



TEXAS TECH UNIVERSITY
HEALTH SCIENCES CENTER

Invitational Working Conference on the Science of Competency

*Alliance for Innovation in Nursing Education
Consensus Building Forum*

*Sponsored by:
Texas Tech University and the National Science Foundation*

February 21-22, 2006

Forum Summary

This invitational working conference gathered thirty professionals, representing a broad spectrum of education and service, to advance the science of competency-based education in nursing. The goals of this conference were to begin the process of a) creating consensus among Texas leaders in nursing practice, education, and administration on the meaning of competency and best practices for measuring competency, b) identifying priorities for a functional electronic competency management system, c) creating common understanding among these leaders about existing and emerging competency models, and d) establishing a preliminary framework for a National Invitational Working conference on the Science of Competency-Based education within the coming year. The highlights of both large and small group discussions are summarized below.

The Meaning of Competency

Definitions

Following spirited small-group discussions focusing on explicating the nature of competence and competency in nursing the following working definitions emerged.

Competence – a competent nurse is able to independently and reliably integrate knowledge (evidence), interpersonal, and technical skills to provide safe, effective and ethical care in role and context specific situations.

Competency – role and context specific aspects of nursing care that result in competent practice.

Consistent with the IOM report, there was agreement that safety at the point of care must be the focus of efforts to promote or assess competency in nursing education and practice. Furthermore, it was agreed that identified competencies must be empirical (observable), valid and reliable, and assessment of competencies must be user-friendly.

Desired Outcomes of a Competency Assessment System

There was consensus among participants that, ideally, the development of a competency assessment system will assist schools of nursing to assure they are preparing students to practice competently in contemporary health care systems and will assist healthcare organizations to promote and monitor the competency of those charged with providing care in particular settings. Competency assessment, therefore, is one way to promote patient safety and quality of care. While patient safety is the ultimate goal, an effective competency assessment system will also assist administrators and researchers to document nurses' contributions to care outcomes and to provide evidence to demonstrate best practices of nursing care in particular roles and contexts. Importantly, it was noted by participants that competency is an integral part of quality assurance initiatives that assess structure, process and outcome (Donabedian, 1990) although it is not always obvious. The development of a competency assessment model will allow the relationships between competency and the structure, process, and outcomes of care provision to be documented and monitored.

There is increasing recognition of how efforts to identify key nursing competencies and to develop competency assessment systems are harbingers of a new nursing education and practice. That is, the evolving contexts in which care is provided and the complexity of clients being served are raising new questions about the nature of nursing practice, the ways in which students can best be prepared for such practice settings, and how current staff can continually update their knowledge, skills, and abilities to provide competent care. It is imperative that a competency assessment system be forward-looking rather than merely reinforcing current knowledge, skills and abilities. Nurses must be prepared differently to practice competently in future healthcare systems. This will require that nurses across settings (academic and service) re-think assumptions such as what constitutes fundamental knowledge, skills and abilities in nursing.

Initial Challenges

While advancing the science of competency in nursing education and practice is a priority among nursing leaders in Texas, there was consensus among participants that several challenges must be taken into account as a system of competency assessment is developed.

1. Competency evolves over time with clinical experience and the advancement of clinical knowledge. This evolution has been well documented by Benner, Tanner & Chesla (1996). Confidence (self-efficacy or agency) is closely aligned with competency and similarly evolves over time. There is a reciprocal relationship between competency and confidence – both are necessary for safe practice. An effective competency model must assess for changes in competency and confidence that occur over time (across nursing courses) and throughout a nurses' career.

2. The context in which care is provided must be reflected in a competency assessment system. It may be possible to delineate fundamental or essential competencies that are applicable across settings/ populations while allowing some degree of flexibility for competencies required for setting/ population specific care. Finding the right balance will be important to the success of the assessment system throughout the state.
3. Interdisciplinary practice is a priority for assuring safe care (IOM, 2001). As a competency assessment system is developed it will be important to balance the unique perspective and contributions of nursing as a discipline with those practices that are truly interdisciplinary, those that are emphasized by other disciplines and those that promote the spirit of interdisciplinary care. In this sense, competency in interdisciplinary care is more complex than merely the knowledge of specific disciplinary roles, communication among disciplines, or sharing information. Perhaps a new conceptualization or definition of interdisciplinary practice is warranted in relation to competency assessment.
4. The importance of including aspects of emotional intelligence in a competency assessment system was emphasized. These aspects, while difficult to measure, assure the inclusion of important aspects of nursing such as caring, being-with, and coaching (Benner, 1984) and prevent an inadvertent focus on technical skills or interventions.
5. A common lexicon of terms is needed to assure portability of best practices across types of educational programs and care delivery settings. This will also facilitate a) the measurement and monitoring of competency development and maintenance via evaluation and research, and b) the development of a library or repository of learning and assessment objects for use by academic and service-based educators.

Assumptions Challenged During Consensus Building Process

1. **Competency can be validated “once and for all.”** Participants recognized the importance of a competency assessment system to account for competency as a dynamic and unending process in the discipline – *continuing competence*. Challenging this assumption also raises questions concerning faculty development and faculty preparation. That is, how will faculty demonstrate continuing competency in clinical practice? Similarly faculty preparation programs will need to address competency assessment and the teaching practices that can promote and evaluate the evolution of students’ abilities to practice competently.
2. **Newly hired graduate nurses are competent to practice.** This assumption reflects a conceptualization of competency as a static rather than dynamic process. It was recognized by participants that competency evolves over time with experience and must be continually evaluated, particularly as nurses practice in new settings. The evolution of expertise described by Benner and colleagues (1996) will be helpful in identifying differing expectations for competency that reflect experience in practice and the development of knowledge, skills and abilities that occur overtime. The important issue is to identify the level of competency expected upon graduation (entry into practice) and how each nurse’s competency in practice develops over time.
3. **There is one best way to teach students to achieve competent practice.** This assumption reflects faculties’ desire for certainty or assurance that how they are teaching will necessarily result in students practicing competently. Persistently challenging this

assumption will prevent reform and innovation in the discipline from being thwarted because of a fear of failure. Indeed, it may be appropriate to assume that preparing students to practice competently in an evolving healthcare system will require a similar evolution in curriculum and instruction. New pedagogies are being developed that will assist teachers to persistently challenge the assumptions embedded in their day-to-day teaching practice and to re-think problems without blame-shifting (either between teachers and students, or academe and practice).

4. **Competencies should reflect medical specialties (ie: Med/ surg, OB, peds).** Participants acknowledged that nurses practicing in differing specialties may need to develop different competencies, yet there are also core competencies required for competent practice irrespective of settings or specialty. The group acknowledged the danger of developing competencies that are “too basic” to account for the complexity for nursing practice or “too specific” to be broadly applicable to nursing practice throughout the state. The group felt strongly that a competency assessment system should reflect a *midrange* of knowledge, skills and abilities.
5. **Learning is an individual activity.** At the point of contact, nursing care is an individual activity and the individual competency of each nurse can be assured with a competency assessment system. However, there was acknowledgement that nursing practice is also a community activity and discussion ensued related to assessing the competency of groups (units) as another mechanism to promote patient safety and quality of care.

Concept Clarification

As participants explored the meaning of competency and the challenges of creating a statewide competency assessment system, it became apparent that several concepts were ambiguous and would need to be clarified and agreed upon over the course of the project.

1. **Interdisciplinarity** – While the literature reflects growing consensus on the importance of interdisciplinary practice, the nature of interdisciplinarity remains somewhat ambiguous. For example, in many cases interdisciplinary practice is taught as a content area (ie: students are taught what interdisciplinary practice is and the roles different disciplines perform). This does not necessarily reflect a true spirit of collaboration and cooperation or the abilities of different practitioners to work together effectively and efficiently. Further work in this area will be needed to develop a common lexicon of competencies that assess interdisciplinary care such that the competencies in each discipline are augmented by interdisciplinary competencies without losing the unique contributions of any particular discipline.
2. **Confidence** – as previously stated, confidence is vital to competent practice. Important aspects of confidence were discussed including realistic self-assessment, self-efficacy and agency. Clarifying this concept is imperative if it is to be assessed in a reliable and valid manner. The group also explored issues related to those teaching practices that may promote or inhibit a students’ confidence. For example, rarely is “I don’t know” or “get help” the best answer during evaluation or testing sessions even though such responses are often critical to patient safety. To practice safely, nurses must have the competence and confidence to recognize when they need help and to seek it out in a timely manner.

3. **Fundamentals or basic care** – as the healthcare system and the complexity of nursing practice evolve, what constitutes “fundamentals” in nursing comes into question. There was consensus that fundamentals includes basic patient safety issues as well as the abilities to “know what I don’t know, what I need to know, where to find the information I need, and how to evaluate and use it in planning and providing care.” It was also acknowledged that ultimately each student (nurse) is responsible for attaining and maintaining “fundamental” competence in practice with educators being responsible for supporting these efforts. There was consensus that current conceptualizations of “fundamentals” are insufficient, thus the concept of “fundamentals” will need to be reconceptualized as *the first step* toward competency.

Moving Ahead

A great deal of effort has already been expended across the state of Texas to identify competencies related to various levels of practice and education and there are competency assessment models that are currently being used and refined in specific settings. Identifying a “starting point” for creating a statewide (nation-wide) model of competency assessment is daunting. Choosing a starting point is difficult. One place to begin is patient safety. Another is with 10 high-risk, high-volume conditions. While no decision was reached, there was consensus that regardless of the starting point the *entire* role of the nurse should guide these efforts and, as stated previously, the system that is developed should be future-oriented to account for how nursing will evolve over time. Other important considerations in moving ahead identified by participants include:

1. Competencies must be evidence-based. That is, the identification of competencies should be based on the best available evidence or best practices of nursing.
2. The competencies that comprise this assessment system must avoid minutia or a focus on particular skills or “pieces of knowledge” and rather focus on the extent to which the nurse integrates knowledge, technical and interpersonal skills to practice competently.
3. Consideration must be given to whether there are competencies that can be considered “mastered” and therefore no longer assessed. Such “mastery” may occur when a particular competency is replaced with a higher level competency or when a simple competency is incorporated into a more complex competency. It will be important to avoid both overlooking particular competencies (or assuming they have been “mastered”) and conducting repetitive assessments of competencies that are part of many complex skills and abilities.
4. It is important that the competency assessment system reflect competencies beyond basic patient safety (the purview of State Boards of Nursing) but not to the point of “being all things to all people.” Identifying statewide competencies must reflect a realistic standard of nursing practice.
5. The competency assessment system is a way of documenting what we DO know and CAN do and is not necessarily adding more work to students, teachers, or clinicians. It does, however, provide a consistent, reliable and verifiable record of competencies and expectations to guide decision making.

Issues not addressed

As development progresses there may be merit in considering the perspectives of patients/ clients in terms of competent practice (ie: how would patients describe competent practice?) Also, while there is agreement that competencies must be empirical and measurable, there is also acknowledgement that some competencies may have non-empirical components (ie: noticing subtle changes in patient status). As the system evolves, can these aspects be accounted for? The ethics of care provision, while incorporated into the definition of competence must also be accounted for in assessment, specifically issues such as non-participation, discrimination, and prejudice.

Evaluating Competency

Participants agreed that evaluating competency should reflect several central premises.

1. The competencies to be evaluated must be standardized, reliable, objective and evidence-based measures of role and context specific aspects of nursing care that result in competent practice. These competencies should be known by students/ nurses in advance. That is, competency assessment should not be seen as a ‘policing’ of practice but as a way of insuring nurses’ continuing competence. This conceptualization can be promoted if what students/ nurses will be assessed *for* and *how* they will be assessed is clearly communicated and widely discussed in advance of the assessment. A rubric, reflecting various levels of competency over time, would assist in these efforts. The Texas Nurses Association is currently developing a rubric which was reviewed positively by participants.
2. The competencies to be evaluated should be linked to institutional outcomes. As previously stated, there was some consideration given to having a small percentage of competencies in the assessment system be mission-related competencies that organizations can specify. One suggestion was to create an 80/ 20 percent division so that each institution could contribute 20 percent to the system to reflect their context. This suggestion reflects the belief that evaluating competency should reflect the context in which care is provided without substantively changing the competencies expected across the state (80%).
3. The competencies to be evaluated should balance specific roles and populations served (career competency). That is, competency for generalist practice may be different from those for specialty practice just as competencies evolve over time with experience. Again, a midrange of competency is seen to be the target.
4. Competencies should be action oriented. For example, assessing a particular competency may include making judgments or considering options but must ultimately result in action that is observable and measurable in order to be evaluated.
5. Communication is an important aspect of competency. Evaluating one’s competency related to communication in practice should include the actual behavior as well as the timing (ie: communicating to the right person at the right time).
6. Evaluating competency at the point of care must include the nurse’s ability to discern the critical information to be gathered as well as interpreting that data and taking appropriate action. Appropriate action means that the action is within the nurse’s scope

of practice, reflective of the patient's needs or desires, and does not cause harm to the patient or others.

7. Multiple methods of assessing competencies may be incorporated into the model (ie: observation, simulations, and scenarios). Because developing scenarios is labor intensive, part of the system may be creating a repository of possible scenarios or linking to other sources that currently archive particular patient scenarios (AHRQ, NCSBON).
8. Consideration will need to be given to the frequency of assessment (ie: all competencies on an annual basis or some competencies biannually with others annually) and the extent to which clinical competency is required for roles not primarily involved in patient care.

How competencies can or should be evaluated was discussed at length. Of particular concern was the need to evaluate nurses' competency in responding to crisis situations. Such assessment would provide teachers/ administrators with data reflecting the nurses' ability to work under pressure and in unpredictable situations. The need to evaluate competency in this area will, of course, need to be balanced with patient safety. High fidelity simulation may provide a mechanism for both teaching and evaluating these competencies.

Once the competency assessment system is developed, consideration will need to be given to planning for such assessments. Several models currently exist that can be investigated that include self-assessment, peer-assessment, instructor-assessment, or "outside" assessment (Excelsior model). Similarly, the evaluation plan will have to address how many opportunities a student/ nurse has to demonstrate or document competency and which competencies are sustained versus those that must be repeatedly verified. Root-cause analysis models may be useful to investigate as well so that the validity of competency assessments can be assured. In other words, this analysis will allow distinctions to be made between when an individual is not competent in a particular area versus a system breakdown that leads to a breach of competency.

Other Considerations

Although there was a great deal of enthusiasm for and momentum toward moving this project forward there were several "sticking points" that participants wanted to not lose sight of or that warranted further conversation as the project progresses.

1. What is the cost/ benefit of any proposed design for competency assessment? It will be important to monitor the extent to which the outcomes achieved by the competency assessment warrant the investment of capital and resources. Data regarding cost/ benefit will also be an asset as the project moves to a national scope.
2. Identifying *midrange* competencies will be challenging and keeping the number of competencies to be assessed manageable will be important.
3. It will be important that the trust and momentum established at this working conference be maintained and extended.
4. Identifying competencies is, perhaps, less difficult than identifying the critical elements that produce the competency.

5. While there is consensus that competencies should be evidence-based, there are many aspects of nursing for which there is little or no evidence. Determining how to proceed in these situations will be important.
6. It will be crucial to keep the multiple settings and contexts throughout the state in mind as competencies are identified, critical elements described and evaluation procedures developed. The system needs to be specific enough to be useable and to insure competency while also being broad enough to account for urban and rural settings, large and small schools, different levels of practice and so forth.
7. The consensus building that occurred during this workshop will need to be extended across the state. This consensus process will be helpful both in soliciting the input and ideas of nurses from many contexts as well as in the adoption and utilization of the “product” of this work. Ultimately, this work will promote patient safety and quality care across Texas.

Participants reported on projects in which they or their organizations are currently involved related to competency and the assessment of competencies. The impact of regulation on the delineation of required competencies was also explored. Discussion ensued regarding the importance of this work occurring across the state and the extent to which this project can draw upon and extend them. While there is both a need and desire to look toward a national system of competency assessment, the group agreed that the initial focus on the state of Texas, while still daunting, was more manageable.

Dissemination will be a key factor and the forum concluded with discussions related to the feasibility and timing of a national conference and to producing a special issue of the *Journal of Continuing Competency* (formerly Journal of Continuing Education in Nursing). Participants were grouped and assigned topics. It was agreed that first drafts would be due April 15th.

Representatives from Cerner reported on the wealth of information they had received from small group sessions related to the requirements of an electronic environment for competency assessment. While issues remain as to security, access and storage, the development of this system was seen as very positive to the group and an integral part of competency assessment systems of the future.

The forum concluded with enthusiasm high and the commitment of all participants to continuing efforts to move this project forward. A list-serve and web-site will be developed at Texas Tech to provide enhanced communication among participants.