Comprehensive Quality Improvement in Rural Health Care

Introduction

Much of the nation’s treasury (17.4% of gross domestic product) is spent on health care, about $9,255 per person, per year (CMS, 2014). And, while the U.S. health care system provides excellent service for many, this enormous investment has not produced an efficient or equitable system. Initiatives such as the HITECH Act (2009), the Affordable Care Act (2010), and the National Quality Strategy (2011), among others, have led to significant quality improvements although progress has been uneven across health sectors and geographic regions. There is concern that America’s efforts to improve health care services will leave rural communities behind. (NRHA, 2014)

NRHA’s (2007) Policy Brief on Comprehensive Quality Improvement adopted the Institute of Medicine’s (2001) quality of care definition as: “the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge”. (IoM, 2001) This definition should be updated to address the three aims identified in the National Quality Strategy (NQS): Better Care, Healthy People/Healthy Communities, and Affordable Care. A renewed focus on rural health quality should emphasize patient and family engagement, care coordination, and population health.

Improving rural health represents a complex challenge that requires rural stakeholder engagement, multi-level (local, state, and federal) partnerships, and resources to establish the necessary technology and workforce infrastructures. As guiding principles, initiatives to improve rural healthcare quality should be: (1) Relevant to rural community conditions and health service realities; (2) Equitably distributed and appropriate in scale to achieve improvement; and (3) Comprehensive, involving multiple stakeholders and health service sectors. A comprehensive strategy is needed to improve quality, consistent with NRHA’s recognition that quality improvement is a “system function” to be “conceptualized broadly across a continuum of care rather than principally in isolated settings such as hospitals.” (NRHA, 2007) Rural communities do not have sufficient political and economic resources to achieve the necessary quality infrastructure.

Rationale for Revision

Improvement is not an isolated act rather a continual process tailored to specific priorities. It begins with the buy-in of organizational administration and leadership followed by effective strategies, coherent policies, and an engaged workforce. Many rural providers have demonstrated the capacity to improve health services and, in some areas, now perform better than, or equivalent to their urban counterparts. Rural community residents often report being more satisfied with care and rural hospitals have comparable performance with urban hospitals in
quality, patient satisfaction, and operational efficiency for the type of care provided (iVantage, 2014).

However, many rural health providers, especially the smaller, independent facilities that operate in remote geographic regions, face significant financial and operational barriers that make it difficult to demonstrate improvement. These providers operate with limited financial resources, under-developed information systems, and professional staff who must address the growing number of federal regulations that were created to insure quality but have often, become a burden. The majority of rural hospitals now publically report quality metric data but the information they are asked to provide is not always relevant to their clinical services and does not always help the provider improve clinical services. The volume of quality metrics has grown together with the number of data requests, which has become a burden. With federal incentive support, information technology systems are being updated. However, the start-up and maintenance costs have continued to escalate and rural providers are concerned that the financial penalties associated with Meaningful Use standards, scheduled to begin in 2015, will exacerbate the fragile financial conditions. The following table identifies four steps to help guide rural health service improvement.

Table 1. Steps to Improve Rural Health

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<tr>
<th>Step</th>
<th>Domain</th>
<th>Activity</th>
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<tr>
<td>1.</td>
<td>Community Engagement</td>
<td>Engage stakeholders; encourage local service coordination; strengthen state and national policy partnerships.</td>
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<tr>
<td>2.</td>
<td>Strategic Assessment</td>
<td>Adopt a rational measurement strategy that highlights care coordination; focus on service priorities and relevant quality metrics.</td>
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<tr>
<td>3.</td>
<td>Technology Deployment</td>
<td>Help providers adopt electronic medical records and participate in health information exchange; develop telemedicine networks.</td>
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**Step #1: Engage stakeholders; encourage local service coordination; strengthen national policy partnerships.**

Patients and their family members are the principal stakeholders and should be at the center of quality improvement efforts. High quality patient care requires communication with the patient community and coordination among multiple service providers.

**Step #2: Adopt a rational measurement strategy that highlights care coordination; focus on local service priorities and relevant quality metrics.**

During the past decade, there has been a rapid expansion in the number of measures that can be used to evaluate health service quality. Unfortunately, many of these measures are not relevant
to rural provider organizations (Casey & Moscovice, 2012). It is important to develop metrics that clearly measure and highlight quality improvement in rural areas.

**Step #3: Help providers adopt electronic medical records and participate in health information exchange; develop telemedicine networks.**

Advances in technology have been shown to improve access to rural health services. This includes electronic medical records and telemedicine networks. Removal of barriers and regulations that restrict adoption of these technologies is necessary for rural health to improve.

**Step #4: Ensure adequate health workforce; use of best practice.**

More than 60 percent of all health professional shortage areas, covering all professional services, are in rural areas (Council of State Governments, 2011). It’s time to invest in alternative workforce models that better serve rural communities.

**Additional Considerations:**

The Institute of Medicine (IOM) began promoting quality improvement initiatives in 1996 with the release of *America’s Health in Transition: Protecting and Improving Quality* which led to the IOM Quality Chasm aims of health care: safe, effective, timely, efficient, equitable and patient-centered (IOM, 2014). Overall, the IOM’s quality improvement initiatives led to the promotion of patient safety, adequate access to appropriate healthcare services, and improving patient outcomes. In addition to the IOM, the Institute for Healthcare Improvement (IHI) has developed a “Triple Aim” framework that serves to optimize health system performance by focusing on quality as one of the three aims (IHI, 2014).

Rural healthcare providers may find a close collaboration with their state’s Quality Improvement Organization (QIO) beneficial. A QIO is comprised of individual who are experts in health quality, healthcare providers, and consumers with the intent of improving the quality of care provided to Medicare beneficiaries (Centers for Medicare and Medicaid, 2014). The QIO in each state works under the direction of the Centers for Medicare and Medicaid Services to assist healthcare providers in the areas of quality improvement and review of quality concerns to protect Medicare beneficiaries (Centers for Medicare and Medicaid, 2014).

Rural healthcare providers should consider interprofessional collaborations across the healthcare system to promote evidence-based practices to support quality improvement, in addition to creating environments that encourage a continuous process of learning and improvement (Center for Quality Improvement and Patient Safety, 2012). The utilization of clinical practice guidelines may assist rural healthcare providers in providing optimal patient care through assessing the benefits and potential harms of various treatment options (IOM, 2011). The utilization of innovative models of care delivery, such as telehealth, should also be considered in the quality improvement of rural health care (American Telemedicine Association, 2013). Other models of care delivery that focus on patient-centered care and care coordination should also be evaluated in the desire for quality improvement (Commission for Case Management Certification, 2010). The utilization of toolkits for rural care coordination can assist rural healthcare providers with the identification and implementation of a care coordination program that will provide resources and best practices (Rural Assistance Center, 2014).
**Patient Considerations**

The direct engagement of patients has the potential to significantly improve knowledge and patient health outcomes. In order to meet the requirements of Meaningful Use Stage 2, healthcare providers are required to provide patients with electronic access to important information relevant to their healthcare needs. Patients should have the capability to view and download information from their electronic health record such as lab results, medical visit summaries, and patient education and resources.

However with all new processes and technologies, there are concerns regarding implementation, privacy issues, and ease of use for patients. Many patients will welcome this change and will have the technological savvy to utilize the patient portal to enhance their healthcare. Others may need basic training and/or lack access to the required technology. According to the 2011 U.S. Census, 75.6% of households reported having a computer in their homes. However, for people 55 and older, the percentage drops to 61.7% and only 56.9% of Blacks and 58.3% of Hispanics report having a computer in their homes (File, 2013). In rural areas, access can be even lower of poorer quality due to lack of service reach or not being able to afford the technology due to poverty. Additional training at the healthcare provider’s office may be required for patients with low literacy or low health literacy. There also may need to be a dedicated computer for those patients who do not have access to the technology and/or needing additional assistance navigating the patient portal.

**Policy Recommendations**

- Partner with the Federal Office of Rural Health Policy for the purpose of recommending a limited core set of population health quality metrics relevant to rural health improvement.
- Partner with rural health service advocacy groups to encourage the Center for Medicare and Medicaid Services (CMS) to adopt a rational quality reporting strategy for rural health providers with a limited, essential core group of quality measures. Evaluate methods to conduct risk adjustment using rural sensitive methods.
- Provide advocacy to ensure that rural health providers are a priority service target to receive technical assistance through the nation’s Quality Improvement Organizations. Ensure rural health providers are identified to receive priority service in future (CMS) Scopes of Work).
- Allow greater flexibility in government mandates for rural health providers to achieve Meaningful Use.
- HRSA should be encouraged to coordinate efforts with CDC and CMS open funding streams to support cross-over collaboration among its various health service and training programs to encourage inter-organizational collaboration on quality. There should be greater linkages across categorically-funded programs in support of population health quality initiatives.
- Additional funding support is needed to evaluate how health service quality is affected by greater use of alternative health service providers.
- Telemedicine - Support H.R. 2001 for the Department of Veterans Affairs and H.R. 3077 for Medicare to help create a “one-state” rule for licensure.
- Telemedicine - Support H.R. 3306, the Telehealth Enhancement Act, as a package of priority, incremental improvements for Medicare and other federal programs.
• Provide funding to rural providers and hospitals to support the technology, training and staff to allow patient portal access for patients who do not have direct access to computers.
• Establish best practices to ensure patient privacy and protection of patient information.
• Provide low-literacy and low health literacy materials and develop community-based training to assist patients and to encourage patient engagement.
• Design patient portals to allow access to low literacy and low health literacy patients.
• Provide funding to national leadership to develop rural-relevant strategies, techniques, and best practices.
• Actively educate the membership about organizational culture and the value of community engagement and consumer participation in rural health care development and decision-making.
• Provide funding to enable the continuing development of an information infrastructure.
• Support utilization of evidence-based guidelines by rural healthcare providers to promote best practices, improve quality of care to promote safety and produce positive patient outcomes.
• Develop collaborations with QIOs to support quality improvement projects in rural healthcare facilities.
• Implement models of care delivery that promote effective team-based communication and care coordination between rural healthcare providers and metropolitan healthcare providers such as case management models, telehealth models, and patient-centered models.
• Utilization of rural care coordination tool kits to identify resources and best practices.

Continuing Recommendations

• Advocate with Congress and major foundations to fund Institute of Medicine rural demonstration projects and the creation of the rural quality commission, and participate in detailed language for legislation.
• Quality Improvement Organizations should be properly funded and directed to establish rurally appropriate quality assessment tools and appropriate staff for rural education.
• National quality accrediting bodies should be challenged and assisted in establishing rurally appropriate quality assessment tools and staff education.
• Rural practitioners and institutions should be involved when health care quality measures, standards, and benchmarks are being developed.
• Any quality benchmark mandate must have been appropriately analyzed for rural impact.
• A rural impact analysis and appropriate modifications to reflect the reality of rural practice must accompany any quality outcomes linked to reimbursement.
• Support adequate number of quality rural providers and staff through recruitment, retention, and reimbursement strategies.
Conclusion

Rural health care is not a small scale version of urban health care and improvement methods applied in larger urban health systems are not always relevant under rural service conditions. Successful rural improvement models exist and should be replicated in other rural communities.

Significant progress has been made during the past decade in improving the quality of rural health services. However, quality improvement in rural healthcare must be a continuous process. Rural health improvement will not be achieved by chance, but by a well-designed strategy supported by a commitment from rural healthcare providers and health-related organizations. The National Quality Strategy offers a useful framework to proceed, however the tactics should be tailored to address rural community needs. NRHA can play an essential role to ensure that local, state, and federal partnerships are strong, committed, and aligned to support comprehensive quality improvement strategies and infrastructure that is needed to promote continuous quality improvement in rural healthcare.
References


This policy paper was approved by the Rural Health Congress in February 2015.

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