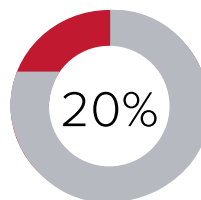# What new technologies and services can best address the challenges of rural hospitals?

Rural hospitals, sometimes referred to as critical access hospitals, play an important role in the communities they serve. In addition to providing much needed medical care to nearly 60 million people, these hospitals operate as economic anchors in their local communities by providing good paying jobs and supporting the local economy with spending on goods and services.[1] Rural hospitals and health systems often need to be resourceful in pursuing opportunities that improve financial stability and viability. Availability of payment models that provide investment flexibility can be a helpful resource to rural hospitals. In addition to financial challenges, rural hospitals also face significant staffing shortages. Partnering with a company to acquire new technology to help attract and retain staff can be an effective alternative to expensive contract labor.[2]

This paper discusses:

- What is a Critical Access Hospital?

- What are some immediate challenges for rural hospital care teams?

- How can technology support rural hospital care teams?

20%

Rural hospitals serve as key access points of care for nearly 20% of Americans.[3]

What is a Critical Access Hospital?

The Centers for Medicare and Medicaid Services (CMS) designates some rural hospitals as Critical Access Hospitals (CAH). The CAH designation was established by Congress in response to the closure of over 400 rural hospitals during the 1980s and early 1990s and is targeted at reducing the financial vulnerability of rural hospitals and improving access to healthcare by keeping essential services available in rural communities.[4]

Eligible hospitals must meet the following conditions to obtain CAH designation.

- ✓ Have 25 or fewer acute care inpatient beds
- ✓ Be located more than 35 miles from another hospital (exceptions may apply)
- ✓ Maintain an annual average length of stay of 96 hours or less for acute care patients
- ✓ Provide 24/7 emergency care services

Rural hospitals have been and will continue to be a crucial part of our health care delivery system. For nearly one in five Americans, they offer caring support for individuals and families who would have few health care options available otherwise.[5]

What are some immediate challenges for rural hospital care teams?

Because each hospital in each location has its own set of obstacles, challenges are numerous, and solutions need to be diverse to be effective. But there are solutions that can provide support to the challenges that care teams in rural hospitals are experiencing.[6]

Staff shortages are affecting hospitals everywhere.

Staff shortages and burnout are common industry topics today. It is estimated that the US will have a 10 to 20 percent nursing gap by 2025, thus increasing the patient-to-nurse ratio and further exacerbating the problem of inadequate staffing.[7] Other factors can also contribute to staff burnout including:

- Increasing patient age and acuity; there are no easy patients today
- Longer shifts, more shifts
- Increasing frequency of patient comorbidities
- Temporary care team members not familiar with department workflow
- Competing priorities
- Workplace distractions
- Data not readily available in the patient's electronic medical record; having to search for data on multiple devices
- Communication gaps
- Overwhelming number of alarms
- Manual processes
- Not having enough equipment; having to locate equipment for needed patient care

The American Nursing Association reports that **1 in 3 nurses feel inadequately staffed.**

New digital technology cannot replace nurses or other care team members, but it can reduce some of the burden understaffed care teams may be experiencing, thus improving workflow, and positively impacting care team satisfaction. When hospitals invest in meaningful technology, it allows care team members to get back to doing what they came to do – provide quality care for patients.

Communication Technologies May Be Lagging

Many hospitals are still reliant on outdated communication technologies such as pagers and fax machines for care team communication.

Messaging platforms that offer mobile options including alarm notification, text messaging, quick messages, and audio recordings greatly improve communication among care team members. Integration with electronic medical records needs to be considered as well as the ability to use communication features on mobile devices anywhere in the hospital, so that staff is not tied to one location as they manage their patients. Leadership should be supportive of the use of communication tools between care team members and investigate what will work best for their teams. Once updated tools and processes are in place to minimize the patterns of poor communication, safe, patient-centered care is more easily facilitated.[8]

Keeping Staff Trained

Training staff is costly and can be time-consuming. But training staff is more important than ever, as the challenge of an aging population, limited workforce, new diseases, and changes and upgrades regarding technology makes having a skilled, up-to-date workforce a requirement for success.[9]

Medical equipment and software systems have become more complex and being able to use these systems properly is a necessity to maximize patient benefits and optimize clinical workflow. When considering a vendor, it is critical that healthcare organizations ensure that flexible training and other services will be available to serve their needs. This may involve onsite training, virtual training, and having the option of additional in-person or virtual consulting services as required to keep patients safe and to maximize efficiencies while having a satisfied care team.

Obtaining New Technology without a Capital Fund Budget

Rural providers across the nation are caring for communities every single day. They are indispensable to the patients they serve, so it is critical to support efforts to keep these hospitals solvent and supporting their patients in the best way possible.

Recently it was announced that the U.S. Department of Agriculture (USDA) Rural Development is awarding $110 million in grants to improve health care facilities in rural towns across the country. These grants have the potential to help 208 rural health care organizations.[10]

However, many rural hospital owners are unaware that they may be eligible for grant money from government grants or other types of financial assistance. Eligibility for federal grant money can be vetted by contacting the local small business administration (SBA). And if grant money is not available, there are a variety of creative finance programs offered both by independent organizations and vendors that allow hospitals to obtain the needed equipment right away, allowing cash on hand to be used for other purposes.

How can Spacelabs technology and services support care teams in rural hospitals?

Spacelabs first believes technology should be easy. Spacelabs solution includes on-site and virtual training for care teams and the technology focuses on improving communication and making actionable data available to care team members wherever they are in the hospital. Our Enterprise Software provides mobile apps and eliminates manual processes. This is more critical than ever in our current healthcare environments where there is limited staff. Also, Spacelabs offers Team Up strategies and finance options to make advanced technology available to hospitals that support rural communities.

Mobile Apps travel with your care teams.

Mobile features are designed to manage patient monitoring information, coordinate care, and track metrics aimed at improving quality, throughput, and efficiency, all in an easy-to-use format no matter where your care team member is. Patient vigilance everywhere it needs to be.

Mobile App features:

Dashboard
Provides an overview of current patients and historical alarms plus the ability to manage tasks and access secure messaging.

LiveView
Provides a near-real-time view of the patient's heart rate, blood pressure, respiratory, and SpO_2 vitals along with up to four waveforms.
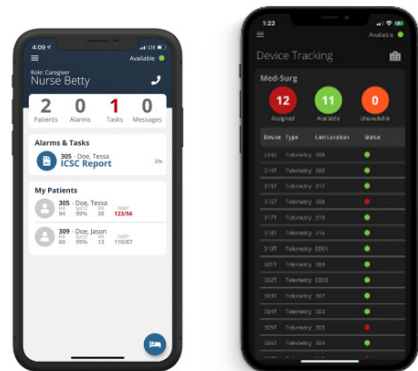
Bedside
Provides the ability to admit and discharge the patient to and from a Spacelabs device along with managing the patient's temporary location if they go to CT, surgery, or other departments.

Waveforms
Provides an overview of up to 14 days of retrospective waveforms. This includes strip/compressed views and the ability to create one seamless record of waveforms as the patient transitions through the hospital on different monitoring devices.

Caregivers
Displays a list of all caregivers associated to the patient with links to send a direct message or call the caregiver.

Driving new efficiencies by eliminating manual processes.

Enterprise Software can drive new efficiencies and enhance the speed and precision of care by eliminating many former manual processes. Take for example the following manual processes.

Strip interpretation and recording can be a tremendous workflow obstacle when data must be scanned by hand into the electronic medical record. With Enterprise Software, strips can be automatically printed in PDF format and directly integrated into the patient's electronic medical record.

Here are examples of other efficiencies that can be recognized using Enterprise Software:

TASK	CURRENT PRACTICE	AFTER ENTERPRISE SOFTWARE IS IMPLEMENTED
Calls To / From Bedside Staff	Frequent calls to verify patient assignments, rhythm interpretation, leads off, battery changes, admission / discharge from monitoring	Patient dashboard accessible by monitor techs and caregivers allowing them to collaborate and automate communications related to patient updates, rhythm interpretations, and more Electronic Patient Admission / Discharge
Documenting Calls / Report Sheets	Paper report sheets that are manually updated and retrieved	Generated staffing information from multiple units, brought together in one area, for ease of use up to date, sole source documentation stored for 2 years
Equipment Accountability	Monitor tech logs for "check out" Monitor tech cleaning Unit using equipment responsible for return of equipment	Units accountable for their own equipment Logging as appropriate: unit to determine process for cleaning

Streamlining and expediting communication.

Hospitals across the county have an increased interest in integrating what used to be multiple forms of communication into one streamlined system. Spacelabs Enterprise Software offers features that support a closed-loop communication model which can save valuable care team time while improving staff satisfaction.

- Text-to-voice
- Communications dashboard
- Patient dashboards that compile patient data from numerous devices into one view
- Click-to-call
- Desktop notifications
- Patient monitoring notifications
- Mobile app

The text-to-voice feature allows a monitor tech to contact any caregiver with a quick two-click process. Common notifications such as 'Low Battery' or 'Leads Off' can be quickly communicated to reduce phone calls and distractions. Closed-loop communication provides confirmation that the message has been received.

The click-to-call feature automates the process of contacting the right caregiver. Simply select the patient and click "Call" next to the caregiver name. All records of the call are tracked and recorded for further review if needed.

Team Up Strategies

Spacelabs TeamUp strategies experts work closely with your team from strategic planning through post-installation support and continuous improvement to help you achieve your clinical and business objectives. We offer no-charge services such as Needs Assessments, Workflow Assessments, and Supplies and Accessories Assessments to ensure your teams success.

Flexible Acquisition Options

Our flexible financing options are designed to help acquire the latest technology and offer the following benefits:

- Preserve cashflow
- Maintain budget flexibility
- No blanket liens
- Low fixed rate financing
- Paperless process

Exclusively for Spacelabs customers, Flex Pay offers flexible financing solutions that can be customized to meet the unique needs of your organization.

Greater efficiencies using Enterprise Software.

As healthcare organizations increasingly seek technology that facilitates evidence-based, data-driven decisions, healthcare executives are turning to Spacelabs Enterprise Software to help manage the challenges presented by ever-changing conditions. Technology can positively impact care team members by streamlining and expediting communication as well as eliminating manual processes, so that staff can more effectively collaborate on care decisions with the goal of providing the best patient experience possible.

If you are interested in learning more about our Enterprise Software, please contact us at 1-800-522-7025. We can arrange an on-site discussion or video conference at your convenience.

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