NOSORH

National Organization of
State Offices of Rural Health

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State Office of Rural Health Roadmap for Working with Vulnerable Hospitals

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Introduction

The National Rural Health Association reports that 673 hospitals are now vulnerable to closure and that almost one-third of these hospitals are at high risk for closure. There are a wide variety of "root causes" for these closures and just as many paths for a vulnerable hospital and their community to take to address this crisis. Some hospitals, especially those owned by larger health care systems, close without any notice to patients, providers or other community stakeholders. Patients, other health care providers including emergency medical services (EMS), home health, primary care providers and community leaders are often left with the conundrum of how to provide services to their citizens in a time of crisis.

With proactive leadership, appropriate planning, and targeted technical assistance, vulnerable hospitals and communities may be able to avoid such a crisis. In fact, it is possible in some situations to avoid closure or to undertake a proactive planning process to ensure there is a vital responsive local health care system, networked with other providers and ready to meet the needs of the community.

It is crucial for State Offices of Rural Health (SORHs) to be prepared to understand the unique dynamics at stake for rural hospitals and to appropriately respond and support vulnerable hospitals and the communities they serve. At the request of, and in partnership with the Federal Office of Rural Health Policy, the National Organization of State Offices of Rural Health (NOSORH) has developed an array of resources to support the work of SORHs as they consider their technical assistance role with vulnerable rural hospitals, the communities they serve and the people that depend on those hospitals for care.

The primary resource developed is this "Roadmap for Working with Vulnerable Rural Hospitals," which is a narrative compendium describing the role of SORHs, types of technical assistance which may be applied before and after closure, and complete descriptions of SORHs examples of work, resources and tools. A simple to use how-to *"Toolkit"* with a summary of information on types of technical assistance is also included. The toolkit includes easy to follow icons for tools, resources and SORH examples.



In addition, there is a summary of *"Regulatory Requirements for Closure of a Hospital"* to help SORHs understand the legal and regulatory environment of closing hospitals. A report on *"Background on Rural Hospital Closure"* is also provided for SORH with a more in-depth understanding about rural hospital closures. All of the resources are meant to be used electronically with easy links to resources, tools and SORHs examples. Where possible, websites are indicated where users can either consult the complete text of a document referred to, or find further information on a given topic. All blue underlined text is a hyperlink to access more information.

Acknowledgments

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- American Hospital Association
- Alabama Office of Rural Health
- Georgia Office of Rural Health
- Hall Render
- iVantage Health Analytics
- Kentucky Office of Rural Health
- Maine Rural Health Research Center
- Massachusetts Office of Rural Health
- Michigan Center for Rural Health
- Montana Office of Rural Health
- National Center for Rural Health Works
- National Rural Health Association
- National Rural Health Resource Center
- Nevada Office of Rural Health
- North Carolina Rural Health Research Program
- Oklahoma Office of Rural Health
- Rural Policy Research Institute
- South Carolina Office of Rural Health
- Stratis Health
- Stroudwater Associates
- Wisconsin Office of Rural Health
- WWAMI

The Role of State Offices of Rural Health

Through funding from the Federal Office of Rural Health Policy (FORHP), State Offices of Rural Health (SORHs) are charged with a responsibility to disseminate information, collect data, coordinate and provide technical assistance to rural providers. As SORHs consider working with vulnerable hospitals, they should keep in mind these responsibilities as they relate to vulnerable hospitals and the communities they serve.

With the changing environment of health care from volume to value the most important thing SORHs can do is to disseminate information to ensure that hospitals and the communities they serve understand they must shift their services from strictly inpatient services to ensure sustainable services that improve the health of the population that can be reimbursed within new models for care.

SORHs face a deluge of information in their efforts to provide technical assistance to rural hospitals. SORHs can best stay up to date with the changing system by engaging with their peers through NOSORH and other national associations, their state hospital and primary care associations, their local providers and FORHP. The narrative in this section provides a broad overview of the major changes and some perspective on how these changes relate to vulnerable rural hospitals.

The data collection role of SORHs can support community work to address the needs of rural hospitals. SORHs should have access or knowledge about data resources both nationally and within their state for rural hospitals. SORHs have access to Flex Monitoring Team data for quality and finance measures for CAHs. SORHs also have a model to follow developed by the North Carolina Rural Health Research Program (NCRHRP) on how to identify vulnerable hospitals using the Financial Distress Index. SORHs who have engaged with rural hospitals in community health needs assessment may work with the hospitals to review and present data to partners and the community as a first step in identifying alternate models for caring for the community in the absence of a hospital.

The coordination responsibility of SORHs can also play an important part in addressing rural hospital closures. SORHs are neutral conveners and may be able to coordinate and convene meetings for hospitals with community leaders, other nearby facilities, health care systems, other health care providers such as EMS, Federally Qualified Health Centers (FQHCs), Rural Health Clinics (RHCs), public health departments, state agencies such as primary care associations and quality improvement organizations and experts in health care financing. SORHs working together with hospitals can bring together stakeholders to understand the changing health care environment, its impact on rural hospitals, and the positive economic impact a rural hospital's services have on the community.

SORHs should also consider monitoring and reporting about rural hospital closures. Informal reporting can be achieved by completing a *NOSORH Survey Monkey* posted on the NOSORH website. The survey is meant to capture anecdotal information about the closure of the hospital that is an important piece of telling the complete story of the impact of the closure on the community.

As SORHs plan technical assistance activities they must consider their own capacity and resources while working within the parameters as SORHs in state government, universities or as a non-profit

The Role of State Offices of Rural Health (continued)

organization. SORHs should understand that no technical assistance effort aimed at supporting vulnerable rural hospitals and their community is "typical". Decisions on whether a hospital will close are increasingly made by larger health systems outside the community. Hospitals can be open one day, closed the next and opened as a different organization the next. Technical assistance efforts may begin in an effort to help a community with an over-burdened EMS system after an abrubt closure, it may initiate as a result to improve community utilization of the hospital, or it may come at the request of a concerned county commissioner or hospital administrator.

SORHs should also understand that even though they might be able to provide technical assistance for the hospital, closure may still be inevitable. Some hospitals have made financial and strategic decisions that make closure of the hospital the only option. SORHs can play a role during any portion of the closure or potential closure process through convening stakeholders, analyzing population health data, conducting financial feasibility studies, and helping to develop strategic communication plans. Sometimes it is possible to re-open the hospital after restructuring, or maybe redefining health care delivery in the community is necessary. This "Roadmap" and "Toolkit" give SORHs the tools and resources they need to have strategic conversations with hospital administration, hospital boards, physician leadership and the community.

SORHs receive federal funding through the Medicare Rural Hospital Flexibility (Flex) Grant Program and the Small Rural Hospital Improvement Grant Program (SHIP) which are often used to assist hospitals with improving financial outcomes that may help prevent hospital closure. However, this limited funding is focused on specific initiatives that will further assist a moderate to well-performing hospital adopt new models of care and does not provide enough resources to those hospitals needing an intense focus on alternative delivery models. Additional resources focused on hospital recovery are needed to evaluate the right models for certain communities. Even states focusing additional resources on health care transformation for rural hospitals may not be able to save some hospitals from closure. SORHs may find that additional resources are needed for transportation solutions, community needs assessments and regional planning to better assist these disproportionately affected communities.

SORHs must carefully consider their role and activities with the variety of situations that affect the capacity of the SORHs. SORHs with limited resources may simply wish to monitor vulnerable hospitals, while other SORHs may elect to provide contract resources to vulnerable hospitals, and still other SORHs may have internal expertise to be a major partner in providing technical assistance directly to the community. *Appendix B* provides SORHs with a 4 step methodology to assess whether or not they should consider offering technical assistance to vulnerable hospitals and communities, what their role should be (if any, in the offering of technical assistance) and key decisions and activities to conduct given the selected role of the SORH. Once SORH capacity is determined, SORHs then need to decide what types of technical assistance they will provide or contract/partner to provide. The chart on the next page outlines the types of technical assistance SORHs can provide either before or after the hospital closure process. Each box in the chart links to a specific section in the Roadmap with more information on that activity.

Types and Timing of Technical Assistance

Before

- SORH self-assessment
- Identify vulnerable hospitals — financials indicators
- Identify vulnerable hospitals — quality indicators
- Identify vulnerable hospitals — provider alignment
- Identify vulnerable hospitals — community support indicators
- Identify vulnerable hospitals — hospital self-assessment indicators
- Ensure financial and operational resources are available to those hospitals in financial trouble
- Preparing the hospital and community for closure
- Offer stakeholder education — leadership
- Offer stakeholder education — changing systems volume to value

After

- Support community decision making — encourage community stakeholder education
- Offer stakeholder education — changing systems volume to value
- Offer stakeholder education — alternative models for providing care
- Assess community health needs
- Evaluate health care resources
- Develop a community plan

A SORH Toolkit for Working with Vulnerable Hospitals & Communities

This toolkit was prepared as a reference guide for the State Offices of Rural Health Roadmap for Working with Vulnerable Hospitals & Communities. This toolkit highlights specific recommendations, tools and resources for the different areas of Technical Assistance (TA) that are recommended for State Offices of Rural Health (SORH) to provide for vulnerable hospitals and the communities they serve depending on the capacity of the SORH. All of the blue underlined text in this document is hyperlinked directly to that tool or resource.

The types of TA suggested include:

- Identifying Vulnerable Hospitals
- Ensuring Financial and Operational Resources are Available
- Preparing a Hospital and Community for Closure
- Offer Stakeholder Education on Other Key Topic Areas
- Support Community Decision Making

Indicates tools available to assist SORHs, hospitals or communities faced with a rural hospital closure. Tools include survey samples, step-by-step planning guides, or other materials providing information to allow for hands-on technical assistance.

Indicates resources available to assist SORHs communicate or educate rural hospitals and communities on the impact of a rural hospital closure and the future of health reform. Resources include presentations, research studies, or articles that support technical assistance.

Indicates a SORH example using these tools and resources to replicate in other states. These states serve as NOSORH mentors for other states and are available to discuss these tools and resources further.

Types of Technical Assistance	Recommendations	Tools, Resources & SORH Examples
Identifying vulnerable hospitals	SORHs need to consider many factors when assessing the vulnerability of rural hospitals for closure. Recommendations, tools and resources focus on 5 key indicators, including: financial, quality, provider alignment, community support, and hospital self-assessment. ***Financial Indicators*** Look at rural hospital financial measures, such as overall payer mix, days cash on hand, consistently low operating margin, days in accounts receivable, etc. to determine the current financial situation of every rural hospital in the state. Look at other anecdotal evidence, such as CEO turnover. Partner with state hospital associations or contract with a financial consultant for collecting and formatting data, if needed. Compile and disseminate various sources of data, which are most meaningful to hospitals. Schedule routine visits to hospitals to review indicators. Convene rural hospitals to provide insight about the type of data collected and share best practices.	*North Carolina Rural Health Research Program (NCRHRP) Financial Distress Index (FDI)* — NCRHRP developed the FDI to forecast the risk of distress of rural hospitals using the most currently available hospital financial performance, government reimbursement, organizational characteristics and market characteristics. *The Critical Access Hospital Measurement and Performance Assessment System (CAHMPAS)* — CAHMPAS is a data measurement tool available for SORHs, Critical Access Hospital (CAH) executives and federal staff to review the financial, quality and community-benefit performance of CAHs. The *Nevada Office of Rural Health* uses multiple data resources to create benchmarking reports for their CAHs. Examples of these reports along with data definitions are provided in *Appendix E* of this Roadmap.

Types of Technical Assistance	Recommendations	Tools, Resources & SORH Examples
Identifying vulnerable hospitals	***Quality Indicators*** Collect and analyze quality measures for all rural hospitals and compare scores with other hospitals. Encourage and track reporting participation with Medicare Beneficiary Quality Improvement Project (MBQIP), Hospital Compare, the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS), and other reporting initiatives. Look to see if hospitals are reporting above and beyond what is required for MBQIP, such as on other Medicare Inpatient Prospective Payment System (IPPS) or Medicare Outpatient Prospective Payment System (OPPS) measures, or even as part of an accreditation program, such as DNV or Joint Commission. Look at adoption and understanding of alternative payment methodology, participation in quality initiatives, achievement of meaningful use and other indicators, which may be related to vulnerability. Partner with local Quality Innovation Network — Quality Improvement Organizations (QIN-QIOs) for quality reporting and improvement initiatives. Provide training and award programs as a result of the data analyses.	*MBQIP Reporting Guide* — The MBQIP Reporting Guide was developed by Stratis Health to help Flex Coordinators, CAH staff and others involved with MBQIP understand the measure reporting process. *The Quality Reporting Center* — This website provides resources to assist PPS hospitals, inpatient psychiatric facilities, PPS-exempt cancer hospitals and ambulatory surgical center with quality data reporting. QIN-QIOs are responsible for working with health care providers and the community on data-driven projects to improve patient safety, reduce harm and improve clinical care at the local level. Locate state QIN-QIO at *http://www.qioprogram.org/contact*.

Types of Technical Assistance	Recommendations	Tools, Resources & SORH Examples
Identifying vulnerable hospitals	***Provider Alignment Indicators*** Assess physician participation in Merit-Based Incentive Payment Systems (MIPS) or Alternative Payment Model (APM). Understand Accountable Care Organization (ACO) participation by rural practitioners. Understand the full dynamic of community providers including home health, Emergency Medical Services (EMS), public health, long-term care, etc. to fully understand the healthcare market place in the community. Identify Primary Care Medical Homes (PCMH) status of any provider-based primary care clinics. Assess the composition of the hospital medical staff — numbers, specialties, etc.	 *Rural Hospital Transition Framework* was presented at the 2016 NOSORH Annual Meeting takes an in-depth look at the industry as a whole and at the particular struggle faced by rural and community hospitals, and outlines strategies for these facilities to not only survive, but thrive in the fast-approaching era of population health.
	Community Support Indicators Look at HCAHPS scores on Hospital Compare as a possible indicator to understand patient perception and patient experience. Review top inpatient and outpatient procedures from hospitals by zip code detailing where people go for hospital services and for what service they had performed including ambulatory sensitive conditions. Assist hospitals in considering adding new service lines depending on the needs of the community and the competitive landscape. Help hospitals to develop a marketing/promotional campaign to illustrate how important it is for the community to utilize the local hospital.	 The *National Center for Rural Health Works* conducts economic impact studies of the healthcare in a rural community that illustrates the importance of healthcare to the local economy.  *Hospital Compare* provides results on emergency department and outpatient surgical quality measures, which evaluate the quality of care provided to patients.

Types of Technical Assistance	Recommendations	Tools, Resources & SORH Examples
Identifying vulnerable hospitals	***Hospital Self-Assessment Indicators*** Plan a regular "route" to visit all rural hospitals at least once per year to review information and assess vulnerability and needs.	The *Kentucky Office of Rural Health* annually surveys all CAHs to understand key financial and community circumstances in order to inform annual site visits. Copies of the email and survey are included in *Appendix D* of this Roadmap.
Ensure financial and operational resources are available	Use Medicare Rural Hospital Flexibility Grant (Flex) and Small Rural Hospital Improvement Program (SHIP) funds to conduct services to help vulnerable hospitals, including: Charge-master Reviews, Revenue Cycle Assessments, Revenue Cycle Team Development, Pricing Strategy Development, Data Collection and Benchmarking, Comprehensive Quality Improvement Program Assessment, Statewide Rural Hospital plans, Population Health Profiles, Population Health Readiness Assessment, etc. Match vulnerable hospitals with expert rural health financial consultants. Work with hospitals to help them understand the need to: ■ Encourage physicians to become more concerned about the costs of supplies and other activities, such as unnecessary tests and inefficient coding processes that may drive up costs. ■ Help medical staff understand the connection of their referrals to the hospital's viability so that their referral decisions reflect the value they place on the hospital. ■ Leverage their standing in the community by partnering with local physicians to share the revenue generated by efficient outpatient cases. ■ Identify and attract additional physicians as another way that hospital leaders can increase profits.	RHIhub's Topic Guide on *Community Vitality and Rural Healthcare* shows the linkage between healthcare and the vitality of the community and focuses on how community and economic development can complement health services in rural areas and how collaboration between the sectors can address issues such as population health. *Report from 2016 Financial Leadership Summit* — The National Rural Health Resource Center (The Center) held a summit to identify strategies and actions that rural hospital leaders should consider as they transition to alternative payment models and population health management. The Report from the Summit provides key operational strategies that providers may deploy to overcome challenges and be successful in alternative payment models. The *Wisconsin Office of Rural Health* developed a model to work with identified consultants to provide in-depth financial analysis and identified specific revenue cycle interventions for CAHs.

Types of Technical Assistance	Recommendations	Tools, Resources & SORH Examples
Preparing a Hospital and Community for Closure	***Understand requirements to transition hospital.*** Have a general awareness of where to find information on the laws in their state and what those laws and regulations govern. Help hospitals understand the complexities of these requirements. Identify the distance to nearest facilities, number of ancillary services owned (such as Rural Health Clinic (RHC), nursing home, home health, etc.), and whether or not the facility is independent, affiliated/owned by another organization or if the hospital is in a tax district.	*NOSORH compiled a summary of regulatory requirements for closure of a hospital* for SORH to be able to easily see the requirements in each state. The Alabama Office of Rural Health created a Hospital Closure Checklist modeled after the Georgia example. The AL Hospital Closure Checklist can be found in *Appendix C* of the Roadmap. This checklist can be used as a template for other SORHs to create state version. The *South Carolina Office of Rural Health* established relationships with state agencies and county councils involved with the closure process and researched options for health care access points. The South Carolina Office of Rural Health shared their experience working in this community after closure in the presentation *"Sustaining Access to Rural Health Care Through Innovation."*
Offer stakeholder education on key topic areas	SORHs should take advantage of the many national and regional conferences available to them to learn about the latest health reform initiatives so that the SORH can pass along this information to vulnerable hospitals through hospital administration, hospital board, and physician education. Education recommendations, resources and tools are categorized into the following sections: leadership, changing systems — volume to value, and alternative models for providing care. ***Leadership*** Educate hospitals on the importance of strong board and physician leadership as hospitals navigate volume to value transitions.	*Engaging Your Board and Community in Value-Based Care Conversations* — Rural Health Value provides a list of conversation starting questions to help rural health care leaders facilitate value-based care discussions with board and community members. *Rural Provider Leadership Summit Summary* — This summary provides strategies for rural provider engagement in the transition to value. *Physician Engagement — A Primer for Healthcare Leaders* — Rural Health Value highlights the importance of physician engagement and describes strategies to build effective physician relationships and trust, which includes a Physician Engagement Assessment tool, prioritization and action planning guides and a list of additional physician engagement resources. CONTINUED ON NEXT PAGE

Types of Technical Assistance	Recommendations	Tools, Resources & SORH Examples
Offer stakeholder education on key topic areas	***Leadership*** Educate hospitals on the importance of strong board and physician leadership as hospitals navigate volume to value transitions.	CONTINUED FROM PREVIOUS PAGE  *Aligning Leadership on the Rural Road to Value* — The Center developed this series of leadership tools to enable rural health care leadership teams to examine and clarify roles for achieving performance excellence during the transition to value-based health care.  *A Systems Development Guide for Rural EMS: A Systematic Approach to Generate Budgets for Rural EMS, August 2014* — This guidebook from the National Center for Rural Health Works is designed to assist rural emergency medical services leaders in generating budgets.
	Changing Systems, Volume to Value Prepare hospitals for value-based payment initiatives by helping them establish internal and external reporting mechanisms. Provide education to hospitals on the different quality reporting initiatives, how to get involved and how to improve measures.	 *The Quality Payment Program* website is a great resource to monitor as CMS rules are continually implemented and updated.  *Small Rural Hospital Transition (SRHT) Project* — SRHT is designed by The Center to prepare and assist rural facilities in moving from fee-for-service and volume based payment system to one that is dependent on value and quality.  *Rural Hospital Performance Improvement (RHPI) Project* — The Center provided technical expertise and business tools to help hospitals with financial and operational strategies, quality improvement, and population health and community care coordination. A number of tools and resources are archived on The Center's website.  NOSORH developed state profiles on the *Combined Impact of Hospital Readmission Penalties* that includes penalties under the Medicare Readmission Reduction Program (MHRRP), the Hospital Acquired Condition (HAC) Program and penalties or bonuses under the Hospital Value-Based Purchasing Program (HVBPP).  *Value-Based Care Assessment Tools* — The Rural Health Value Team created a comprehensive tool to assess 121 different value-based care capacities in eight categories. After completion of the online tool, organizations will receive a readiness report on their organization's readiness for value-based care and to develop value-based care action plans. CONTINUED ON NEXT PAGE

Types of Technical Assistance	Recommendations	Tools, Resources & SORH Examples
Offer stakeholder education on key topic areas	CONTINUED FROM PREVIOUS PAGE ***Changing Systems, Volume to Value***	*Comprehensive Primary Care Plus* — A Rural Commentary — Rural Health Value overviews the new CMS Comprehensive Primary Care Plus (CPC+) program and the importance to rural providers. *"Framing Rural Health Value" Flex Conference Webinar Series* is a Technical Assistance and Services Center (TASC) effort aimed to assist State Flex Programs with designing and maintaining responsive technical assistance and education for CAHs in the emerging value-based health care system. *Blueprint for Performance Excellence* — The Center and Stratis Health developed this Blueprint to be a tool for rural hospital leaders to implement a comprehensive systems approach to achieving organizational excellence. *Quality Improvement Implementation Guide and Toolkit for Critical Access Hospitals* — This toolkit was prepared by Stratis Health to help CAH staff organize and support efforts to implement best practices for quality improvement. Through the work of the *Michigan Office of Rural Health*, the Michigan CAH Quality Network (MICAH QN) has been reporting a core group of measures to CMS, and benchmarking these measures at every meeting. Presentations from the last meeting on quality and financial measures can be found in the Accompanying Reports located on the *NOSORH website.*
	Alternative Models for Providing Care Understand the different alternative models of care, including but not limited to those listed on the page 15. Stay connected with NOSORH, National Rural Health Association (NRHA) and others to learn of new models and opportunities as they develop.	The *NOSORH Policy Committee* is open to any member of NOSORH who has an interest in the learning more about national policy issues and being engaged in the policy activities of the organization. CONTINUED ON NEXT PAGE

Types of Technical Assistance	Recommendations	Tools, Resources & SORH Examples
Offer stakeholder education on key topic areas	CONTINUED FROM PREVIOUS PAGE ***Alternative Models for Providing Care*** **Rural Freestanding Emergency Department** — A rural freestanding emergency department (RFED) is one potential model for providing emergency services in areas where hospitals have closed. **Frontier Extended Stay Clinician Demonstration** — tested the feasibility of providing extended stay services to Medicare beneficiaries at clinics in isolated rural areas under Medicare payment and regulations. **Frontier Community Health Integration Project (FCHIP) Demonstration** aims to develop and test new models of integrated, coordinated health care in the most sparsely-populated rural counties with the goal of improving health outcomes and reducing Medicare expenditures. **Practice Transformation Network (PTN) Program** is a demonstration project from the Center for Medicare and Medicaid Innovation (CMMI) that was designed as part of their Transforming Clinical Practices Initiative (TCPI) to help small and safety net providers transition from fee-for-service payment models to advanced payment models. **Rural Accountable Care Organizations** Accountable Care Organizations (ACOs) are groups of doctors, hospitals, and other health care providers, who come together voluntarily to give coordinated high quality care to the Medicare patients they serve.	Research on the RFED model has been completed by NCRHRP titled *Estimated Costs of Rural Freestanding Emergency Departments, November 2015.* *Evaluation of the Medicare Frontier Extended Stay Clinic Demonstration: Report to Congress* — This report summarizes the five lessons learned from the 10-year experience relevant for assessing the advisability and feasibility of creating an alternative type of provider and payment system to promote the availability of basic acute and emergency care services in remote geographic regions of the country. *The Frontier Community Health Integration Project Demonstration* website provides additional resources. RHIhub provides more detail on the *FCHIP demonstration*. *CMMI Transforming Clinic Practices Initiative* — This link is to the CMS Innovation Transforming Clinical Practice Initiative with links to more information. *ACO: Accelerated Development Learning Sessions* — This Learning Series is for existing or emerging Accountable Care Organizations (ACOs) to develop a broad and deep understanding of how to establish and implement core functions to improve care delivery and population health while reducing growth in costs. Reources available from Caravan Health ■ *Rural Practice Transformation: Getting Ready for Value-Based Payments* ■ *Rural ACOs: Pathway to Sustainability (Video)* ■ *Rural Strategy: ACOs vs. CINs (PDF)* ■ *SGR "Doc" Fix: Rural Implications (PDF).* CONTINUED ON NEXT PAGE

Types of Technical Assistance	Recommendations	Tools, Resources & SORH Examples
Offer stakeholder education on key topic areas	CONTINUED FROM PREVIOUS PAGE ***Alternative Models for Providing Care*** **Telehealth Services** offers an alternative to patient transfer to urban hospitals, which could translate to increased revenue and patient satisfaction for small rural hospitals. **Community Paramedicine (CP)** has been promoted as a strategy to help rural communities, which frequently experience significant health care disparities and service gaps, by using emergency medical technicians (EMTs) and paramedics in an expanded role to provide public health and primary care services. **Mergers & Acquisitions** may be the only viable option for hospitals to remain open in rural areas. SORHs need to be aware of potential mergers or acquisitions and the potential for the transactions to be mutually beneficial for all parties involved, including the community.	*Telehealth Resource Centers* (TRCs) are funded by the Office for the Advancement of Telehealth (HRSA/DHHS) to assist health care organizations, health care networks, and health care providers in implementing cost-effective telehealth programs to serve rural and medically underserved areas and populations. Here is a presentation on Telehealth for Rural Health: Regional Updates and Model Programs from the NOSORH Region A meeting. More information on Community Paramedicine can be found on the *RHIhub website*. *Community Paramedic* has a program manual and a curriculum people can request. The *National Association of Emergency Medical Technicians* (NAEMT) has a great webpage with links to resources (on the left column), including a toolkit that is a collection of useful documents from various sources and the "knowledge center" link that has a lot of material as well. HRSA has a *Community Paramedicine Evaluation Tool* as well—useful for thinking about up front when planning a program: *WWAMI Community Paramedicine Research Study* — WWAMI presented at the NOSORH Region B meeting a 2016 research study looking to see if CP could fill rural health care gaps. *5 Key Questions for Healthcare Executives Considering a Transaction* and *The Merger Frenzy* — Rural Health Value offers resources for providers considering a merger.

Types of Technical Assistance	Recommendations	Tools, Resources & SORH Examples
Support community decision-making	***Encourage Community Stakeholder Engagement*** Identify leaders in the community and reach out to them to educate them on the impact of the potential hospital closure. Inform communities of federal resources available for community planning and health care redesign. Convene community stakeholders to review data on community needs. Work with communities to avoid closure or in the event of closure determine a set of needed services to meet the community's needs.	*How to Start a Community Coalition* — The Community Tool Box provides tools for community assessments including developing a plan for assessing local needs and resources and coalition building. *Appendix G* provides a list of federal resources available to rural facilities to assist in community planning and health care redesign. *The Economic Impact Analysis Tool* was developed for FORHP grantees to help them determine the economic impact of grant dollars in their communities. This tool can be used by any community health organization wanting to understand how its activities affect the community. *The Economic Impact of Recent Hospital Closures on Rural Communities* — Rural Health Works studies the potential impact of a hospital closure for a community and provides a template to assist local leaders interested in estimating the potential economic impact.
	Assess Community Health Needs Analyze Community Health Needs Assessment (CHNA) data to understand community need. Conduct CHNA if necessary. Provide information to hospital, community, and civic leaders.	*Using Data to Understand Your Community* — Rural Health Value explains how understanding a community's data can be a useful starting point to understanding how to improve the health of the population. This resource includes ideas and next steps for using data to understand the community. *Practical Community Health Needs Assessment and Engagement Strategies* presentation from the Maine Rural Health Research Center is a resource that can help SORHs understand how community health needs assessments can be used as a place to start the conversations among hospitals, communities and SORHs who serve them. *Population Health Portal* — The Center designed this portal to help CAHs, Flex Coordinators and rural health networks navigate towards improved population health. It includes an online readiness assessment, resources to support population health and information on how to effectively conduct population health analytics with access to a web-based database for acquiring geographic health data specific to your location.

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Types of Technical Assistance	Recommendations	Tools, Resources & SORH Examples
Support community decision-making	CONTINUED FROM PREVIOUS PAGE ***Assess Community Health Needs***	The *Oklahoma Office of Rural Health* conducts CHNAs using multiple tools for a number of rural communities to help them understand the health care dynamics in their communities. The *Montana Office of Rural Health* has a program called Community Health Development Project to help communities understand their health care needs to make informed decisions about needed services.
	Evaluate Health Care Resources Discuss with community leaders the resources available to the community both within the community and those services available in neighboring communities.	RHIhub topic guide Healthcare Access in Rural Communities provides an overview of the *impact of closures of healthcare facilities and services* on access to care for rural citizens. *Community Assessment from Community Toolbox* — The Community Tool Box provides tools for community assessments including developing a plan for assessing local needs and resources and coalition building.
	Develop A Community Plan Work with community stakeholders to assess data on community need and resources and help them develop a health care plan for the community.	A simple outline for the major benchmarks of developing a community plan are included in *Appendix F*. County Health Rankings and Roadmaps created an *Action Cycle* with the goal of making communities healthier. There is a guide for each step that describes key activities within each step and provides suggested tools, resources, and additional reading. *Community Engagement Toolkit for Rural Hospitals* — This toolkit was developed by the Washington State Hospital Association to give administrators tools to engage in a community dialogue about health and form sustainable community partnerships. *NOSORH Media Toolkit* — NOSORH has developed a Media Toolkit to help SORHs navigate media coverage for an event. The toolkit includes strategies and templates to develop communication plans that can be crafted for vulnerable hospitals.

Types of Technical Assistance

Rural hospitals are vulnerable and close for a number of reasons with a variety of circumstances compounding the situation and creating unique environments that require a varied response to help alleviate the void in services. This section outlines types of technical assistance, resources and tools that State Offices of Rural Health (SORHs) may use to provide assistance for hospitals and communities that are faced with a potential hospital closure or a hospital that has already closed.

1. Identifying Vulnerable Hospitals

SORHs who are considering technical assistance may at the least, adopt a monitoring role for hospitals and communities at risk for closure. Monitoring includes identifying which hospitals in each state are most at risk for closure and is a necessary first step for SORHs to determine which hospitals and communities need the most assistance. SORHs can identify which rural hospitals are most at risk through a variety of data resources available as outlined in the section below. Identifying hospitals at high risk and understanding what led to the current situation may help to prevent or mitigate the effects of future closures. SORHs can look at the following five indicators to determine if a hospital is vulnerable to closing.

1.1 Financial Indicators

1.2 Quality Indicators

1.3 Provider Alignment Indicators

1.4 Community Support Indicators

1.5 Hospital Self-Assessment Indicators

1.1 Financial Indicators

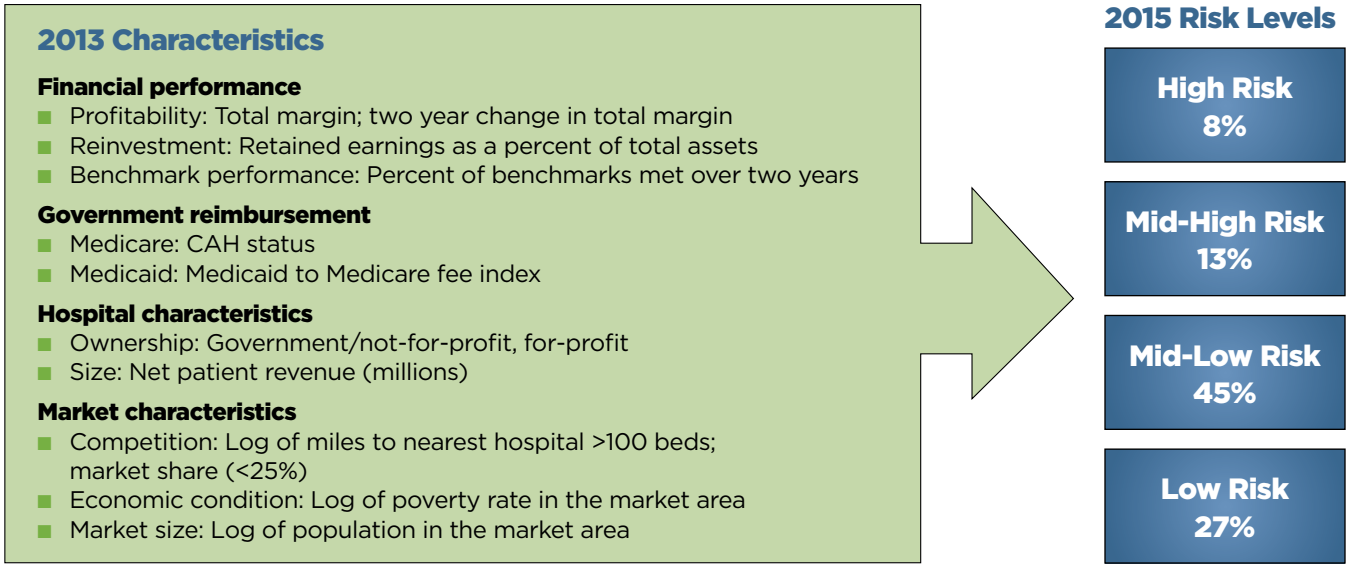
There are a number of financial measures to consider when identifying a financially vulnerable hospital. The resources described in this section allow SORHs to look at financial measures such as overall payer mix, days cash on hand, consistently low operating margin, days in accounts receivable, etc. SORHs should also look at anecdotal evidence, such as CEO turnover, adoption and understanding of alternative payment methodology, participation in quality initiatives, achievement of meaningful use and other indicators which may be related to vulnerability. The following resources provide SORHs with information and options on how to determine the most vulnerable hospitals in their individual state.

The *North Carolina Rural Health Research Program* (NCRHRP) at the Cecil G. Sheps Center for Health Services Research researches and tracks rural hospital closures and provides many resources and publications on the *NCRHRP website* focusing on rural hospital closures.

In October 2016, NCRHRP released *Trends in Risk of Financial Distress among Rural Hospitals*, which uses data from 2011-2014 to update and describe the distribution and trends in the risk of financial distress among rural hospitals for the 2013-2016 period by state and census region.

NCRHRP created the Financial Distress Index (FDI) model, which assigns hospitals to high, mid-high, mid-low or low risk levels for 2016 using the 2014 Medicare cost report and Neilsen-Claritas data summed to market areas.

Figure 1: FDI Model for Forecasting Financial Distress in Rural Hospitals



Financial indicators are the strongest drivers of financial distress, particularly total margin, benchmark performance and retained earnings, while hospital size and market poverty rates are the most influential non-financial factors. The diagram above defines the key indicators in the FDI model.

SORHs can apply the FDI model using the same data sources to all rural hospitals in their state. Those hospitals that fall in the high-risk category will need more immediate technical assistance, if possible. Some hospitals may be beyond financially saving while others may be able to establish health reform initiatives to increase revenue or streamline inefficiencies. SORHs will need to determine what technical assistance to provide depending on the severity of risk of closure.

The Flex Monitoring Team analyzes the financial and operational performance of Critical Access Hospitals (CAHs). *The Flex Monitoring Team website* provides valuable data for SORHs to provide CAH administrators and boards with comprehensive information about the financial performance and condition of their hospitals.

FMT provides access to CAHMPAS (Critical Access Hospital Measurement and Performance Assessment System). CAHMPAS has data for CAHs on financial indicators, quality indicators, HCAHPS, and market characteristics. All of the data is publicly available so it is at least two years old. This system also allows SORHs to create customized reports. A login to use the system is required and can be provided by FMT. A tutorial on the FMT website provides an overview of the system at: *www.flexmonitoring.org/cahmpas/*.

State Offices of Rural Health around the nation compile and disseminate various sources of data, which are most meaningful to their hospitals. SORHs often partner with state hospital associations, Quality Improvement Organizations (QIOs), or contract with a financial consultant for collecting and formatting data. SORHs should be able to obtain access to a central location for the collection and analysis of hospital utilization and financial data. SORHs can disseminate the data to hospitals for benchmarking. Data is typically collected every month to provide a timely snapshot of important information about the hospital discharges and patient days by payer category and levels of service, outpatient visits and financial data. Reports can contain monthly, aggregate data for each hospital, including utilization and financial information by primary payer for a wide range of hospital services including acute, sub-acute, swing bed, distinct-part units, and home health care. If this information is not publicly available in a state, SORHs could discuss gaining access to this data from their state hospital association.

SORH Example

WHAT: Create benchmarking reports

WHY: Empower informed decision making and analysis

FUNDING: Flex program funding

The Nevada Office of Rural Health uses a variety of robust data sources, including FMT data, to compile several reports shared with rural hospitals throughout the state. Below are three examples of reports the Nevada Office of Rural Health prepares annually that provide a good understanding of the financial and operational performance of each hospital.

Nevada CAH Financial and Operational Performance — Annual Assessment
The Nevada Office of Rural Health updates FMT data with more current financial data and includes a glossary of definitions and formulas with raw data. The report also provides peer review benchmark data with two prior years and is updated annually. A sample report can be found in *Appendix E1*.

Nevada Critical Access Hospitals Community Health Needs Assessment (CHNA)
This information is pulled from Robert Wood Johnson Foundation's County Health Rankings and additional data is added and benchmarked against Nevada and national figures. It provides a snapshot of what population health looks like in the community and what is driving that. A sample report can be found in *Appendix E2*.

Hospital Inpatient and Outpatient Utilization Report
This report is by county, using zip code data, financial and utilization data submitted by all hospitals including CAHs, Top 10 — ranked by admission by DRG — Inpatient, ER, outpatient surgery and outpatient other services. It includes information used to inform feasibility planning. One hospital used the information to change services and now contracts with an orthopedic specialist. A sample report can be found in *Appendix E3*.

Some SORHs plan award programs and present awards to hospitals based upon the data. Training programs can also be provided as a result of the data analyses. SORHs can convene rural hospitals to provide insight about the type of data that is compiled, benchmarked and analyzed. The Nevada Office of Rural Health work provides an example of their effort to provide robust data to rural hospitals. The data provided in these reports have led to informed decision-making on adding or reducing services.

1.2 Quality Indicators

The quality of services provided by a hospital can also be an indicator of a vulnerable hospital that a SORH may want to monitor. Prior to a hospital closure, the patients or their physicians may bypass the nearest hospital in favor of a more distant facility because of concerns over quality, availability of high technology procedures, or other factors. Additionally, one of the best ways to prepare hospitals for value-based payment initiatives is to help them establish internal and external quality reporting mechanisms. SORHs can provide education to hospitals on the different quality reporting initiatives, how to get involved and how to improve measures.

Many SORHs and SORH partners already collect and analyze quality measures for rural hospitals and compare scores with other hospitals. CAHMPAS was mentioned in the previous section for the financial and operational measures included in the database, but it also includes quality information and is a great tool for SORHs to use to assist CAHs.

Another way to assess the quality of a hospital's services is to encourage and monitor their reporting participation in *The Flex Medicare Beneficiary Quality Improvement Project (MBQIP)*, which works with Critical Access Hospitals to improve patient care and operations. Participating hospitals report a set of annual quality measures and submit data to Hospital Compare, Medicare's web-based tool that gives consumers access to measures that show whether or not hospitals provide

some of the care that is recommended for patients being treated for a heart attack, heart failure, pneumonia, asthma (children only) or patients having surgery.

Phase 1 (FY 2012) focused on pneumonia and congestive heart failure measures. Phase 2 (FY 2013) expanded to outpatient and the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey. Phase 3 (FY 2013) included pharmacy review of orders and outpatient emergency department transfer communication.

The *MBQIP Reporting Guide* was developed by Stratis Health to help Flex Coordinators, CAH staff and others involved with MBQIP understand the measure reporting process.

SORHs should look to see if hospitals are reporting beyond what is required for MBQIP, as an indicator of whether they are moving forward with change from volume to value. SORHs may consider reviewing indicators such as on other Medicare Inpatient Prospective Payment System (IPPS) and Outpatient Medicare Outpatient Prospective Payment System (OPPS) measures or as part of an accreditation program such as The Joint Commission or Det Norske Veritas (DNV).

The Quality Reporting Center — This website provides resources to assist Prospective Payment System hospitals, inpatient psychiatric facilities, PPS-exempt cancer hospitals and ambulatory surgical centers with quality data reporting.

SORHs are also encouraged to work with Quality Innovation Network-Quality Improvement Organizations (QIN-QIOs) to assist with quality data collection. As of August 1, 2014, CMS established a new functional structure for the QIO Program that separates review of Medicare beneficiary quality of care concerns and appeals from quality improvement work carried out in provider and community settings. Two Beneficiary and Family Centered-Quality Improvement Organizations (BFCC-QIOs), covering all 50 states and three territories, address quality of care concerns and appeals, while 14 Quality Innovation Network-Quality Improvement Organizations (QIN-QIOs) work with providers, stakeholders, and Medicare beneficiaries to improve the quality of health care for targeted health conditions.

There are 14 QIN-QIOs that bring Medicare beneficiaries, providers, and communities together in data-driven initiatives that increase patient safety, make communities healthier, better coordinate post-hospital care, and improve clinical quality. If a SORH is not already partnering with the state designated QIN-QIO, they should consider partnering with them to monitor and assist rural hospitals with quality reporting. To locate state QIN-QIO, visit *http://www.qioprogram.org/contact*.

1.3 Provider Alignment

Monitoring and understanding the dynamics and history between physicians and hospitals in small towns is an additional piece to fully understand the vulnerability of the hospital. Many small rural hospitals depend on private practice physicians for patient referrals and other support. In addition, hospitals are becoming increasingly dependent on physicians to achieve the operational efficiencies needed to survive in the tight reimbursement environment. Additionally, future reimbursement mechanisms such as bundling, pay for performance and third-party payor initiatives around quality are all dependent on functioning collaborative relationships between hospitals and physicians.

In order to ensure maximum reimbursement in the future, hospitals must refocus the relationship between hospitals and physicians beyond pure employment and move toward closer collaboration than they have had in the last decade. To do so, a framework, tools and preferred models need to be articulated, which expand beyond just economic alignment and includes clinical quality, operations and market realities, as well as engagement initiatives focused on vision and strategy. The culture of the physician-hospital collaborative relationship needs to be emphasized. It is this development of alignment on clinical, engagement and economic factors, which is required to be competitive in today's environment.

Another area for SORHs to consider when monitoring the vulnerability of a hospital is their current physician structure within the hospital and community. SORHs should assess the composition of the medical staff — numbers, specialties, etc. Physician employment may be a good model as hospitals move forward into an ACO type environment; however, it can be expensive for the hospital. SORHs need to have an understanding of the

providers that are in the community and those at the hospital. In addition, SORHs may need to take an environmental scan to assess physician participation in Merit-Based Incentive Payment Systems (MIPS) or Alternative Payment Model (APM), in addition to their participation in Accountable Care Organizations (ACOs).

SORHs also need to understand the full dynamic of community providers including home health, emergency medical services (EMS), public health, long-term care, and others to fully understand the health care marketplace in the community. SORHs have access to many past presentations from regional and annual meetings that can help them understand and communicate these dynamics to rural communities.

A presentation called *Rural Hospital Transition Framework* takes a look at the industry as a whole and at the particular struggle faced by rural and community hospitals, and outlines strategies for these facilities to not only survive, but thrive in the fast-approaching era of population health.

Another area for SORHs to consider when helping rural communities with physician alignment is to identify the Patient Centered Medical Home (PCMH) status of any provider-based clinics. Achieving PCMH status can result in benefits for the patient and the clinic in terms of improved quality of care.

1.4 Community Support Indicators

Local support of the community hospital is another critical piece to understand when determining the vulnerability of a rural hospital. If the community is bypassing the local hospital, then there is an underlying problem that needs to be addressed within the community. SORHs understand that the community hospital is a strong economic driver for the community and may need to communicate this message to both hospitals and communities.

The *National Center for Rural Health Works* can conduct an economic impact study of the healthcare in a rural community, which will measure the level of health care dollars spent outside the community and illustrate the importance of healthcare to the local economy. An economic impact study can be prepared for the entire health sector, a component of the health sector, or a specific healthcare organization.

SORHs may monitor and review top inpatient and outpatient procedures from hospitals by patient zip code, detailing where people go for hospital services and for what service they had performed, including ambulatory sensitive conditions. SORHs should look to state hospitals associations for this data if they do not have a state repository.

SORHs can also look at HCAHPS scores on *Hospital Compare* to understand patient perception and patient experience; however, some vulnerable facilities can still have good HCAHPS scores. The data analysis can assist hospitals in considering adding new service lines depending on the needs of the community and the competitive landscape.

1.5 Hospital Self-Assessment Indicators

One of the best ways to understand hospital vulnerability is to receive information directly from the hospital. SORHs can gain this valuable information from in-person visits, phone interviews and online surveys. One way to begin dialogue with rural hospitals about their vulnerability is to provide them with a benchmarking report on their financial information that can be accessed through the *Flex Monitoring Team (FMT)* or state hospital association. The discussion of financial data is a good starting point and can lead in to other factors that may contribute to the hospitals vulnerability and help identify the hospital's technical assistance needs. Many SORHs spend time visiting in person with hospital administrators and their team. Some SORHs plan a regular "route" to visit all rural hospitals at least once per year. Scheduling an in-person visit at the hospital to review the information and assess their vulnerability and needs can be very informative. These visits should be carefully planned, including goals for the visit, time with staff with responsibility for other SORH technical assistance efforts and, if appropriate, a visit to local stakeholders. SORH staff should be prepared with information in advance regarding the hospital.

The Kentucky Office of Rural Health conducts a survey of hospitals to prepare for their visits, as seen in the example below.

SORH Example

WHAT: Connect with hospital leaders

WHY: Understand hospital technical assistance needs

FUNDING: Flex program funding

Prior to hospital visits, each year the Kentucky Office of Rural Health surveys hospital administration to get a good understanding of what each hospital is offering and their current financial status. The survey also includes open-ended questions asking hospitals specifically what they want to see the Flex program or the Kentucky Office of Rural Health offer. The information also gives the Kentucky Office of Rural Health an understanding of the hospital's relationship with their health dept./local clinic/larger nearby hospital/FQHC, etc. The Kentucky Office of Rural Health can then look at convening network meetings or tie into other stakeholder meetings that might be happening to try and strengthen those relationships. A sample of the Kentucky Office of Rural Health survey and email to Administrators is included in the *Appendix D*.

2. Ensure Financial and Operational Resources are Available

SORHs around the country vary in levels of expertise regarding hospital financing and other resources needed by vulnerable hospitals and their communities. Some SORHs have staff with a hospital finance background; however, most SORHs have only general hospital financial knowledge. SORH staff working with vulnerable hospitals should have a working understanding of financial risks for rural hospitals, but it is not necessary to have a high level of expertise.

SORHs most often have a **contracting role** in ensuring financial and operational resources are available to hospitals and communities. The type of resource needed may be made more apparent after initial monitoring. The resources described below can help SORHs augment and be strategic about the use of those contracting resources. Vulnerable hospitals and communities have wide ranging needs which often require the specific expertise of financial, billing, practice transformation, quality and marketing consultants. A number of rural health corporate partners provide financial and operational assessments specifically for small rural hospitals. Many SORHs use Medicare Rural Hospital Flexibility Grant (Flex) and Small Rural Hospital Improvement Program grant (SHIP) funds to contract with a variety of companies on behalf of rural hospitals to conduct many services to help vulnerable hospitals, including: Chargemaster Reviews, Revenue Cycle Assessments, Revenue Cycle Team Development, Pricing Strategy Development, Data Collection and Benchmarking, Comprehensive Quality Improvement Program Assessment, Statewide Rural Hospital plans, Population Health Profiles, Population Health Readiness Assessment, etc.

In response to the numerous financial challenges facing rural providers, the Federal Office of Rural Health Policy (FORHP) supported the *2016 Financial Leadership Summit*, which was convened by the National Rural Health Resource Center (The Center). The Summit was held to identify strategies and actions that rural hospital leaders should consider as they transition to alternative payment models and population health management.

The Summit panelists consisted of 13 nationally recognized rural hospital field experts, as well as chief executive officers (CEOs) and chief financial officers (CFOs) from top performing critical access hospitals (CAHs) and small rural perspective payment system (PPS) facilities. The panel also included representatives from State Offices of Rural Health, the Flex Program and the National Rural Health Association.

The *report of the Summit findings* is designed to help rural hospital leaders address the financial transition in three ways. First, the report describes market forces impacting rural hospitals. Second, it provides key operational strategies that providers may deploy to overcome these challenges and be successful in alternative payment models. Third, the report highlights success stories and lessons

learned that were shared during the summit. The report also is intended to offer timely information to state rural health and hospital programs in developing tools and educational resources that support their hospitals and networks as they transition to population health.

The report concluded, "Of the many identified financial ratios proven useful for assessing organizations' financial conditions, the Summit participants identified the 10 most important indicators for evaluating CAH financial performance. Table A displays each of these 10 indicators with the 2012 CAH U.S. medians as listed in the 2014 CAH Financial Indicators Report distributed by the Flex Monitoring Team."

This report builds upon the knowledge gained from the *Critical Access Hospital 2012 Financial Leadership Summit* and includes key strategies discovered through The Center's Technical Assistance and Services Center (TASC) *Small Rural Hospital Transition (SRHT)* Project's *Rural Hospital Toolkit for Transitioning to Value-Based Systems.* Visit the *TASC website* to watch the *webinar recording*.

Hospitals must consider which services have no positive revenue and consider changes, modifications, and elimination of some services to become more efficient and generate more revenues to survive. A thorough financial analysis will include: a review of equipment expense that is not paying for itself, consider inpatient vs outpatient services, and look at reduction of services and staff where not critical. If inpatient volume is low and is remaining low, inpatient staffing needs to be reduced for the lower volume for cost reduction. New outpatient or mobile services that could generate additional positive revenue streams should also be considered.

SORHs should also encourage hospitals to find information on ambulatory sensitive conditions — reasons for admission to a hospital that are deemed avoidable if the individual had sought care in an appropriate manner. Also, hospitals should review the top inpatient and outpatient procedures from hospitals by zip code, detailing where people go for hospital services by zip code and for what service they had performed. Armed with this information, hospitals can develop a marketing/promotional campaign to illustrate how important it is for the community to utilize the local hospital.

Hospitals and communities must go beyond an awareness of their financial performance to understand the operational and leadership factors, which can make a hospital vulnerable to closure. In addition to ensuring that hospitals and communities needs for financial

Table A. CAH Financial Indicator Medians, 2012

CAH Financial Indicator	2012 U.S. Median	Favorable Trending
Days in Accounts Receivable	52.74	Down
Days Cash on Hand	69.07	Up
Total Margin	2.61%	Up
Operating Margin	1.13%	Up
Debt Service Coverage	2.52	Up
Salaries to Net Patient Revenue	44.87%	Down
Medicare Inpatient Payor Mix*	73.59%	Down
Average Age of Plant (years)	9.83	Down
Long Term Debt to Capitalization	17.26%	Down

*Summit participants agreed Overall Payor Mix was a more comprehensive indicator of financial performance than Medicare Inpatient Payor mix alone. Source: Flex Monitoring Team Data Summary Report No. 16: CAH Financial Indicator Report: Summary of Indicator Medians by State, October 2014.

resources are met, SORHs can take a contracting lead for providing experts in operations (alignment, clinical practice transformation, community support and other topics).

SORHs can use RHIhub's Topic Guide on *Community Vitality and Rural Healthcare* to show the linkage between healthcare and the vitality of the community and focuses on how community and economic development can complement health services in rural areas and how collaboration between the sectors can address issues such as population health.

SORHs can work directly with hospitals or contract to have a consultant to help them understand the need to:

- Encourage physicians to become more concerned about the costs of supplies and other activities, such as unnecessary tests and inefficient coding processes that may drive up costs.
- Help medical staff understand the connection of their referrals to the hospital's viability so that their referral decisions reflect the value they place on the hospital.
- Leverage their standing in the community to partner with local physicians to share the revenue generated by efficient outpatient cases.
- Identify and attract additional physicians as another way that hospital leaders can increase profits.

A great example of a SORH **contracting role** to ensure the availability of financial resources is the Wisconsin Office of Rural Health program which encourages hospitals to identify their financial needs and to request support from financial experts.

SORH Example

WHAT: Provide financial and operational assessments

WHY: Empowering hospitals to establish their own financial goal and plan for improvement using expert financial consultants

FUNDING: Flex program funding

Prior to submitting the FY15 Flex grant, the Wisconsin Office of Rural Health had identified the Wisconsin CAHs that were at the highest level of financial risk in the state. Hospitals at risk were asked to submit a request for support for a specific project to address their risk. The original plan in Year One of the grant was to enlist the services of a financial consultant to provide an in-person, comprehensive financial analysis with each of the identified hospitals. The consultant was charged with identifying the system(s) that are contributing to the hospital's financial distress, and provide recommendations and a strategic work plan. Five hospitals submitted proposals stating their need, a proposed project to address that need, and anticipated outcomes.

Two of the projects called for in-depth financial analysis:

- Development of a data driven plan for decision making on the future direction and strategic financial position of the hospital
- An in-depth assessment to include: operations, facility, community and financial feasibility

Three proposed projects identified specific revenue cycle interventions:

- A review of hospital inpatient, outpatient and clinic cases to identify coding and billing errors, along with potential charge capture and pricing issues
- A charge capture/coding/billing effectiveness assessment
- A ChargeMaster review

3. Preparing a Hospital and Community for Closure

One of the most difficult technical assistance activities a SORH may undertake is in responding to hospitals facing imminent closure. If SORHs are aware of an imminent closure and determine to provide technical assistance, they should undertake this effort only in a **partnering role**. The complexities involved with physically closing a hospital's doors are burdensome for an already distressed hospital and community. Volatile situations can erupt when hospital employees are faced with layoffs, hospital assets are liquefied, vendors are notified of closing, other health providers are left without a hospital and the leadership a local hospital provides for health care planning and services, and patients are faced with the grim prospect of no emergency, lab, in-patient or long term care services typically offered by small rural hospitals.

SORHs may need to be involved with differing aspects of the hospital closure process. Some SORHs have had to help identify a neighboring hospital to take the closed hospital's medical records so that patients could continue to retain access to their medical records. SORHs have also had to consider how to close out grant-funded initiatives or retain grant-funded equipment at closing hospitals. It is important to be responsive to the unique needs of the hospital. SORHs should schedule meetings to discuss the necessary steps for closure with the closing hospital if there is adequate time and notice.

Technical assistance activities to prepare a hospital and community for closure should include at least three efforts: the identification of a community lead for planning in the absence of the hospital, a scan of existing resources, and communication of the federal and state requirements of hospital closure.

SORHs should work with partners to help identify leadership to ensure the community has a focal point for moving forward in the absence of inpatient care. SORHs or partners may need to reach out to a variety of leaders with whom they have little prior connection, such as county commissioners, cooperative extension, economic development authorities or local businesses. The goal for this effort should be to support the community decision-making process as described in section 5.

SORHs should also identify the distance to nearest facilities, number of ancillary services owned (such as Rural Health Clinics (RHCs), nursing home, home health, etc.), and whether or not the facility is independent, affiliated/owned by another organization or if the hospital is in a tax district. These additional circumstances may change closure procedures and will impact the dynamics of the situation. It is helpful to understand the closure process for each entity.

Regardless of what point the hospital is in the transition process, it is important they understand all of the requirements that need to be met in order to transition the hospital. SORHs can help hospitals understand the complexities of these requirements. A hospital can take steps to ensure it is moving toward a smooth transition of staff and services, while meeting its obligations to vendors and the community. Understanding state and federal closure regulations can be of great assistance to the hospitals and communities faced with this crisis. State regulations vary from state to state and are quite complex. Sometimes several agencies are involved with this process and multiple agencies, including the public, are required to receive notices at certain times. SORHs who wish to help a closing hospital and the community understand these requirements are encouraged to meet with all the state agencies involved to understand the requirements in place and help ease the transition for rural hospitals.

SORHs should have a general awareness of where to find information on the laws in their state and what those laws and regulations govern. SORHs should also take into consideration that there may be additional requirements for HIPAA compliance, ADA compliance, ACA compliance, OSHA compliance, FDA compliance with pharmacy issues and controlled drug issues, civil rights compliance, workman's compensation reporting and some other requirements. Reaching out to all state agencies involved in the hospital closure process to connect hospital leaders and provide them with the information they need is an excellent use of SORH resources.

NOSORH has prepared a *Regulatory Requirements for Closure of a Hospital* that details the federal and state regulations hospitals must adhere to when closing down a hospital.

Since the hospital closure crisis has hit the Southeastern portion of the U.S. especially hard, these states have had to look to each other for resources. The Alabama Office of Rural Health did just that and modified a hospital closure checklist created by the Georgia Office of Rural Health for their own state to help rural hospitals understand what they needed to do to close a hospital. See *Appendix C* for a copy of the Alabama Hospital Closure Checklist/Road Map. This checklist is specific to Alabama, but the "licensing agency" could apply in any state, with varying time frames. The federal requirements outlined in the checklist for CMS certified facilities are national.

In order to better understand state hospital closure regulations, the South Carolina Office of Rural Health met with the state agency involved with regulating hospital closures to fully understand the next steps so the SORH could then educate the community on their options. Their effort is described in the example box below.

SORH Example

WHAT: Understanding Rules & Regulations

WHY: Establish relationships with state agencies and counties councils involved with the closure process and research options for health care access points

FUNDING: Various grant and operational funding for staff time

Through the South Carolina Department of Health and Human Services' Hospital Transformation Plan Program, the South Carolina Office of Rural Health worked with 16 hospitals to support their transition to a more sustainable model of service delivery that meets the needs of their communities and reduces reliance on inpatient admissions, surgery, or high-tech diagnostics. Rural communities received training and technical assistance for quality improvement, financial and operational improvement, and health systems development in their organizations. The South Carolina Office of Rural Health continues to work with providers and staff to ascertain needs and facilitate solutions in these areas.

One rural PPS hospital from this group did have to close after being in financial trouble for years. In 2012, the county-owned hospital sold to a for-profit firm to try to mitigate some of their financial issues; however, in January 2016, the for-profit firm gave 2 days notice that they were closing the hospital and its two Rural Health Clinics. The County quickly developed community committees to help determine next steps for access to care. The County has a strong FQHC in 4 sites and one RHC. It became clear to the South Carolina Office of Rural Health that everyone needed to understand what the legal ramifications were to closure. The hospital had chosen to temporarily close, allowable by state regulations, so they were able to retain their license for a year. However, they lost their Medicare NPI numbers since there is no temporary closure allowable by CMS and the application process for new provider numbers is intensely complicated.

The South Carolina Office of Rural Health focused on understanding what the Certificate of Need rules required and discovered that multiple departments within the state health department dealt with a different aspect of the closure process. The South Carolina Office of Rural Health convened a meeting with all staff involved in the hospital closure process to gain a complete understanding of all the necessary requirements to close a hospital and the options for sustaining services going forward.

The South Carolina Office of Rural Health has since worked with the community and stakeholders to understand the complexities of the situation. The South Carolina Office of Rural Health shared their experience working in this community after closure in the presentation *"Sustaining Access to Rural Health Care through Innovation"*.

4. Offer Hospital and Stakeholder Education on Other Key Topic Areas

SORHs who choose to be part of hospital and stakeholder education must consider a **partnering role** to provide the wide range of educational resources and connecting them with these resources and partners. Rural hospitals and communities need a great deal of education on various aspects of health care, which can point them to solutions, community needs and new modes for meeting those needs. The vulnerability of a rural hospital may begin with a failure to adopt a strategy that builds a road to a different future. There are many choices for rural hospitals and communities to consider as the delivery system continues its evolution from paying for volume to paying for value. Hospital and stakeholder education is a proactive approach which can potentially help hospitals and communities avoid closure, or in the event of closure, ensure that the community understands health care issues so they are able to determine a set of needed services to meet the communities needs.

A broad array of education and resources are available to support vulnerable rural hospitals and the communities they serve. SORHs should work closely with community and hospital leaders to identify the most appropriate form of education to address the unique needs of the individual community.

Topics and resources for education are organized around 4 key topic areas and targeted to five primary stakeholder groups: Hospital Administration, Hospital Board, Physician Leadership, EMS Stakeholders and the Community. These key topics are crucial for hospitals and communities who are at-risk for closure to understand opportunities and other models to consider.

4.1 Ensuring Informed Leadership

4.2 Changing Systems, Volume to Value Resources

4.3 Alternative Models

4.1 Ensuring Informed Leadership

Vital hospital and community leadership is crucial to address and reduce the vulnerability of rural hospitals. Leadership requires understanding the issues, having a vision for what is possible and what is not, and knowledge of available resources. The following resources are compiled to support SORH efforts to educate leaders in rural hospitals and communities.

Engaging Your Board and Community in Value-Based Care Conversations — Rural health care leaders report challenges when trying to educate and engage board and community members regarding health care organization changes required to succeed during the volume-to-value transition. Yet, value-based care discussions should play a significant role in all strategic planning and should be included in organizational performance measurement. This document produced by TASC provides a list of conversation starting questions to help rural health care leaders begin value-based care discussions with board and community members.

Rural Provider Leadership Summit Summary — This summary provides strategies for rural provider engagement in the transition to value, provided by TASC.

Physician Engagement — A Primer for Healthcare Leaders — For successful rural hospital volume to value transformation, engaging physicians (and other providers) will be essential. Physician engagement needs proactive physician involvement and meaningful physician influence that move a healthcare organization toward a shared vision and a successful future. *Physician Engagement — A Primer for Healthcare Leaders* by Rural Health Value highlights the importance of physician engagement and describes strategies to build effective physician relationships and trust. The primer also includes links to additional physician engagement information: interview with physician leader Dr. Paul Kleeberg, Excel-based Physician Engagement Assessment tool, prioritization and action planning guides, and a list of additional physician engagement resources.

Aligning Leadership on the Rural Road to Value — "Aligning Leadership on the Rural Road to Value" is a series of leadership tools developed by TASC to enable rural health care leadership teams to examine and clarify roles for achieving performance excellence during the transition to value-based health care. The tools, including an introduction video, a grid that delineates the typical roles of health care leadership teams and a series of self-assessments, will enable health care leadership teams to examine and clarify roles for achieving performance excellence and is geared specifically toward three key hospital leadership roles - administrative teams, board members, and physician leaders.

A Systems Development Guide for Rural EMS: A Systematic Approach to Generate Budgets for Rural EMS, August 2014 — This guidebook from the National Center for Rural Health Works is designed to assist rural EMS leaders in generating budgets. The "Budget Generator" helps an individual EMS or multiple EMS services to compare their expenses and revenues, and consider consolidation or collaboration through regional budgeting alternatives. With a hospital closure, EMS will have increased call volume and increased mileage, have longer time away from the local community and will need additional vehicles, etc. The budget tool can assist EMS providers to determine the increased amount of expenses and revenues associated with the increased level of service. Budget generator Excel spreadsheet and the development guide are available at: *www.ruralhealthworks.org*

4.2 Changing Systems, Volume to Value Resources

The biggest challenge rural hospitals must face in order to remain vital is the need to change from traditional payment methods based on inpatient census to payment for incentives for keeping patients well and out of the hospital. It is hard for small hospitals in financial trouble to implement expensive system changes to receive enhanced reimbursement. As of the writing of this document, there is a huge amount of flux around these rules. It is important for SORHs to stay connected with *NOSORH's Program Policy and Monitoring Team (PPMT)* and other organizations to continually monitor the impact of these rules on rural providers including vulnerable hospitals. SORHs face a deluge of information to help in their efforts to provide effective technical assistance to rural hospitals. SORHs can best stay up to date with the changing system by engaging with their peers through NOSORH and other national associations, their state hospital and primary care associations, their local providers and the Federal Office of Rural Health Policy. The narrative in this section provides a broad overview of the major changes and some perspective on how these changes relate to vulnerable rural hospitals.

These changes began with an executive order by the Bush administration laying out guidelines for the implementation of electronic health care and were carried further by the enactment of the Affordable Care Act (ACA). Congress passed legislation in 2015 called the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) to streamline various programs into a single framework to help clinicians transition from payments based on volume to payments based on value. MACRA legislation created additional rewards for clinicians who take this further step towards care transformation. These models include the new Comprehensive Primary Care Plus (CPC+) model, the Next Generation ACO model, and other Alternative Payment Models under which clinicians accept both risk and reward for providing coordinated, high-quality care.

In January 2016, the Secretary of the Department of Health and Human Services laid out a framework by which the nation's health care system can work to achieve the triple aim of better care, better quality and lower costs. This work continues to evolve as the CMS rolls out proposed rules and regulations to move the health care system from volume to value.

Currently, Medicare measures the value and quality of care provided by doctors and other clinicians through a patchwork of programs. Some clinicians are part of Alternative Payment Models such as the Accountable Care Organizations, the Comprehensive Primary Care Initiative, and the Medicare Shared Savings Program — and some participate in programs such as the Quality Payment Program (QPP), the Value Modifier Program, and the Medicare Electronic Health Record (EHR) Incentive Program.

In October of 2016, the Department of Health and Human Services issued a final rule that implement changes through the unified framework called QPP, which includes two paths:

- The Merit-based Incentive Payment System (MIPS)
- Advanced Alternative Payment Models (APMs).

The *Quality Payment Program* website is a great resource to monitor as the rules are continually implemented and updated.

Throughout 2106, CMS has launched (and will launch more) initiatives to reduce hospital readmission, transform clinical practice, encourage quality improvement networks and propose new payment incentives and penalties for clinical practices which achieve objectives of the triple aim. The following resources are compiled to support SORH efforts to help leaders in rural hospitals and communities to change from volume to value.

Two projects developed by The Center have numerous tools for SORHs to use to help rural hospitals transition from volume to value:

The *Small Rural Hospital Transition* (SRHT) Project is designed to prepare and assist rural facilities in moving from fee-for-service and volume based payment system to one that is dependent on value and quality.

The *Rural Hospital Performance Improvement* (RHPI) Project provides technical expertise and business tools to help hospitals with financial and operational strategies, quality improvement, and population health and community care coordination. A number of tools and resources are archived on the website.

Rural Health Value is funded through a cooperative agreement between the Federal Office of Rural Health Policy, the RUPRI Center for Rural Health Policy Analysis, and Stratis Health. The Rural Health Value Team analyzes rural implications of changes in the organization, finance and delivery of health care services and assists rural communities and providers transition to a high performance rural health system.

The *Rural Health Value* website has an abundance of information which can support SORH education and inform SORH TA and education efforts.

State profiles which document the *Combined Impact of Hospital Readmission Penalties* have been documented and posted on the NOSORH website. SORHs can share this resource with rural hospitals.

Value-Based Care Assessment Tool — As healthcare payments shift from volume to value, healthcare providers must deliver value-based care to be successful. But delivering value-based care will require new healthcare organization processes, polices, and priorities. The Rural Health Value Team's comprehensive Value-Based Care Strategic Planning Tool (VBC Tool) assesses 121 different value-based care capacities in eight categories.

Comprehensive Primary Care Plus — A Rural Commentary - The new Comprehensive Primary Care Plus (CPC+) program from the Center for Medicare & Medicaid Innovation will offer new, value-based payments to primary care practices. This commentary explains about CPC+, and its rural implications.

"Framing Rural Health Value" Flex Conference Webinar Series is a TASC effort aimed to assist State Flex Programs with designing and maintaining responsive technical assistance and education for critical access hospitals (CAHs) in the emerging value-based health care system. Recordings and materials can be found at *https://www.ruralcenter.org/tasc/content/2014-flex-conference-webinar-series-recordings-and-materials*.

Blueprint for Performance Excellence — This Blueprint is intended to be a tool for rural hospital leaders to implement a comprehensive systems approach to achieving organizational excellence.

The best way to prepare hospitals for value-based payment initiatives is to help them establish internal and external reporting mechanisms. SORHs can provide education to hospitals on the different quality reporting initiatives, how to get involved and how to improve measures.

SORHs can also look at the hospital's adoption of alternative payment methodology, participation in quality initiatives, achievement of meaningful use and other indicators, which may be related to vulnerability.

Stratis Health prepared a toolkit called *Quality Improvement Implementation Guide and Toolkit for Critical Access Hospitals* to help CAH staff organize and support efforts to implement best practices for quality improvement.

The Michigan Center for Rural Health works with CAHs and rural PPS hospitals to provide quality benchmarking data. The data, monitored by the Michigan Center for Rural Health and provided to hospitals, has led to improved quality and financial improvement.

SORH Example

WHAT: Engage CAHs, and Rural PPS Hospitals in Quality Reporting

WHY: Quality Reporting is a key component of payment reform

FUNDING: Flex

The Michigan Center for Rural Health has encouraged public reporting of quality measures by Critical Access Hospitals and Rural PPS hospitals since 2001 via the Michigan Critical Access Hospital Quality Network (MICAH QN).

MI CAHs convened in 2001 to discuss quality improvement in the CAH setting, and developed a goal of forming a network that would "monitor and improve care in Michigan Critical Access Hospitals". Since that time, the MICAH QN has met on a quarterly basis, became a 501(c)3, has developed a formal structure consisting of an executive committee, has adopted by-laws and has a robust membership of all 36 CAHs, and 4 rural PPS hospitals.

Flex funds support mileage, and lodging to and from the quarterly meetings, vendor(s) for HCAHPS reporting for a sub-set of the CAHs, education as needed, and MCRH staff support to facilitate the workings of the network.

Partnerships are vital to the success of the MICAH QN. Since inception, the Michigan QIO, and the Michigan Health and Hospital Association have been supporters offering education and attendance at every meeting. Technical expertise surrounding QI concepts, CMS measures, and the CART tool have been very useful to the network. In addition, the MICAH QN has formed a partnership with BCBS of Michigan. MICAH QN attendance is a component of the overall payment methodology for the BCBS Peer Group Five Pay-for-Performance Program.

The MICAH QN has been reporting a core group of measures to CMS, and benchmarking these measures at every meeting. With the support of the MICAH QN, all 36 CAHs participate in the MBQIP program. Education on areas of opportunities for the group is presented at every meeting. This is provided by subject matter experts and peer education.

Currently, the MICAH QN is focusing their efforts on three areas that align with the U.S. Department of Health and Human Services National Quality Strategy:

- Making care safer by reducing harm caused in the delivery of care.
- Promoting effective communication and coordination of care.
- Working with communities to promote wide use of best practices to enable healthy living.

On the *NOSORH website* to access a PowerPoint that showcases MICAH QN annual benchmarking of key quality and financial indicators. In addition, you will find a listing of departmental benchmarks that are collected by the Michigan Center for Rural Health on a monthly basis.

4.3 Alternative Models of Care

SORHs have a long history of partnering to explore and advance policies, which allow community based solutions and alternatives to care to improve services for rural citizens. It is important for SORHs to understand alternative models of delivering acute inpatient care in rural communities. SORHs may consider lessons learned from demonstration projects and new models of care to help hospitals and the communities they serve to identify alternatives to ensure their survival. Past demonstrations hold lessons learned and new models of health care delivery may be better able to support the needs of rural communities. SORHs may have a unique role in coordinating with other stakeholders to inform policy makers, regulators and payors to adopt alternative models of care to meet the needs of vulnerable hospitals and communities. A few states around the nation have begun to do this in an effort to review regulations regarding the challenges of a freestanding emergency department. The following example of SORH work shows how the Georgia Office of Rural Health informed policy makers on rural hospital closure.

The Georgia Office of Rural Health example illustrates a policy approach to alternative models of care. The following section illustrates additional information on possible alternative models and lessons learned for communities in jeopardy of losing the hospital or when a hospital has closed.

SORH Example

WHAT: Assist with implementation of alternative models of care

WHY: Hospital closing left a vacuum of services for rural citizens

FUNDING: Multiple

IThe Georgia Office of Rural Health regularly monitors rural hospital vulnerability and took on the task of informing policy makers. They proactively brought this to the attention of their Commissioner in 2014. As a result of that communication, the Rural Hospital Stabilization Committee was established.

The Committee reviewed regulations that would allow a closed rural hospital to be reopened as a freestanding ED within 12 months of the initial closure. After testimony and research it was determined that stand-alone EDs are not financially viable, for several reasons. The Committee concluded that there are issues with the reimbursement mechanisms, as well as high labor costs and capital investments.

However, research by the committee highlighted the many resources throughout Georgia that could assist in maintaining rural healthcare infrastructure. A "Hub and Spoke" model pilot was recommended in the *final report* to the Governor.

Rural Freestanding Emergency Departments

The Kaiser Commission on Medicaid and the Uninsured and the Urban Institute case review of three closed hospitals found that hospital closures did reduce access to emergency care. In all three case studies, stakeholders emphasized that a major impact of the hospital closure was the loss of access to emergency care in the community. They pointed out that the hospitals' EDs had also served as a safety-net for people with acute mental health or addiction treatment needs by stabilizing them and arranging for their transport when needed; when the hospital closed, local capacity to address these needs disappeared. Respondents cited the immediate and ongoing need to ensure emergency transportation to neighboring hospitals following the closure.

Though it is clear that rural communities desire and have a need for emergency care in the event of a closed hospital, it is undetermined if a rural community could financially support a rural freestanding emergency department. Research on the model has been completed by NCRHRP titled *Estimated Costs of Rural Freestanding Emergency Departments*, November 2015.

KEY FINDINGS:

- Rural freestanding emergency departments currently do not receive any rural-specific designation under federal regulations; as such, rural FEDs must take the form of a hospital-owned freestanding emergency department to be eligible for facility fee

reimbursement by the Centers for Medicare and Medicaid Services.

- The annual total cost to operate a low, medium, and high volume RFED is estimated to be $5.5, $8.8 and $12.5 million, respectively. The average visit cost per patient declines with greater volume ($600, $370 and $347 for low, medium and high volume RFEDs, respectively).
- Low patient volumes, high rates of uninsured patients, minimum staffing requirements, provider shortages, federal reimbursement policies, and other rural factors must be considered in assessing the financial viability of an RFED.

A demonstration project is an opportunity to test changes in practices or procedures that results in improved services. There are a variety of past and current demonstration projects that provide insight into alternative models of care to support vulnerable hospitals and communities. Several demonstration projects are described below.

Frontier Extended Stay Clinic Demonstration

The *Frontier Extended Stay Clinic (FESC)* demonstration, mandated by Section 434 of the Medicare Modernization Act, allows remote clinics to treat patients for more extended periods, including overnight stays, than are entailed in routine physician visits.

According to the legislation, a clinic must have been located in a community that is at least 75 miles from the nearest acute care hospital or critical access hospital, or that is inaccessible by public road. The law mandated that the project last for 3 years. There were 5 clinics participating in the demonstration. All of these clinics received Medicare certification from the CMS Seattle Regional Office. The clinics that participated included:

- Alicia Roberts Medical Center (Prince of Wales Island, Alaska)
- Haines Health Center (Haines, Alaska)
- Cross Road Medical Center (Glennallen, Alaska)
- Iliuliuk Family & Health Services (Unalaska, Alaska)
- Inter Island Medical Center (Friday Harbor, Washington)

The law allowed waiver of provisions of the Medicare program as was necessary to conduct the demonstration project. The FESC addressed the needs of seriously or critically ill or injured patients who, due to adverse weather conditions or other reasons, could not be transferred to acute care hospitals, or patients who needed monitoring and observation for a limited period of time, but did not require hospitalization. The FESC legislation required that the demonstration be budget neutral to the Medicare program.

An earlier evaluation, conducted in 2011 by the RUPRI Center for Rural Health Policy Analysis, found that FESCs provide critical services to isolated communities, with better quality of care and better experiences for patients and families. The program saved health insurers millions of dollars in transfer costs. However, FESCs did not recover the cost of providing care from the current health insurance reimbursement.

A 2014 report from the Secretary of the U.S. Department of Health and Human Services, *Evaluation of the Medicare Frontier Extended Stay Clinic Demonstration: Report to Congress*, identifies five key lessons learned:

1. The costs of building and maintaining extended s tay capacity are high.
2. The demand for extended stay services among Medicare beneficiaries is low.
3. Extended stay services improve beneficiaries' experiences.
4. Extended stay services promote appropriate monitoring and observation services.
5. Frontier communities would likely not be able to sustain extended stay capacity under fee-for-service Medicare.

Frontier Community Health Integration Project Demonstration

The *Frontier Community Health Integration Project Demonstration*, now in its second round, aims to support the CAH and local delivery system in keeping patients within the community who might otherwise be transferred to distant providers, test whether payments for certain services will enhance access to care for patients, increase the

integration and coordination of care among providers, and reduce avoidable hospitalizations, admissions, and transfers; and test new CAH activities in three service categories: skilled nursing care, telehealth, and ambulance services. The demonstration is limited to critical access hospitals in the most sparsely-populated rural counties in Montana, Nevada and North Dakota.

RHIhub provides more detail on the FCHIP demonstration. *https://www.ruralhealthinfo.org/new-approaches/frontier-community-health-integration-program*

Practice Transformation Network (PTN)

The Practice Transformation Network (PTN) program is a demonstration project from the Center for Medicare and Medicaid Innovation (CMMI) that was designed as part of their *Transforming Clinical Practices Initiative* (TCPI) to help small and safety net providers transition from fee-for-service payment models to advanced payment models, and also to be able to succeed under the new guidelines for the Physician's Quality Reporting System (PQRS) and the Value-Based Modifiers (VBM).

The Practice Transformation Networks are peer-based learning networks designed to coach, mentor and assist clinicians in developing core competencies specific to practice transformation. This approach allows clinician practices to become actively engaged in the transformation and ensures collaboration among a broad community of practices that creates, promotes, and sustains learning and improvement across the health care system.

Rural Accountable Care Organizations

Accountable Care Organizations (ACOs) are groups of doctors, hospitals and other health care providers, who come together voluntarily to give coordinated high quality care to the Medicare patients they serve.

ACO: Accelerated Development Learning Sessions is for existing or emerging Accountable Care Organizations (ACOs) to develop a broad and deep understanding of how to establish and implement core functions to improve care delivery and population health while reducing growth in costs. Caravan Health, formerly The *National Rural Accountable Care Consortium*, was awarded up to $31 million to provide technical assistance to assist rural providers in redesigning their ambulatory practices to maximize their success under the new value-based payment models. Caravan provides rural providers with tools to set up a Medicare-billable care coordination program. These tools include the necessary IT infrastructure and a 24-hour Nurse Advice hotline. They use data from electronic health records to help providers facilitate and optimize their ambulatory quality scores. Caravan also sets up ambulatory patient satisfaction surveys, engages with physicians and leadership, and provides guidance on how to participate in and increase revenue through Advanced Payment Models.

Additional resources available include:

- *Rural Practice Transformation: Getting Ready for Value-Based Payments*
- *Rural ACOs: Pathway to Sustainability (Video)*
- *Rural Strategy: ACOs vs. CINs (PDF)*
- *SGR "Doc" Fix: Rural Implications (PDF)*

Telehealth Services

The RHIhub provides an overview of telehealth services in rural areas and explains, "telehealth includes remote non-clinical services, such as provider training, administrative meetings, and continuing medical education, in addition to clinical services. Although telehealth is broader in scope, the American Telemedicine Association and many other organizations use the terms "telemedicine" and "telehealth" interchangeably."

Telehealth offers an alternative to patient transfer to urban hospitals, which could translate to increased revenue and patient satisfaction for small rural hospitals. Telehealth programs also help rural hospitals engage remotely with providers in other locations for support, training and specialized care through teleneurology, tele-ICU, telepsychiatry and teledentistry, for example. Telehealth programs could offer a lifeline to rural hospitals to continue to serve their communities and potentially expand services in a more economical way.

Telligen and *gpTRAC, the Great Plains Telehealth Resource and Assistance Center*, created a start-up and resource guide to provide an overview and framework for implementing telehealth in critical access hospitals and rural areas. The *guide* provides reliable and informative resources for learning about telehealth and the organizations that support the use of telehealth in various ways.

The U.S. Department of Health and Human Services (HHS) is also committed to helping CAHs, rural hospitals and other rural health care providers overcome barriers to health IT adoption and achieving meaningful use. More resources can be found on the *HealthIT.gov* webpage.

Additionally, the *Telehealth Resource Centers* (TRCs) are funded by the Office for the Advancement of Telehealth (HRSA/DHHS) to assist health care organizations, health care networks, and health care providers in implementing cost-effective telehealth programs to serve rural and medically underserved areas and populations. A *presentation* on TRCs was given in June 2016 at the NOSORH Region A meeting.

There are many resources available for rural clinics and hospitals to assist in the adoption of telehealth in remote areas. SORHs can assist rural providers by disseminating information on telehealth resources available and by providing technical assistance through coordination with urban facilities, if needed.

Community Paramedicine

Community Paramedicine (CP) has been promoted as a strategy to help rural communities, which frequently experience significant health care disparities and service gaps, by using emergency medical technicians (EMTs) and paramedics in an expanded role to provide public health and primary care services. More information on CP can be found on the RHIhub website at: *https://www.ruralhealthinfo.org/topics/community-paramedicine*

Community Paramedic (*http://communityparamedic.org/*) has a program manual and a curriculum people can request.

The National Association of Emergency Medical Technicians (NAEMT) has a great webpage with links to resources (on the left column), including a toolkit that is a collection of useful documents from various sources and the "knowledge center" link that has a lot of material as well. *http://www.naemt.org/MIH-CP.aspx*

HRSA has a Community Paramedicine Evaluation Tool that is useful for thinking about up front when planning a program: *http://www.hrsa.gov/ruralhealth/pdf/paramedicevaltool.pdf*

WWAMI presented *What is the Potential of Community Paramedicine to Fill Rural Health Care Gaps?* discussing a 2016 research study looking to see if CP could fill rural health care gaps.The study aimed to understand the organizational characteristics, goals, target populations, services offered, integration into the community, and evidence to demonstrate success of CP programs that serve rural communities. Initial findings show a 76% reduction in total hospital readmissions, 44% reduction in readmissions for heart failure, 41% reduction in readmission for CP patients with a potential in $7,461,981 in savings.

Mergers and Acquisitions

SORHs need to be aware of potential mergers or acquisitions and the potential for the transactions to be mutually beneficial for all parties involved, including the community. According to RUPRI, 1,299 health care sector mergers and acquisitions occurred in 2014, which is up 26% from the year before. In some cases, this may be the only viable option for hospitals to remain open in rural areas.

MergerWatch released a *report* in June 2016 that surveyed health care statutes and regulations in all 50 states and the District of Columbia. It found that:

- Only 10 states require review when a hospital is going to close or if a service would be discontinued.
- Only 8 states require review for a proposed hospital affiliation that is less formal than a sale, purchase or lease.

- Only 9 states require consumer representation on the reviewing body that decides whether hospitals can merge, downsize or close.
- Only six states require a public hearing on applications from hospitals proposing to merge, downsize or close.

Most state governments offer few avenues for consumers to express their concerns about proposed hospital deals. Many states do allow the state attorney general to review transactions when they involve non-profit hospitals to ensure their charitable status won't be compromised. Some hospital mergers might also trigger antitrust review at the state or federal level. Since November, the Federal Trade Commission has challenged proposed hospital mergers in Pennsylvania, West Virginia and Illinois. More resources can be found on the Rural Health Values website, including:

5 Key Questions for Healthcare Executives Considering a Transaction — Health care provider affiliations are increasing. In this era of consolidation, health care providers should carefully consider options. In a published interview and presentation, Mr. Joseph Lupica, Chairman of Newpoint Healthcare Advisors, reminds readers that local health care is a precious asset requiring fiduciary care. Yet independence is not a mission statement.

The Merger Frenzy — During health care organization affiliation discussions, the local health care system should be considered as a community treasure. Joseph Lupica, a national health care affiliation expert, embraces the Rural Health Value "stop and think" step during health care organization planning. Review Mr. Lupica's interview and presentation for insights about the health care affiliation process.

5. Support Community Decision Making

When a community is faced with the possibility of a hospital closure, they must engage in some type of decision making to determine how best to meet the needs of their citizens, to reduce the impact on other health care providers and address the vacuum of services. Many SORHs have a rich history in providing technical assistance through a broad range of community development activities. These activities may take many forms. In general, the hospital and/or community needs to:

5.1 Encourage community stakeholder engagement
5.2 Assess community health needs
5.3 Evaluate health care resources
5.4 Develop a community plan

There are several tools and guides SORHs may utilize as a model framework for technical assistance available to rural communities as they move forward with decision making and planning for the loss or transition of a rural hospital. The following section summarizes the steps in a basic process of decision-making and **partnering role** for SORHs.

5.1. Encourage Community Stakeholder Engagement

Encouraging community stakeholders' engagement is crucial to vulnerable hospitals and to communities that are dealing with a hospital closure. SORHs can support community engagement by supporting hospitals or communities to establish community advisory committees. Some hospitals or communities have already established a community advisory committee to assist with community needs assessments or other projects. A community advisory committee may be comprised of a variety of stakeholders, including clergy, union representatives, major employers, other health care providers, patients, consumers and medical staff. In the case of a hospital closure the establishment of a committee could, among other functions, serve as a focus group, allowing the hospital to articulate in a small forum its reasons for closing, giving both the community and the hospital an opportunity to hear each other's perspectives before announcing to the public that a closure is imminent. Members of a committee, having had an opportunity to fully understand the position of the hospital, can serve as the hospital's advocate, explaining to members of the community the challenges the hospital faces and the reality that the hospital has no alternative but to close. Community advisory committees can also

take a lead when a hospital closes to assess the remaining resources available, identify opportunities to meet needs, and advise county or other officials.

Community advisory committees should be officially sanctioned through appointment by a hospital board or county commission. Community advisory boards must be appointed for a specific task and term in order to be an effective focal point for improving health care in vulnerable communities.

Resources for how to start a community coalition are available at *http://ctb.ku.edu/en/table-of-contents/assessment/promotion-strategies/start-a-coaltion/main*

Appendix G provides a list of federal resources available to rural facilities to assist in community planning and health care redesign.

The *Economic Impact Analysis Tool* was developed for FORHP grantees to help them determine the economic impact of grant dollars in their communities. This tool can be used by any community health organization wanting to understand how its activities affect the community.

In, *The Economic Impact of Recent Hospital Closures on Rural Communities, Rural Health Works* studies the potential impact of a hospital closure for a community. A template has been provided to assist local leaders interested in estimating the potential economic impact.

5.2. Assess Community Health Needs

Community health needs assessment data are important tools to inform the prioritization of health care services to be provided in the absence of acute care services and to inform the transformation of vulnerable hospitals.

The Maine Rural Health Research Center presented in 2010 at the NRHA Annual Conference on *Practical Community Health Needs Assessment and Engagement Strategies*. This resource can help SORHs understand how community health needs assessments can be used as a place to start the conversations among hospitals, communities and SORHs who serve them.

Most communities have access to community health needs assessment data. The SORHs can support the analysis of this data or supplement it to ensure that it looks at the entire health care delivery system. This data is valuable in understanding the unique circumstances of the community. Community health needs assessments can potentially provide baseline information from which communities can plan for the services most needed by their population in the absence of a hospital.

Many SORHs have supported the work of hospitals in conducting community health needs assessments. This work can be a starting point for SORHs work with communities facing hospital closure. Non-profit hospitals are required to make CHNA data publicly available. SORHs who have not been actively involved in community health needs assessments should be able to query the hospital and easily obtain the CHNA from the hospital administrator or website. SORHs can help hospitals and communities review and update this information or provide analysis on the following key points.

- Provide quantitative data, which includes important planning information such as health status, demographics, socio-economic status, and local utilization patterns of how people use the health care system.
- Work in partnership with hospital or community advisory committees to conduct interviews or forums to query residents on their needs and preferences, asking residents what they like and dislike regarding their local health system.
- Blend qualitative and quantitative data and help prioritize.

Many SORHs across the nation are engaged in technical assistance on community health needs assessments. SORHs are able to utilize results to plan for their own technical assistance efforts and to support the communities with a neutral source of information. Supporting communities and hospitals in understanding community health needs assessments is a crucial step towards assessing systems, and identifying next steps to identify

SORH Example

WHAT: Use CHNA data to help hospitals implement alternative models of care

WHY: Help hospitals make informed decisions

FUNDING: Various

The Montana Office of Rural Health has conducted community surveys and needs assessments through the Community Health Services Development project since 1987 in response to rural hospital closures happening at that time. The Community Health Services Development (CHSD) project is a community health needs assessment process that helps Montana CAHs engage members of their rural community, identify and measure the community's health needs, recognize potential gaps in healthcare services, and develop specific strategies to prioritize and address the health needs that were identified during the CHSD process.

CHSD involves a steering committee to actively engage community members, a random sample mailed survey, local focus groups and key informant interviews, and an implementation planning process with the hospital's leadership team. In recent years, the CHSD process has been modified to comply with the IRS 990 Schedule H requirements for CAHs to provide community benefit to their service area. To date, over 40 communities in Montana have used the CHSD process to conduct a community health needs assessment to inform their hospitals' community benefit plan and improve the overall health of their community.

In response to community need for dental services, Granite County Medical Center in Philipsburg, MT created a hospital-based dental clinic in 2010 and it is still going strong today. From February 2012 to August 2013, the dental office provided 941 oral health screenings to schoolchildren in Granite County. This service is particularly important because Granite County lacks an optimal level of fluoride in the drinking water to prevent tooth decay and dental caries. In these screenings, typically one in five children is identified with early or urgent dental needs. This service further diversified revenue and could be a model for a vulnerable hospital.

SORH Example

WHAT: Conduct Community Health Needs Assessments

WHY: Help educate communities on need

FUNDING: Flex funding

The Oklahoma Office of Rural Health uses funds from Medicare Rural Hospital Flexibility Program to provide rural areas with tools necessary for local leaders and citizens to make informed decisions about their healthcare infrastructure to address the challenges posed by the financial realities of many rural areas. The cornerstone of the program is the Community Engagement Process. This is a series of meetings with local leaders and citizens that seek to educate the community on just how economically critical it is to use and maintain local hospital services and healthcare providers.

The program is free and pays for:

- A telephone survey of over 200 local residents on how they feel about their local healthcare providers and which services they use locally
- A customized directory of local healthcare services
- An economic impact study the local hospital and healthcare providers have on their community
- Demographic data for their area

The Oklahoma Office of Rural Health also pays for economic feasibilities studies for an individual community. These studies assess whether or not a given community can support a particular physician specialty.

best options for meeting the needs of rural communities. The Montana and Oklahoma Offices of Rural Health provides community needs assessments for rural hospitals, which has led to informed business development decisions for the benefit of the community.

TASC has resources on their website to support CHNA work, easiest found in the *Population Health Portal* which is the most comprehensive library for rural areas on this topic with a self-assessment.

Using Data to Understand Your Community — For rural communities or organizations seeking to address the Triple Aim, using data to better understand the community's population can be a useful starting point. It also includes useful websites (and how to best use them) that include demographic, population, health, and other data for ZIP code, city, county, and state-level geographic areas. (Rural Health Values)

For SORHs who are not providing community health needs assessment, the National Center for Rural Health Works offers two national workshops each year to teach professionals how to conduct a community health needs assessment. For more information on workshop availability and detailed agendas, see the website at: *www.ruralhealthworks.org*.

5.3. Evaluate Health Care Resources

The closure of rural health care facilities or the discontinuation of services will have a negative impact on the access to care in the community. Factors affecting the severity of the impact may include distance to the next closest provider, availability of alternative services, the availability of transportation services, and the socioeconomic and health status of individuals in the community, according to a *topic guide* prepared by RHIHub. It is important for communities faced with a rural hospital closure to create an inventory of available resources within the community and near by to help the community find existing access points.

Vulnerable hospitals should undertake an examination of the population and a review of how services are accessed throughout the community to assist the hospital in determining whether the hospital needs to maintain access to certain services at the current location or if patients will be able to obtain services at other facilities. These could include primary care services at Rural Health Clinics (RHCs), Federally Qualified Health Centers (FQHCs), physician's offices and outpatient and emergency services at neighboring hospitals.

According to the *Community Toolbox*, a community assessment helps to uncover not only needs and resources, but the underlying culture and social structure that will help communities understand how to address the community's needs and utilize its resources. The link above provides a number of resources to help develop a plan for assessing local needs and resources.

If a community hospital closes, the community will need additional assistance and support to assess any available health resources and to ensure some local health services are available. SORHs can support communities' efforts to understand existing health care services and the potential for bringing additional health care services to the community. SORHs can provide data on available providers and help identify a community or hospital champion to catalog existing resources.

5.4 Develop a Community Plan

Once a community has the information needed to assess their situation, they are able to embark on a plan going forward. The community planning process requires SORHs to take on a significant **partnering role**. A major investment in time and resources is needed to provide the appropriate level of education, engagement and communication for the community to come to a decision regarding how it will provide for the health care services for its citizens. The plan should establish a goal for health services, allow for key decision points, and time for votes of any pertinent Board, community advisory group or even the general citizens. Regardless of how health care services are provided, the planning activities should include an effort to promote the health of the population.

A simple outline for the major benchmarks of developing a community plan are included in *Appendix F*.

A great resource for this is the *County Health Rankings*. Roadmaps to Health has created an *Action Cycle* with the goal of making communities healthier. There is a guide for each step that describes key activities within each step and provides suggested tools, resources, and additional reading. *Roadmaps to Health Coaching* is available to provide local leaders with direct support in using Action Center tools and guidance to advance health.

Community Engagement Toolkit for Rural Hospitals — This toolkit was developed by the Washington State Hospital Association to give administrators tools to engage in a community dialogue about health and form sustainable community partnerships.

Once this plan has been established, the creation of a communication plan is essential to the survival of a rural hospital and to a community facing hospital transition or closure. A communication plan will help ease the transition of health care in the community in the event of a hospital closure. The goal of any communication plan should be to inform and engage stakeholders. SORHs can support hospitals and communities in developing a communication plan with the community and help work with the media.

NOSORH put together a *media toolkit* to help SORHs develop or expand their media outreach. This guide contains information and resources that will help support SORHs in communicating key messages to television, radio and print professionals. A list of valuable resources have been included that will answer questions when working with the media. Developing relationships with the media and public information officer (PIO) is vital to promoting messages and stories about people living in rural America.

The Massachusetts Office of Rural Health supported a community coalition to do this work in the example below.

SORH Example

WHAT: Conduct community planning

WHY: A community's response to the loss of inpatient services

FUNDING: Various

LESSONS LEARNED: A community learned they had many existing resources available to them despite the closure of the hospital.

Despite efforts by the Massachusetts Office of Rural Health, the hospital in North Adams, MA was forced to close in 2015. The community of North Adams already had a strong community coalition that had begun in 1986 after another major employer closed in the community. With one part-time staff member making $12,000, the Northern Berkshire Community Coalition (NBCC) was formed to address the almost 20% unemployment in the area. There were no coordinated services to help the dislocated workers, so they needed to bring people together to talk once a month.

In response to the hospital closure, NBCC set out to compile resources already available in the community. They worked with staff and volunteers to research available resources and shared this information at local stakeholder meetings to continually refine. The Massachusetts Office of Rural Health supported this effort by presenting information at these meetings.

A link to the resource guide can be found here: *Northern Berkshire Community Resource Guide*

Hospitals in transition or at risk for closure or communities that are responding to a hospital closure may wish to form a group to present at civic groups and other community meetings, to engage community organizations in assisting with the communication plan, and disseminating information on hospital issues. Hospitals (and other health care services) have not traditionally had to "promote" their services; marketing and promotions are imperative for the current day hospital (or health care service). Regular communication with the community on if and how the closure is progressing, the steps that are being taken to address issues related to access, and possible issues regarding physicians, etc., are crucial. This routine communication will help facilitate a smoother closure and minimize the negative impact on the community.

The following are suggestions for the development of a communication plan as amended from an outline provided by the National Center for Rural Health Works.

Importance of Hospital or Health Care Services

- Illustrate the importance of the hospital or health care services in terms of economic impact as well as health care to residents
- Discuss the connection between the hospital or health care service and the community and the other health care providers
- Explain that costs are typically lower in community hospitals
- Convey the importance of the hospital or health care facility to the health care structure in the community, as well as the economic importance of the hospital to the community
- If a hospital closes, other health care services typically will close within 3 to 5 years.
- Emphasize the need for a local emergency room and outpatient services and/or inpatient services.

Importance of Community

- Importance of community to utilize and support the hospital or local health care service
- Access to care: utilization is critical if the community wants to continue to have access to a local hospital
- Engaging community in needs assessment to determine what health services the community wants

Marketing/Promotions

- Ads in paper
- Brochures to be handed out at every health provider's office
- Community meetings to discuss and hand out literature

Communicating with the community is critical for any decision making process. With an engaged advisory committee, a goal, and a communication plan, the advisory committee can go forward with a plan to ensure services even in the wake of a hospital closure. This roadmap includes tools, resources, and SORH examples to inform the efforts of SORHs to support rural communities' efforts to ensure health care services for the people they serve.

This roadmap includes tools, resources, and SORH examples to inform the efforts of SORHs to support rural communities' efforts to ensure health care services for the people they serve. For more information on how to access these tools and resources, contact Kassie Clarke at *kassiec@nosorh.org*.

Appendix A:
Acronyms

ACA	Affordable Care Act
ACO	Accountable Care Organization
ADA	Americans with Disabilities Act
AHRQ	Agency for Healthcare Research and Quality
APM	Advanced Alternative Payment Model
CAH	Critical Access Hospital
CAHMPAS	Critical Access Hospital Measurement and Performance Assessment System
CFR	Code of Federal Regulations
CHIP	Children's health Insurance Program
CHNA	Community Health Needs Assessment
CMMI	Center for Medicare and Medicaid Innovation
CMS	Center for Medicare and Medicaid Services
CON	Certificate of Need
COPs	Conditions of Participation
CP	Community Paramedicine
CPC+	Current Procedural Terminology
DRG	Diagnosis-Related Group
ED	Emergency Department
EHR	Electronic Health Record
EMS	Emergency Medical Services
EMT	Emergency Medical Technician

Appendix A:
Acronyms

ER	Emergency Room
FCHIP	Frontier Community Health Integration Project Demonstration
FDA	U.S. Food and Drug Administration
FDI	Financial Distress Index
FESC	Frontier Extended Stay Clinic Demonstration
Flex	Medicare Rural Hospital Flexibility Program
FMT	Flex Monitoring Team
FORHP	Federal Office of Rural Health Policy
FQHC	Federally Qualified Health Center
HIPAA	Health Insurance Portability and Accountability Act
HIT	Health Information Technology
HRSA	Healthcare Resources and Services Administration
HUD	United States Department of Housing and Urban Development
IHI	Institute for Health Care Improvement
ILP	Intermediary Lending Pilot
MACRA	Medicare Access & CHIP Reauthorization Act of 2015
MIPS	Merit-Based Incentive Payment System
MU	Meaningful Use of Electronic Health Records
NOSORH	National Organization of State Offices of Rural Health
NQF	National Quality Forum
NRHA	National Rural Health Association
NCRHRP	The North Carolina Rural Health Research Program
ONC	Office of the National Coordinator for Health Information Technology

Appendix A:
Acronyms continued

OPPS	Outpatient Prospective Payment System
OQR	Outpatient Quality Reporting
OSHA	Occupational Safety and Health Administration
PCMH	Patient Centered Medical Home
PPS	Prospective Payment System
PQRS	Physician Quality Reporting System — System used by Fee For Service physicians to report quality measures
PTN	Practice Transformation Networks
QIO	Quality Improvement Organization
QPP	Quality Payment Program
REC	Regional Extension Center
RFED	Rural Freestanding Emergency Department
RHC	Rural Health Clinic
RHI	Rural Health Innovations
RUPRI	Rural Policy Research Institute
SBA	Small Business Administration
SHIP	Small Hospital Improvement Grant Program
SORH	State Office of Rural Health
SRHT	Small Rural Hospital Transition Project
TA	Technical Assistance
TASC	Technical Assistance and Services Center
TCPI	Transforming Clinical Practice Initiative

Appendix B:
SORH Self-Assessment

The information and questions below provide a 4 step process intended to help State Offices of Rural Health determine what role they should (or should not) play in providing technical assistance for vulnerable hospitals and communities. SORHs should understand that their role may need to change over time, depending on the technical assistance needs of the vulnerable hospitals and communities. This assessment is meant to provide a general guide for discussion and framework for articulating the technical assistance role of the SORH.

Fundamental Questions For SORH Consideration

Recommendation: If any answer to these questions is no, it is recommended that the SORH should have NO role in technical assistance to vulnerable rural hospitals and communities.

1. Does the SORH know what kind of hospitals are vulnerable to closure in the state?
2. Does the highest level of leadership to which the SORH reports supportive of the technical assistance role of the SORH with vulnerable hospitals and communities?
3. Does the SORH or its partner have an invitation or existing relationship with the community or hospital on which to build the technical assistance effort?
4. Is there at LEAST a .10 FTE available from the SORH to provide or coordinate resources?

Questions To Determine Role Of The SORH

Recommendation: SORH staff should utilize these questions to consider the capacity they (and their partners) have to respond to the needs of vulnerable hospitals and communities. They should be fully vetted before proceeding with any effort

1. Will the SORH be available as a resource to all vulnerable hospitals and communities? In the event of multiple target communities how will these be prioritized?
2. Are travel funds available from the Office budget(s) to support SORHs staff to travel to vulnerable rural communities? How much travel funding is available?
3. Are there Office funds available to support contractors or partners to provide additional expertise? How much? What is the timeline for being able to disseminate these funds?
4. What is the additional available FTE of SORHs staff for supporting or working directly with the community? e.g. staff for travel, meeting coordination, logistics, preparation of materials?
5. Is there at least one other partner willing to engage? e.g. hospital associations, primary care associations, rural health associations, universities, AHEC, Cooperative Extension, economic development authority, county commission.
6. What resources can partner offer? e.g. FTE of staff, expert consultants, funding to support travel to the vulnerable hospital or community.
7. Is there a "sanctioned" community focal point for the technical assistance? e.g. an advisory committee appointed by the county commission, a community development agency, or hospital employee?
8. Does the community already have an achievable goal for the technical assistance effort?
9. Has a simple project plan including a goal for addressing the needs of been adopted by community and a TA team? See project plan example in Appendix F.
10. Is there an Memorandum of Understanding (MOU) in place for the SORH, the community and any needed partners and contractors to achieve the project plan?

Appendix B:
SORH Self-Assessment continued

Utilizing the chart below, consider the questions for consideration and identify a descriptive role for your SORHs to adopt.

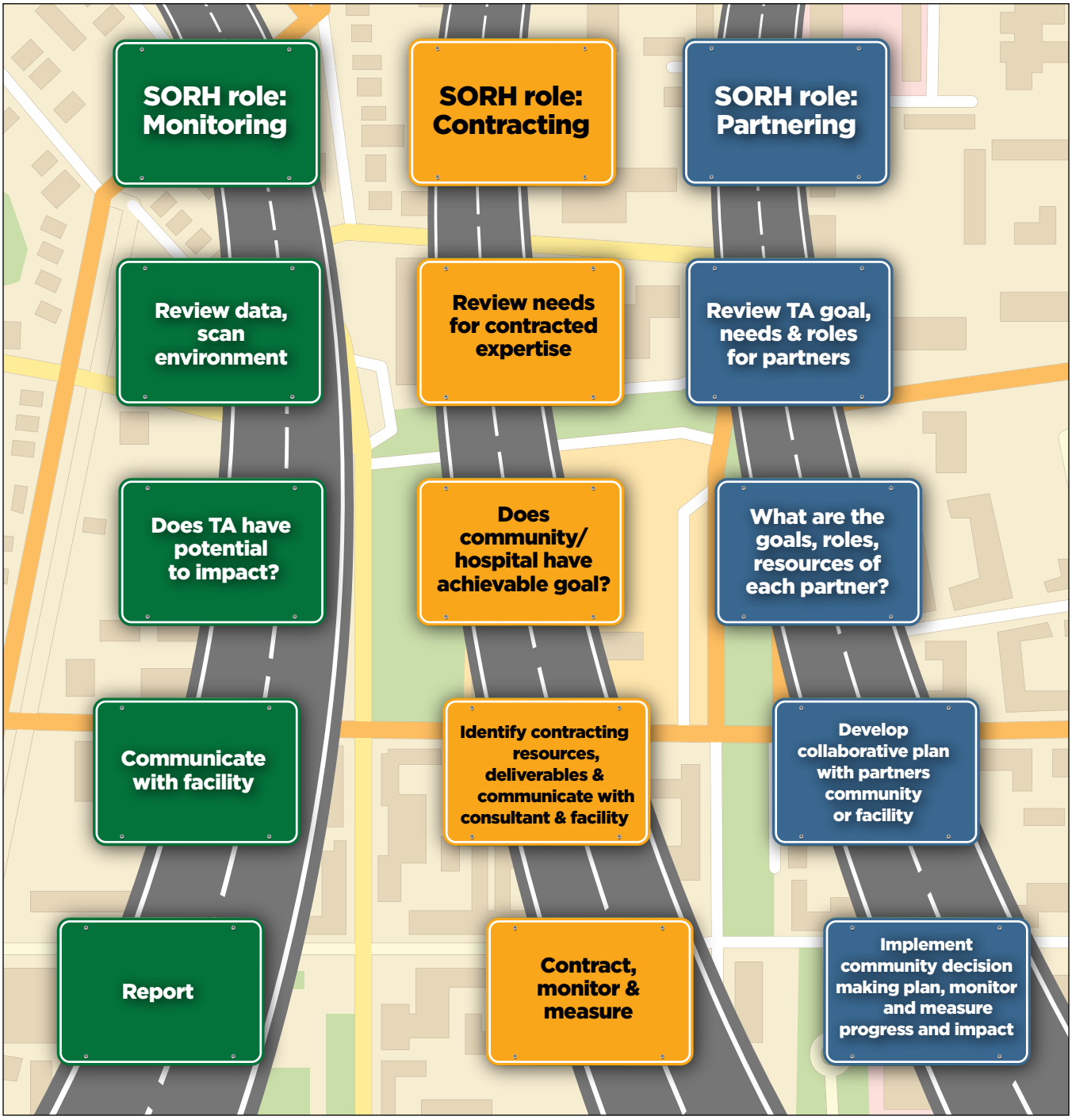
With answers to these questions SORHs can consider one of three general roles. This delineation of roles is a general guide for a SORHs to determine the type of technical assistance a SORHs could consider given the existing capacity.

SORH/partner available resource	Which Role?	Types of TA
.10 FTE and no other budget	**Monitoring —** SORH has limited staff, budget and partner resources to allocate. SORH can utilize one of the resources described in the "Identifying Vulnerable Hospitals" section of the toolkit or roadmap. This is a simple role to periodically review data on rural hospitals and disseminate information as appropriate to hospitals, community, partner or other organizations.	Identifying vulnerable hospitals ◆ Financial Indicators ◆ Quality Indicators ◆ Provider Alignment Indicators ◆ Community Support Indicators ◆ Hospital Self-Assessment Indicators
.25 FTE and some SORH budget for contracting and travel	**Contracting —** SORH has staff and budget resources from FLEX, SHIP or other funds which be may be utilized to hire contracted expertise to provide information or education to support more than one vulnerable hospital or community. SORH activities include travel and meetings with the community, and ensuring appropriate contract development and management.	**Monitoring +** ◆ Ensure financial and operational resources are available (e.g. bench-marking reports, contract for expertise) ◆ Encourage community stakeholder education ◆ Prepare hospital & community for closure
.50 FTE and some budget and partners	**Partnering —** SORH has resources, a partnership with at least one organization with expertise and resources to offer to the hospital and community. There should be a specific community contact dedicated to a community and/or hospital identified goal. SORH activities include facilitation, participation in a collaborative community effort and may include an educational role.	**Contracting +** ◆ Offer stakeholder education on leadership & changing systems ◆ Encourage community stakeholder education ◆ Offer stakeholder education on alternative systems of care ◆ Assess community health needs ◆ Evaluate health care resources ◆ Develop a community plan

Appendix B:
SORH Self-Assessment continued

STEP 4

SORH Delineation Map — Use this map to understand the role of the SORH and as a guide for the decisions and activities which must be made by SORH, hospitals, communities, partners and contractors who are supporting the technical assistance efforts.



Appendix C:
Alabama Hospital Closure Checklist/Roadmap

1. Notify AL Department of Public Health (ADPH), Bureau of Health Provider Standards within 30 days of planned closure or cessation of operations.

2. Prior to closure, inform ADPH Bureau of Health Provider Standards in writing of:

- Planned storage location for patient records and method for patients to access their records; publish in widely circulated newspaper(s) where and how medical records and other critical information can be retrieved (AL State Board of Health Rule, 420-5-7-.13)
- Medical staff information
- Other critical information (develop list)

3. In compliance with the 1988 Worker Adjustment and Retraining Notification (WARN) Act for all hospitals with a staff of 100 or more employees, a 60-day written notice of the intent to close is required.

4. CMS Requirements:

- 3046 - Voluntary Terminations
  (Rev. 1, 05-21-04)
  3046A - General
  (Rev. 1, 05-21-04)
  Under the provisions of §1866(b)(1) of the Act, a provider of services may terminate its agreement by filing a written notice of its intention. If a Medicare provider/supplier notifies the SA (State Survey Agency) of its desire to terminate its Medicare participation or if it ceases operations, which is considered as voluntarily terminating its agreement, the SA notifies the RO (Regional Office) immediately. The RO accepts the proposed termination date or set a different date. However, the termination date must not be more than 6 months from the date the notice is filed. The RO determines the provider's or supplier's reason(s) for deciding to terminate participation. Identifying the reasons for voluntary termination aids in evaluating policies and procedures and focuses on problems not previously recognized.

- 3046C - Notice to Public
  (Rev. 1, 05-21-04)

  In voluntary termination cases, the provider or supplier is obligated to notify the public of the effective termination date. An exception to the requirement for public notice is made when the RO receives retroactive notice of the close of a business. If the RO learns that the provider does not intend to comply with the requirement for a public notice, where required, the RO should assume the responsibility. The required public notice should be published in the local newspaper with the widest circulation as soon as possible after the provider receives the RO's letter, and, if time permits, not less than 15 calendar days before the effective termination date.

- 3046D - Effective Date of Voluntary Termination
  (Rev. 1, 05-21-04)

  The effective date of termination is the date business ceased (if there is closure) and should allow sufficient lead-time to notify CMS components and to give the public notice of the termination. If the provider's request does not specify an acceptable termination date, the RO sets the date (42 CFR 489.52(b)). This date cannot be more than 6 months after the provider's request is dated. If a retroactive termination date is requested, the RO honors it, provided there were no Medicare beneficiaries receiving services from the facility on or after the requested termination date. In setting an effective termination date that is less than 6 months in the future, the RO must be assured that it would not unduly disrupt the services to the community or otherwise interfere with the effective and efficient administration of the health insurance program. In making this determination, the RO considers the availability of other facilities in the area. In the case of a closure, the effective date is the actual date of closing.

Appendix C:
Checklist continued

5. Other notifications:

- All active inpatients and outpatients
- Public – 15 days or more from expected date of closure
- Medical Staff
- Local Government – County Commission Chairman; City Manager
- Police
- Fire Department
- EMS
- Department of Transportation (removal of blue hospital locator signs day of closure)
- Department of Labor
- Area hospitals
- Vendors and suppliers
- Payers
- Accrediting organizations (The Joint Commission, etc)
- Elected officials
- Others?
- The Office of Radiation Control (Bradley Grinstead 334-206-5391)

6. Other closure plan considerations:

- Patient transfer plan
- Limited intake of patients during the notice period
- How patients will be advised of alternative services
- Disposition of medications, medical waste, equipment, etc.
- Other?
- Assure illuminated signage is disconnected or covered.
- Place signage on all entry doors of the closure.

Post closure:

1. Surrender of License within 10 days of closure?
2. There would be other post closure considerations for the hospital; regulatory or industry standard practices:

- Financial — post-closure operating budget; personnel, space necessary to manage claim submission, accounts receivable
- Operational — IT, equipment leases, storage of financial, business, personnel records, etc.
- Physical Plant — Security of the building, etc.
- Audited financial statements
- Medicare and Medicaid cost reports
- Insurance — Maintenance of Liability Insurance for officers and directors for a specified period of time
- Notify the ADPH any change in location of patient records, medical staff and other critical information.

For more information, contact the AL Bureau of Provider Standards or the AL Primary Care and Rural Health Office, both in the AL Department of Public Health, www.adph.org.

Appendix D1:
KORH Email Survey to CAH Administrators

Dear CAH Administrators,

As part of the 15-16 Medicare Rural Hospital Flexibility (Flex) Grant Requirements we must complete a CAH Needs Assessment for Kentucky.

In order for your hospital to continue to receive Flex/SHIP grant benefits you are required to complete this survey online by January 5th, 2015.

Although the survey must be completed online, you will be able to save your information and return at a later time. To save your progress, simply click "Save" at the bottom of the web page and you will be sent an e-mail link to access your saved information. Saved information is only kept in the online system for 28 days.

In order to assist with this process, I have attached a printable version of the survey as you may have to consult with other staff to complete all of the questions. Please note that not all of the questions on the printed version will appear online, depending upon your own answers.

The online survey can be found here: *https://adobeformscentral.com/?f=reKohv8PtZ5K9r7Ws4a8lg*

All information gather will remain confidential, and all information reported will be done so anonymously. If you have any questions, please do not hesitate to email me at *kayla.combs2@uky.edu* or give me a call at 606-439-3557.

This survey is extremely important to determining what the needs of CAHs in our state are and making sure the Kentucky Office of Rural Health utilizes our funds in the most beneficial and prudent way possible.

Thank you so much.

Appendix D2:
Kentucky Flex CAH Needs Assessment Survey

Kentucky Critical Access Hospital and FLEX Program Survey - 2014

KORH
Kentucky Office of Rural Health

Hospital Name

Person Completing Survey

Position/Title

E-mail

Please complete all sections of this survey. Progress can be saved and returned to at any time. You may print this application if you wish to see all pages at once, but the survey must be submitted electronically.

Sections

1. Current Services
2. Financial Information
3. Future Services
4. Hospital Issues and Relationships
5. EMS
6. FLEX Program Impact

Section 1 - Current Services

This section will review the CURRENT services that are provided by, or managed by, your hospital.

Does your hospital own and operate a Rural Health Clinic?

◯ Yes ◯ No

List the name of the RHC(s) that your hospital operates.

Appendix D2:
Kentucky Flex CAH Needs Assessment Survey

Does your hospital own and operate a clinic OTHER than an RHC?

◯ Yes ◯ No

List the name of the Clinic(s) OTHER than an RHC that your hospital operates.

Select ALL services that your hospital currently provides:

- ☐ Swing Beds
- ☐ General Surgery/Operating Services
- ☐ Outpatient Pharmacy
- ☐ Physical Therapy
- ☐ Pulmonary Services
- ☐ Speech Therapy
- ☐ IV Therapy
- ☐ Preventive Care Services
- ☐ Intensive Care
- ☐ Ambulance
- ☐ Ambulatory Surgical Care
- ☐ Audiology
- ☐ Oncology
- ☐ Extra corporeal shock wave therapy
- ☐ Nursery
- ☐ Trauma Designation
- ☐ Home Care Store
- ☐ Lab Services
- ☐ Pharmacy
- ☐ Labor Room/Delivery
- ☐ Cardiology
- ☐ Respiratory Services
- ☐ Occupational Therapy
- ☐ Anesthesia
- ☐ Lab (Pathology)
- ☐ Gastrointestinal Services
- ☐ Behavioral Health Treatment/Services
- ☐ Coronary Care
- ☐ Trauma Response
- ☐ Renal Dialysis
- ☐ Osteopathic Services
- ☐ Senior Care Services
- ☐ Home Health
- ☐ Respite Care
- ☐ Other

Does your hospital provide X-Ray services?

◯ Yes ◯ No

What type of X-Ray system does your hospital have in place?

◯ Conventional ◯ Digital

What digital X-Ray system does your hospital currently utilize?

Does your hospital offer Radiology Services?

◯ Yes ◯ No

Appendix D2:
Kentucky Flex CAH Needs Assessment Survey

Is the Radiologist on-site?

◯ Yes ◯ No

Where is the Radiologist located?

Select ALL other diagnostic services offered by your hospital:

- ☐ Fluoroscopy
- ☐ EKG/ECG
- ☐ CT Scan
- ☐ Nuclear Medicine
- ☐ EEG
- ☐ Ultrasound
- ☐ Mammography
- ☐ MRI
- ☐ PET Scan
- ☐ Dexa/Bone Densitometry

Does your hospital currently have an EMR system in place?

◯ Yes ◯ No

Who is your EMR provider?

Section 2: Financial Information

Does your hospital receive county and/or city tax support?

◯ Yes ◯ No

What is the estimated tax support received on an annual basis?

How likely is it that you will begin receiving local tax support in the next five years?

- ☐ Very likely
- ☐ Likely
- ☐ Not Likely
- ☐ Will not happen
- ☐ Unsure

Does your hospital operate a hospital foundation to provide additional support to the facility?

◯ Yes ◯ No

What is the estimated annual contribution of the Foundation to the hospital?

Appendix D2:
Kentucky Flex CAH Needs Assessment Survey

How likely is it that you will create a hospital foundation in the next two years?

- ☐ Very likely
- ☐ Likely
- ☐ Not Likely
- ☐ Will not happen
- ☐ Unsure

The following questions are NOT required but will better assist the KORH in creating a clearer picture of the financial landscape moving forward. All financial information in this section will be kept confidential, and any reporting of this information will be anonymous.

What is the hospital's operating margin?

What is the hospital's number of days cash on hand?

What is the hospital's number of days revenue in accounts receivable?

What is the hospital's debt service coverage?

Section 3: Future Services

Over the next 12 months, which of the following would you expect?

- ◯ Stay the way we are
- ◯ Close the facility
- ◯ Be bought by an external organization
- ◯ Be managed by an external organization
- ◯ Explore feasibility of de-certifying as a CAH (move back to PPS)
- ◯ None of the above

Appendix D2:
Kentucky Flex CAH Needs Assessment Survey

Over the next 12 months, do you intend to reduce any of the following services?

- ☐ None
- ☐ Home Health
- ☐ Obstetrics
- ☐ Cardiac Rehab
- ☐ Respite Care
- ☐ Hospice
- ☐ EMS
- ☐ Long-term Care
- ☐ Other _____

Over the next 12 months, do you intend to remove any of the following services?

- ☐ None
- ☐ Home Health
- ☐ Obstetrics
- ☐ Cardiac Rehab
- ☐ Respite Care
- ☐ Hospice
- ☐ EMS
- ☐ Long-term Care
- ☐ Other _____

Over the next 12 months, do you intend to add any of the following services?

- ☐ None
- ☐ Home Health
- ☐ Obstetrics
- ☐ Cardiac Rehab
- ☐ Respite Care
- ☐ Hospice
- ☐ EMS
- ☐ Long-term Care
- ☐ Other _____

Appendix D2:
Kentucky Flex CAH Needs Assessment Survey

Over the next 12 months, do you intend to expand any of the following services?

- ☐ None
- ☐ Home Health
- ☐ Obstetrics
- ☐ Cardiac Rehab
- ☐ Respite Care
- ☐ Hospice
- ☐ EMS
- ☐ Long-term Care
- ☐ Other _____

Over the next 12 months, do you intend to acquire any Clinics?

○ Yes ○ No

What type(s) of clinic do you intend to acquire?

_____

Over the next 12 months, do you intend to acquire any of the following facilities?

- ☐ Long-term Care
- ☐ EMS
- ☐ Other _____

Section 4: Hospital Issues and Relationships

Appendix D2:
Kentucky Flex CAH Needs Assessment Survey

Rural Hospitals face many pressures and issues. Please review each item below and assess the degree of significance you feel is associated with each issue for your hospital.

	No Problem	Minor Problem	Problem	Moderate Problem	Severe Problem
Physician workforce supply	○	○	○	○	○
Nursing workforce supply	○	○	○	○	○
Ancillary workforce supply	○	○	○	○	○
Maintaining access to primary care services	○	○	○	○	○
Hospital reimbursement (Medicare)	○	○	○	○	○
Hospital reimbursement (Medicaid)	○	○	○	○	○
Hospital reimbursement (Third Party Payer)	○	○	○	○	○
Health care reform readiness	○	○	○	○	○
Hospital staff training	○	○	○	○	○
Hospital staff morale	○	○	○	○	○
Meeting Medicare conditions of participation	○	○	○	○	○
Access to mental health services	○	○	○	○	○
Impact of uninsured	○	○	○	○	○
Impact of under-insured	○	○	○	○	○

Appendix D2:
Kentucky Flex CAH Needs Assessment Survey

	No Problem	Minor Problem	Problem	Moderate Problem	Severe Problem
Quality of care reporting	○	○	○	○	○
Physical plant/building issues	○	○	○	○	○
Relationship with designated support hospital	○	○	○	○	○
Providing pharmacy coverage	○	○	○	○	○
Community support for the hospital	○	○	○	○	○
Providing 24 hour emergency coverage	○	○	○	○	○
Adequate patient transport services (EMS)	○	○	○	○	○
Community/area economic change	○	○	○	○	○
Maintaining Trauma designation	○	○	○	○	○
EMR/IT Network Issues	○	○	○	○	○
Meaningful Use requirements	○	○	○	○	○
ICD-10 Implementation	○	○	○	○	○
Competition in the market service area	○	○	○	○	○

Appendix D2:
Kentucky Flex CAH Needs Assessment Survey

From the above list, which issue are you most concerned about? Please explain why.

Appendix D2:
Kentucky Flex CAH Needs Assessment Survey

Rural hospitals work with a number of other organizations in the local community. Please indicate your view on the quality of relationship between the hospital and the following organizations:

	Poor	Below Average	Average	Above Average	Excellent	Hospital Owned	No Local Resource
Public Health Dept.	○	○	○	○	○	○	○
Local Clinics	○	○	○	○	○	○	○
Long-term Care	○	○	○	○	○	○	○
Ambulance	○	○	○	○	○	○	○
Pharmacy	○	○	○	○	○	○	○
Dental	○	○	○	○	○	○	○
Economic Development	○	○	○	○	○	○	○
Mental Health	○	○	○	○	○	○	○
School Systems	○	○	○	○	○	○	○
University/College	○	○	○	○	○	○	○
AHEC	○	○	○	○	○	○	○
Local Foundations	○	○	○	○	○	○	○
Wellness Coalitions	○	○	○	○	○	○	○
Kentucky Office of Rural Health (KORH)	○	○	○	○	○	○	○
Kentucky Hospital Association (KHA)	○	○	○	○	○	○	○

Section 5: Emergency Medical Services (EMS)

Is the local ambulance service owned and operated by your hospital?

○ Yes ○ No

Appendix D2:
Kentucky Flex CAH Needs Assessment Survey

How are ambulance staff reimbursed?

- ◯ Paid employees (based on call time)
- ◯ Paid employees (based on runs)
- ◯ Some paid employees, some volunteer
- ◯ All volunteer

How is the paid ambulance staff's time calculated?

- ◯ Per shift
- ◯ Per hour
- ◯ Other

What is the estimated annual cost to operate the hospital-ran ambulance service?

Does your hospital-run ambulance service operate at a loss?

◯ Yes ◯ No

What is the estimated annual loss of the hospital-run ambulance service?

What are the primary reasons that the ambulance service operates at a loss?

- ☐ Low-run volume
- ☐ Ambulance salaries
- ☐ Do not use (or limited use) of paid ambulance staff in other hospital operations (to spread cost)
- ☐ Low reimbursement rate
- ☐ Reduced reimbursement rate
- ☐ Increased operating expenses
- ☐ Do not m
- ☐ Other

Appendix D2:
Kentucky Flex CAH Needs Assessment Survey

What other duties are the paid hospital-run ambulance service employees responsible for in the hospital or community?

- ☐ Inpatient Care (Nursing)
- ☐ Lab
- ☐ ER
- ☐ Public Health
- ☐ Chronic disease management
- ☐ Education (CPR, PALS, etc.)
- ☐ Other _____
- ☐ X-Ray
- ☐ Cardiac Rehab
- ☐ Building maintenance/janitorial
- ☐ Home Visits
- ☐ Community relations/building awareness
- ☐ None

Since the ambulance service is not part of the hospital, do you financially support the ambulance operation in other ways?

○ Yes ○ No

How do you support the ambulance operation?

- ○ Donate annually (monetary)
- ○ Donate in-kind support
- ○ Other _____

How much, or what form of service, is donated?

_____

Do you include local ambulance service personnel (either hospital-run or independent ambulance service) in quality improvement activities?

○ Yes ○ No

Appendix D2:
Kentucky Flex CAH Needs Assessment Survey

Please review each item below and assess the degree of significance you feel is associated with that issue for your local ambulance. *In other words, what you as a CAH administrator think of ambulance service issues, not how the ambulance service views the issues.*

	Positive Asset	No Problem	Minor Problem	Problem	Moderate Problem	Severe Problem	N/A
EMS Leadership	○	○	○	○	○	○	○
Staffing	○	○	○	○	○	○	○
Funding	○	○	○	○	○	○	○
Medical Director involvement	○	○	○	○	○	○	○
Integration and Communication with hospital	○	○	○	○	○	○	○
Useable data and outcome information	○	○	○	○	○	○	○
Community understanding of the true cost of providing EMS	○	○	○	○	○	○	○
Community view that EMS should be a free service	○	○	○	○	○	○	○
Lack of legislation recognizing EMS as an essential service	○	○	○	○	○	○	○
Ambulance response time	○	○	○	○	○	○	○
Timeliness of patient care reports from EMS	○	○	○	○	○	○	○
Ambulance provides appropriate level of patient care	○	○	○	○	○	○	○

Appendix D2:
Kentucky Flex CAH Needs Assessment Survey

Section 6: FLEX Program Impact

The following are some of the services provided by the KY FLEX Program. Please indicate, for each service your assessment of the impact on your hospital. This is part of the program's evaluation effort.

	No Benefit	Limited	Moderate	Substantial	N/A
TeamSTEPPS	○	○	○	○	○
Scholarships to conferences	○	○	○	○	○
Financial Improvement workshops	○	○	○	○	○
Benchmarking reports	○	○	○	○	○
Trauma Team Development Training	○	○	○	○	○
Grant writing workshops	○	○	○	○	○
Lean/Care Transitions training	○	○	○	○	○
CareLearning	○	○	○	○	○
Stroke Care Workshops	○	○	○	○	○
KHA InfoSuite	○	○	○	○	○
Patient Safety Organization	○	○	○	○	○
MBQIP trainings	○	○	○	○	○
Community health needs assessments	○	○	○	○	○
Economic impact studies	○	○	○	○	○
Network related activities	○	○	○	○	○
Presentations (boards, community groups)	○	○	○	○	○

Appendix D2:
Kentucky Flex CAH Needs Assessment Survey

Please review each item below and assess the degree of significance you feel is associated with that issue for your local ambulance. *In other words, what you as a CAH administrator think of ambulance service issues, not how the ambulance service views the issues.*

	Positive Asset	No Problem	Minor Problem	Problem	Moderate Problem	Severe Problem	N/A
EMS Leadership	○	○	○	○	○	○	○
Staffing	○	○	○	○	○	○	○
Funding	○	○	○	○	○	○	○
Medical Director involvement	○	○	○	○	○	○	○
Integration and Communication with hospital	○	○	○	○	○	○	○
Useable data and outcome information	○	○	○	○	○	○	○
Community understanding of the true cost of providing EMS	○	○	○	○	○	○	○
Community view that EMS should be a free service	○	○	○	○	○	○	○
Lack of legislation recognizing EMS as an essential service	○	○	○	○	○	○	○
Ambulance response time	○	○	○	○	○	○	○
Timeliness of patient care reports from EMS	○	○	○	○	○	○	○
Ambulance provides appropriate level of patient care	○	○	○	○	○	○	○

Appendix D2:
Kentucky Flex CAH Needs Assessment Survey

Section 6: FLEX Program Impact

	No Benefit	Limited	Moderate	Substantial	N/A
TeamSTEPPS	○	○	○	○	○
Scholarships to conferences	○	○	○	○	○
Financial Improvement workshops	○	○	○	○	○
Benchmarking reports	○	○	○	○	○
Trauma Team Development Training	○	○	○	○	○
Grant writing workshops	○	○	○	○	○
Lean/Care Transitions training	○	○	○	○	○
CareLearning	○	○	○	○	○
Stroke Care Workshops	○	○	○	○	○
KHA InfoSuite	○	○	○	○	○
Patient Safety Organization	○	○	○	○	○
MBQIP trainings	○	○	○	○	○
Community health needs assessments	○	○	○	○	○
Economic impact studies	○	○	○	○	○
Network related activities	○	○	○	○	○
Presentations (boards, community groups)	○	○	○	○	○

Appendix D2:
Kentucky Flex CAH Needs Assessment Survey

The KY FLEX Program is guided by three federally identified areas as follows:
1. Supporting CAHs with quality improvement
2. Improving CAH financial and operational performance
3. Improving health systems of care with a strong emphasis on EMS integration

Please help the KY FLEX Program with its program planning by sharing your thoughts on future FLEX support in these three areas. What avenues should we explore, what activities to initiate, how can we achieve these goals?

Supporting CAHs with quality improvement.

Improving CAH financial and operational performance.

Improving health systems of care with a strong emphasis on EMS integration.

Appendix D2:
Kentucky Flex CAH Needs Assessment Survey

Any additional comment regarding the FLEX Program?

Thank you for taking the time to complete this extensive survey. We know that this took a large amount of your time to complete and are appreciative of your participation. Results from this survey will allow the FLEX Program to better target the areas of need moving forward.

Please contact our office if you have any questions or need further assistance.

Appendix E1: Nevada CAH Benchmarking Reports

Nevada - BCH - Annual Financial & Operational Indicators Report

Annual Assessment – FY 2015-2016

Boulder City Hospital

Indicator	BCH 2013	BCH 2014	NV CAH 2013	US CAH 2013
Profitability Indicators				
Total Margin (%)	-1.3%	-4.8%	4.3%	2.5%
Cash Flow Margin (%)	4.7%	5.7%	8.1%	6.7%
Return on Equity (%)	-15.3%	-163.4%	11.7%	5.2%
Operating Margin (%)	-1.8%	-5.8%	3.2%	1.0%
Liquidity Indicators				
Current Ratio of Assets to Liabilities	0.9	1.6	2.3	2.3
Days Cash on Hand (days)	50.9	42.2	66.0	68.8
Net Days Revenue in Accounts Receivable (days)	73.2	94.2	70.3	54.2
Capital Structure Indicators				
Equity Financing (%)	7.8%	2.3%	77.1%	60.3%
Debt Service Coverage	1.0	0.6	2.8	2.7
Long-term Debt to Capitalization (%)	88.2%	97.3%	9.4%	26.2%
Revenue Indicators				
Outpatient Revenues to Total Revenues (%)	71.4%	65.4%	76.1%	74.4%
Patient Deductions (%)	66.8%	64.5%	42.8%	40.0%
Medicare Inpatient Payer Mix (%)	61.5%	58.6%	57.1%	73.0%
CAH Medicare Outpatient Payer Mix (%)	47.7%	49.4%	38.3%	37.9%
CAH Medicare Outpatient Cost to Charge	0.25	0.24	0.39	0.47
Medicare Acute Inpatient Cost per Medicare Day ($)	$1,603	1,774	$3,732	$2,305
Cost Indicators				
Salaries to Net Patient Revenue (%)	54.5%	46.0%	53.8%	45.6%
Average Age of Plant (years)	11.3	5.1	10.6	9.8
FTE's per Adjusted Occupied Bed	7.5	11.6	4.0	5.8
Average Salary per FTE ($)	$49,397	$49,045	$47,212	$50,845
Utilization Indicators				
Average Daily Census Swing - SNF Beds	1.3	1.2	0.4	1.5
Average Daily Census - Acute Beds	5.2	4.6	5.2	3.2

*Note: NV CAH Indicators are based on information from 11 CAHs and US CAH indicators are based on information from 1,275 CAHS.

Appendix E1: Nevada CAH Benchmarking Reports

Nevada - BCH - Annual Financial & Operational Indicators Report

Total Margin – Measures the control of expenses relative to revenues.		**Total Margin** = Net Income / Total Revenue
Cash Flow Margin – Measures the ability to generate cash flow from providing patient care services.		**Cash Flow Margin** = Net Income – (Contributions, Investments, & Appropriations + Depreciation Expense + Interest Expense) / (Net Patient Revenue + Other Income – Contributions, Investments, & Appropriations)
Return on Equity – Measures the net income generated by equity investment (net assets).		**Return On Equity** = Net Income / Net Assets
Operating Margin – Measures the control of operating expenses relative to operating revenue.		**Operating Margin** = (Net Patient Revenue + Operating Income – Total Operating Expenses) / (Net Patient Revenue + Other Revenue)
Current Ratio of Liabilities to Assets – Measures the number of times short-term obligations can be paid using short-term assets.		**Current Ratio Of Liabilities To Assets** = Current Assets / Current Liabilities
Days Cash on Hand – Measures the number of days an organization could operate if not cash was collected or received.		**Days Cash on Hand** = (Cash + Temporary Investments + Investments) / ((Total Expenses – Depreciation) / Days In Period)
Net Days Revenue in Accounts Receivable – Measures the number of days that it takes an organization to collect its receivables.		**Net Days Revenue in Accounts Receivable** = Net Patient Accounts Receivable / ((Net Patient Revenue) / Days In Period))
Equity Financing – Measures the percentage of total assets financed by equity.		**Equity Financing** = Net Assets / Total Assets
Debt Service Coverage – Measures the ability to pay obligations related to long-term debt, principal payments, and interest expense.		**Debt Service Coverage** = (Net Income + Depreciation + Interest Expense) / (Notes & Loans Payable (Short Term)*(365/Days in Period) + Interest Expense)
Long-term Debt to Capitalization – Measures the percentage of total capital that is debt.		**Long-term Debt to Capitalization** = Long-Term Debt / (Long-Term Debt + Net Assets)
Outpatient Revenues to Total Revenues – Measures percentage of total revenues that are for outpatient revenues, such as revenue from Rural Health Clinics and home health services.		**Outpatient Revenues to Total Revenues** = Total Outpatient Revenue / Total Patient Revenue

Appendix E1: Nevada CAH Benchmarking Reports

Nevada - BCH - Annual Financial & Operational Indicators Report

Patient Deductions – Measures the allowances and discounts per dollar of total patient revenue.		**Patient Deductions** = (Contractual Allowances + Discounts) / Gross Total Patient Revenue
Medicare Inpatient Payer Mix – Measures the percentage of total inpatient days that are provided to Medicare patients.		**Medicare Inpatient Payer Mix** = Medicare Inpatient Days / (Total Inpatient Days – Nursery Bed Days – NF Swing Bed Days)
CAH Medicare Outpatient Payer Mix – Measures the percentage of total outpatient charges that are for Medicare patients.		**CAH Medicare Outpatient Payer Mix** = Hospital Outpatient Medicare Charges / Hospital Total Outpatient Charges
CAH Medicare Outpatient Cost to Charge – Measures outpatient Medicare costs per dollar of outpatient Medicare charges.		**CAH Medicare Outpatient Cost to Charge** = Hospital Medicare Outpatient Costs / Hospital Medicare Outpatient Charges
Medicare Acute Inpatient Cost per Medicare Day – Measures the amount of Medicare revenue earned per Medicare day.		**Medicare Acute Inpatient Cost per Medicare Day** = Medicare Acute Inpatient Cost / Medicare Inpatient Days
Salaries to Net Patient Revenue – Measures the percentage of net patient revenue that are labor costs.		**Salaries to Net Patient Revenue** = Salary Expense / Net Patient Revenue
Average Age of Plant – Measures the average accounting age in years of the fixed assets of an organization.		**Average Age of Plant** = Accumulated Depreciation / Depreciation Expense*(365 / Days In Period)
FTE's per Adjusted Occupied Bed – Measures the number of full-time employees per each occupied bed.		**FTE's per Adjusted Occupied Bed** = Number of FTEs / Adjusted Occupied Beds
Average Salary per FTE – Measures the price and mix of labor.		**Average Salary per FTE** = Salary Expense / Number Of FTEs
Average Daily Census Swing, SNF Beds – Measures the average number of swing-SNF beds occupied per day.		**Average Daily Census Swing, SNF Beds** = Inpatient Swing Bed SNF Days / Days in Period
Average Daily Census, Acute Beds – Measures the average number of acute care beds occupied per day.		**Average Daily Census, Acute Beds** = Inpatient Acute Care Bed Days / Days In Period

Appendix E1: Nevada CAH Benchmarking Reports

Nevada - BCH - Annual Financial & Operational Indicators Report

Financial and operational data for Boulder City Hospital were derived from the Medicare Cost Reports for Fiscal Year 2013 (January 1 to December 31, 2013) and 2014 (January 1 to December 31, 2013), retrieved October 16, 2015.

Comparative Nevada and US data were derived from the Flex Monitoring Team Data Summary Report No. 16: CAH Financial Indicators Report: Summary of Indicator Medians by State (October 2014).

Description	Worksheet	Part	Line(s)	Column(s)	2013	2014
Interest expense	A		113	2	$453,177	$744,972
Total salaries	A		200	1	$8,448,367	$9,534,857
Total expenses	A		200	3	$16,396,717	$21,932,284
Capital Related Costs- Building and Fixtures	A		1	2	$244,981	$1,044,219
Capital Related Costs- Movable Equipment	A		2	2	$341,156	$407,848
Other Capital Related Costs	A		3	2	$0	$0
Total outpatient charges	**C**	**I**	**200**	**7**	**$33,483,175**	**$39,267,994**
Non-CAH outpatient charges	C	I	88,89,93-117	7	$0	$646,779
Medicare outpatient charges	D	V	202	2-4	$15,983,567	$19,079,576
Medicare outpatient costs	D	V	202	5-7	$4,049,086	$4,565,580
Medicare inpatient acute cost	E-3	V	4		$1,588,762	$1,474,003
Nursing facility revenue	G-2	I	8	1	$0	$0
Other long-term care	G-2	I	9	1	$0	$0
Outpatient revenues	G-2	I	28	2	$33,282,488	$38,123,036
Total patient revenues	G-2	I	28	3	$46,624,071	$58,330,814
Inpatient revenues	G-2	I	28	1	$13,341,583	$20,207,778
Total patient revenues	G-3		1		$46,624,071	$58,330,814
Allowances and discounts	G-3		2		$31,132,480	$37,606,303
Net patient service revenue	G-3		3		$15,491,591	$20,724,511
Operating expenses	G-3		4		$16,396,717	$21,932,281
Contributions	G-3		6		$73,230	$0
Investment income	G-3		7		$617	$0
Revenue from telephone service	G-3		8		$2,300	$0
Revenue from TV and radio	G-3		9		$0	$0
Purchase discounts	G-3		10		$0	$0
Rebates and refunds of expenses	G-3		11		$65,229	$0
Parking lot receipts	G-3		12		$0	$0
Revenue from laundry and linen service	G-3		13		$0	$0
Revenue from meals sold to employees and guests	G-3		14		$45,306	$0
Revenue from rental of living quarters	G-3		15		$0	$0
Revenue from sale of medical and surgical supplies	G-3		16		$0	$0
Revenue from sale of drugs to other than patients	G-3		17		$0	$0
Revenue from sale of medical records and abstracts	G-3		18		$397	$0
Tuition (fees, sale of textbooks, uniforms, etc.)	G-3		19		$0	$0
Revenue from gifts, flowers, coffee shops, canteen	G-3		20		$0	$0
Rental of vending machines	G-3		21		$693	$0
Rental of hospital space	G-3		22		$25,150	$0
Government appropriations	G-3		23		$0	$0

Appendix E1: Nevada CAH Benchmarking Reports

Nevada - BCH - Annual Financial & Operational Indicators Report

Description	Worksheet	Part	Line(s)	Column(s)	2013	2014
Other	G-3		24		$477,300	$0
Total other income	G-3		25		$690,222	$209,142
Net income	G-3		29		-$214,904	-$998,631
Cash on hand or in banks	G		1	1-4	$2,197,770	$1,009,986
Temporary investments	G		2	1-4	$8,934	$9,440
Accounts receivable	G		4	1-4	$35,584,216	$13,819,550
Allowances for uncollectible	G		6	1-4	-$32,478,700	-$8,471,271
Current assets	G		11	1-4	$5,650,467	$7,217,046
Accumulated depreciation (Land improvements)	G		14	1-4	-$304,371	-$311,151
Accumulated depreciation (Buildings)	G		16	1-4	-$5,977,175	-$6,972,116
Accumulated depreciation (Leasehold improvements)	G		18	1-4	-$812,487	-$905,537
Accumulated depreciation (Fixed equipment)	G		20	1-4	-$27,726	-$27,838
Accumulated depreciation (Automobiles and trucks)	G		22	1-4	-$174,156	-$113,306
Accumulated depreciation (Major movable equipment)	G		24	1-4	$662,536	$995,012
Accumulated depreciation (Minor equipment)	G		26	1-4	$0	
Accumulated depreciation (HIT designated assets)	G		28	1-4	$0	
Investments	G		31	1-4	$0	$1,349,811
Total assets	G		36	1-4	$17,947,620	$26,330,249
Notes and loans payable (Short-term)	G		40	1-4	$350,000	$1,125,426
Current liabilities	G		45	1-4	$6,409,522	$4,650,178
Total long-term liabilities	G		50	1-4	$10,130,740	$21,068,823
Total fund balances	G		59	1-4	$1,407,358	611248
Medicare SNF swing-bed days	S-3	I	5	6	469	413
SNF swing-bed days	S-3	I	5	8	469	455
NF swing-bed days	S-3	I	6	8	0	
Nursery days	S-3	I	13	8	0	
Inpatient days	S-3	I	14	8	2375	2123
Medicare inpatient days	S-3	I	14	6	1460	1244
FTE's	S-3	I	27	10	171	194.41
Days in period					365	365

Appendix E2: Nevada CAH Benchmarking Reports

Nevada - CVMC-Douglas Co CHRR Report - 2015

Douglas County, Nevada

Health Outcomes

Table 1: Mortality – Length of Life in Douglas County

Indicator	Douglas County	Nevada	United States	Nevada Minimum	Nevada Maximum
Premature death – Years of potential life lost before age 75 per 100,000 population	5,176.1	7,065	7,681	5,176	12,736

Source: County Health Rankings (2015) www.countyhealthrankings.org

Table 2: Morbidity – Quality of Life in Douglas County

Indicator	Douglas County	Nevada	United States	Nevada Minimum	Nevada Maximum
Poor fair health – Percent of adults reporting fair or poor health	14.8%	17%	17%	12%	20%
Poor physical health days – Average number of physically unhealthy days reported in past 30 days	3.7	3.7	3.7	3.4	5.4
Poor mental health days – Average number of mentally unhealthy days reported in past 30 days	3.8	3.7	3.5	2.6	5.0
Low birthweight – Percent of live births with low birthweight (< 2500 grams)	8.4%	8.2%	8.0%	6.2%	13.7%

Source: County Health Rankings (2015) www.countyhealthrankings.org

Health Factors

Table 3: Health Behaviors in Douglas County

Indicator	Douglas County	Nevada	United States	Nevada Minimum	Nevada Maximum
Adult smoking – Percent of adults who are current smokers	17.8%	21%	21%	15%	27%
Adult obesity – Percent of adults that report a body mass index (BMI) ≥ 30	21.9%	25%	31%	22%	32%
Food environment index – index of factors that contribute to a health food environment (0-10)	6.9	7.4	7.3	4.0	8.7
Physical inactivity – Percent of adults aged 20 and older reporting no leisure-time physical activity	15.9%	21%	27%	16%	28%
Access to exercise opportunities – Percent of population with adequate access to locations for physical activity	89.1%	87%	65%	1%	97%
Excessive drinking – Percent of adults reporting binge or heavy drinking	20.9%	18%	16%	13%	25%
Alcohol-impaired driving deaths – Percent of driving death with alcohol involvement	48.5%	33%	31%	15%	48%
Sexually-transmitted infections – Number of newly diagnosed chlamydia cases per 100,000 population	191.5	404	291	104	657
Teen births – Number of births per 1000 female aged 15 to 19	18.9	44	41	11	65

Source: County Health Rankings (2015) www.countyhealthrankings.org

Appendix E2: Nevada CAH Benchmarking Reports

Nevada - CVMC-Douglas Co CHRR Report - 2015

Indicator	Douglas County	Nevada	United States	Nevada Minimum	Nevada Maximum
Uninsured – Percent of population under age 65 without health insurance	20.2%	25%	17%	20%	26%
Primary care physicians – Ratio of population to primary care physicians	1567:1	1777:1	2015:1	6416:1	1163:1
Dentists – Ratio of population to dentists	1571:1	1790:1	2670:1	3942:0	1038:1
Mental health providers – Ratio of population to mental health providers	1047:1	637:1	1128:1	3942:1	287:1
Preventable hospital stays – Number of hospital stays for ambulatory-care sensitive conditions per 1000 Medicare enrollees	34	52	65.3	34	153
Diabetic monitoring – Percent of diabetic Medicare enrollees aged 65-75 that receive HbA1c monitoring	81%	77%	85%	65%	88%
Mammography screening – Percent of female Medicare enrollees aged 67-69 that receive mammography screening	64.2%	56.2%	61%	32.2%	64.2%

Source: County Health Rankings (2015) www.countyhealthrankings.org

Table 5: Social and Economic Factors in Douglas County

Indicator	Douglas County	Nevada	United States	Nevada Minimum	Nevada Maximum
High school graduation – Percent of ninth-grade cohort that graduates in four years	80.0%	64%	85%	52%	83%
Some college – Percent of adults aged 25-44 with some post-secondary education	69.3%	55.5%	56%	32.4%	74.6%
Unemployment – Percent of population aged 16 and older unemployed but seeking work	10.5%	9.8%	7%	5.2%	13.4%
Children in poverty – Percent of children under the age of 18 in poverty	15.8%	23%	24%	10%	32%
Income inequality – Ratio of household income at the 80th percentile to income at the 20th percentile	4.1	4.3	4.4	3.7	5.3
Children in single-parent households – Percent of children that live in a household headed by single parent	32.6%	36%	31%	6%	46%
Social associations – Number of membership associations per 10,000	9.1	4.2	12.6	2.5	11.8
Violent crime – Number of reported violent crime offenses per 100,000 population	121.9	611	199	112	891
Injury deaths – Number of deaths due to injury per 100,000 population	82.1	68	73.8	63	140

Source: County Health Rankings (2015) www.countyhealthrankings.org

Appendix E2: Nevada CAH Benchmarking Reports

Nevada - CVMC-Douglas Co CHRR Report - 2015

Indicator	Douglas County	Nevada	United States	Nevada Minimum	Nevada Maximum
Air pollution – particulate matter – Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5)	10.6	12.5	11.9	10.6	13.6
Drinking water violations – Percent of population potentially exposed to water exceeding a violation limit during the past year	34.4%	1%	1.0%	0%	39%
Severe housing problems – Percent of households with overcrowding, high housing costs, or lack of kitchen or plumbing facilities	18.8%	22%	14%	7%	23%
Driving alone to work – Percent of workforce that drives alone to work	77.8%	78%	80%	54%	84%
Long commute – driving alone – Among workers who commute in their care alone, percent commuting > 30 minutes	32.2%	28%	29%	8%	47%

Source: County Health Rankings (2015) www.countyhealthrankings.org

Healthcare Utilization

Table 7: Top 10 Diagnosis Related Group (DRG) in Douglas County - 2014

Rank	Type of Admission (DRG)	Number of Visits	Rate per 1,000 Population	Average Length of Stay (Days)
1	**Major Joint Replacement** (470)	236	4.9	3.0
2	**Normal Newborn** (795)	229	4.8	1.6
3	**Psychoses** (885)	228	4.7	9.0
4	**Vaginal Delivery** (775)	184	3.8	1.6
5	**Septicemia** (871)	108	2.2	6.5
6	**Spinal Fusion** (460)	94	2.0	3.0
7	**Gastrointestinal Disorder** (392)	82	1.7	2.3
8	**Simple Pneumonia** (194)	73	1.5	3.7
9	**Rehabilitation** (945)	66	1.4	13.3
10	**Cervical Spinal Fusion** (473)	65	1.3	1.5

Source: Center for Health Information Analysis (2015)

Appendix E3: Nevada CAH Benchmarking Reports

Nevada - HGH -Utilization + Market Capture Report

Humboldt General Hospital

Table 1: Top 10 Inpatient Admissions by Diagnosis Related Group (DRG) in Humboldt County — 2014

Rank	Type of Admission (DRG)	Number of Visits	Rate per 1,000 Population	Average Length of Stay (Days)
1	**Normal Newborn** (795)	213	12.0	1.6
2	**Vaginal Delivery** (775)	168	9.4	1.3
3	**Psychoses** (885)	55	3.1	7.0
4	**Cesarean Section** (766)	53	3.0	2.6
5	**Major Joint Replacement** (470)	51	2.9	2.8
6	**Spinal Fusion** (460)	29	1.6	2.4
7	**Rehabilitation** (945)	27	1.5	15.3
8	**Simple Pneumonia** (194)	27	1.5	5.2
9	**Chronic Obstructive Pulmonary Disease** (192)	25	1.4	4.2
10	**Cellulitis** (603)	24	1.3	3.2

Source: Center for Health Information Analysis (2015)

Table 2: Top 10 Emergency Department Admissions by Principal Diagnosis in Humboldt County —2014

Rank	Principal Diagnosis Range	Type of Admission (Principal Diagnosis)	Number of Visits	Rate per 1,000 Population
1	460-519	**Acute upper respiratory infections of unspecified site** (4659)	135	7.6
2	580-629	**Urinary tract infection, site not specified** (5990)	122	6.9
3	780-799	**Other chest pain** (78659)	101	5.7
4	780-799	**Abdominal pain, unspecified site** (78900)	98	5.5
5	710-739	**Lumbago** (7242)	85	4.8
6	780-799	**Headache** (7840)	85	4.8
7	780-799	**Abdominal pain, other specified site** (78909)	84	4.7
8	001-139	**Unspecified viral infection** (07999)	61	3.4
9	460-519	**Acute bronchitis** (4660)	61	3.4
10	780-799	**Vomiting alone** (78703)	61	3.4

Source: Center for Health Information Analysis (2015)

Rank	Principal Diagnosis Range	Type of Admission (Principal Diagnosis)	Number of Visits	Rate per 1,000 Population
1	V70-V82	**Special screening for malignant neoplasms of colon** (V7651)	126	7.1
2	320-389	**Other and combined forms of senile cataract** (336619)	56	3.1
3	320-389	**After-cataract, obscuring vision** (36653)	27	1.5
4	520-579	**Calculus of gallbladder with other cholecystitis, without mention of obstruction** (57410)	19	1.1
5	520-579	**Stricture and stenosis of esophagus** (5303)	18	1.0
6	320-389	**Carpal tunnel syndrome** (3540)	16	0.9
7	800-999	**Tear of medial cartilage or meniscus of knee, current** (8360)	13	0.7
8	520-579	**Inguinal hernia, without mention of obstruction or gangrene, unilateral or unspecified (not specified as recurrent)** (55090)	12	0.7
9	390-459	**Internal hemorrhoids with other complication** (4552)	10	0.6
10	520-579	**Dental caries, unspecified** (52100)	10	0.6

Source: Center for Health Information Analysis (2015)

Table 4: Top 10 Outpatient Service Admissions by Principal Diagnosis in Humboldt County — 2014

Rank	Principal Diagnosis Range	Type of Admission (Principal Diagnosis)	Number of Visits	Rate per 1,000 Population
1	390-459	**Unspecified essential hypertension** (4019)	1,729	97.2
2	240-279	**Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled** (25000)	1,036	58.2
3	V20-V29	**Routine infant or child health check** (V202)	854	48.0
4	460-519	**Bronchitis, not specified as acute or chronic** (490)	774	44.0
5	460-519	**Acute pharyngitis** (462)	746	42.0
6	V70-V82	**Routine general medical examination at a health care facility** (V700)	637	35.8
7	390-459	**Atrial fibrillation** (42731)	629	35.4
8	V70-V82	**Health examination of defined subpopulations** (V705)	580	32.6
9	580-629	**Urinary tract infection, site not specified** (5990)	863	31.6
10	V20-V29	**Supervision of other normal pregnancy** (V221)	549	30.8

Source: Center for Health Information Analysis (2015)

Appendix E3: Nevada CAH Benchmarking Reports

Nevada - HGH -Utilization + Market Capture Report

Rank	Type of Admission (DRG)	Total Number of Visits	Number of Visits to HGH	Percent of Total Visits from HGH
1	**Normal Newborn** – healthy or minor issues, e.g. jaundice	213	169	79.3%
2	**Vaginal Delivery** – natural baby birth without complicating diagnoses	168	125	74.4%
3	**Psychoses** – schizophrenia, manic, bipolar episodes	55	1	1.8%
4	**Cesarean Section without Complication/Comorbidities or Major Complications/Comorbidities (W/O CC/MCC)** – surgical baby birth	53	40	75.5%
5	**Major Joint Replacement Or Reattachment Of Lower Extremity** – hip or knee replacements	51	0	0
6	**Spinal Fusion Except Cervical without Major Complications or Comorbidities (W/O MCC) – spinal fusion of upper back (not neck) vertebrae**	29	0	0
7	**Rehabilitation with Complications/Comorbidities or Major Complications/Comorbidities (W CC/MCC)** – complex issues with motor skills, language competency assessments	27	7	25.9%
8	**Simple Pneumonia & Pleurisy with Complications/Comorbidities (W CC)** – chronic lung infection e.g. abscess, blood poisoning	27	26	96.3%
9	**Chronic Obstructive Pulmonary Disease W/O CC/MCC** – lung condition with shortness of breath	25	25	100.0%
10	**Cellulitis W/O MCC** – bacterial abscess through open skin	24	15	62.5%
11	**Esophagitis, Gastroent & Misc Digest Disorders W/O MCC** – viral intestinal infection, e.g. food bacteria, diverticulitis, bowel spams	24	17	70.8%
12	**Septicemia Or Severe Sepsis W/O MV 96+ Hours with Major Complications/Comorbidities (W MCC)** – complex body response to infection injuring body issues	22	3	13.6%
13	**Chest Pain –** bubble of pain in ribs	21	16	76.2%
14	**Neonate with Other Significant Problems** – extremely low birth weight, immaturity, preterm	21	10	47.6%
15	**Intracranial Hemorrhage Or Cerebral Infarction W CC Or TPA In 24 Hrs** – chronic brain trauma, hemorrhagic stroke or bleeding in the brain	15	7	46.7%
16	**Cervical Spinal Fusion W/O CC/MCC** – fused neck vertebra	15	0	0
17	**Diabetes W CC** – with coma, ulcer, skin condition, or hypoglycemia	15	14	93.3%
18	**Cesarean Section W CC/MCC** – complex surgical baby birth due to early onset, multiple births, breech presentation	15	5	33.3%
19	**Cardiac Arrhythmia & Conduction Disorders W CC** – chronic heart block (electrical misfire) between sides of the heart, depolarization	14	11	78.6%
20	**Disorders Of Pancreas Except Malignancy W/O CC/MCC** – alcohol or drug induced, injury or laceration, inflamed upper abdomen	14	13	92.9%
21	**Laparoscopic Cholecystectomy W/O C.D.E. W/O CC/MCC** – gallbladder removal or excision	13	13	100.0%
22	**O.R. Procedures For Obesity W/O CC/MCC** – stomach or duodenal bypass	13	0	0
23	**Kidney & Urinary Tract Infections W/O MCC** – kidney disease from TB, syphilis, abscess infection	13	12	92.3%
24	**Percutaneous Cardiovascular Procedure with Drug-Eluting Stent W/O MCC** – stent implant to prop an artery open	12	0	0
25	**Heart Failure & Shock (W CC)** – hypertensive heart and chronic kidney disease	12	10	83.3%
26	**Other DRGs (not in Top 25)**	834	467	56.0%

Source: Center for Health Information Analysis (2015)

Appendix E3: Nevada CAH Benchmarking Reports

Nevada - HGH -Utilization + Market Capture Report

Rank	Principal Diagnosis Range	Type of Admission (Principal Diagnosis)	Number of Visits	Number of Visits to HGH	Percent of Total Visits from HGH
1	460-519	**Acute upper respiratory infections of unspecified site** (4659)	135	127	94.1%
2	580-629	**Urinary tract infection, site not specified** (5990)	122	113	92.6%
3	780-799	**Other chest pain** (78659)	101	93	92.1%
4	780-799	**Abdominal pain, unspecified site (**78900)	98	85	86.7%
5	710-739	**Lumbago** (7242)	85	77	90.6%
6	780-799	**Headache** (7840)	85	72	84.7%
7	780-799	**Abdominal pain, other specified site** (78909)	84	80	95.2%
8	001-139	**Unspecified viral infection** (07999)	61	60	98.4%
9	460-519	**Acute bronchitis** (4660)	61	58	95.1%
10	780-799	**Vomiting alone** (78703)	61	61	100.0%
11	800-999	**Open wound of finger(s), without mention of complication** (8830)	60	53	88.3%
12	780-799	**Abdominal pain, epigastric** (78906)	57	55	96.5%
13	460-519	**Pneumonia, organism unspecified** (486)	56	50	89.3%
14	780-799	**Fever, unspecified** (78060)	52	49	94.2%
15	320-389	**Unspecified otitis media** (3829)	52	48	92.3%
16	460-519	**Asthma, unspecified type, with (acute) exacerbation** (49392)	52	48	92.3%
17	290-319	**Alcohol abuse, unspecified** (30500)	52	45	86.5%
18	800-999	**Sprain of ankle, unspecified site** (84500)	51	46	90.2%
19	780-799	**Chest pain, unspecified** (78650)	51	40	78.4%
20	460-519	**Obstructive chronic bronchitis with (acute) exacerbation** (49121)	49	49	100.0%
21	460-519	**Acute pharyngitis** (462)	48	45	93.8%
22	780-799	**Dizziness and giddiness** (7804)	44	39	88.6%
23	580-629	**Calculus of ureter** (5921)	41	37	90.2%
24	780-799	**Painful respiration** (78652)	40	35	87.5%
25	800-999	**Contusion of face, scalp, and neck except eye(s)** (920)	39	35	89.7%
26		**Other ED Admissions (not in Top 25)**	4,471	3,675	82.2%

Source: Center for Health Information Analysis (2015)

Appendix E3: Nevada CAH Benchmarking Reports

Nevada - HGH -Utilization + Market Capture Report

Rank	Principal Diagnosis Range	Type of Admission (Principal Diagnosis)	Number of Visits	Number of Visits to HGH	Percent of Total Visits from HGH
1	V70-V82	**Special screening for malignant neoplasms of colon** (V7651)	126	124	98.4%
2	320-389	**Other and combined forms of senile cataract** (36619)	56	56	100.0%
3	320-389	**After-cataract, obscuring vision** (36653)	27	27	100.0%
4	520-579	**Calculus of gallbladder with other cholecystitis, without mention of obstruction** (57410)	19	16	84.2%
5	520-579	**Stricture and stenosis of esophagus** (5303)	18	18	100.0%
6	320-389	**Carpal tunnel syndrome** (3540)	16	5	31.3%
7	800-999	**Tear of medial cartilage or meniscus of knee, current** (8360)	13	1	7.7%
8	520-579	**Inguinal hernia, without mention of obstruction or gangrene, unilateral or unspecified (not specified as recurrent)** (55090)	12	7	58.3%
9	390-459	**Internal hemorrhoids with other complication** (4552)	10	7	70.0%
10	520-579	**Esophageal reflux** (53081)	10	9	90.0%
11	520-579	**Chronic cholecystitis** (57511)	9	8	88.9%
12	140-239	**Benign neoplasm of colon** (2113)	9	8	88.9%
13	520-579	**Umbilical hernia without mention of obstruction or gangrene** (5531)	9	7	77.8%
14	V50-V59	**Fitting and adjustment of vascular catheter** (V5881)	9	3	33.3%
15	520-579	**Other specified gastritis, without mention of hemorrhage** (53540)	7	7	100.0%
16	240-279	**Diabetes with neurological manifestations, type II or unspecified type, not stated as uncontrolled** (25060)	7	7	100.0%
17	800-999	**Non-healing surgical wound** (99883)	7	6	85.7%
18	520-579	**Constipation, unspecified** (56400)	6	6	100.0%
19	680-709	**Ulcer of calf** (70712)	6	6	100.0%
20	780-799	**Abdominal pain, epigastric** (78906)	6	6	100.0%
21		**Other Outpatient Surgery Admissions (not in Top 20)**	514	292	56.8%

Source: Center for Health Information Analysis (2015)

Appendix E3: Nevada CAH Benchmarking Reports

Nevada - HGH -Utilization + Market Capture Report

Rank	Principal Diagnosis Range	Type of Admission (Principal Diagnosis)	Number of Visits	Number of Visits to HGH	Percent of Total Visits from HGH
1	390-459	**Unspecified essential hypertension** (4019)	1,729	1,680	97.2%
2	240-279	**Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled** (25000)	1,036	1,006	97.1%
3	V20-V29	**Routine infant or child health check** (V202)	854	848	99.3%
4	460-519	**Bronchitis, not specified as acute or chronic** (490)	774	774	100.0%
5	460-519	**Acute pharyngitis** (462)	746	746	100.0%
6	V70-V82	**Routine general medical examination at a health care facility** (V700)	637	612	96.1%
7	390-459	**Atrial fibrillation** (42731)	629	561	89.2%
8	V70-V82	**Health examination of defined subpopulations** (V705)	580	517	89.1%
9	580-629	**Urinary tract infection, site not specified** (5990)	563	519	92.2%
10	V20-V29	**Supervision of other normal pregnancy** (V221)	549	517	94.2%
11	V70-V82	**Other screening mammogram** (V7612)	523	454	86.8%
12	320-389	**Unspecified otitis media** (3829)	498	496	99.6%
13	240-279	**Unspecified acquired hypothyroidism** (2449)	482	465	96.5%
14	780-799	**Abdominal pain, unspecified site** (78900)	409	390	95.4%
15	460-519	**Unspecified sinusitis (chronic)** (4739)	383	372	97.1%
16	710-739	**Lumbago** (7242)	376	344	91.5%
17	710-739	**Backache, unspecified** (7245)	364	354	97.3%
18	710-739	**Pain in limb** (7295)	288	269	93.4%
19	V70-V82	**Laboratory examination ordered as part of a routine general medical examination** (V7262)	269	269	100.0%
20	460-519	**Chronic airway obstruction, not elsewhere classified** (496)	267	262	98.1%
21	290-319	**Anxiety state, unspecified** (30000)	267	260	97.4%
22	V01-V06	**Need for prophylactic vaccination and inoculation against influenza** (V0481)	259	259	100.0%
23	V70-V82	**Examination for medicolegal reasons** (V704)	256	256	100.0%
24	780-799	**Chest pain, unspecified** (78650)	248	210	84.7%
25	V70-V82	**Other general medical examination for administrative purposes** (V703)	246	233	94.7%
26		**Other Outpatient Service Admissions (not in Top 25)**	31,926	23,517	73.7%

Source: Center for Health Information Analysis (2015)

Note: This data does not include clinic services information

Appendix F:
Shell Community Project Plan

Shell Project Plan for _____ Hospital or Vulnerable Community Plan

GOAL:

COMMUNITY CONTACT:

TECHNICAL ASSISTANCE TEAM/CONTACT:

Activity/Decision points/Reports	Type of Technical Assistance	Date	Responsibilities/Roles
Identification of community/hospital team goal			
Assessment of vulnerabilities			
Identify needed data and resources			
Educational needs and key topics identified and scheduled			
Community decision making plan			
Adoption of community plan			

Appendix G:
Other Federal Resources

Rural hospital closures are complex and require collaborative solutions that focus on this problem using a multitude of sources. It is important for SORHs to be aware of other federal resources that are available to rural hospitals and communities to help sustain access to health care.

Financing Capital Investments in Rural Health Care: A Resource Overview

Many vulnerable hospitals struggle with the maintenance of older buildings and the need to purchase new equipment. In some cases, hospitals able to upgrade their physical plant have experienced improved public perception and utilization of the hospital. RHIHub and the Federal Office of Rural Health Policy prepared the *Financing Capital Investments document* to help hospital administrators, board members, rural administrators, state associations, community lenders, and community leaders better understand and identify federally sponsored health care financing options.

Federal programs can provide favorable terms and lower costs to eligible health organizations that choose to pursue them. Additionally, a number of capital investment programs focus on supporting equipment purchases or starting new lines of business (e.g. USDA Business and Industry Guaranteed Loans) rather than entirely on "bricks and mortar" projects. Depending upon the goal, there are a number of options which can meet your health care financing needs.

Federal programs outlined in the resource guide and available to assist with rural health care financing include:

1. *Community Facilities Program in the Department of Agriculture (USDA)*
2. *Business and Industry Guaranteed Loan Programs, USDA*
3. *Section 242 Hospital Mortgage Insurance Program in the Department of Housing and Urban Development (HUD)*
4. *Section 232 Residential Care Facilities Mortgage Insurance Program, HUD*
5. *504 Loan Program in the Small Business Administration (SBA)*
6. *7(a) Business Loan Program, SBA*
7. *Intermediary Lending Pilot (ILP) Program*
8. *New Market Tax Credit Program in the Department of the Treasury*

USDA Rural Development

There is a *USDA Rural Development Office* in every state in the nation. Many of these offices have community development staff dedicated to supporting rural communities with financial resources and providing technical assistance in understanding how to apply for these funds. SORHs work to build linkages between rural communities and the USDA state offices can include inviting USDA officials to rural health conferences, quarterly meetings with the Office or eligible communities, webinars, or other communication mechanisms such as newsletter articles, email notices or simple reports.

Appendix G:
Other Federal Resources

The *Federal Office of Rural Health Policy* is a focal point for the Health Resources Services Administration on rural health. All states receive a State Office of Rural Health grant to link communities with state and federal resources to help develop long-term solutions to rural health problems. Forty-five SORHs are required to work with Critical Access Hospitals (CAHs) to improve financial and operational outcomes through their work with the Medicare Rural Hospital Flexibility Grant Program (Flex). States already use Flex resources to address identified needs for CAHs within the state to achieve improved and measurable outcomes. These activities can include financial benchmarking, financial and operational assessments, chargemaster review, revenue cycle assessments, and pricing strategy development, for example. SORHs also receive another small federal grant, the Small Rural Hospital Improvement Grant Program (SHIP), to assist small rural hospitals participate in various Affordable Care Act (ACA) delivery system reforms, such as value-based purchasing programs, accountable care organizations and payment bundling.

In addition to funding the SORH, SHIP and Flex programs, FORHP's community-based division administers several grant programs, which may be able to assist communities faced with vulnerable hospitals.

The network grants are funded to support consortiums to improve rural health, and though not specifically dedicated to vulnerable hospitals, funding can support the efforts of vulnerable hospitals. Applicants to these program are required to notify their SORHs of their intent to apply. All SORHs should make efforts to disseminate information about these funding sources and to link potential applicants to resources and information as they pursue this funding. SORH may or may not elect to provide technical assistance to individual applicants. Technical assistance can be an in-depth webinar or workshop regarding all aspects of the grant guidance, connecting local organizations together to consider the feasibility for a joint application, supporting a meeting of community-based providers to plan grant seeking activities, review of application concepts or pieces of the grant applications.
For more information on support for SORH grant writing technical assistance, contact Kassie Clarke at *kassiec@nosorh.org*.

Once awarded, grantees may need additional assistance to implement grant activities.

In Fall of 2014, Rural Health Innovations (RHI), received a contract to provide technical assistance (TA) to over 100 network grantees in the Development, Planning and HIT Workforce rural health network programs with Health Resources and Services Administration's (HRSA's) *Federal Office of Rural Health Policy (FORHP)*.

RHI provides technical assistance services to rural health networks across the country through education, training and guidance including: webinars, on-site visits, reverse site visits, direct questions and consultations, resources and tools, creating directories and sourcebooks and guiding grantees in self-assessment, evaluation and strategic planning. The *Aim for Impact and Sustainability* website is a compilation of tools, resources and educational materials based on the Baldrige Performance Excellence framework.

Along with its parent company, the National Rural Health Resource Center, RHI has experience in providing technical assistance to *rural health networks* and communities through many federal and state programs such as the *Rural Health Information Technology Network Development (RHITND)* Program.

More information can be found here: *https://www.ruralcenter.org/rhi/network-ta*

Appendix G:
Other Federal Resources

The following is a summary of Outreach, Network and other grant funds, which may be used to support community efforts to address the needs of vulnerable hospitals.

Rural Health Network Development Planning (Network Planning)

Supports activities — such as business plan development, community needs assessment, or health information technology readiness — needed to plan and develop formal health care networks at the community level.

Delta States Rural Health Development (Delta Program)

Supports organizations located in the eight Delta States that promote, through planning and implementation, the development of integrated health care networks that have combined the functions of the eligible entities participating in the networks in or to: achieve efficiencies; expand access to, coordinate, and improve the quality of essential health care services; and strengthen the rural health care system as a whole.

Small Health Care Provider Quality Program (Quality Program)

Supports rural providers engaged in quality improvement initiatives through evidence-based quality improvement models, tests of change focused on improvement, and use of health information technology to collect and report data.

Rural Health Care Services Outreach Grant Program (Outreach Program)

Provides funding for evidence-based projects that address health issues identified at the community level.

Rural Health Network Development Program (Network Development)

Provides support for networks of rural providers to integrate administrative, clinical, technological and financial functions to improve health care delivery.

Community Based Grants

Program	FY 2017	FY 2018	FY 2019
Rural Health Network Development Planning (Network Planning)	X *Funding applications available Winter 2016	X *Funding applications available Winter 2017	X *Funding applications available Winter 2018
Delta States Rural Health Development (Delta Program)			X *Funding applications available Spring 2018
Small Healthcare Provider Quality Program (Quality Program)			X *Funding applications available Spring 2018
Rural Health Care Services Outreach Program (Outreach Program)		X *Funding applications available Fall 2017	
Rural Health Network Development Program (Network Development)	X *Funding applications available Fall 2016		

Appendix H:
Accompanying Reports on the NOSORH Website

Background on Rural Hospital Closure
This is a compilation of research articles describing the background on rural hospital closures over the past decade.

Regulatory Requirements for a Hospital Closure
NOSORH compiled a summary of federal and state regulatory requirements related to closure of a hospital.

Michigan CAH Quality Network Quality and Financial Quarterly Presentations
Michigan CAH Quality Network (MICAH QN) has been reporting a core group of measures to CMS, and benchmarking these measures at every meeting. Presentations from the last meeting on quality and financial measures can be found at the link above.

NOSORH

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