Leveraging Economies of Scale with a Multi-Stakeholder Rural and Urban Telehealth Network





Indiana Rural Health Association Conference French Lick Springs Resort & Conference Center, Indiana June 13, 2017



HSHS St. John's Hospital



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The Problem of Silos





Definition

Telemedicine: "The practice of medicine over a distance, in which interventions, diagnostic and treatment decisions and recommendations are based on data, documents and other information transmitted through telecommunication systems."

--World Medical Association, "Statement on the Ethics of Telemedicine," 2007



Network Planning Launched

June 1, 2014

Network Mission

The Illinois Telehealth Network promotes the capacity of Members to improve access to health care, in rural, underserved and disadvantaged communities, through the application of telehealth and telemedicine solutions.

[Strategic Plan, p. 6]





Network Vision

The Illinois Telehealth Network will connect and share resources, strengthen rural health care and save lives.

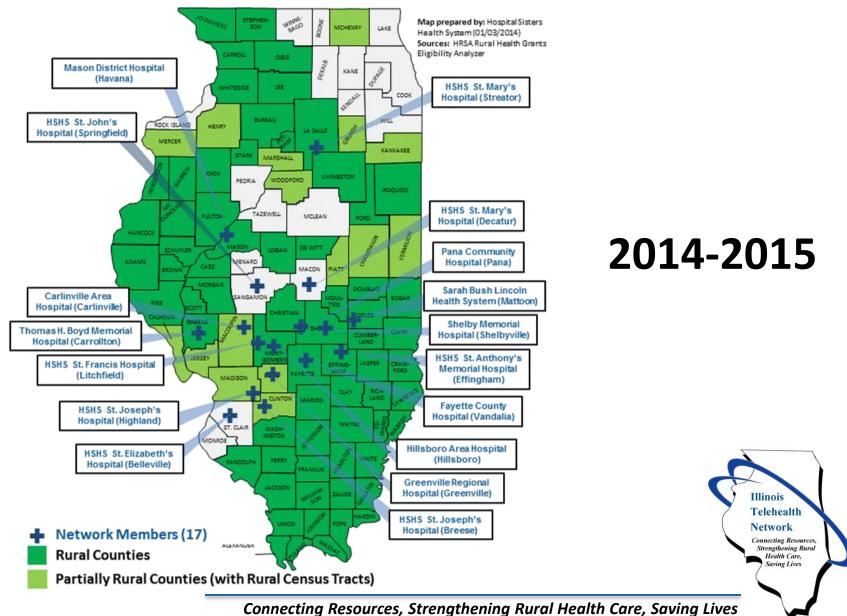
[Strategic Plan, p. 6]





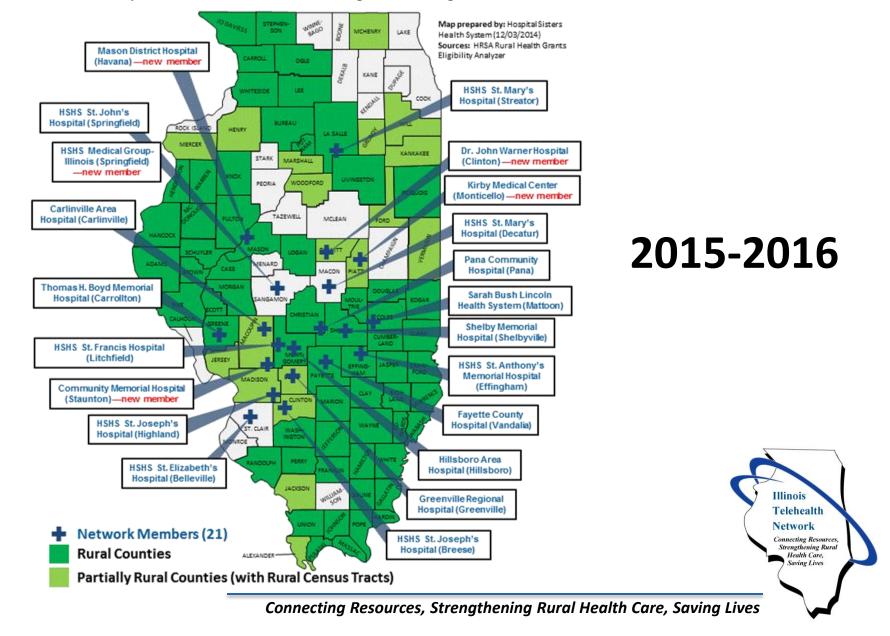
Illinois Telehealth Network Members (17)

Rural & Metropolitan Counties with Designated Eligible Rural Census Tracts



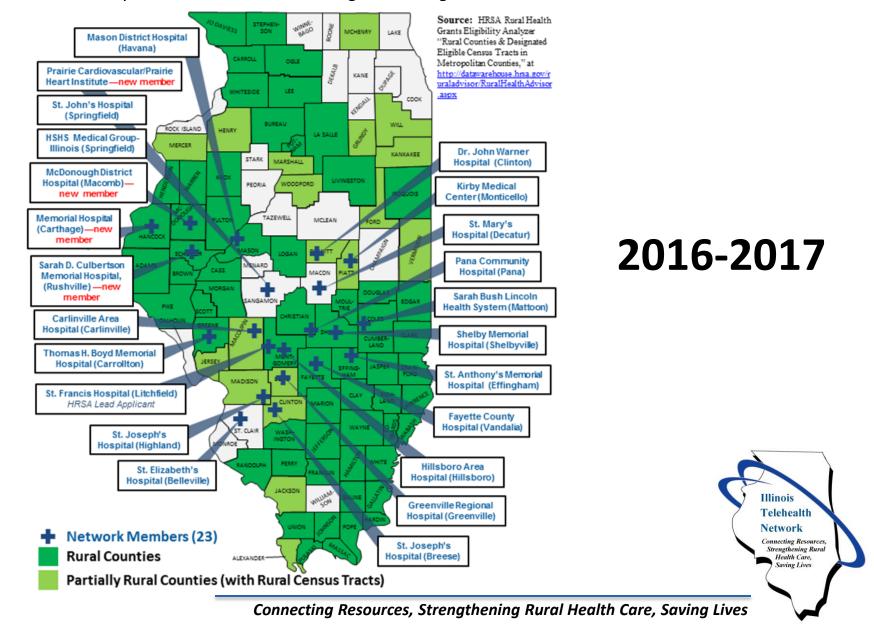
Illinois Telehealth Network Members (21)

Rural & Metropolitan Counties with Designated Eligible Rural Census Tracts



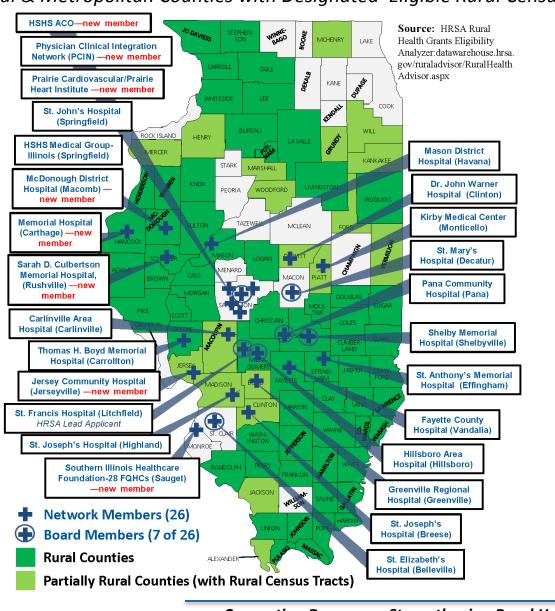
Illinois Telehealth Network Members (23)

Rural & Metropolitan Counties with Designated Eligible Rural Census Tracts



Illinois Telehealth Network Members (26)

Rural & Metropolitan Counties with Designated Eligible Rural Census Tracts



2017-2018



Connecting Resources, Strengthening Rural Health Care, Saving Lives

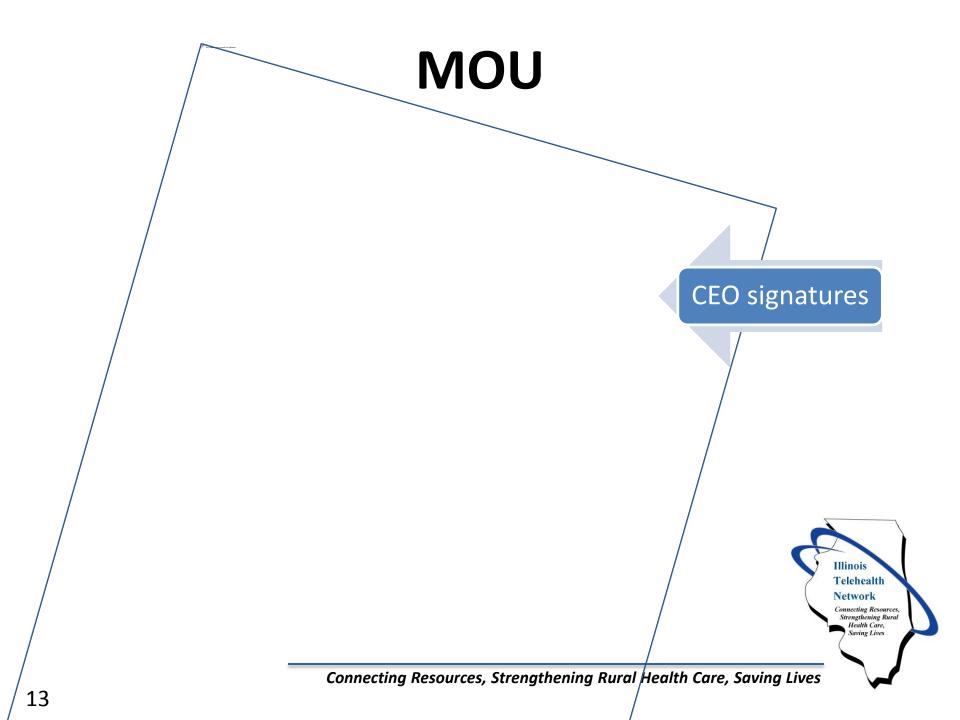
"A Collaborative Strategy"



"Rural health networking is a collaborative strategy. It requires individual actors to *come together voluntarily, agree on a course of action, and take action cooperatively*. Because the individual goals of the actors may differ, it is not always easy to agree on common goals, let alone a common strategy for achieving goals. Rural health networking is not easy; *it requires time, trust, will, and skills*. Network members must have the ability to separate their individual goals from the common goals of the network, and the vision to see the potential benefits of joint action."

-Gregory Bonk, *Principles of Rural Health Network Development and Management* (2000), p. 1.





Key Benefits of a Network



Doing More With Less

- Sharing costs & savings
- Pooling resources
- Providing new, more & better services to rural stakeholders

Creating Economies of Scale

- Sharing applications, services, staff & equipment
- Leveraging funding & grants
- Leveraging higher volumes for better price points

Telehealth
Network
Connecting Resources
Strengthening Rural
Health Care,

Bylaws

BYLAWS OF ILLINOIS TELEHEALTH NETWORK

Adopted [DATE]

Article I. NAME

The name of the Corporation shall be the Illinois Telehealth Network (the "Corporation").

Article II. PURPOSES AND POWERS

Section 2.01 **Not for Profit**. The Corporation is organized and shall operate as an Illinois not-for-profit corporation, and shall have such powers as are now and may hereafter be granted by the Illinois General Not-for-Profit Corporation Act of 1986, as amended (the "Act").

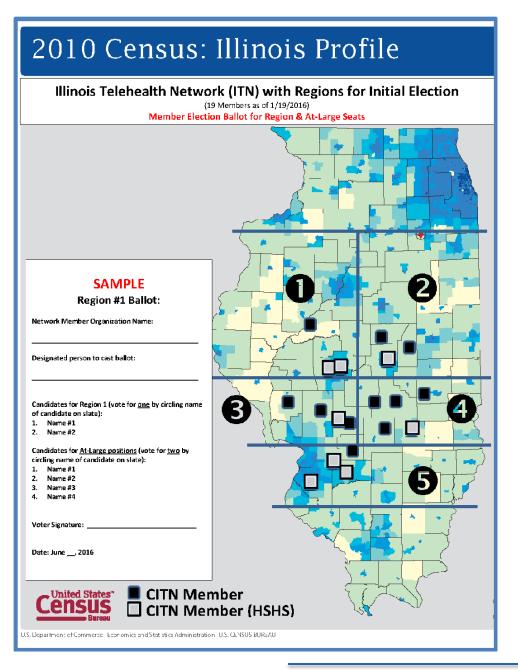
Section 2.02 **General Purposes**. The Corporation is organized to operate exclusively for the purposes set forth in its Articles of Incorporation.

Section 2.03 **Rules**. The Corporation and all persons acting for and on behalf of it shall be conclusively bound by the rules set forth in its Articles of Incorporation and these bylaws.

Section 2.04 Prohibited Purposes and Acts.

- (a) No part of the net earnings of the Corporation shall inure to the benefit of, or be distributable to, any of its Directors, officers, or other private persons, except that the Corporation shall be authorized and empowered to pay reasonable compensation for services rendered and to make payments and distributions in furtherance of the purposes set forth above.
- (b) No substantial part of the activities of the Corporation shall be the carrying on of propaganda, or otherwise attempting to influence legislation, and the Corporation shall not participate in or intervene in (including the publishing or distributing of statements) any political campaign on behalf of or in opposition to any candidate for public office.
- (c) Notwithstanding any provision of the Articles of Incorporation of the Corporation or any other provision of these Bylaws, the Corporation shall not carry on any other activities not





Equity in Rural Representation



Inaugural ITN Board

- Region 1: Dr. Charles Lucore, CEO, HSHS St. John's Hospital (Springfield)
- Region 2: Daniel Perryman, CEO, HSHS St. Mary's Hospital (Decatur)
- Region 3: David Imler, Board Chair, Hillsboro Area Hospital (Hillsboro)
- Region 4: Meredith Barnes, RN, BSN, Clinical Nurse Specialist, Shelby Memorial Hospital (Shelbyville)
- Region 5: Alison Kennedy, ED Stroke Coordinator, HSHS St. Elizabeth's Hospital (Belleville)
- At-Large: Patricia Fischer, CEO, HSHS St. Francis Hospital (Litchfield)
- At-Large: Trina Casner, CEO, Pana Community Hospital (Pana)





Network Development: Key Elements

- **1. Compelling need:** The network was formed in response to a *compelling need that was mutually recognized* by members.
- **2. Expected benefits:** The network was formed to provide *benefits* to members, the public, or both.
- **3. Form and function:** Network *form is determined by expected network functions*.
- **4. Key participants and actions:** Network members are *organizations whose resources are essential for success.*

-Gregory Bonk, Principles of Rural Health Network Development and Management (2000), p. 3.



Compelling Need		Expected Benefits		Network Composition		
Community	Network	Community	Network	Form	Functions	Participants
Shortage of rural ED specialists Patient outmigration ("drive-bys) to larger or more competitive hospitals that offer or market telemedicine services Delays in ED patient treatment & transfer decisions Inappropriat transfers of that could have stayed at rural hospital (closer to home) Need to ↓ costs, ↑ efficiency, ↓ duplication, share key resources Inadequate FFS reimbursement for telemedicine Telemedicine equipment prohibitively expensive	Difficult coordice contracts, physician credentialing No telemedicine equipment No clear network infrastructure or relationships Poor positioning to support Accountable Care Organization (ACO) preparedness or Integrated Delivery system (IDS) models Inability to demonstrate value with outcomes data	Improved ED outcomes (saved lives & reduced disability) Faster ED specialist evaluation Faster transfers Faster treatments ↓ inappropriat e transfers ↑ patient volume ↑ patient satisfaction Strengthened and unified marketing & branding to support hospitals in competitive landscape	T capacity Better positioning for federal grants Better ACO & IDS prepared- ness Demonstrated ROI Sustainability	2010: HSHS St. John's CONNECT Referral Center launched 2014: IL Telehealth Network formed with MOU 2015: Governance structure in place with formalized by-laws and dedicated staff	Streamlined referral process Equipment leased & deployed Contracts & credentialing in process Network planning Standardized treatment protocols Expedited transfers Successful HRSA, USDA & foundation grants	Current: 17 Members 4 advisors Network chair & 3 staff Consultants supporting network planning HRSA (pending application) Innovation Institute funding (secured) Future: Additional Members New network staff Board Members HRSA resources Innovation Institute support



ITN Focus Areas (2014-2018)

- 1. Tele-Stroke
- 2. Tele-intensive care ED consults
- 3. Tele-NICU
- 4. Tele-Pediatrics
- 5. Heart Failure Remote Monitoring Telehealth (Postacute & outpatient settings)
- 6. Virtual Urgent Care
- 7. Tele-Behavioral Health (OP and IP, and eventually ED)
- 8. Tele-Cardiology
- 9. Tele-Hospitalist and others





ITN Member Benefits

- Collaborative support for telehealth service development
- Opportunities for group purchasing
- Shared resources such as job descriptions, workflows, billing and payment protocols
- No requirement for "exclusive participation" (members can participate in other telehealth initiatives as desired)
- Access to grant funding



\$1m Grant Support Secured (2014-2016) \$1.3m in Requests Pending (2017-2020)



Distance Learning & Telemedicine \$336k awarded; new request being considered



\$185k awarded; \$900k requested (pending) for \$1.3 project



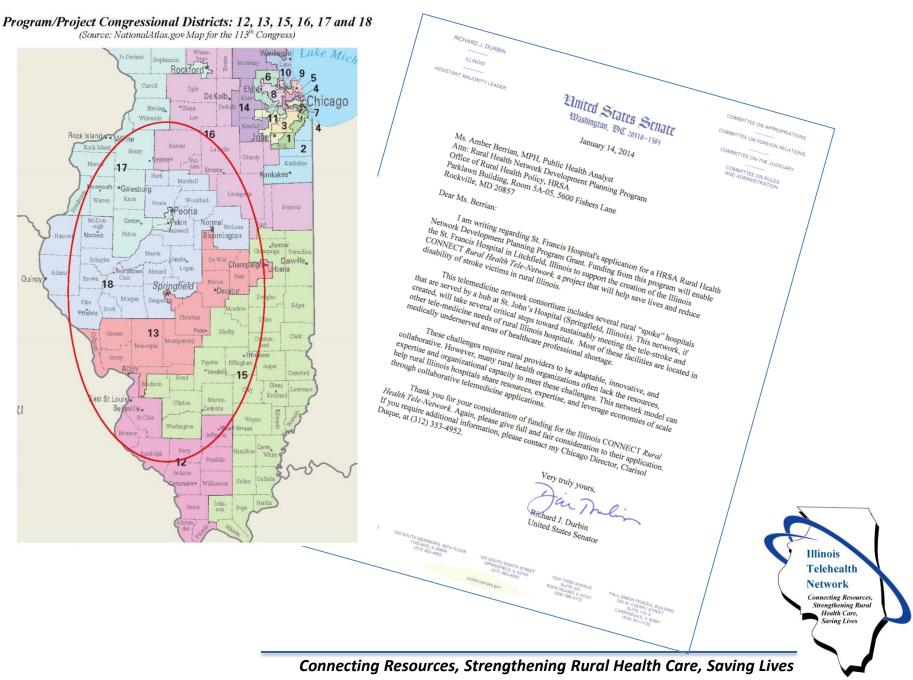
\$310k awarded (matching); \$150k match pending AstraZeneca HealthCare Foundation

Connections for

Cardiovascular HealthSM

\$206k awarded





ITN Accomplishments (first three years)

SurveyMonkey

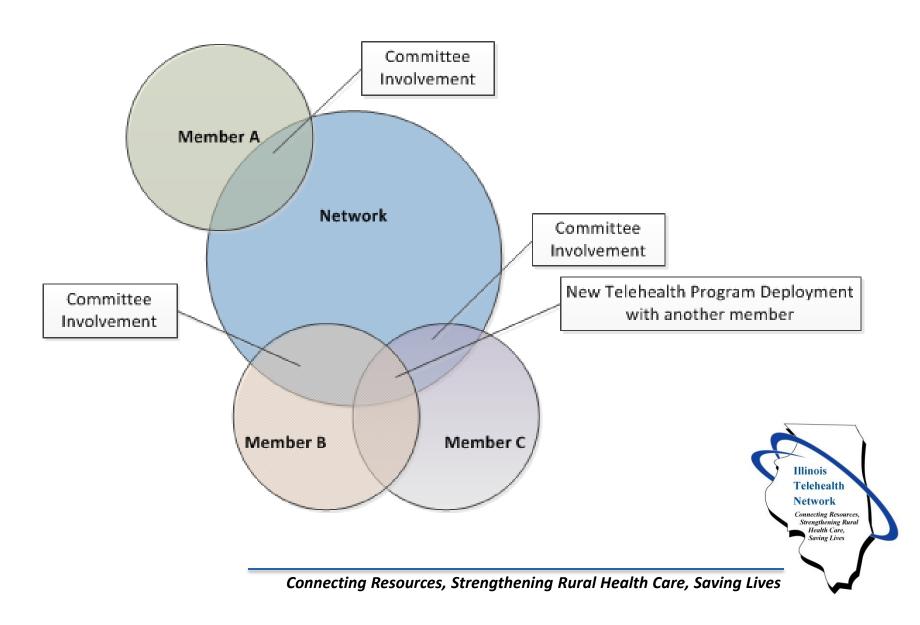
- Network began with 16 hospitals in 2014 and grew to 26 members
- Member Needs Assessments
- Launched pilots (tele-stroke, remote monitoring telehealth, virtual urgent care, tele-psychiatry and others)
- Secured USDA telemedicine equipment funding for <u>six</u> rural hospital members
- Awarded more than \$1 million in active grant funding for network projects
- Completed five-year strategic plan
- Elected 7-member board
- Formalized bylaws
- Began incorporation as 501(c)(3)



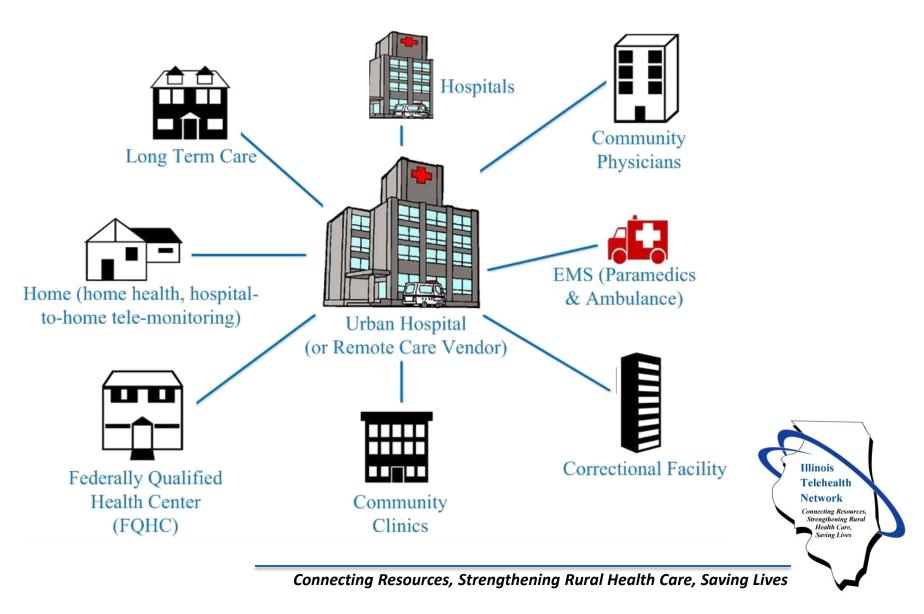
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ITN Levels of Involvement



From Horizontal to Vertical Network



Tele-Heart Pathway

Post-Acute Launched (1999)

The Burden of Cardiac Disease

Heart Failure (HF):

Has the <u>highest</u> number of Medicare readmissions of all DRGs4

Has been the top condition for hospital readmission rates

Has been the largest total spending on readmissions of all other DRGs

Has been responsible for an very high 30-day readmission rate in Illinois

- Advanced heart failure
 is a <u>progressive</u>
 condition that results in
 a poor quality of life
 and shortened life
 expectancy.
- Hospital admissions and readmissions <u>can</u> <u>often be avoided</u>.

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Saving Lives

Connecting Resources, Strengthening Rural Health Care, Saving Lives

Program Background



In 1999, HSHS St.
John's Hospital
(Springfield, Illinois)
was one of the first
pioneers in the nation
to manage a longdistance post-acute
rural Heart Failure
population with a telescale.







How it Works



An Expert Supporting You

Built on a simple premise:
The best HF patient
education is targeted
guidance by Certified Heart
Failure RNs given at the
precise time it's needed at
home.



How it Works



RN Engages Patients with

- Teachable Moments
- Education When it's Most Needed

HF patients and their caregivers are given tools and empowered to support independence and self-management.



Outcomes: Better Care & Less Cost

In 2013, the HRSA program demonstrated:

- Exceptional clinical outcomes and significantly reduced readmissions (with 844 recently discharged HF patients): Patients had an all-cause, 30-day unplanned readmission rate of 12.9% (compared to a 24.7% all-cause readmission rate national average for the same period)
- 2. Unplanned 30-day readmission of 4.3% (HF only)
- 3. Patients reported better understanding of HF self-management and symptom awareness:
 - 94% reported making changes in self-care;
 - 97% reported increased symptom awareness due to remoted monitoring and targeted education received from CHFRNs

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Health Care,

Tele-Stroke Launched

April 1, 2014

Tele-Stroke Launched

April 1, 2014

1,500th patient by April 1, 2017 (Less than 3-minute Neuro Response Times)



Tele-Stroke Benefits

- 1) Patients
- 2) Physician
- 3) Hospital
- 4) Community







The Remote Consult Process



ED Physician determines that a Neuro consult is needed

Patient is treated and remains in community

physician or transferred to facility of choice

hospital under the care of attending



ED Physician accesses SJS Connect 24/7 for Neurologist/Surgeon on-call



Consult note transmitted promptly to nurses station using data-capture application



ED Physician is connected with specialist for Telestroke evaluation



Comprehensive evaluation is performed by neurology physician specialist including history, lab, imaging, physical, and review of data



Connecting Resources, Strengthening Rural Health Care, Saving Lives



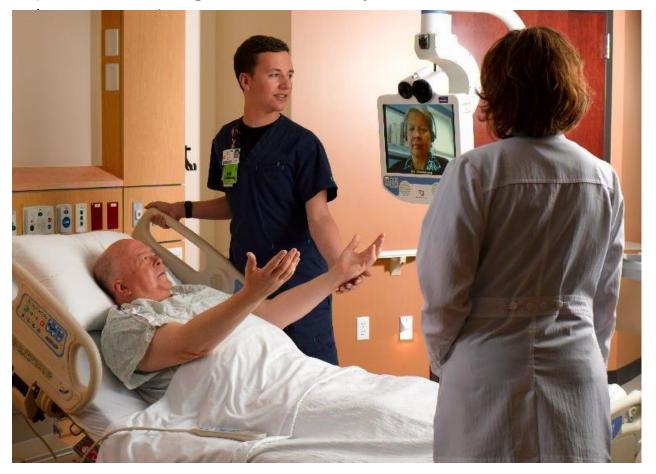


1) Greater access to specialty physicians





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- 2) Stellar average 3-minute response times





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- 3) Improved outcomes





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- 2) Stellar average 3-minute response times
- 3) Improved outcomes
- 4) Real-time face-to-face Communication
- 5) Helps avoid unnecessary transfers
- 6) Provides greater opportunity for patient to remain at the local hospital









1) Immediate access to sub-specialists for management of acute care patient needs





- 1) Immediate access to sub-specialists for management of acute care patient needs
- 2) Increased efficiency due to reduced travel time





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- 2) Increased efficiency due to reduced travel time
- 3) Improved the doctor-patient and doctor-staff relationships





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- 4) Collaboration to improve patient safety and quality of care





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6) New access to advanced treatment options





Tele-Stroke Benefits to the Local Economy

- 1) Keeps dollars in the local community
- 2) Increases clinician retention and recruitment
- 3) Increases utility and marketability of current medical support staff





Program Expansion:

- 1) Tele-NICU
- 2) Pediatric intensive care consults
- 3) Maternal-Fetal Medicine
- 4) Round & Respond





Virtual Urgent Care

Launched May 5, 2015



- Healthcare network includes 16 hospitals and 1,500 aligned physicians
- HSHS Medical Group includes 350 providers in central and southern Illinois (yellow dots)

ANYTIME CARE

- Public virtual clinic offered to Illinois residents within PSA and SSA
- HSHS employee plan enrollees have dedicated access
- Employer program access



Virtual Urgent Care



Available in the App Store

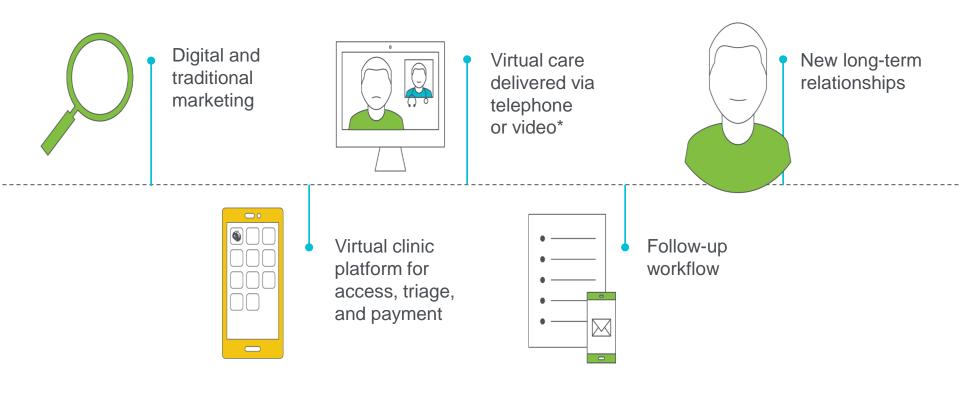
https://anytimecare.com

- Launched by HSHS Medical Group
- Providers adhere to consistent practice guidelines
- Clinician manages follow-up care and PCP selection (if requested)

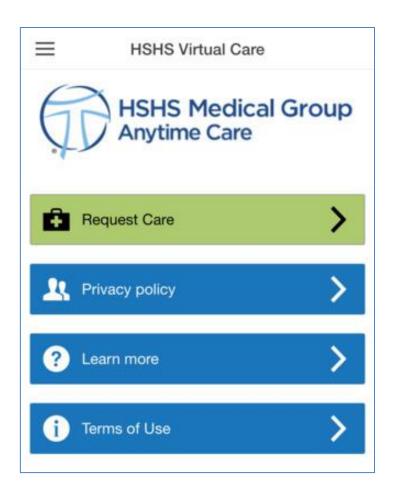




How AnytimeCare.com works



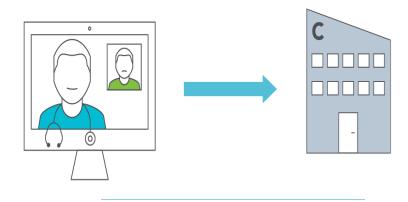
Virtual Urgent Care: Value



- Allows patients to conveniently access healthcare providers 24/7 anywhere
- Expands service area and reach
- Serves new patients with no PCP
- Reduces operating costs
- Helps keep non-acute patients out of ED



Linking Patients to a PCP



Scripted phone or email outreach, completed by dedicated staff member Connected to PCP schedules and availability

Helps consumer select PCP

MAKING AN INTRODUCTION, NOT COMPLETING A TRANSACTION

83%

of Anytime Care patients do not have an HSHS Medical Group PCP

100%

of Anytime Care patients do not have an HSHS Medical Group PCP within one employer population

Making a big system work better for individuals

63%

OF ANYTIME

CARE PATIENTS

12 MIN WAIT

20 MIN VISIT 96%

ADHERENCE

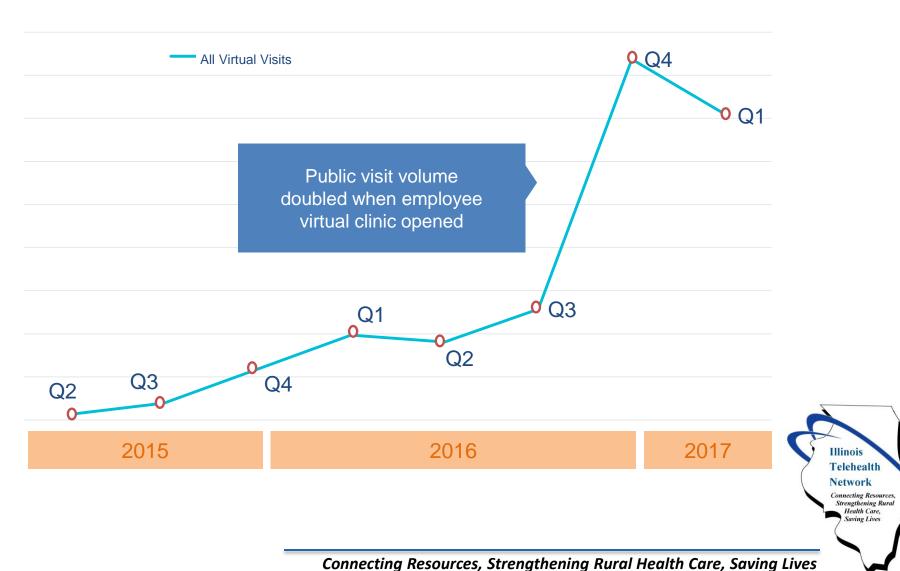
Complete virtual visits outside of urgent care business hours

Virtual visits offered when wait times rise in urgent care facilities

Provider encounter time is close to 2X wait time

Clinician adherence to evidence-based virtual practice guidelines

Patient Volumes



Questions & Discussion

Executive Summary

Overview: Panelists will detail the strategies and opportunities of the Illinois Telehealth Network (ITN), a collaborative consortium model that requires collective action to be conducted by the resource users themselves. Launched with a diverse grant portfolio and Hospital Sisters of St. Francis Foundation Innovation Institute support, ITN is supported by more than \$1m in active grants and is comprised of 26 mostly rural stakeholders to explore, plan and launch applications like ED telestroke, heart failure telehealth remote monitoring, virtual urgent care and others. Presentation will share how this model coordinates care, creates economies of scale to reduce costs, uses shared clinical protocols to achieve efficiencies, and expands access to specialist care for patients in underserved rural areas.

