ABSTRACT

As healthcare delivery systems increasingly adopt models designed to reward cost-efficient and high-quality care, the demand for expertise in healthcare quality continues to grow. There has been wide variation and limited conformity in the definition of the quality competencies that are essential for healthcare professionals. To address the need for a standard, widely accepted, comprehensive definition of the competencies required for healthcare quality, the National Association for Healthcare Quality (NAHQ) made a strategic commitment to develop a comprehensive healthcare quality competency framework applicable to all practice settings across the care continuum. In this article, the authors describe the development of NAHQ’s Healthcare Quality Competency Framework depicting eight competency dimensions required for success in current and future healthcare quality positions. In addition, they discuss a self-assessment survey tool to identify individual and organizational gaps in the workforce competencies of Healthcare Quality Professionals.

Keywords: competence, NAHQ’s Healthcare Quality Competency Framework, professional development, career advancement, workforce development

Introduction

As the pace and transformation of healthcare continues at an unprecedented rate, so does the complexity of the roles of Healthcare Quality Professionals (HQPs). These HQPs are champions and leaders of quality and safety within the healthcare industry and work in every facet of the healthcare system and at every organizational level. HQPs are indispensable members of the healthcare system, and their contributions are necessary for driving quality to support the optimization of healthcare systems including improving outcomes, increasing capacity, and providing safe, effective, patient-centered, timely, efficient, and equitable care. Achieving the Quadruple Aim necessitates that healthcare leaders focus on Quality-Driven Healthcare. Quality-Driven Healthcare includes (1) leadership commitment to quality workforce integration; (2) workforce training in quality competencies, and (3) provider engagement in quality work. Healthcare leaders should have an awareness of the competencies necessary to perform quality and safety work and use quality professionals with these requisite skills to promote safe care and positive clinical outcomes.

As a leader in the field of healthcare quality and as the professional home for HQPs, the National Association for Healthcare Quality (NAHQ) is committed to advancing healthcare quality, supporting the continued development of the HQP, and ensuring that HQPs are well prepared to continue to serve and lead in quality roles both now and in the future. The association developed the NAHQ Healthcare Quality Competency Framework as a defined set of standardized competencies for the HQP. NAHQ’s Healthcare Quality Competency Framework was built on the foundational work of the HQ Principles, Certified Professional in Healthcare Quality (CPHQ) Practice Analysis, and HQ Essentials: Competencies for the Healthcare Quality Profession (HQ Essentials). NAHQ’s Healthcare Quality Competency Framework was developed to address a defined
gap in quality and safety competencies not yet addressed in quality competency development efforts to date. The knowledge, skills, and attitudes essential for all healthcare professionals holding both quality roles and those in clinical practice roles are addressed in NAHQ’s Framework. NAHQ leadership called for creating a framework for the competencies necessary to engage in professional practice, and at all skill levels for the field of healthcare quality regardless of discipline. The purpose of this article is to describe the methodology used to develop NAHQ’s Healthcare Quality Competency Framework, present the eight foundational dimensions of the framework, and discuss translation and use of the framework in clinical practice and in academic quality curriculum development.

Background

Competency frameworks are organizing schemas that detail the knowledge, skills, and abilities required for effective performance in a defined discipline. These competency frameworks play an important role in the selection, training, assessment, and development of professionals within a given field. In 2016, a study team evaluated 22 position papers containing evidence- or expert opinion-based competencies for “patient safety” or “patient safety and quality improvement.” The study team found limited conformity in quality and patient safety competencies and called for creating a consensus for the competencies necessary to practice at all skill levels for the field of healthcare quality.

In addition to the lack of standardization of competencies in healthcare quality practice, there has been a call for standardization of quality and safety curriculum components in academic program development. Graduate programs in quality and patient safety have been increasing in number since 2006. Today, there are approximately 18 schools of higher education offering master’s to doctoral degrees in healthcare quality. The increase in the number of quality and safety programs has escalated in part due to the demand for trained HQPs to fill roles in professional practice environments. The Commission on Accreditation of Healthcare Management Education is currently working with 11 leading academic institutions and professional associations such as NAHQ to develop accreditation standards for their graduate programs in healthcare quality and patient safety. Several graduate programs, Northwestern University, The University of Alabama at Birmingham, and Thomas Jefferson University now award master’s level credit hours to graduate students who earn the CPHQ certification, thus reducing the number of hours a student needs to complete to achieve the degree. Advancing competency-based training by developing strategic partnerships among academic organizations is an additional building block that defines a profession that is maturing and increases the understanding of the profession. This competency development work recognizes a scientific foundation and the broad diversity covered within this discipline.

A standardized healthcare quality competency framework provides (1) payers, employers, healthcare institutions, peers, and recipients of care with uniform expectations of HQP performance; (2) a clearly articulated breadth of responsibilities delineating the functions of the HQP, and (3) consistent expectations for HQPs therefore reducing variability in practice for individual HQPs from one healthcare setting to another. Clearly established healthcare quality competencies serve as a foundation and guide for quality practice and curriculum development. The future of healthcare depends on a coordinated competent workforce delivering exceptional quality care in a cost-effective manner.

Development of NAHQ’s Competency Framework

The National Association for Healthcare Quality’s Competency Framework was developed in three phases: content development, content evaluation, and user evaluation. A panel of quality experts coordinated with the NAHQ team completed the 3-phased process in a 10-month period. Each of the phases will be described.

Phase 1: Content Development

A framework oversight team was established to conduct the activities necessary for the content development of NAHQ’s Healthcare Quality Competency Framework. The four-member oversight team included two individuals from the NAHQ HQ Essentials development team, a member with CPHQ expertise, and a member with academic expertise in quality and safety. A PhD prepared education specialist served as a consultant on the framework development. Six rapid cycle work groups were convened to iteratively develop the content for the framework.
Using foundational content previously developed by NAHQ, the framework oversight and rapid cycle work groups created a crosswalk and harmonized HQ Principles, the CPHQ and HQ Essentials into a single framework using the Dreyfus Model of Skill Acquisition and Blooms’ revised taxonomy. The content development process included a literature synthesis, a comparative analysis of quality position job descriptions, and expert opinion from individual and group interviews of practicing HQPs.

During the harmonization process, the four domains within the CPHQ content outline and the six areas within the HQ Essentials were combined and reframed as dimensions within NAHQ’s Framework. The six areas of the HQ Essentials: Performance and Process Improvement, Population Health and Care Transitions, Health Data Analytics, Patient Safety, Regulatory and Accreditation, and Quality Review and Accountability were included in the framework as dimensions. The CPHQ domain, Organizational Leadership (renamed Quality Leadership and Integration), was included as a framework dimension. One additional dimension, professional engagement, was included based on analysis of the literature, CPHQ content outline, and stakeholder feedback. The final framework included a definition of each of the eight dimensions, 29 competency statements (Figure 1 depicts NAHQ’s Healthcare Quality Competency Framework), and 486 observable behaviors differentiating three proficiency levels: novice, proficient, and expert to direct professional and curriculum development.

**Phase 2: Content Evaluation**

NAHQ’s Healthcare Quality Competency Framework was evaluated using expert opinion, through a survey process. The survey only included the eight competency dimensions and 29 competency statements. An education consultant designed the survey using a Likert scale and open-ended questions for feedback. Members of the framework development team and non-team members completed the initial review of the survey. The final survey was deployed to randomly selected HQPs listed in the NAHQ database.

After survey completion and analysis of feedback, the framework team concluded that all the competency statements in the framework were relevant and accurately reflected skills required for HQP roles. There were no recommendations for additional competency statements to be included.

**Phase 3: User Evaluation**

A self-assessment tool provides a method for HQPs to translate and use NAHQ’s Healthcare Quality Competency Framework. Upon completion of the framework evaluation process described in phase 2, NAHQ engaged survey experts to design a self-assessment tool to evaluate the consistency of the framework content compared with quality practice. The self-assessment format allowed participants to provide feedback on the framework competencies and the eight dimensions within the framework.

The self-assessment tool was developed using four types of questions: demographics, questions related to attitudes about healthcare, questions related to confidence in their ability to enact certain competencies (e.g., “I am confident in my ability ...”), and questions asking respondents to select a group of observable behaviors that best represented typical job activities that corresponded to categories of (0) do not engage in the observable behavior, (1) novice, (2) proficient, or (3) expert behaviors. The survey was tested by the framework development team and NAHQ staff and then deployed to 1,500 randomly selected HQPs listed in the NAHQ database. Participants were unaware of the categories being assigned. The survey expert and the NAHQ team found the self-assessment tool consistently provided accurate information on competencies relevant to quality practice.

**Limitations**

There are limitations associated with development and evaluation of the framework for ensuring consistent and accurate content. The framework was developed using an extensive literature review and expert opinion. However, there remains a risk that important resources were not identified or used as foundational elements to quality and safety practice. In addition, the number of participants for both the evaluation of the framework content and the self-assessment tool were limited to participants from the NAHQ database. Although, NAHQ’s database potentially contains the largest amount of information and participation from HQPs, the demographics of those providing feedback on the self-assessment survey may not represent the population of healthcare quality professions working across all settings. Furthermore, psychometric testing within a formal research protocol could be performed with a broader sample of HQPs to gain further insights into the tool’s validity and reliability.
Other limitations include both survey-specific and participant factors. The evaluation methodology comprised a lengthy survey process. NAHQ’s content self-evaluation survey contained 28 multitiered questions and the self-assessment; user evaluation survey contained 81 questions, so participant fatigue may have been a factor. The results of both surveys are based on user responses that may be inherently biased by the individual who chooses to voluntarily complete a survey. Self-assessment tools are subjective tools and only provide one person’s view. The respondents who took the self-assessment survey assessed their current work against the competency behavioral levels (novice, proficient, and expert), meaning the respondents could have broader capabilities than what the assessment results show.

**Using NAHQ’s Healthcare Quality Competency Framework**

NAHQ’s Healthcare Quality Competency Framework developed and evaluated by industry experts, gives
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<th>Who</th>
<th>Tips/Actions</th>
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<td>Healthcare Quality Professionals (HQPs)</td>
<td><strong>Communication</strong>&lt;br&gt;• Use as a standard language for clear effective communication among healthcare professionals and social networks to articulate the value and breadth of the Healthcare Quality Profession&lt;br&gt;• Show evidence of required skills within the workforce and showcase professional skills</td>
<td>National Association for Healthcare Quality. Key Workforce Competencies for Quality-Driven Healthcare. 2019. <a href="https://www.qualitydrivenhealthcare.org/workforce-report">https://www.qualitydrivenhealthcare.org/workforce-report</a>. Accessed May 6, 2019&lt;sup&gt;11&lt;/sup&gt;</td>
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<td><strong>Career management</strong>&lt;br&gt;• Self-assess skills—Use the NAHQ workforce self-assessment tool (available summer 2019) to:&lt;br&gt;  o Identify strengths to communicate to others/promote skills&lt;br&gt;  o Identify opportunities for professional development&lt;br&gt;  o Benchmark current self-assessed performance against standards of the proficiency level desired&lt;br&gt;• Set career goals and map a career journey to attain goals&lt;br&gt;  o Identify competencies needed for career advancement in one or multiple competency dimensions&lt;br&gt;  o Create stretch goals for professional growth to aspired level</td>
<td>National Association for Healthcare Quality. Education. <a href="https://nahq.org/education">https://nahq.org/education</a>. Accessed May 6, 2019&lt;sup&gt;12&lt;/sup&gt; National Association for Healthcare Quality Certification. <a href="https://nahq.org/certification/certified-professional-healthcare-quality">https://nahq.org/certification/certified-professional-healthcare-quality</a>. Accessed May 6, 2019&lt;sup&gt;13&lt;/sup&gt;</td>
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<td><strong>Life-long learning</strong>&lt;br&gt;• Create a learning plan for advancement and/or improvement in specific areas identified inclusive of advanced graduate education&lt;br&gt;• Incorporate CPHQ certification, professional development, and/or academic training in the plan</td>
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<td>Healthcare Leaders</td>
<td><strong>Define the organization’s quality structure</strong>&lt;br&gt;• Align quality program/structure and staff scope of work to NAHQ’s HQCF providing a common language and expectations for quality work&lt;br&gt;• Develop an organizational quality chart that supports hardwiring the practice of healthcare quality into the organization at all levels&lt;br&gt;• Coach organizational leaders on the utility and necessity of the framework</td>
<td>National Association for Healthcare Quality. Key Workforce Competencies for Quality-Driven Healthcare. 2019. <a href="https://www.qualitydrivenhealthcare.org/workforce-report">https://www.qualitydrivenhealthcare.org/workforce-report</a>. Accessed May 6, 2019&lt;sup&gt;11&lt;/sup&gt; National Association for Healthcare Quality and Accountable Care Learning Collaborative. The Road to Healthcare Value is Driven by Quality Workforce Integration. 2018. <a href="https://qualitydrivenhealthcare.org/">https://qualitydrivenhealthcare.org/</a>. Accessed March 18, 2018&lt;sup&gt;3&lt;/sup&gt;</td>
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<td><strong>Commit to quality workforce development using the Healthcare Quality Competency Framework to:</strong>&lt;br&gt;• Assess staff quality competencies&lt;br&gt;  o Measure current competency levels using a self-assessment tool and dialog&lt;br&gt;  o Identify opportunities for improvement for each staff member and the team as a whole</td>
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healthcare a common quality language, sets standards and expectations for quality work, and provides accountability by offering a way to assess competency in professional quality practice. NAHQ’s Healthcare Quality Competency Framework serves as a guide not a prescription. NAHQ will be responsible for future evolution and psychometric testing of the framework as the profession of healthcare quality evolves.

NAHQ’s Healthcare Quality Competency Framework articulates the breadth of competencies across the career path of a HQP (from novice to expert) regardless of setting and provides a schema that offers a staged approach to develop competencies and expertise for practicing HQPs. NAHQ’s Healthcare Quality Competency Framework provides a useful resource not previously available to individuals, healthcare leaders, or academic institutions. Table 1 provides tips and strategies for using NAHQ’s Healthcare Quality Competency Framework.

Healthcare Quality Professionals can use NAHQ’s Healthcare Quality Competency Framework for individual career management and life-long learning through (1) planning and development by assessing professional strengths and gaps, (2) guiding and mapping career pathway options, and (3) identifying and working toward advancement opportunities and other career decisions. A self-assessment tool is one of the most active and impactful ways for HQPs to engage in a competency framework and is a great first step to charting one’s healthcare quality career trajectory.

Healthcare leaders can use NAHQ’s Healthcare Quality Competency Framework to define their organizational quality structure and align their departments and teams on what matters most to the organization to help drive success. In addition, NAHQ’s Framework has applicability for human resource functions such as evaluating individual and team assessments and gap analysis, building job descriptions, creating behavioral interviews, and developing performance and succession plans. NAHQ’s Healthcare Quality Competency Framework can be used as a standard against which to measure HQP job performance and to develop, recruit, and hire employees. NAHQ’s Healthcare Quality Competency Framework codifies what makes an HQP successful and provides a framework for communicating to others what HQPs do and how they can contribute to an organization’s needs and outcomes.

Academic institutions and professional development instructors can use NAHQ’s Healthcare Quality Competency Framework to align their core healthcare quality and safety curriculum with the best practices in the quality field and provide their students with the knowledge and skills that

| Table 1. Guide to Using NAHQ’s Healthcare Quality Competency Framework (Continued) |
|---|---|---|
| Who | Tips/Actions | References/Resources |
| | • Create training and professional development plans for healthcare quality staff, healthcare quality department, and the organization | |
| | • Inform the recruiting process: (1) develop position descriptions, (2) create interview questions/scenarios, and (3) candidate selection | |
| | • Create career ladders and succession plans to retain employees | |
| | • Incorporate the tenets of NAHQ’s HCFC into your curriculum | |
| | • Collaborate with other academic organizations and professional associations to reduce variability in quality and safety core curriculum to produce a workforce with a common language and tool set | |

HQP, Healthcare Quality Professional; NAHQ, National Association for Healthcare Quality.
healthcare employers value and are necessary for success in quality roles. Educators from all healthcare disciplines, at all levels from undergraduate to graduate, can integrate the framework dimensions as modules in their curriculum and select and adapt as appropriate for the level of learner ranging from novice to expert. Using NAHQ’s Healthcare Quality Competency Framework as a standard provides students with a clear set of shared expectations for the knowledge and competencies required for success in quality roles both now and in the future.

Conclusion

NAHQ’s Healthcare Quality Competency Framework is a broad and dynamic guide for HQP training and development. It encompasses the diversity of HQP roles and settings HQPs work within across the care continuum.

The National Association for Healthcare Quality invites healthcare professionals to participate in NAHQ’s self-assessment process, which may provide them feedback for professional growth. Healthcare Quality Professional participation in the self-assessment process will increase the amount of data available for study related to healthcare quality competency development. The data may allow NAHQ and other organizations to collaborate in producing learning opportunities that improve the quality of healthcare delivery. NAHQ invites comments and interprofessional collaborations as HQP quality competencies evolve over time to meet the needs of the continuously changing healthcare environment.

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