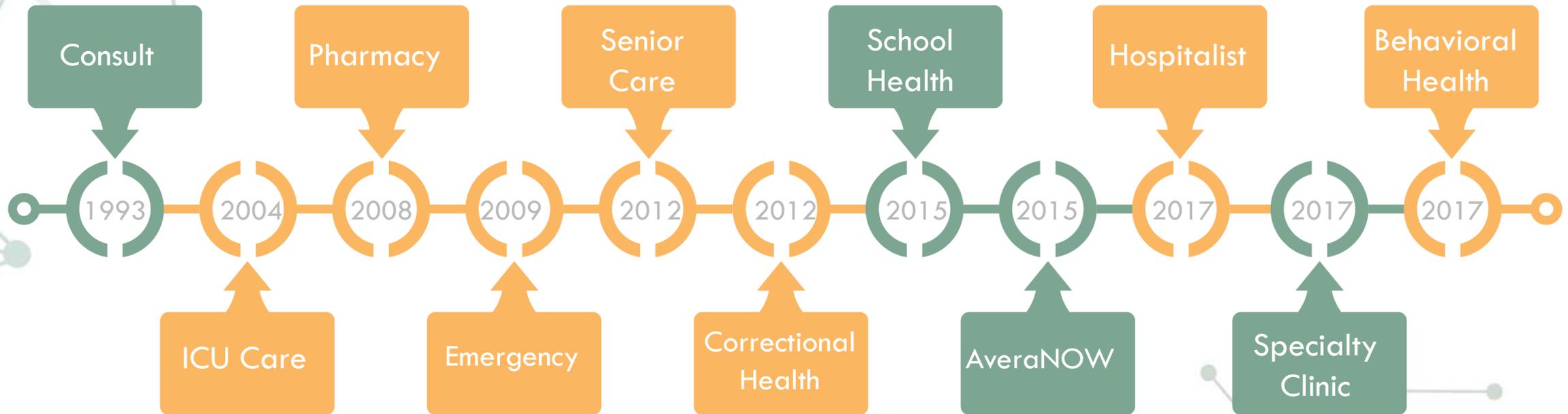
Group Purchasing Organizations



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Service Line Expansion



Acute & Post Acute Services

Ambulatory Services

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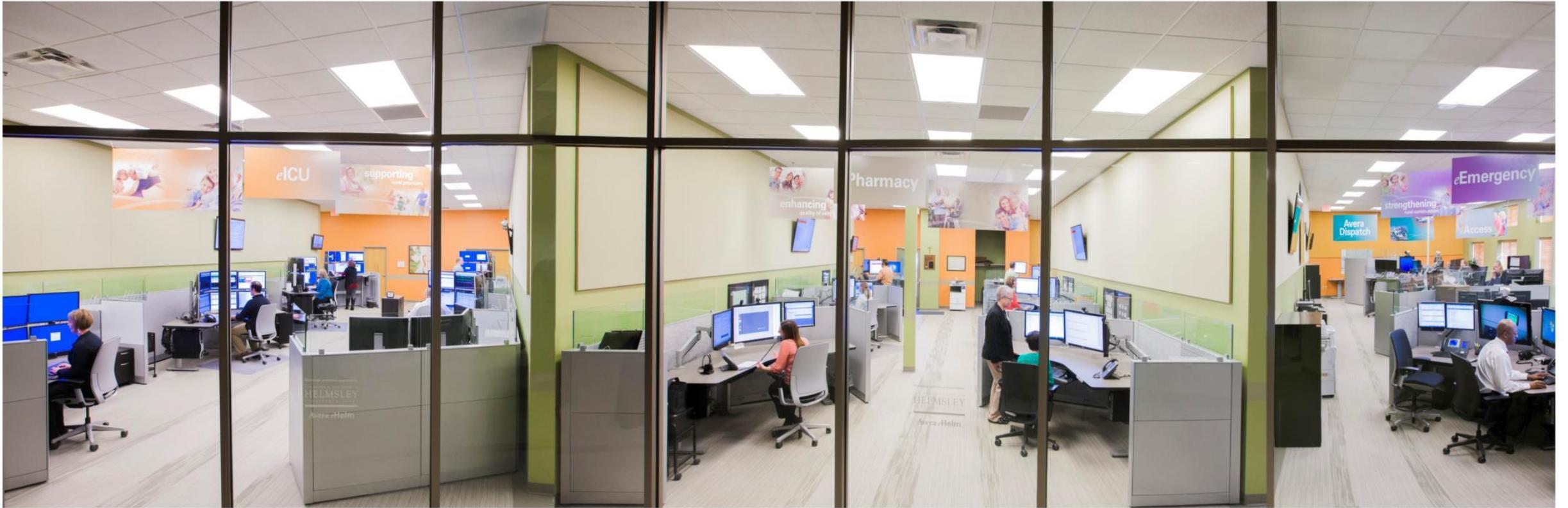
What does your telemedicine transformation look like?

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STIOUX FALLS, SOUTH DAKOTA

View from the Bridge



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Avera eCARE Emergency

Immediate, 24/7
Access to Board-
Certified Emergency
Physicians &
Experienced
Emergency Nurses



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eCARE Emergency The Process

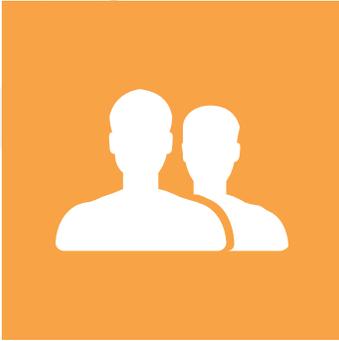
When your team needs emergency assistance, simply push a button to connect 24/7/365 and our staff will respond immediately from our virtual hospital hub



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eCARE Emergency Support



Initiate Diagnostic Testing

Eliminate Unnecessary Transfers

Streamline Emergency Transfers

Nursing Documentation Support

Behavioral Health Assessments

Leverage APP Staffing Model if Appropriate

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eCARE Emergency Collaborative Results

EXPERIENCE

175+
sites

Video Encounters

Telephone Support

Transfer Support

PATIENTS

5,329

Potential
Transfers
Avoided

QUALITY

Hub physician was
available an average
of
17-21 minutes*
sooner than the local
physician.

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

RECRUITMENT

81.5%
of clinicians

believe that eCARE
Emergency helped
with recruitment
and retention

COST

\$30
million

Estimated Cost
Savings

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Avera eCARE Pharmacy

Dedicated team of hospital
trained pharmacists
providing clinical and
consultative support for 24/7
remote pharmacy services



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eCARE Pharmacy

The Process

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



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eCARE Pharmacy Collaborative Results

PATIENTS

1,043,000

Patients
Impacted

EXPERIENCE

3,500,000

Orders
Reviewed

QUALITY

35,764

Avoided
Adverse
Drug Events

COST

**\$95
million**

Potential Cost
Avoidance
from Avoided
Adverse Events

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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

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- 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 The Process



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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

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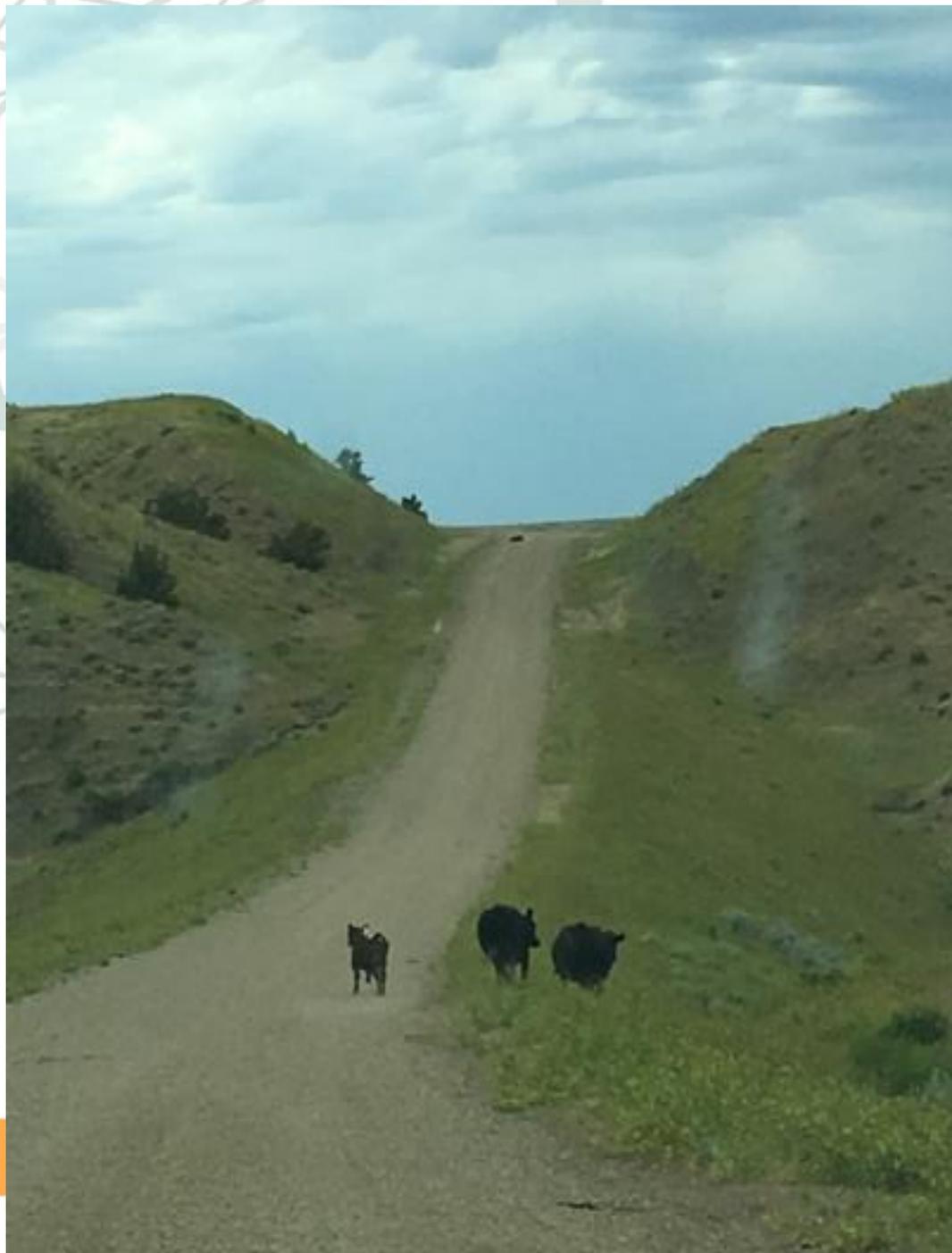
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Make Lives Easier



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**Our town is so small,
we had to borrow a horse
to make a one horse town.**

Recruitment



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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."

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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.

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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

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Stories of Teamwork



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QUESTIONS?

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RESOURCES

- National Rural Health Association (NRHA). www.nrha.org
- Rural Health Information Hub www.ruralhealthinfo.org
- CMS Service Area File 2015. Robert Wood Johnson Foundation/University Wisconsin Population Health Institute 2016 County Health Rankings and National Center for Veterans Analysis and Statistics 2016.
- iVantage Health Analytics. www.lvantagehealth.com
- Society for Healthcare Strategy & Market Development of the American Hospital Association. 'Evolving Healthcare Landscape'.
<http://www.shsmd.org/resources/bridging-worlds2.0/evolving-healthcare-landscape.shtml>
- National Rural Health Resource Center. <https://www.ruralcenter.org/tasc/mbqip>
- New England Journal of Medicine. Catalyst 2017.



THANK YOU

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Discover the possibilities at AveraeCARE.org

Avera eCARE® | Visionaries in Virtual Health