

Bringing Specialty Care to Rural Communities with Telemedicine

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Background

There is a shortage of specialty providers nationwide. In the United States more than 90 percent¹ of hospitals use locum tenens, a pricey alternative, to supplement their full-time staff.

Rural communities experience challenges with provider recruitment and persistent turnover. Concurrently, there is a steady increase in rural patient populations with acute diseases.

By implementing an innovative approach and leveraging telemedicine, it is possible to bring acute care to rural patients while avoiding unsustainable staffing models and costly patient transfers.

Objectives

- 1) Assess telemedicine as an effective way to provide timely inpatient coverage, reduce patient transfers, and avoid additional staffing costs.
- 2) Leverage existing resources, workflows, and activation criteria to mimic the experience of in-person coverage.
- 3) Maintain patient care standards and care team satisfaction, while keeping patients close to home.

Methods

Planning/Research Methods

An interdisciplinary team, including providers, nurses and operational support staff, was established to implement a weekend coverage model for a six week time-period. This effort included extensive collaboration between an existing tele-ICU program, Mayo Clinic Rochester (hub) and Mayo Clinic Health system – Mankato (spoke) team members. As part of the planning process, workflows, communication and training plans were developed. A post-implementation survey was deployed to assess the satisfaction of both patients and providers.

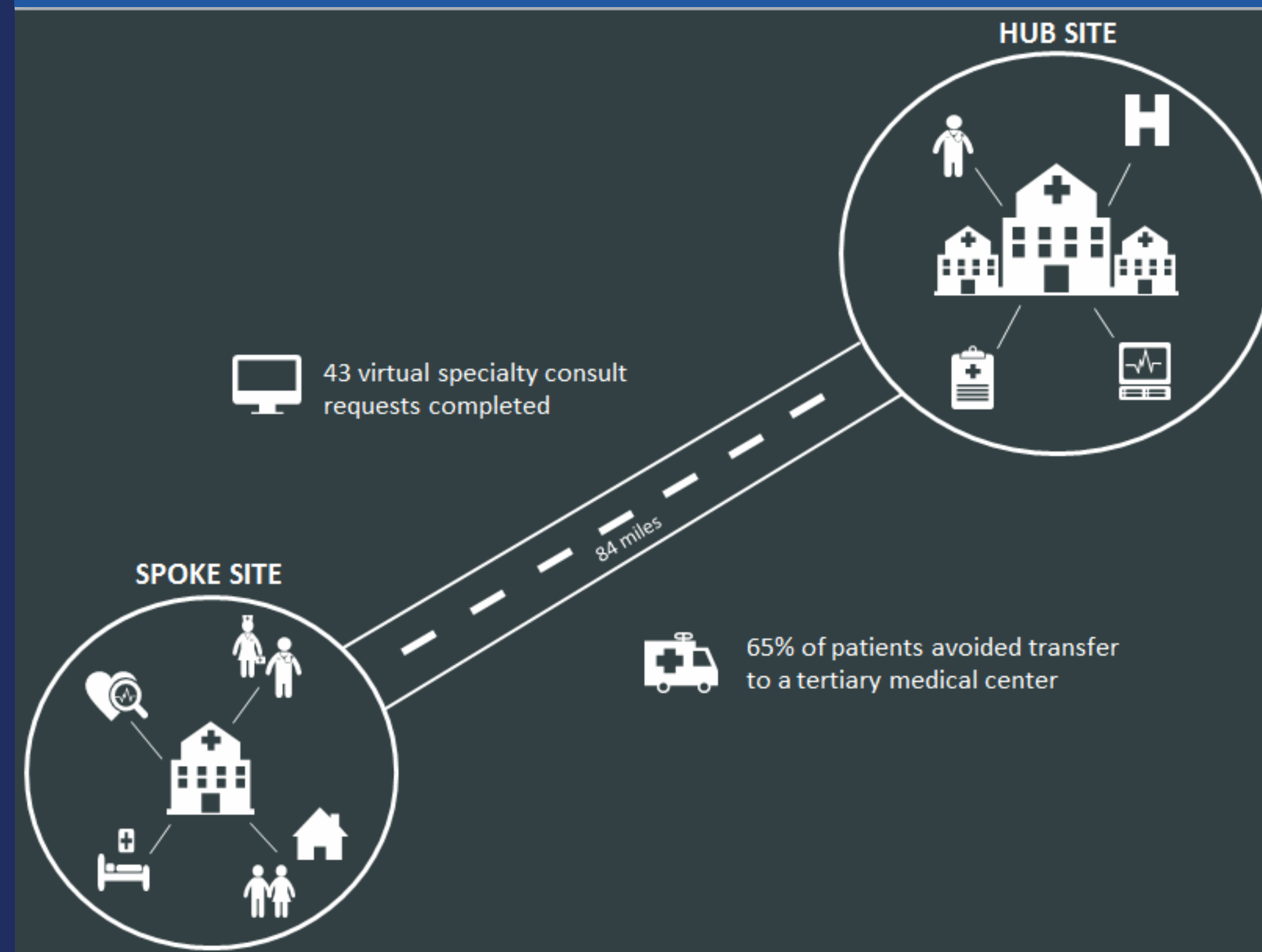
Implementation Methods

The startup costs for this project were minimal, as existing tele-ICU technology was utilized in the spoke site. To cover areas without existing technology, a mobile telemedicine cart was used.

Each morning, the team would huddle and round to determine the appropriate plan of care for each patient. The decision to initiate a telemedicine consult was made by the spoke provider and based on individual patient need.

Bedside nurses played a pivotal role in providing education and explanation to patients before and during the telemedicine interactions.

Key Details



Supporting Information

- Avoided locum hiring costs for six weekends.
- Based on feedback from spoke participants, there were no challenges with coordination of care during the pilot.
- Counterbalance measure was maintained: Average time to complete a consult during the telemedicine pilot met or exceeded the response time for consults with in-person coverage.

Survey Results

- 100% of patient surveys completed reported the highest level of satisfaction.
- 96% of referring (spoke) team members reported satisfaction with the service and experience.
- 100% of hub participants reported satisfaction with the ability to care for patients during the pilot.

Discussion

The pilot project provided specialty care coverage in a time of need, while serving as a proof of concept for leveraging telemedicine and existing resources. This model is currently being implemented for several other service lines based on the pilot's success (i.e. providing timely specialty care, avoiding patient transfers and additional staffing costs).

As the model is expanded to additional areas, data will continue to be gathered. Satisfaction data from patients and their families is equally important to financial and quality data; proving that in addition to being a cost – effective option, telemedicine strengthens patient support networks and satisfaction.

¹ Slabach, B., & National Rural Health Association. (2018, June 20). Fixing the medical staff shortage problem in rural areas: Physicians are disappearing from the map of rural America. <https://www.beckershospitalreview.com/population-health/fixing-the-medical-staff-shortage-problem-in-rural-areas.html>