

# North Dakota Critical Access Hospital Quality Network Evaluation Executive Summary

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#### Introduction

The North Dakota Critical Access Hospital Quality Network is comprised of 36 critical access hospital (CAHs) members throughout North Dakota, and operates through a formalized structure including an executive committee (representatives from nine CAHs) and an advisory committee (key stakeholders including the Center for Rural Health (CRH), North Dakota Health Care Review, Inc.(NDHCRI), North Dakota Hospital Association (NDHA), and the North Dakota Department of Health (NDDoH)). The Network has professional full time staff – a network coordinator (hired in May 2008) and stroke project coordinator (hired in September 2010).

The evaluation of the ND CAH Quality Network was completed by Brad Gibbens, MPA, who has 25 years of rural health experience. His areas of expertise include community key informant interviews, needs assessments, program evaluation, qualitative analysis, rural health policy, and strategic planning. The evaluation process was prompted by receipt of a federal award made to the ND CAH Quality Network funded by the Office of Rural Health Policy, a division of the Health Resources and Services Administration (HRSA). The intent of the grant was to conduct an overall evaluation of the Network and use that information to create a business plan for the Network.

At the time of the evaluation, the Network was working to accomplish seven goals which are outlined below\*. The first four goals serve as the Network's core goals. Additional goals (number 5-7) were developed in association with the aforementioned federal grant. Data analysis focused mainly on the core goals of the Network with the result then utilized to inform the implementation of the latter goals.

\*ND CAH Quality Network goals:

- Goal 1: Support quality improvement activities
- Goal 2: Assist critical access hospitals with Medicare Conditions of Participation
- Goal 3: Develop and maintain partnerships
- Goal 4: Develop and manage the Network
- Goal 5: Develop a strategic plan
- Goal 6 : Develop a communications plan
- Goal 7: Develop a plan for the Network's sustainability

This executive summary serves to highlight the evaluation effort on behalf of the ND CAH Quality Network and highlight key findings and recommendations.

### Methodology

The ND CAH Quality Network's evaluation employed a number of techniques and approaches in a concerted effort to analyze the structure, process, and impact of the Network. The methodology included a logic model design to guide the process. Qualitative (e.g., key informant interviews) and quantitative (e.g., two general surveys to network members to measure attitudes at distinct time points, and training session evaluation surveys) methods were used. The key informant interviews and the surveys represent primary data (i.e. data gathered for a specific purpose, in this case the evaluation). Meeting minutes, entries in an electronic activity data gathering system (known as CATS), Network reports (e.g. strategic planning, communication, annual report), and other sources served as secondary data sources (i.e. data gathered for one purpose but which is then used for an additional, or secondary purpose).

Evaluation is an on-going activity, and is used as a feedback mechanism for program implementers to continually move the program effort forward, taking in information, processing it, making adjustments, and improving the initiative, program, or organization. Thus, evaluation is a management tool and is vital to effective program implementation.

### Findings

The following is a summary of the Networks' activities and accomplishments from 2008-2010, and the impact of those activities to Network members and to stakeholders.

Activities	Impacts
<ul> <li>Development of communication tools including a website, newsletter, brochure, and listserv         <ul> <li>7,052 website page views (2008-2010)</li> <li>Quarterly publication of the Network's newsletter</li> <li>118 subscribers to the listserv; 328 postings from 2008-2010 covering 400-450 questions</li> <li>Brochures explained the focus and function of the network and were disseminated through a variety of means</li> </ul> </li> </ul>	<ul> <li>Communication tools were ranked high as information sources by users</li> <li>Newsletter and listserv were ranked 1<sup>st</sup> and 2<sup>nd</sup> by member as highest rated information sources</li> <li>Members explained that the information increased their knowledge</li> <li>Network established itself as a reliable source of information</li> <li>Overall evaluation found that the communication tools were effective in providing useful and timely information and were relied upon by members; the anonymity and "one-stop shop" effect provided by the listserv was singled out as a positive feature; the newsletter was a reliable summary of current activities including subjects searched through the listserv and the activities of the tertiary-CAH meetings</li> </ul>

## Goal 1: Support quality improvement activities

<ul> <li>Educational opportunities were provided         <ul> <li>Seven CAH/tertiary regional meetings</li> <li>Three TeamSTEPPS trainings involving 18 hospitals, including 13 CAHs), conducted by the ND Health Care Review, Inc., and facilitated by the ND Health Care Review, Inc., and facilitated by the Network</li> <li>Dakota Conference on Rural and Public Health established as a time for annual meeting and election (Spring of each year) – host a separate fall meeting at the NDHA conference</li> <li>Use of listserv to share information among members</li> <li>Media contacts (e.g. radio interviews, news articles) were established</li> <li>Hosted and facilitated webinars</li> <li>Participation in national webinars</li> <li>CMS website reviewed for new information particularly related to CoP</li> </ul> </li> </ul>	<ul> <li>Member survey indicated CAHs placed high premium on this concept of learning from each other, sharing ideas, approaches, policies, and best practices</li> <li>Surveys found high ratings for educational efforts and resource sharing provided through the network</li> <li>Many positive comments from key informant interviews were expressed toward increasing awareness and understanding, and improving knowledge</li> <li>Separate surveys administered to participants at TeamSTEPPS education seminars found very high ratings for the sessions</li> <li>Overall evaluation found strong support for the educational efforts of the Network; evidence of how this benefited the CAHs was provided</li> </ul>
<ul> <li>Implementation of the Health Care Safety Zone Pilot Project (a web based data collection and benchmarking system covering medication, falls, infection reports, patient/family concerns, procedure/clinical, employee incidents, and others)         <ul> <li>13 CAHs participated in pilot from September 2008 through April 2009; all continue to participate</li> <li>Focus on increasing communication</li> <li>Pilot program developed by Clarity</li> <li>Individual training on Safety Zone Portal provided to all participating CAHs</li> </ul> </li> </ul>	<ul> <li>When surveyed, participating CAHs said the project impacted their organizations in efficiency and education; high approval rating from participating CAHs; CAHs showed evidence of how they used data within their facility (e.g., benchmarking within the hospital and with other hospitals, tracking of medication events led to change in practice, elimination of some paperwork, education of staff members, follow-up and intervention, development of goals and targets, development of quality improvement projects – overall seen as positive for efficiency and education</li> <li>Overall evaluation found that the staff</li> </ul>

<ul> <li>Development of technical assistance options, including the following:         <ul> <li>Credentialing assistance</li> <li>scope of practice issues</li> <li>educational information for nurses</li> <li>pre-made care plans</li> <li>mood behavior monitoring sheets</li> <li>medication reconciliation</li> <li>self-harm precaution procedures</li> <li>peer review assistance for physicians</li> <li>working with CAHs and corresponding tertiary hospitals</li> <li>state survey assistance</li> <li>in-service training development</li> <li>other services as needed</li> </ul> </li> </ul>	<ul> <li>that had used the Portal provided clear evidence that they believed the collection of data and its review and analysis was practical and beneficial to the hospital; evaluation also concluded that not all CAHs were ready for this extensive involvement in collecting their own data and analysis; however, the Portal was a good way to initiate rural hospitals in a process that is likely to continue to develop</li> <li>Over 60 percent of the respondents found technical assistance to be a moderate to substantial benefit</li> <li>Data comparison of two network member surveys, administered at two separate points of time, found TA had the highest increase in perceived benefit.</li> <li>Overall evaluation found a significant level of technical assistance was provided to members, and that members found the TA to be beneficial; another measure of TA satisfaction was that 74% were very satisfied and 26% satisfied with the availability and response of the coordinator, who was the primary provider of TA</li> </ul>
<ul> <li>Coordinated statewide and regional meetings         <ul> <li>Eight statewide meetings held with CAHs</li> <li>Seven regional meetings involving a tertiary and area CAHs covering a wide range of issues (e.g., transfer protocols, quality measures, stroke care, CoP survey experience and deficiencies, patient care, SBAR technique, employee surveys, credentialing, lab coding and billing, peer review, discharge prescriptions, pediatric emergency management care, case management, shared transfer forms, computerized radiology systems, and other subjects</li> </ul> </li> </ul>	<ul> <li>Member survey indicated a majority of CAHs found both statewide and regional meetings to be beneficial; the perceived benefit to regional meetings had a notable increase at the two points of time as measured by two member surveys (mean scores increased by .51 or half of a point on a 5 point scale); regional meetings had a strong focus on credentialing and sharing protocols; meeting frequency and meeting facilitation had high rates of satisfaction</li> <li>Key informant interviewees made positive reference to either the regional meeting approach or to face-to-face</li> </ul>

	meetings in general
	<ul> <li>Overall evaluation found strong evidence that the regional tertiary-CAH meetings were perceived to have produced more information sharing and facilitated trust development between providers; some evidence from key informant interviews that the CAH Quality Network was seen as "instilling a change in culture" between CAHs and tertiary hospitals and between tertiary hospitals themselves as the tertiary hospitals shared information (e.g. credentialing process and protocols) with each other</li> </ul>
Development of efforts on mentorship,	<ul> <li>Member surveys showed about 95% of</li> </ul>
clinical efforts, and medical staff	members substantially supported or
• Development of survey/checklist to	supported development of peer mentoring
<ul> <li>determine specific mentoring needs</li> <li>Informal mentorship efforts</li> </ul>	<ul><li> Member surveys showed about 90% of</li></ul>
identified as a secondary benefit to	members substantially supported or
statewide and regional meetings	supported the development of strategies to
<ul> <li>Executive Committee held</li> </ul>	more actively engage physicians with the
discussions on clinical efforts (e.g.	network and quality of care matters
coordinated clinical projects,	• An example of clinical efforts included the
outpatient indicators, and Health Care Safety Zone Portal	Outpatient Measure Survey which found that a majority of CAHs were collecting
<ul> <li>Coordinated clinical efforts (data</li> </ul>	data on median time from ER arrival to
collection, analysis, benchmarking,	administration of fibrinolytic therapy,
and identification of best practices)	almost half were collecting data on ED
• Initiated new stroke program in	acute myocardial infarction patients
partnership with NDDoH	receiving fibrinolytic therapy, almost half
<ul> <li>CAHs collect data and use CART</li> <li>Administered and Outpatient</li> </ul>	were collecting data on median transfer time to another facility for acute coronary
Measure Survey	intervention, over 70% were collecting data
• Executive Committee held	on aspirin at arrival to ER, over half were
discussions on peer review	collecting data on median ECG for and
• 3 of 4 regions had actively	AMI, and about 70% were interested in
addressed credentialing and tertiary in one region shared protocols and	participation in the clinical project for CMS outpatient measures collection
process with two other tertiary	<ul> <li>Overall evaluation found that some forms</li> </ul>
regions	of informal mentoring occurred, the
<ul> <li>Executive Committee discussion</li> </ul>	network was at a stage that more
on increasing focus and	formalized efforts should be initiated;
opportunities for the network with	efforts on credentialing process are
medical providers	important and necessary however, the
	network was at a stage where more formalized efforts with the medical
	ionnalized enorts with the medical

community should be initiated
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Activities	Impacts
<ul> <li>Development of a ND conditions of participation manual and checklist.</li> <li>Active involvement and review by Executive Committee with staff on the development of CoP tools</li> <li>Dissemination of manual and checklist to members</li> <li>Facilitate collaboration with NDDoH and their active involvement in training and education of CAHs on survey process and interpretation of data</li> <li>Development of a network process for hospitals to share state survey results/deficiencies.</li> <li>Education of CAHs on survey process central focus of the network</li> </ul>	<ul> <li>Member survey found that:         <ul> <li>42% of members said they had received substantial benefit from the Network's conditions of participation efforts and 47% said moderate benefit</li> <li>47% identified a substantial benefit of the Network's efforts to prepare CAHs for the state survey and another 47% indicated moderate benefit.</li> <li>Key informant interviews found very strong support for the CoP effort of the network's measures that the network had supported a number of tangible, practical, and useful actions to assist the CAHs with CoP; TA was provided to hospitals, the network provided a platform for the NDDoH to meet and educate hospitals; the tertiary-CAH meetings were beneficial to this subject; and CAHs found the manual and checklist to be useful</li> </ul> </li> </ul>

# Goal 2: Assist critical access hospitals with Medicare conditions of participation compliance

Activities	Impacts
<ul> <li>Partnerships and collaborative activities established         <ul> <li>Advisory Committee and Executive Committee formed representing CAHs and key interests</li> <li>Coordination among stakeholders involving about 30 separate statewide, regional, and national groups</li> <li>Joint meetings established with executive and advisory committees</li> <li>Establishment of regional tertiary-CAH networks</li> </ul> </li> </ul>	<ul> <li>Member survey found that 32% of members received substantial benefit and another 26% saw moderate benefit from regional collaboration efforts</li> <li>58% of members said that collaboration was producing substantial benefit to them and 25% said moderate benefit.</li> <li>Member survey comparison at two different time frames found that perceived level and benefit of collaboration between five key network partners increased in all cases.</li> <li>Key informant interviews were conducted with representatives of organizations that were a partner for the network. All respondents found a tangible and concrete benefit to their organization in being involved with the CAH Quality Network.</li> <li>Overall evaluation found that the partnership process, or at least an orientation to form collaborative ventures, was present and developing; a number of mutually beneficial activities were initiated; regional tertiary-CAH networks were perceived as positive; going forward, however, the network will need to focus on strategic alliances particularly as they relate to network functions</li> </ul>

## Goal 3: Develop and Maintain Partnerships (stakeholders, tertiary hospital system, and others)

Activities	Impacts
<ul> <li>Development of organizational structure, including processes to make decisions         <ul> <li>Hired program coordinator in May 2008</li> <li>Developed and disseminated a Network strategic plan in February 2010</li> <li>Developed and disseminated a Network communication plan (April 2010)</li> <li>Developed a useful work plan with evidence from network meetings that the plan is followed and reviewed at each meeting</li> <li>Created goals for network sustainability</li> <li>Conducted formal evaluation which was used for development of a grant proposal and has been used to influence sustainability steps</li> <li>Successfully secured two additional grants.</li> <li>Development of a strong, participatory, and independent</li> </ul> </li> </ul>	<ul> <li>Member survey rated a variety of management components as very high: <ul> <li>a. Expertise of the coordinator 79% rated very high</li> <li>b. Availability &amp; response of the coordinator 74% very high</li> <li>c. Availability and accuracy of information 53% very high</li> <li>d. Other components had high scores</li> </ul> </li> <li>Open ended questions did produce concerns or potential barriers – having the time for commitment to quality activities, and financial concerns</li> <li>Key informant interviews found support that the network's management structure and decision making process were effective, open, and focused on building a strong network</li> <li>Overall the evaluation found that the network, over a three year period, had adhered to the original tenets outlined by the original hospitals that had come together to create a quality network: the three original themes or needs that were identified were being addressed adequately over the three years: 1)</li> </ul>
<ul> <li>sustainability steps</li> <li>Successfully secured two additional grants.</li> <li>Development of a strong,</li> </ul>	adhered to the original tenets outlined by the original hospitals that had come together to create a quality network: the three original themes or needs that were identified were being addressed
administrators, directors of nursing, and quality coordinators and broad representation from key interest groups on Advisory Committee	vehicle to improve CAH quality; and the two primary functions or purposes were being addressed: addressing CoP and resource sharing

# **Goal 4: Develop and Manage the Network**

Activities	Impacts
<ul> <li>Strategic planning process developed and implemented         <ul> <li>One day planning meeting held, high participation from CAHs, facilitated by an outside CAH quality expert not affiliated with the network or partner organizations</li> <li>Three CAH planning work groups were created and met over a two month period to develop specific goals, action steps, and time frames</li> <li>Official strategic plan was issued and disseminated to all Network members in March 2010</li> <li>Strategic plan influenced the development of the network work plan which is currently followed</li> </ul> </li> </ul>	<ul> <li>85% of respondents were satisfied or very satisfied with the strategic planning process</li> <li>56% of those surveyed at the end of the strategic planning day said they agreed and 25% strongly agreed that they were confident in the ability of the Network to sustain itself</li> <li>66% agreed and 19% strongly agreed at the end of the planning day that they had an enhanced understanding of the overall focus and intent of the network</li> <li>74% agreed and 16% strongly agreed that that the activities and steps identified during the day of planning were feasible and achievable</li> <li>Key informant interviews produced results showing that they believed the strategic planning process was effective</li> <li>Overall evaluation found that the strategic planning process produced a workable tool that has been successfully used by the network as a tangible working document to guide the organization; openness and participatory nature of the process facilitated a plan that is accepted and has legitimacy to the members</li> </ul>

# Goal 5: Develop a Strategic Plan

Activities	Impacts
<ul> <li>Developed communication work group</li> <li>Current communication efforts were examined through an inventory</li> <li>Development of tools such as newsletters, website, brochure, and listserv</li> <li>Communication facilitated via formal and informal partnerships and collaborative activities</li> <li>Development and implementation of a communication plan</li> </ul>	<ul> <li>Almost six out of ten (58%) respondents surveyed said communication produced a substantial benefit with 37% more indicating a moderate benefit</li> <li>A significant number supported continuing to expand communication with state agencies (47% substantial support and 32% moderate support)</li> <li>Key informants found the efforts of the network to address communication and the tools used to be positive; however, most did not recognize that the network had produced a formal communication plan</li> <li>Overall evaluation found that the primary efforts of the network to communicate with members and partners was positive; the tools were effective; communication was seen to facilitate education, resource sharing, and other key network functions; while the network had been successful with internal communication particularly as it related to information on the subject of quality it needed to address more specifically a communication telated subject: marketing; marketing the network is seen as an approach to network sustainability</li> </ul>

# Goal 6: Develop a Communication Plan

Activities	Impacts
<ul> <li>Developed an Executive Committee and an Advisory Committee with active participation from CAHs, and from key stakeholders</li> <li>Developed and implemented a strategic planning process that would frame elements for sustainability</li> <li>Developed and implemented a communications plan</li> <li>Based on elements of the strategic plan and communications plan developed an operational work plan which was used for all Executive Committee meetings</li> <li>Developed and implemented a program evaluation to serve as a tool to measure network accomplishments and to be used as part of management planning, and as a source of information to construct sustainability goals</li> <li>Executive Committee discussed additional funding options</li> <li>Network secured two additional grants</li> <li>Identified goals, objectives, and activities for network sustainability</li> </ul>	<ul> <li>Member surveys and assessments of programmatic activity (e.g., TeamSTEPPS, Safety Zone Portal) indicated strong or high approval and support for network activity which is an indicator of sustainability as a program must meet the needs of the intended audience, produce benefit, and garner their support; an understanding of a need for sustainability and ideas on how to achieve sustainability was developed</li> <li>The Network developed a viable and stable management structure, led by CAHs with professional staff, a participatory approach which included active involvement by other CAHs, regular executive and advisory committee meetings, and hosted annual meetings; an element of sustainability is providing effective governance which the networked achieved</li> <li>The network had provided a tangible, and recognizable set of services to its core audience –CAHs – and had provided services or facilitated the delivery of services for partner organizations and other entities in collaborative arrangements</li> <li>Key informant interviews found both confidence for the network's ability to sustain itself and some level of cautionary concern; concern was expressed that essential elements for sustainability would be difficult to achieve particularly finance or funding concerns and the ability for small rural hospitals to arrange and provide "time" to developing a network, sustaining its functions, providing staff time for new trainings, and other factors</li> <li>Securing two additional grants has</li> </ul>

Goal 7: Develop a Network Sustainability Plan

allowed the network to focus on a new
range of CAH needs, added staff, and
facilitated the relationship of the network
with additional stakeholders
• An element of sustainability is building
awareness of the organization, its
mission, and benefits; the network
established itself to its primary audience
(CAHs) and some secondary targets
(statewide organizations and tertiary
hospitals) indicated a level of benefits
were achieved; however, the network
needs to concentrate on marketing itself
and its services to a broader audience,
and it needs to consider developing a fee-
for-service structure to provide services
to other organizations, a dues structure
e ,
for current members, and a sponsorship
category for non-members

#### Recommendations

The recommendations are designed to assist the CAH Quality Network in securing a level of organizational sustainability. Sustainability is a process to achieve a cohesive, functional state for an organization. Sustainability is ongoing: it builds on itself and it creates momentum. Organizations need to be as committed to sustainability as they are to program development and delivery, as they are to planning and evaluation, and as they are to their core values and mission. Sustainability, in and of itself, is not the organizational goal. Operationalizing the mission, values, and purpose of the organization; providing benefits and value to the consumer of the organization; and evolving through creativity and flexibility – these are the ultimate goals which through their success then can build sustainability.

Organizational sustainability is sometimes seen as synonymous with funding. While continuous funding or the availability of additional financial streams is of course essential, and while efforts to secure those funds are required, funding is actually an input to sustainability rather than a corresponding idea. *Building awareness* through a marketing campaign as part of a broader communication plan is an input to secure sustainability. *Securing benefit and value* to the intended audience – and offering the prospect of a similar achievement to new audiences – is a contribution to secure sustainability. *Providing effective governance* in the management of the operation is an effort to secure sustainability. Writing grants, offering a fee-for-service product line, paying organizational dues, and local cash or in-kind matches are *funding options* to secure sustainability.

The ND CAH Quality Network has established a number of key elements that serve to frame a sustainability effort.

- The Network has established a strong and participatory focused management structure with an Executive Committee and an Advisory Committee;
- The Network has maintained a strong connection with membership by providing benefits and services that are highly rated by that membership;
- The Network has developed a strategic plan and a communication plan, which set the foundation for a concrete and implementable work plan;
- The Network has achieved a level of awareness on the part of CAHs and some key stakeholders; and,
- The Network has identified and discussed additional funding options.

### **Recommendations focused on Network Sustainability**

The ND CAH Quality Network must establish for its audience that they have a mission with a clear set of goals that are being met, there is a stable and functional organizational structure, current target audiences are being positively impacted with concrete benefits, and visibility and awareness are increasing in a manner that can lead to a larger market. Below are steps the Network should consider.

- Marketing plan: The Network's communication efforts should be more inclusive of marketing steps. Efforts should be expanded to address more directly increasing the visibility of the Network, enhancing awareness on the part of others outside the current network, identifying a set of network benefits and building an understanding of potential benefits to others, and overall relationship building activities. The CAH Quality Network has done an excellent job with CAHs and some key stakeholders; however, it must expand its base which can include offering and promoting its services to organizations outside the network. As part of this the Network needs to consider fee-for-service options.
- Additional funding: Financial considerations are important and the Network will need to continue to address this issue. Some areas the Network might explore are membership dues, sponsorship (non-member organizations that endorse the network and seek to provide some level of funding), new grant opportunities particularly those that may emerge from the Affordable Care Act, and fee-for-service contractual offerings. Considering the Network's areas of expertise it could offer services directed at training/education, data assessment and benchmarking, planning and organizational design, information access, and other areas. As part of an overall marketing plan funding options need to be explored.
- **Data and Benchmarking:** The Network must continue to provide definition and application to the subject of data benchmarking. Through the Health Care Safety Zone Portal project the Network did initiate the process with about 13 CAHs. This was a productive first step.

Surveys of the CAHs involved with the Safety Zone Portal indicated strong support as the CAHs received concrete benefit. They learned how to collect their own data and how to interpret metrics. Data has been shared with other CAHs in an effort to initiate benchmarking processes. In addition, the Outpatient Measure Survey found that a large number of CAHs were collecting data and were interested in additional CMS outpatient measurement studies. As the Affordable Care Act is implemented over a series of years there will be more opportunities for CAHs to be involved, particularly as it relates to value based purchasing and bundled payments. The movement of integrating payment structures with quality metrics and performance marks will continue. A significant rationale for the restructuring of the American health system, via reform measures, was to improve quality outcomes for the population. The CAH Quality Network can position itself to assist CAHs through the approaching payment redesign.

- Regional meetings and culture change: It is recommended that the Network continue to build on the regional structure they have created, where CAHs and tertiary hospitals share best practices and resources, and have identified practical elements for mutual benefit and support. The development of regional meetings was a major finding of the evaluation. There is evidence that this was a tangible benefit of the Network, one that was appreciated by CAHs. It provided more direct access to information and resources not only the tertiary hospitals that CAHs typically associated with, but also tertiary hospitals from other regions of the state and comments were made with regard to a "culture change" as hospitals made efforts to tear down some of the walls of competition, and build open-faced platforms for dialogue, information sharing, and collaboration. Three of the four regions showed significant progress in the pursuit of openness of information and dialogue. CAHs found benefit from the regional meetings and the Network developed and facilitated this process. Continuing such development that produces mutual benefit to CAHs and tertiary hospitals alike, can and should be an important element in structuring the sustainability of the Network.
- Clinical outcome: The ND CAH Quality Network needs to build on the efforts to develop a focus on clinical outcomes and the initiatives and efforts to build a foundation for improving quality and patient outcomes. The Outpatient Measure Survey and the participation of ND CAHs in the CMS CART indicates that a growing number of CAHs are interested and willing to actively participate in efforts to analyze and incorporate clinical data for quality improvement. As the CAH Quality Network evolves it will need to push forward with regard to clinical data and benchmarking. This will ratchet-up both the skill-sets found within the network, including staff, and the complexity of services provided by the Network. By doing so, the Network adds another element of sustainability.
- **Medical staff:** This is an underdeveloped area for the Network to address. In the first three years of the Network, work focused on hospital efforts; however, the physician role within quality improvement has not been addressed. The Network should identify specific projects to address the quality needs of physicians and non-physicians or midlevel providers. The key

informant interviews identified some sentiment for working with the North Dakota Medical Association and this dialogue should be engaged.

• Health Information Technology (HIT): The primary purpose of HIT is to improve quality, organizational performance, and to inject more efficiency into the health system. The Institute of Medicine in various reports has singled-out HIT development as an important tool in improving overall health quality. The Network Executive Committee has discussed HIT and recognizes its contribution; however, it has remained more of an idea. The Network is encouraged to explore opportunities in more detail. It is recommended the Network engage with the North Dakota Health Information Technology Advisory Committee, appointed by the Governor, and serving to set the overall direction for HIT for the state. The two groups should be made aware of each other, including their missions, values, and projects. The Network needs to be actively engaged in HIT discussions to have a larger impact on overall quality.

#### Conclusion

The ND CAH Quality Network has done an excellent job in establishing itself as a network. It has met or is meeting its goals. CAHs, the primary beneficiary of the Network, believe the network is working to meet their needs. The analysis even lends support to the idea that some elements of culture change (i.e. enhanced trust between providers, both small and large) are underway. These are not insignificant realizations. In three short years this Network has created a sound formal management structure; initiated numerous educational, training, and service efforts; facilitated regional quality improvement meetings between CAHs and tertiary hospitals, initiated CAH efforts in acquiring quality related data and benchmarking, and has begun to build CAH-based capacity to deal with significant federal policy changes wrapped around national goals to better serve the public's need for high quality care. It is an impressive record.

With regard to its seven primary goals the network has made significant progress in accomplishing its stated functions. This is supported by both process and outcome measures. General participant surveys, along with evaluation tools used for specific events indicated support for the network, its mission, and its overall state of accomplishment. It has provided a number of approaches to supporting quality improvement activities (e.g., listserv, Healthcare Safety Zone Portal, direct technical assistance, education, regional tertiary-CAH meetings, and others). It assisted CAHs with Medicare Conditions of Participation via a CoP manual and checklist, along with securing education and training from the state health department. The network has developed and secured partnerships with a number of statewide and regional entities that have contributed to the overall state of quality for CAHs. The CAH Quality Network has developed a strong management structure that includes an Executive Committee comprised of CAH representatives, a statewide Advisory Committee comprised of key stakeholders,

participatory decision making, frequent meetings with all CAHs, a formal evaluation, and it has secured two additional grants. The network has developed a strategic plan that has been operationalized in a complete work plan that is used for all Executive Committee meetings. A communications plan has been developed. Finally, while the work of sustainability is an on-going process, the network has laid the cornerstone for securing a stable future. The primary caveat for the network and its viability rests with its ability to build awareness and establish benefit to a wider audience. With all rural hospitals having converted to CAH status, the network cannot serve more CAHs. However, it can continue to identify CAH quality needs and then work to address those emerging needs; it can expand its market and work to meet those needs; and it can explore alternative funding options. It also must be aware of the financial constraints, staff constraints, and even time constraints found in the CAHs.

Much of the strength of this Network is found less in what it has done (as significant as that may be), then resides in its philosophy and how its members and staff exercise that philosophy. This is truly a rural network. While it has the organizational support of key interest groups with statewide visibility and resources (e.g., University of North Dakota Center for Rural Health, North Dakota Department of Health, North Dakota Healthcare Review, Inc., and the North Dakota Hospital Association), its vision, its ideas, and its value framework flows from critical access hospitals. All the members of the executive committee represent CAHs. Some are administrators, some directors of nursing, and some quality directors. It is a network designed to meet rural hospital needs and the needs of their communities and to operate through the direction of those same rural hospitals. The principles and goals discussed in the earliest days of the network (actually before it was a network) still guide its actions today. As a network they have steadily and faithfully evolved and moved forward.