NPP Evaluation Case Study Report: North Carolina Center for Hospital Quality and Patient Safety (North Carolina Quality Center)

The North Carolina Center for Hospital Quality and Patient Safety (also known as the North Carolina Quality Center or NCQC) was created in 2004 by the North Carolina Hospital Association (NCHA) to lead North Carolina hospitals to become the safest and highest quality hospitals in the United States. NCQC is funded by a grant from the Duke Endowment and a donation from Blue Cross Blue Shield of North Carolina. Because NCQC exists as a division of the NCHA, and there is crossover institutionally and in staff, the quality journeys of the NCQC and NCHA are intertwined. As a member of the National Quality Forum (NQF), NCQC's Director learned about the National Priorities Partnership (NPP) priorities framework in 2008, when NPP released its first major report, National Priorities and Goals: Aligning Our Efforts to Transform America's Healthcare. Referring to the report, NCQC's Director drafted a strategic model for NCHA and initiated discussions there and within the NCQC to use the NPP framework to re-energize their safety and quality work. By 2010, both NCQC and NCHA adopted the NPP framework and its goal statements as the foundation for their strategic plans. NCQC focused on two priorities: improve the safety and reliability of North Carolina healthcare and ensure patients receive wellcoordinated care within and across all healthcare settings. This case study highlights the diverse factors that set the stage for and supported the rapid movement of the NPP priorities framework from a national concept into the organizational strategic plans for transforming healthcare within a state.

Project story

Deciding to Engage with NPP and the Framework

Quality champions

The NCHA started down the road on its current journey to quality in 2003 when a Board member noted that "of all the problems we face as hospitals – inadequate Medicare reimbursement, inadequate Medicaid reimbursement, threats to our tax exempt status – the only problem we've got that we can't blame on someone else is quality of care. Let's fix that." One of NCHA's first steps to fixing the

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quality problem was to initiate a relationship with the Institute for Healthcare Improvement (IHI). NCHA's CEO attended a speech where Dr. Donald Berwick, then at IHI, told hospital leaders what they were doing wrong, but was so compelling and convincing that he received a standing ovation. Subsequent to this, NCHA's CEO approached Dr. Berwick and asked if he thought there was a role for a state hospital association in quality. Dr. Berwick's "yes" answer galvanized NCHA's CEO resolve. He pursued a grant from the Duke Endowment to start NCQC which was established in 2005 as a division of NCHA.

In late 2005, a Director of NCQC was hired who immediately went to work on developing a strategic plan for the Center. Partly to inform this process, in 2006 NCQC became an NQF member. NCQC was assigned to NQF's QMRI (Quality, Measurement, Research and Improvement) Council, where it still remains a member.

The time was right

The NPP priorities summed up a cause whose time had come in North Carolina. Quality and safety had been a focus for awhile. The Center had been in existence for four years and had collaborative projects under its belt, but engagement had plateaued. NCQC's Director was actively looking for a new way of organizing the Center's work that would improve efficiency of resource use and give people a

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new and energizing way to think about their common work on quality and safety issues. NCHA was looking for a way to ground itself around what to work on, knowing quality and safety were key issues.

Adding to the sense of urgency was the fact that North Carolina was the 35th healthy state in the nation. It didn't have enough doctors, nurses or dollars to take care of its sick people. NCHA's CEO believed that the healthcare field could be fixed — and that it had to be. He described it as an economic security issue as well as a population health issue. He shared that in order for cost to be fixed, quality of care and health had to be improved. This kept him awake at night worrying that "if we don't get there in time, the system will implode."

Upon reading the 2008 *National Priorities and Goals* report, NCQC's Director found that the NPP priorities aligned with much of the work that the NCQC and NCHA were already doing. It appeared to be a great organizing framework for looking at quality and patient safety and for transforming healthcare in North Carolina. The NPP priorities provided a way to remain focused on what was deemed as the nation's highest priorities as well as provided an opportunity to benchmark North Carolina against national levels.

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Soon after the release of the 2008 National Priorities and Goals report, NCQC's Director, along with other NCHA staff, met with IHI to discuss its strategic planning challenge on how to move the NCQC forward. NCQC's Director suggested using the NPP priorities as an organizing framework for their work to Dr. Berwick. Encouraged by Dr. Berwick's support, the NCQCs Director created a strategic model for NCHA that called out the NPP priorities. She presented the model to NCHA's CEO, whose response was "Wow! ... This is what we've been talking about and where we need to focus." He thought the model was well-suited for NCHA as each area was important, and he liked the fact that it was based on a national document that could provide an opportunity to benchmark the state against national levels. One of the big sellers was that Dr. Berwick had co-chaired the NPP committee. NCHA's CEO noted about the report, "I knew that it was golden. That document came with incredible credibility."

By 2009, under the NCQC Director's guidance, the Center developed and its board approved a strategic plan that focused on the two NPP priorities of safety and coordinated care. The NCHA board also approved their new strategic plan, *Model for Transforming Healthcare in North Carolina*. The plan not only integrated the NPP priorities, but also IHI's Triple Aim framework. The strategic plans of NCQC and NCHA were now aligned with each other.

Value of the NPP Framework

NCHA's CEO believes that in order to fix the cost component of healthcare, quality of care and health have to be improved. He sees NPP's framework as having a role in NCHA's efforts in this regard, as he stated, "Today we [NCHA] are driving transformational change in this organization and using NPP as a blue print for that transformation." "Today we [NCHA] are driving transformational change in this organization and using NPP as a blue print for that transformation."

Having these priorities allows NCHA and NCQC to focus their resources, and provides a direction to the hospitals they serve. As the NCHA CEO said, "Our blue print, our roadmap is the National Priorities Partnership. That's what we go back to." Similarly, the Director of NCQC calls the NPP priorities and goals report her "new Bible" for deciding what initiatives to join. While the NCHA and NCQC partnered with many organizations prior to adopting the NPP priorities and goals, being able to say that the priorities and goals are national priorities helps open a door for furthering the work that organizations do with each other and strengthens the partnerships.

Three Factors Enabling the Use of the NPP Framework

Three aspects of NCHA's and NCQC's cultures opened the door to the use of the NPP priorities: a preexisting partnering orientation, a pre-existing quality and measurement orientation, and a team-based organizational culture. From at least 1997 through 2008, NCHA referenced collaboration among healthcare providers and related associations, organizations, and agencies as part of the values listed in its strategic plans. Collaboration is also a value listed in the NCQC's 2009 Strategic Plan. Prior to adoption of the NPP priorities framework, NCQC and NCHA work was occurring in partnership with hospitals (e.g., around several collaboratives – cardiac care, Just Culture, and ICUs), rural health centers, physicians, and the state public health sector.

NCHA and NCQC have a long history of commitment to quality. Since at least 1997, NCHA has included the phrase "promotes ... delivery of quality healthcare" in its mission statement. The NCQC's 2009 mission was "To foster a culture of quality and safety within North Carolina hospitals and healthcare" and its vision was "To lead North Carolina hospitals to become the safest and highest quality hospitals in the United States."

NCHA's CEO noted that its whole approach to quality is based around measuring – "you measure what you treasure." The early measurement focus was on safety and reliability. Among the ways listed in NCQC's 2009 strategic plan for assessing its performance were four Optimal Care Scores measures, including surgical infection prevention, plus risk-adjusted mortality index, and CLABSI. Optimal care

measures, that use an "all or none" methodology to assess reliable care, have been tracked since 2006 and are posted on NCQC's website.

For NCQC's Director, one way to assess the effectiveness of the NCQC and NCHA priority-based strategic approaches, and to determine whether the NCHA and NCQC are able to do work in all the NPP areas that they "The biggest challenge for us ... [is] how do you get the day-to-day caregivers to align and understand what this is all about?"

have targeted, is to look at the metrics connected to the goals after these have been in place for a period of time. To this end, she developed and brought to the NCHA board a set of dashboard measures for its priority areas a year after it approved the NPP-based strategic model.

With its standard team-based approach, both the *2008 National Priorities* report and the idea of aligning with it was shared as a strategic planning conversation with the Collaborative Learning, Clinical Measurement, and the Patient Safety Organization directors at NCQC. One director noted that each of the three directors read the report from their own professional perspectives, and "everyone liked it." The report was also shared with NCQC staff, who saw their current work aligned with and validated by the priorities. They also saw great potential for the priorities to focus their future work and to help them ensure that the Center aligned itself with national priorities. One director said, "It is just great to say that our work maps into a national priority framework. It also helps us to tell our Board that we can't fix everything. Prioritizing is hard for everybody.... There are so many things we can work on, and you can't pull yourself that thin.... We have to set priorities in a high quality manner... we are not going to be effective if we don't set priorities."

Staff indicates that NCQC is staying true to the activities it states in its strategic plan. They report getting calls "all of the time" asking about why the Center is not attending to a certain health or quality issue. The ready answer now is that they are focused on the national priorities set in their strategic plan – and callers respect that.

Changing day-to-day practice

Various NCQC staff said that it is important to make sure the staff at the unit floor level in the hospitals understand the big picture (e.g., national priorities) and see how their own work relates to it. One of the NCQC staff noted that hospital staff "thirst for" this type of information but that "the biggest challenge for us sometimes is making people at the unit levels and at the hospitals levels understand these national priorities.... Many of the hospitals' leaders understand it; we understand it, but how do you get the day-to-day caregivers to align and understand what this is all about?" The NCQC plans to incorporate more information about the linkage to national priorities into its meetings and trainings offered to hospital staff involved in their collaboratives.

According to NCQC's Director, to sustain improvement in areas such as the NPP priority of safety, in is important to address both technical knowledge and skills <u>and</u> culture change. One example of this is the story of the CLABSI (Central Line-Associated Bloodstream Infection) Collaborative. The CLABSI story is one of engaging practitioners as a way to integrate local and national efforts to change the practice of day-to-day care providers and improve the health of North Carolinians.

The NCQC already knew from its North Carolina System for Hospital Infection Measurement data that CLABSI rates were an important concern for healthcare in North Carolina. The NPP priority framework was being discussed by NCQC and NCHA internally when an invitation to join a national CLABSI Collaborative arrived. The priorities confirmed that CLABSI was an important national issue in healthcare safety. This alignment of state and national focus helped NCQC decide that North Carolina should participate in the CLABSI Collaborative. So did the fact that the invitation came from the Agency for Healthcare Research and Quality, the American Hospital Association Health Research and Educational Trust, the Johns Hopkins University Quality and Safety Research Group, and the Michigan Health and Hospital Association's Keystone Center for Patient Safety and Quality—all well-known and well-respected institutions. The collaborative included a specific focus on culture change via a Comprehensive Unit-based Safety Program (CUSP), which is an intervention supporting efforts to learn from mistakes and improve safety culture. For North Carolina, the CUSP component would build on the Just Culture collaborative that NCQC had been leading.

Duke – Raleigh Hospital ICU's technical improvement plus culture change approach was one part of the CLABSI Collaborative effort in North Carolina. At the time of the case study visit, they reported great success. They maintained 15 months at zero central line infections. They incorporated what they learned to address catheter related Urinary Tract Infections and Ventilator Associated Pneumonia.

The CLABSI Collaborative, itself, achieved a 46% reduction in CLABSIs over the 18-month time period. In comparison to baseline, by mid-collaborative, this static group of 40 ICUs had eliminated 51 infections (34% decrease) and 75 more (46% decrease) by the final nine months. These results translate to approximately 18 lives saved using a 15% fatality rate, and \$4.5 million saved using \$40,000 as the extra cost to a hospital for a CLABSI. Fourteen units had zero CLABSIs during the final 9 months and 17 units decreased their CLABSI rates by more than 50% from baseline.

While individual participating hospitals had success, not all hospitals participated and the state rate did not decrease as much as desired. Consequently, at the time of the site visit, NCQC was planning what they called Phase 2 to continue the focus on this healthcare associated infection problem. Influenced by the NPP framework, Phase 2 will include a focus on patient and family engagement. This new addition will integrate elements of professional development with an experiential process designed to be implemented by hospital personnel in their own setting. The process includes doing a defect analysis/root cause analysis on a CLABSI or near miss event with the inclusion of the patient and family.

The NCQC also plans to use safe surgery tools that were developed through the NPP Safety Workgroup as part of their effort to improve their surgical safety and decrease surgical complications. As a NPP Safety Workgroup member, NCQC's Director was involved in the creation of these tools.

NCQC staff said that it is too early to tell if alignment with the NPP framework was an "effective" action for the Center, although in their experience everyone, including the Board and others in leadership positions, embraced it. The staff, themselves, point to the value of prioritizing the NCQC's focus, and being able to model priorities and goals set by national thought leaders for constituents and partners. For proof of the model's success, NCHA's CEO will look for evidence that the goals of the model are met or near to being met. For example, he said that a 46-50% decrease in CLABSI "would be exciting."

Room for Improvement

Six barriers were identified that could impact uptake, sustainability, and effectiveness of the NPP priorities:

- Ways to measure are not fully available. For example, there is an NQF endorsed standard measure for CLABSI but not for other infections. Staff noted that they were "pretty much on their own" in developing specific measures for each. This was especially difficult because they prefer using measures that have been NQF endorsed. They also prefer to use measures that can be nationally compared. Another concern is that measures need to be actionable, of which not all NQF measures are. Further, some NQF measures cannot be re-created by those in the field. For instance, sometimes specific elements cannot be collected because of state-specific Health Insurance Portability and Accountability Act (HIPAA) sensitivities.
- 2. Organizational culture can block adoption of, or action, regarding the priorities. An organization needs to address both the technical issues of a priority as well as the underlying cultural issues. As NCQC's Director noted with the safety priority area, an organization can focus on the technical component, put processes in place, and get short-term results (e.g., regarding CLABSI), "but as soon as you take the focus off of it, unless you change the culture, it's going to drift back to where it was." Sustainability is enhanced by making sure the process is hardwired into the way people approach their work, such as when staff say (and believe) "it is my job to do it right."
- 3. Lack of time or other resources. As NCHA's CEO commented, "The only obstacle is time ... we're always drinking from the fire hose."
- 4. The NPP framework does not directly address hospital financial concerns.
- 5. Having a large list of priorities could be difficult for people to remember. This is partly why the NCHA's strategic plan is first broken down by the three Triple Aims, and then the six original NPP priorities, which "fit nicely" under them.
- 6. The NPP engagement priority has the potential to threaten powerful healthcare stakeholders and create barriers to its own adoption because it challenges the status quo of how healthcare does business. There are perceived legal risks in involving patients and families in various organizational-level efforts, as well as financial costs. Moreover, such changes entail contests regarding retention of authority and control over patient care.

Summary of Key Findings

Key findings from the case study are that:

- The passion, energy, and sense of urgency from leaders and staff at NCQC and NCHA for improving quality and safety and generally transforming healthcare provide an important motivational foundation for moving others to commit to priorities-based work in North Carolina.
- A pre-existing active commitment to quality improvement set the stage for NCQC's and NCHA's awareness and adoption of the NPP priorities.

- NCQC's pre-existing relationship with NQF supported quick initial awareness of the priorities and the related report soon after their release.
- At NCHA and within NCQC, the NPP priorities address a need for focusing limited resources and for re-energizing stakeholders around their roles in improving healthcare in North Carolina and the nation overall.
- Dr. Berwick as a chair of the NPP committee that developed the priorities added credibility to the NPP framework and predisposed NCQC and NCHA to adopt it. His support for adapting the priorities within a NCHA strategic plan provided strong impetus to do so.
- Alignment of NCHA's and NCQC's current work with the NPP priorities validated this work for them. This, along with the potential to focus and align future work with national priorities, sold NCQC and NCHA staffs and boards on the utility of incorporating the framework in the strategic *Model for Transforming Healthcare in North Carolina* document.
- The NPP framework is providing "a blue print" for transformational organization change in the NCHA. It has been integrated with the already valued Triple Aim framework from IHI that specifically calls out a critical element of cost.
- The NPP framework was adopted into the strategic plans of both the NCHA and NCQC to bring a more shared, directed, and nationally aligned focus to their work. Quality is being measured on whether NCQC is meeting its objectives within activities and on the effectiveness of the NPP priorities-based strategic approaches now being taken.
- Specific initiatives that use the NPP priorities to focus their work provide a means for driving the NPP's priorities approach into day-to-day practice and for changing practice.

Issues that merit further consideration include whether and how:

- A lack of benchmarks and NQF-endorsed measures for assessing progress in various priority areas makes setting goals for local programs and measuring their effectiveness difficult.
- The NPP priority for engaging families and patients in their own healthcare may challenge the status quo of how healthcare does business and therefore it may generate powerful healthcare stakeholder resistance to its adoption.

This case study was conducted for the national evaluation of the National Priorities Partnership on May 9^{th} and 10^{th} , 2011 by:

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