Working Conditions of the Nursing Workforce Excerpts from a Policy Roundtable at AcademyHealth's 2003 Annual Research Meeting

The role of nursing in the delivery of health care has emerged as a complex and cross-cutting issue ripe for inquiry and multidisciplinary research. Indeed, problems in the nursing workforce have risen high on the agendas on many influential organizations, including the American Academy of Nursing, the Institute of Medicine, the National Quality Forum, The Robert Wood Johnson Foundation, and others. In an effort to clarify current research issues and advance an agenda for future investigations, Dr. Peter Buerhaus at Vanderbilt University organized a round table focused on the working conditions of the nursing workforce at the AcademyHealth 2003 Annual Research Meeting in Nashville, Tenn. Chaired by the University of California, Los Angeles, School of Public Health's **Jack Needleman**, the "Working Conditions of the Nursing Workforce" roundtable proved to be a provocative exchange of views among researchers and users of research. Participants shared background about their role in advancing the research, identified gaps in current research, and suggested specific areas for further research. What follows is an edited transcript of the Roundtable that, in addition to Dr. Needleman, included **Ellen Kurtzman**, National Quality Forum; **Barbara Mark**, University of North Carolina, Chapel Hill; **Lori Melichar**, The Robert Wood Johnson Foundation; and **Donald Steinwachs**, Johns Hopkins University.

THE NEED TO UNDERSTAND THE INTERFACE BETWEEN RESEARCHERS AND USERS

Jack Needleman is Associate Professor at the University of California, Los Angeles, School of Public Health, Department of Health Services, and Adjunct Associate Professor of Economics and Health Policy in the Harvard School of Public Health, Department of Health Policy and Management. He was asked to set the context for the discussion, moderate the session, and introduce the speakers.

Strikes, shortages of nurses in hospitals, rates of entry into the profession at levels far lower than are needed to sustain the current level of service for an aging population, have become major issues for policymakers thinking about the nursing workforce and its role in health care delivery. Critical to addressing these issues is the current working environment for nurses and its effect on the willingness of people to enter and remain in the profession, and the ability of nurses to provide quality care to the patients in their charge.

This session discusses using research and examines efforts by government, providers, payers, and foundations to understand the findings of researchers and to apply it in the context of shaping and moving forward policy and programmatic agendas. As researchers, our goal is to produce usable and used research. Because nursing has become such a critical issue, nursing and research related to it are important in and of themselves. But the experience of those who are trying to apply the research on nurses' working environments and patient care offers a test case for thinking about how investigators can make research more usable. In that sense, this session goes far beyond the issue of nursing or even hospital care and patient safety, but extends to the more complicated interface between the research and the user communities.

Three questions are typically asked of research in the policy- or decision-making process: to describe the environment (the status of the population and the effect of current policies and programs); to explain the dynamics of the system (how different variables in the environment relate to or influence others); and to predict how program and policy changes are likely to affect the environment and population. As researchers, we hope our work will be used to address such questions. For policymakers and other decision-makers, the ability of research to address these questions is the measure of its usefulness. Using research on working conditions of nurses as a particular focus, panelists will describe the activities that are underway from the organizations they represent to understand nurses' working conditions and use this understanding to improve patient care. I have asked them to provide an assessment of how useful or usable they have found the research; to describe some of the problems they have encountered in using it; and to make some recommendations to the research community on how research in this area can be more useful.

ROLE OF NURSING IN PATIENT SAFETY

The AcademyHealth panel started with comments given by Donald Steinwachs, professor and chair of the Department of Health Policy and Management at the Johns

Hopkins University Bloomberg School of Public Health. Steinwachs has joint appointments in the Department of Mental Health in the Bloomberg School of Public Health, the Department of Medicine, and the Department of Psychiatry and Behavioral Sciences. He is co-chair, with Ada Sue Hinshaw, Dean of the University of Michigan School of Nursing, of the Institute of Medicine (IOM) Committee on the Work Environment for Nurses and Patient Safety. Dr. Steinwachs was asked to speak not about the substance of the IOM committee's effort, which was embargoed at the time of the roundtable, but what he learned about the research base and our ability to use it.

The IOM committee was established in response to a request by the Agency for Healthcare Quality and Research for a follow-on to the two IOM reports, *To Err is Human* and *Crossing the Quality Chasm*. Those reports noted that, within inpatient settings, 40,000 to 90,000 people died each year due to mistakes and errors suffered in the course of their care.

The committee has used research to study nurses' working environment. When we talk about environment, a number of areas come up, including management, leadership, and organization. The committee is focusing on inpatient settings and long-term care settings and issues related to staffing, work hours, design of the patient care units, and the role of technology. There are other issues, but these are the most relevant to the work environment.

As you know, IOM reports are based on what the evidence reveals. They are the product of an expert group that synthesizes and reports back on the evidence. Where there is no evidence, the best the report can do is point to the need for more research. We hope that the report will come out with strong recommendations regarding areas in which there is strong evidence. We are in the final drafting stages, and you should see the report and recommendations by the end of 2003.

It is good news that the research on patient safety in inpatient settings is growing. It is not as clear what the role of nursing is in patient safety, in part because we have yet to really understand how the team, and elements of the team providing care, either are or are not working together.

Peter Pronovost is leading the implementation and evaluation of an AHRQ-funded national incident reporting system in Intensive Care Units that is trying to use the approach that the airlines have taken toward voluntary reporting of near misses. Rather than waiting until something serious happens that actually hurts the patient, one tries to use what is learned from near misses. Early data identify issues related to organizational culture around participation and willingness to report, which applies to the multiple disciplines generally

involved in errors occurring within inpatient settings. The opportunity to observe near misses may fall more to nursing in their function of monitoring and assessing patients, but there are also many other contributors. One would like to think that all professions would be contributing actively to this information base and to prevention strategies.

LESSONS FROM OTHER WORK ENVIRONMENTS

We also found that, in order to examine some of the issues that we want to learn about, we had to reach outside of health care and nursing research. The Committee sought information and received testimony on management and leadership research outside of health care. For example, there has been outstanding research done on fatigue, most of it not in health care, but in the airline industry, the military, and places where performance is the key issue in understanding how fatigue creates detriments in performance. This is just one example of where we have had to reach beyond our industry. Part of what the committee is learning is that there is value in understanding research on work environments more generally. Certainly research very specific to nursing is needed, too.

A RESEARCH AGENDA TO UNDERSTAND THE FACTORS INFLUENCING PATIENT SAFETY

Greater understanding of how to organize and manage patient care to improve patient safety is critical. In nursing, it is not just the nurse by him or herself, but the nurse in the work environment. Focusing on one profession helps sharpen our thinking about what needs to be done. However, improving care is a collective effort that involves other disciplines and considerations beyond nursing.

Some of the people on the IOM panel have contributed to our staffing research in very significant ways and we have become much more sophisticated in our thinking. We haven't gone as far as we need in helping people understand staffing options and alternatives. For every hospital in different situations facing opportunities and difficulties in recruiting and retaining nurses, what are their options to staff adequately and maintain patient safety? The Committee is focusing on inpatient settings, not only because they are high-risk areas for patient safety, but also because they have

been the locus of much research. In a recent AHRQ-sponsored patient safety briefing on Capitol Hill, the point was made very clearly that we don't have good research from outside the hospital setting. And yet, we are moving more and more patients into the community and the role of nursing in the community is growing.

I have a general concern about health services research and I think it applies here, too. A lot of what we do is superb at defining the problem; trying to understand things that correlate with the issues and the interactions. We need more research, however, that tests interventions that are solution-oriented. Otherwise we understand the problem, we understand where to focus attention, but we are not helping decision-makers say, "well, what's the best alternative," or to rule out certain actions as those that you would never take.

Again, there is the issue of the team. While there is some research on team and team effectiveness, there is much less research in health care than in other kinds of businesses and organizations. We need more because we are going to be forced to function more as teams, even though it is difficult sometimes to get health professionals to work in that way.

We need to change our orientation to design failsafe systems, instead of systems that just have lower rates of mistakes and errors. They need to be robust. They need to be affordable. There are concerns about the affordability of some of the solutions we are coming forward with and we need to address that straight up.

We are, in a sense, slaves to our history and you can't ignore our history. However, if we were trying to redesign the health care system and the roles of different health professionals in that system, how would we define them today? Attention must be paid to medical practice acts, nurse practice acts, physician practice acts, and state pharmacy practice acts. We need to think more about what we need to have the kind of delivery system that is part of either addressing patient safety or, as *Crossing the Quality Chasm* talks about, providing ongoing care for chronic disease.

SETTING VOLUNTARY CONSENSUS STANDARDS FOR NURSING CARE PERFORMANCE

The next member of the AcademyHealth panel was Ellen Kurtzman, Senior Program Director for the National Quality Forum (NQF), a private, non-profit membership organization created to develop and implement the national strategy for quality

measurement and reporting. Ms. Kurtzman is leading an effort funded by the Robert Wood Johnson Foundation (RWJF) to review the literature and achieve consensus on evidence-based measures of nursing quality. Since that project has just begun, Ms. Kurtzman was asked to describe NQF's standard-setting process, the RWJF project's objectives, and to outline a research agenda.

Kurtzman began by noting that the National Quality Forum was founded in 1999 with an emphasis on standardizing measurement and reporting in health care. Consistent with our mission,¹ we have two key competencies. One is standard setting and the other is health care measurement and reporting. We combine those in unique ways. Our work is based on a number of features that enable rapid diffusion of the output of our work.

We have 180 members who are health care organizations that reflect the diversity of health care stakeholders. Our membership is open and we represent all segments of health care. We have a board of directors and four member councils which represent providers and health plans; research and quality improvement organizations; consumers; and purchasers. Each of the four councils gets an equal voice in decision-making and in policy-setting, which leads to some lively debates. We also use a formal consensus-setting process, not unlike federal rulemaking. It has certain decision points at which all of our members and the public are involved.

NQF members have key roles, but the public also has a key role. Part of our process involves a public comment period. Our consensus process and founding principles also incorporate all the required elements of standard-setting under the National Technology Transfer and Advancement Act of 1995 (NTTA). That results in adoption by the government of NQF-endorsed consensus standards before setting new ones or adopting standards that have not gone through formal consensus. The result is high impact work that actually influences policy fairly rapidly.

Similar to federal rulemaking, the first steps involved convening a Steering committee, a group of experts who represent the project content, including experts from consumer and purchaser organizations. The work of the Steering Committee results in a set of recommendations which are detailed in a draft consensus report. The draft goes through a 30-day public comment period, where we invite the public, our members, and non-members to comment on the recommendations. After comments are reviewed, a final version of the consensus report is produced and made available to NQF members for voting through a formal balloting process. The board reviews the

results of the voting and then considers and endorses voluntary consensus standards.

NURSING CARE PERFORMANCE MEASURES PROJECT

Sponsored by The Robert Wood Johnson Foundation, this project has three objectives, to:

- Identify and endorse a set of evidence-based measures for evaluating the quality of nursing care in hospitals that will improve both nursing and patient outcomes. A subset of measures will be used for public reporting to inform the selection of providers.
- Identify a framework to measure nursing care performance with particular attention to nurses' contribution to effective care teams.
- Identify and prioritize unresolved issues and research needs.

The project is scheduled for completion and voting by the end of 2003.

NQF MEASURE SELECTION APPROACH

By working through a six-step process², the Steering Committee will start with a large number of candidate measures and eventually reduce the number to those meeting Committee-determined thresholds. Some of the criteria set by the Steering Committee call for measures that are scientific and evidence-based; measures that are in widespread use or collected for other purposes, thereby reducing burden; measures that are in the public domain; and measures that are important leverage points in ensuring our health care system is safe, beneficial, patient-centered,³ equitable, timely, and efficient.

The National Quality Forum doesn't develop measures; it endorses measures for standardization. To inform our deliberations, we examine a number of sources, including the Joint Commission on the Accreditation of Healthcare Organizations (JCAHO), the American Nursing Association, the IOM, the federal government, and others. In addition, we have conducted a "call for measures" that is an open request to the nursing research and performance measurement communities to identify measures we might have overlooked.

ROLE OF RESEARCH IN ENDORSING PERFORMANCE MEASURES

We will look at the research to identify suitable measures based on the decision rules that the Steering Committee has set. We have looked at more than 300 articles to date and identified more than 150 candidate measures. Despite the large number, I anticipate significant gaps in priority areas, like the function of nurses on nursing teams.

We subject all measures to rigorous evaluation. For example, we carefully examine numerators, denominators, inclusions, exclusions, and risk adjustment methodologies used to develop each measure. Based on the 300 articles reviewed to date, there is much discussion of measures without a lot of specificity around those elements, which makes it almost impossible to define and evaluate many measures.

We will rely on the research to address the sufficiency of evidence related to our evaluation criteria. All measures are screened for their importance, scientific acceptability, usability, and feasibility and we look to the research to document their sufficiency based on those criteria. In fact, most of the research that we have reviewed, is silent on those criteria, making it almost impossible for the Steering Committee to do a full-scale evaluation of measures.

Lastly, since one of our objectives is to identify measures for public accountability, we will use published research to document effectiveness of reporting measures to the public to improve quality and to impact selection, and actual reporting strategies for these measures. To date, it looks like there is an absence of research in this area.

PERFORMANCE MEASURES RESEARCH AGENDA

At this point in our project, an actionable research agenda might look like this:

- Improve the precision and specificity of measures in the literature, especially around those areas addressed by the evaluation criteria adopted by the Steering Committee (i.e., importance, scientific acceptability, usability, and feasibility). Without evidence, it will be impossible to select measures.
- Study the role and effectiveness of nursing care teams. As Don mentioned, it is hard to pull out the role of a nurse when they are

integrated into a care system and yet, especially in health care and nursing care, there is not much research to date speaking to the nurse's effectiveness in that capacity.

- Evaluate the contribution of advance practice nurses on improving patient safety and health care outcomes.
- Investigate the relationship between nursing variables beyond staffing and quality (e.g., educational levels, satisfaction, and burnout) to patient outcomes and patient safety.
- Develop measures of nursing process and intervention as they relate to patient outcomes.
- Expand data collection methods, data sources, and risk adjustment methodologies to enable the development of more robust and sophisticated measures.

TRANSFORMING CARE AT THE BEDSIDE

Next, the panel continued with a presentation by Lori Melichar, a labor economist and a program officer in the Department of Research and Evaluation at The Robert Wood Johnson Foundation (RWJF). The RWJF has recently made a major commitment to studying and improving the status of nursing as it relates to patient care in the United States. Dr. Melichar coordinates research, evaluation, and performance measurement efforts of the Foundation's team working to improve the quality of care provided by nurses. Dr. Melichar was asked to offer her perspective on trying to develop a research agenda and the usefulness of the research she has encountered.

The mission of The Robert Wood Johnson Foundation is to improve the health and health care of all Americans. It has a long history of funding programs and research on nursing. Last year, a nursing work group began thinking about ways that our team might contribute to efforts to improve the working environment for nurses. This year the status of what was formerly called the Nursing Work Group has been upgraded reflecting the feeling of the Foundation's Board that nursing should be a priority. In addition, the implementation of a new impact framework calls upon all teams to be more strategic in their program, research, evaluation, and communications efforts to track their progress toward achieving their objectives.

The RWJF Nursing Team's vision is to transform the care provided at the bedside. Our strategic objective is to fund efforts to help hospitals improve

performance on key nursing-related indicators of quality of care by 2013. Though we have some idea of what some of these indicators may be, due in large part to the literature to which many of you have contributed, we have yet to finalize our list and are looking to the NQF efforts that Ellen described to select our specific performance measures. In the meantime, we have developed a framework to help guide our efforts towards achieving this objective in the context of the work that others are doing.

RWJF OBJECTIVES

Given the efforts of other funders and looking to where we might have the most impact, we have chosen to focus on improving the environment in which nursing care is delivered to patients in hospitals. We believe that the work we do in this area will lead to:

- Increases in nursing satisfaction,
- Decreases in the nursing shortage, and
- Improvements in the quality of care provided to patients at hospitals.

This belief is based on assumptions inherent in our logic model and my job is to validate these assumptions through research and evaluation. For example, our logic model assumes that efforts to improve the working conditions of nurses that increase the satisfaction level of nurses working at hospitals will lead to increased quality of care in hospitals. Though suggestions of correlations abound, I have yet to encounter a piece of research that establishes a causal relationship between nursing satisfaction and the quality of care provided to patients and hospitals.

Though limited resources require us to focus, at least initially, on the conditions for nurses who are working in hospitals, this is not to say that we're not interested in the well-being of nurses who are working in other environments. In fact, we hope that what we learn from our efforts will be applicable and influence other areas as well.

ADDITIONAL RESEARCH NEEDS

A small sampling of the research questions to which the RWJF Nursing Team would like answers include the following:

- What evidence is needed to convince CEOs, policymakers and other decision makers to improve the working conditions for nurses? What is the business case for change?
- What number and combination of individuals comprises the ideal nursing care team?
- What impacts do various forms of information technology (IT) have on the satisfaction of nurses and the effectiveness of nursing activities?
- What are the barriers to implementing IT and what are the barriers to having IT used effectively by nurses?
- What combination of human resources practices, benefits packages and organizational improvements have the biggest impact on reducing nursing turnover?
- What makes magnet hospitals different?
- What are the determinants of across-hospital variation in patient outcomes and working conditions?
- How has the skill set of those who provide nursing care changed over time as women have had alternative employment options?
- How does the use of traveling nurses and nurses who float among hospital units affect the effectiveness of care teams in hospitals?
- What can be done to attract faculty to nursing education programs?
- How should the curricula be changed to better educate nurses for real world practice? What skills must nursing schools impart to increase the likelihood that new nurses will remain on the job after two years?

Some of these questions imply research products that will involve statistical and econometric analysis of secondary data or controlled experimental methodologies that will yield articles suitable for publication in peer reviewed journals. Other questions can be answered through what we're calling "targeted research projects," which are small-scale projects with quick turnaround that may precede, complement, or substitute for larger research efforts.

Finally, the Foundation will fund evaluations of our programming activities and the activities of others, so that we can inform future RWJF programming, the efforts of other funders and policymakers.

Though long, the list above is only a subset of the questions we think are most important and need to be answered. Given current and projected future budgets, we will not be able to fund even half of the above research projects.

To guide allocation of scarce resources, our team has settled on prioritized criteria for research projects, and will fund those that will generate the greatest:

- Impact on RWJF Team Activities;
- Impact on the field;
- Usefulness;
- Feasibility;
- Bang for the buck;
- Comparative advantage; and
- Potential for partnerships.

STRENGTHS AND BARRIERS TO GOOD RESEARCH

Strengths include the fact that the nursing literature to date is broad in scope and has been developed through contributions of researchers of many backgrounds and disciplines. The results can be translated into many kinds of dissemination products to target those who should have the information. Attention from the media has made dissemination earlier and easier. Many researchers are drawn to work to inform efforts to ease the current and future nursing crisis because they think it is the right thing to do.

Barriers are that there are so many gaps and so many questions. This is a boon for researchers, but it is frustrating to program officers who want to just get out there and start making changes. We need longitudinal data to analyze within-hospital variation and nursing inputs and outcomes. Until the NQF process is finished, there is no standardized list of nursing measures. Funding is scarce and often the researchers have to deal with small sample sizes.

Finally, for researchers in the audience who would like to help the RWJF, we need you to come up with innovative ideas and offer guidance about the barriers you face to doing things you think should be done (gathering data, conducting surveys and experiments, etc.).

The final member of the panel was Barbara Mark, the Sarah Frances Russell Distinguished Professor at the University of North Carolina at Chapel Hill, and a Fellow at the American Academy of Nursing. Barbara is one of the nation's leading nurse researchers. She has funding from both the National Institute for Nursing Research and AHRQ. Dr. Mark has been involved with the American Academy of Nurses' efforts to think about measurement of nursing and what nurses do and its impact on patient care. She has been asked to speak from her unique dual perspective as both a producer and user of research on nurses' working conditions.

The American Academy of Nursing is taking the position that the nursing “shortage” is not a problem that will be solved simply by increasing the supply of nurses. It is a multi-faceted issue. Efforts must also be made to reduce the demand for nurses⁴ and to improve nurses’ work environment.

The AAN’s Commission on Workforce, chaired by Linda Burnes Bolton, has launched a project specifically designed to address the issue of demand for nursing. Its charge is to:

- Synthesize the research practice and policy issues around the nursing workforce, focusing on the demand for nursing care;
- Identify gaps in science practice, education, and policy; and
- Develop interventions based on consensus emerging from focused studies, forums, and conferences.

The Commission has to date sponsored two invitational conferences, one in July and the other was held in November 2002. The first, titled “Using Innovative Technology to Decrease Nursing Demand and Enhance Patient Care Delivery,” focused on technology. A conference report appears in the May/June 2002 issue of *Nursing Outlook*. The second conference, titled “From Nightingale to the New Millennium: Charting the Research and Policy Agenda for the Nursing Workforce,” generated the following priorities for research and policy development:

- Advance initiatives that improve the public’s health;
- Ensure ethical policies and practices for recruiting and retaining nurses;
- Develop new leadership in nursing to guide its future;
- Employ the efficient use of nursing resources; and
- Assure diversity of the nursing workforce.

USEFULNESS OF THE RESEARCH

In a discussion of the “usefulness” of the current research, the question becomes: Usefulness for what? Is it to increase the visibility of the problems in the work environment and nursing? The research that we have to date has done a marvelous job in doing that. Nursing is very much at the forefront of people’s awareness of health and health care delivery. Is it to drive further research? The current research has done a good job with that as well. Or is it to develop consensus on where we are going, or where we should be going? I

don't think we have done a very good job on these, and there is a great deal more that needs to be done. Does the current research provide any basis on which interventions can be developed? As Don mentioned, we need more intervention studies. Intervention studies need to be based on theories about what might work and why, and we do not have those.

BARRIERS TO GOOD RESEARCH

Problems exist on three levels: conceptual, measurement and data, and analytic. The conceptual and theoretical development is still at the most elementary stage. We have major issues with the unit of analysis. Where do we study this? Do we study this at the hospital level? Do we study it at the nursing level? Jack Needleman and Peter Buerhaus' research found similar findings at the hospital level and the aggregate unit level, but there are many, many issues about where we study a nurse's work environment. There are huge measurement and data issues. There are enormous problems with the availability of data and consistency of measurement. Those who do research with secondary data sets know it is a nightmare. We need multi-level studies; we need longitudinal studies; and we need intervention studies.

ADDITIONAL RESEARCH NEEDS

We need to have solid theory that proposes underlying causal mechanisms that are tested through research. We need to begin to ask "what works, for whom, and under what conditions." This is not a one-size-fits-all problem. We need to be clear about what we are studying. I would love to have some consensus definition about what is the work environment. What do we mean when we say "nurse staffing?" There needs to be a coordinated effort to identify critical data elements and to ensure their availability. The work of the NQF is especially important in this regard.

Academics need to partner with clinical sites. We have done a good job of developing multidisciplinary research teams, but our tendency is to form multidisciplinary academic research teams; however, we need to be more aware of what is occurring at the bedside—we need staff nurses to tell us what it is really like to be a staff nurse.

We have tremendous problems with risk adjustment. Every study, for example, uses different mechanisms of risk adjustment. We need to investigate the impact of using different risk adjustment systems.

Finally, there is an increasing awareness of process. It was only a matter of time before we began to move away from outcomes and back to process and then eventually get back to structure.

Dr. Needleman offered the following summary remarks:

Someone once said: "Life is the art of making adequate decisions from inadequate data." Clearly, if we wait for research to answer all the questions, we will not make any decisions at all. The challenge is finding the most critical data needs and filling those as quickly as possible. I think that is one of the challenges in setting the research agenda.

At the conclusion of this panel, I am struck by five themes. One is the critical importance of understanding the context for this work. Don said we do not have a lot of discussion about what role nurses play in patient safety. I saw some of the nurses in the audience look absolutely aghast at that statement. I think it is important to recognize that the role of nurses often is not appreciated outside of the profession. Creating an understanding of nursing is clearly one of the context elements.

Related to that, we have many recommendations to move to patient-centered, team-oriented care. We haven't got a clue of what that means in terms of the way the teams look. Much of the research agenda is going to be driven by thinking about teams and we need to think about how to do that.

Related to Barbara's last point, if we take the Donobedian model of structure, process, and outcome as a framework, we have a certain amount of work right now that relates to broad measures of structure, principally the relationship of the number of nurses in the mix who are registered nurses to certain outcomes. There are missing pieces; descriptions of process are absent because the data are not there.

There are three things that are needed for good research: creativity, funding, and data. Often data is the hardest to come by, and the research in the field reflects that. We need to think about data, particularly if The Robert Wood Johnson Foundation goal of transforming care delivered at the bedside through changing the processes of care. How are we going to get the data to conduct research to support that goal? A critical issue will be thinking creatively about how to reduce the cost of data and make it more available, if we're really going to respond to the user community.

The issue of solutions came up in a variety of ways. What works for whom and in what circumstances? As was suggested, academics need to partner with institutions, but we also need to think more about the

process by which solutions are tested and reported. The current vehicles for publication of research findings are tied to the researchers' professional success and advancement; they are not geared to publishing information about translating research into process or solution. We have a structural issue for the community: If we want research linked to practice and researchers linked to users, we need to find vehicles for rewarding the researchers that do this.

Finally, missing from the discussion of research agendas was the question of why hospitals and nursing homes do what they do. We have talked about transforming the environment. We talked about changing the structures. In order to understand how to create and encourage change, we need to understand why these organizations are performing the way they are and act the way they do.

Prepared for publication by
Hollis A. Hope,
former Vice President at AcademyHealth and
Director of Planning and Communications
at the Colorado Health Institute

NOTES

1. The mission of the National Quality Forum is to improve American health care through the endorsement of consensus-based standards for measurement and public reporting of health care performance data that provides meaningful information about whether care is safe, timely, beneficial, patient-centered, equitable, and efficient.
2. The Steering Committee will go through a six-step process, which includes setting a purpose for the measure set. In this case, the purpose is to improve health care outcomes and improve patient safety. Step 2 is to construct a conceptual framework that will identify which measures will be considered and which will be excluded. Steps 3-5 represent decision rules or thresholds set by the Steering Committee to narrow the universe of measures to those that will be ultimately recommended. Step 3 is to identify scope: What elements should drive the scope of this measure set (e.g., definition of nurse, scope of hospital services)? Step 4 is to establish priorities: What kinds of measures should get high-priority attention? Step 5 is to evaluate candidate measures within the framework endorsed in *A Comprehensive Framework for Hospital Care Performance Evaluation*. Step 6 is the final step: Recommend nursing care measures.
3. From the audience, Laurie Radwin asked the panel to speak to how patient-centered care is being measured. Ms. Kurtzman replied, "The Steering Committee has

constructed a framework with three kinds of wells. One well measures patient-centered outcomes, which would include perception of care, patient satisfaction, and other things. The second well would be nurse-centered measures, which would mostly be intervention and process measures, but not exclusively such measures. The third well, which we call system measures, addresses how the overall system is working. This might include components of the nursing piece, like length of stay or readmission rates, which nursing has an effect on, but is not completely responsible for.”

4. Asked by a member of the audience to expand on the concept that we need to reduce the demand for nurses, Dr. Mark responded, “For example, Audrey Nelson at the Tampa VA has a center funded on ergonomics, looking at, for example, how to reduce the physical strain on nurses, in order to decrease back injuries among nurses. Another aspect is to use information technology to improve the efficiency of how a nurse’s time is used. Those are technological features of reducing demand. The next one I’m going to say will probably be extraordinarily controversial, and it’s only my opinion, but I think [is one] we need to look at, does every hospitalized patient need to see a registered nurse on every shift. There may be some patients where the nurse can supervise other people in giving their care. ... There are other issues related to organizational support for registered nurses. For example, one of my studies found that the strongest predictor of a unit’s being able to engage in professional nursing practice is the availability of support services in the unit. Things like medication delivery systems or tray delivery systems. All of those things reduce the demand on nursing and allow nurses to be at the bedside, which is where they want to be.”