NATIONAL ADVISORY COUNCIL ON NURSE EDUCATION AND PRACTICE

Third Report to the Secretary of Health and Human Services and the Congress

November 2003

United State Department of Health and Human Services
Health Resources and Services Administration
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5600 Fishers Lane
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EXECUTIVE SUMMARY

The National Advisory Council on Nurse Education and Practice (NACNEP) in this third report to the Secretary of Health and Human Services and the Congress focuses on the subjects of the meetings held in November 2002 and April 2003. This report, along with those dated November 2001 and 2002, fulfill the requirements under Section 845 of Title VIII of the Public Health Service Act as amended by the Nurse Education and Practice Improvement Act of 1998 (P.L. 105-392).

Throughout the period covered by the three reports, the country has been faced with a critical nursing shortage. This event coupled with the 9/11 act of terrorism and the concerns about medical errors as documented in various studies have provided the framework for NACNEP's work. This most recent report highlights two specific areas: the initiation and implementation of new provisions of Title VIII set forth in the Nurse Reinvestment Act (NRA) (P.L. 107-205) and the effects of the nurse work environment on patient safety and the retention of RNs in the workplace.

The Nurse Reinvestment Act

Mindful of the need to enhance Title VIII of the Public Health Service Act so that it could better serve to increase recruitment into nursing and retain those already in the field, Congress passed the NRA that was signed into law August 1, 2002. Its provisions included the expansion of the support for career enhancement and development, approaches to retaining nurses in the workforce through better job satisfaction and career advancement, the means for expanding clinical knowledge and skills to better qualify nurses to deliver care in today's complex health care arena, including geriatrics and support for nurses to obtain the necessary skills to become faculty members and students to become nurses. Following the appropriation of funds in February 2003, the Request for Applications was made available toward the end of April 2003 and the first grants for projects under the provisions of the NRA were made in September 2003.

The NRA responded to a number of the actions NACNEP had suggested in the first two reports forwarded to the Secretary and the Congress. NACNEP was pleased to be called upon to provide advice to the Division of Nursing (DN) staff within the Bureau of Health Professions (BHPr) of the Health Resources and Services Administration (HRSA) during the development of the implementation plans.

Building Career Ladders

In order to assist in retaining nursing personnel in the health care area, Section 831 of Title VIII was expanded to provide for grants that encourage nursing career ladders. The provisions of the Career Ladder Grant Program promoted career advancement for nursing personnel in a variety of training settings and across the spectrum of nursing occupational categories. As NACNEP reviewed the questions posed to it on implementing these provisions it agreed that the intent was to focus on both recruiting individuals in the nursing workforce and retaining those who have already shown an interest in working at some level with people in need of nursing interventions. When considering educational levels, NACNEP felt the focus should be on pathways and career mobility models that (1) further the achievement of its goal that by 2010 two-thirds of the RN workforce should have at least a baccalaureate degree and (2) help to develop those eligible to

become faculty members. NACNEP believed that the ultimate accomplishment of these provisions should be that of articulation through the RN.

The response to the Career Ladder Program was overwhelming. In the relatively short time allowed, 276 applications considered eligible for review were received. Of these, 116 were approved through the peer review process. Because of limited funds available, only 11 could be funded.

Enhancing Patient Care Delivery Systems

As a means of assisting with nurse retention and with enhancing patient care, Section 831 was also amended to call for grants related to collaboration and communication among nurses and other health professionals, and to promote nurse involvement in decision-making in health care facilities. Considerable documentation exists that demonstrates the increased job satisfaction that comes from these practices. NACNEP saw these provisions as enhancing patient care through outcomes providing for consistency of care and continuity of care givers, good physician-nurse relations, interdisciplinary team standards of practice and acuity-sensitive staffing. A total of 108 applications out of the 125 received were considered eligible for review. Of the 35 approved grants under these provisions, 14 were funded. The entities involved in the activities to be carried out under these grants involved a variety of health care facilities including rural and disproportionate share hospitals and long-term care institutions.

Internships and Residencies

Another amendment to Section 831 focusing on the retention of nurses called for awards that would develop and implement internship and residency programs to encourage mentoring and the development of specialties. Given the focus for these awards, NACNEP advised that the interns and/or residents to benefit from these provisions be active members of the nurse workforce. With regard to the scope of the programs to be supported, NACNEP advised that the programs should contain both didactic and clinical aspects and that care should be taken that the individual is in a learner rather than a practitioner role.

Potential applicants for these awards were provided with three purposes for which awards would be granted: returning RNs to the workforce, providing graduate nurse transition in the first professional role, and changing a nursing specialty. Among the eligible applications, half covered more than one of these purposes. Of those with single purposes, only five had as their purpose returning RNs to the workforce. Of the 125 applications received, 98 were considered eligible and 52 were approved. However, limitation of funds available allowed for only 14 of those approved to be funded.

Comprehensive Geriatric Education

In recognition of the increasing number of the elderly among the country's population and the need for enhancing the health care of these individuals, the NRA also amended Title VIII to provide for support for training and educating individuals in providing geriatric care for the elderly (Section 855). NACNEP suggested that the focus of these grants be on continuing education, strengthening nurse faculty, and strengthening geriatric content in the nursing curricula. Of the 77 eligible grants reviewed, 30 were approved and 17 were funded. These grants will provide education/training for RNs providing care to older adults to enhance their

leadership skills and increase their geriatric knowledge base. As geriatric nursing leaders, they will provide training for the licensed practical nurses and certified nursing assistants.

Nurse Faculty Loans

The NRA also added a loan program geared to increasing the pool of nurses prepared to be faculty members in schools of nursing (Section 846A). As NACNEP indicated in its Second Report, the lack of sufficient numbers of faculty members is a serious deterrent to attempts to expand the nursing student body. The agreement entered into with each institution under this program provides the base for a faculty loan fund for nurses to become full-time students to prepare as nurse faculty. Given the funding levels available, the 55 funded schools of nursing received only 29 percent of the total funds requested.

Nurse Scholarship Program

In addition, the NRA also amended Section 846 of Title VIII to provide for a scholarship program in addition to the loan repayment program. The Nurse Scholarship Program provides scholarships to nursing students in exchange for a service commitment at a health facility with a critical shortage of nurses. The scholarships include an amount for tuition, fees and other reasonable educational costs. Full-time students also receive a monthly stipend of $1,098. Of the approximately 4,400 eligible applications received, 500 met the first preference (full-time students with no expected family contribution). Of these 500, 81 recipients received awards totalling $3,308,016. Given the total request, about $15 million additionally would have been required to fund the remaining eligible applications with first preference.

It is anticipated that those projects funded under these initiatives will result in important contributions to the recruitment and retention of the nurse workforce. But the need is great and these limited funded projects can only address a portion of the issues involved in the critical nursing shortage.

Nurse Work Environment

The relationship between nurse staffing and patient safety has been demonstrated in numerous studies. The present climate of severe nursing shortages causes many health care provider organizations to experience significant levels of vacant nursing positions. However, others with positive work environments have been shown to have adequate nursing staff. Safe patient care resulting from declines in medical errors and decreases in adverse outcomes is an important goal of the health care system. Active attention to the nurse work environment is an important component of achieving this goal.

Creating a Positive Work Environment

Concerns about the work environment are uppermost in the minds of nurses as they discuss their careers. Nurses, in commenting about their heavy workloads and chaotic work environments, express concerns about the safety of their patients. An analysis of 26 studies of the relationship between nurse staffing and outcomes of patient care concludes higher nursing workload is associated with higher rates of non-fatal adverse outcomes and with higher incidence of medication errors. A recent Institute of Medicine (IOM) publication focusing on health professions education reinforces these conclusions and calls for limitations in nurse work hours and establishing programs within health care facilities to set nurse staffing according to the needs

within each patient care unit per shift. It also calls for steps that would ensure nurse participation in the decision-making processes for staffing and patient care.

Nurse work environment issues directly impact patient safety. Research shows that hospitals having highly qualified nursing executives with participation in their top decision-making body and involvement of nurses in the operation and patient care decision-making at the unit level are "Magnets" in their ability to attract and retain nurses on their staff. Magnet hospitals have been shown to have better satisfied nursing staff and more positive patient outcomes than non-Magnet hospitals. The climate established by nurse leaders plays an important role in nurse satisfaction. Autonomy, team work and relationships with co-workers and supervisors, collaboration with physicians in decision-making about patient care and the reduction of job stress have been shown to be important to job satisfaction leading to retention of nurses.

The provision of a climate for collaborative practices in the work setting is crucial. But, in order for those practices to be successful, they must first be established in the disparate health care occupations' educational experience. The recognition of the need for such experiences was the crux of NACNEP's joint interest with the Council on Graduate Medical Education (COGME) in interdisciplinary health professions education. The first joint COGME/NACNEP interdisciplinary activities culminated in a joint meeting in 2000 that resulted in support for five interdisciplinary education projects centered on patient safety. Subsequently, NACNEP and COGME were involved in IOM's multidisciplinary efforts including serving on the committee guiding these efforts and participating in the National invitational summit held in June 2002. The IOM report stresses the importance of these activities and calls for biennial summits to further the efforts.

Creating a Positive Patient Environment

As documented in the report's data quality health care with positive patient outcomes can best be achieved with well-staffed nursing services with an organizational structure providing a positive role in the decision-making process for nurses. Basic to the achievement of a good working environment is creating an environment that recognizes the needs of today's diverse staff and patient population. In serving the patient population the disparities in the availability and delivery of health care need to be considered and active steps are needed to mitigate them. Studies show that racial and ethnic minorities experience lower quality and more limited health services than others within the country's population. Providing for cross-cultural education for health professionals and sensitizing providers are among the approaches to alleviating these problems. Through the recognition of its own staff needs and those of its patients, the leaders in a health care facility need to actively develop and carry out programs that provide for cultural competence and build a diverse workforce that reflects the population's diversity. As pointed out in an article on the development of such a program, a hospital's fiscal health depends on both an adequate supply of nurses and a nursing workforce that reflects the racial and ethnic diversity of its patient census.

Attracting individuals from diverse backgrounds into nursing is one of the means toward assuring an adequate nurse supply. A significant gap exists between the proportion of individuals with minority backgrounds in nursing and the proportion within the population as a whole. The development and implementation of specific strategies are needed to actively attract to and retain in nursing individuals from diverse backgrounds. In schools of nursing, faculty commitment in terms of contact and support, positive attitudes toward minority students and the integration of

these students into the social and educational structure of the school are important to the accomplishment of these objectives.

Conclusions and Recommendations

During this year NACNEP turned its attention to those areas in both education and practice that would further the objective of providing an adequate nurse workforce to promote safety and quality in patient care and affect nurse recruitment and retention. In considering next steps it built on the broader actions recommended in its first two reports to the Secretary and the Congress bearing in mind actions taken by the Federal government in the NRA and the many others undertaken by the nursing community and other entities in working toward effecting the necessary changes. NACNEP recognizes that to solve the continuing critical nursing shortage requires cooperation from all segments. It sees a critical leadership role for the Federal government within these efforts through encouraging and fostering new creative and innovative approaches. To this end it recommends six actions designed to lead to improved access to and quality of the Nation's delivery of health care to its disparate population, as follows:

- Broaden the impact of the NRA initiatives by increasing funding appropriations consistent with National demand.
- Expand resources available to develop models to effectively recruit and graduate sufficient numbers of racial/ethnic students.
- Support continuing efforts toward fostering health professions interdisciplinary practice and education through implementation of the recommendations arising out of the IOM health professions summit.
- Foster development of working conditions providing for nurse involvement in operational and patient care decision-making within health care facilities and programs incorporating a diverse workforce at all levels of the organization.
- Support the development and evaluation of culturally competent interventions through demonstration projects using cooperative agreements.
- Develop survey mechanisms to create a database on the elements of the nurse work environment through cooperative agreements with professional hospital-affiliated organizations.

As NACNEP moves forward with its examination of the issues related to the nurse workforce it will continue to monitor the availability of an appropriate supply necessary to provide quality health care for the Nation's population. NACNEP will examine outcomes accomplished through support of the NRA and other aspects of Title VIII and suggest ways of building on these. It will also continue its particular focus on interdisciplinary education and practice with the effects on the improvement of patient safety, recruitment and retention of nurses, and educational costs.

I. INTRODUCTION: AN OVERVIEW OF NACNEP'S ACTIVITIES

The National Advisory Council on Nurse Education and Practice (NACNEP) submits this report to the Secretary of Health and Human Services and the Congress in the continuing climate of a critical shortage of registered nurses (RNs) necessary to the provision of quality health care to the Nation's population. The report, the third of the series responding to the requirement in Section 845 of Title VIII of the Public Health Service Act (amended by P.L.105-392) for annual reports of its activities and recommendations, highlights activities related to NACNEP's work during the November 2002-April 2003 meetings. (See Appendix A.)

During the period covered by NACNEP's three reports, the country has been faced with major crises affecting the health and safety of the population. The horrendous act of terrorism of September 11, 2001 (9/11) motivated the need for intensive plans and actions to ensure the safeguarding of the population in the face of possible future acts of terrorism. During this time as well, major studies of the country's health care system showed the need to enhance patient safety through the reduction of medical errors and better collaborative activities on the part of the health disciplines. And, throughout the time period, the country faced a lack of a sufficient number of RNs to ensure the appropriate nursing care needed by the current population with predictions of even greater dire straits for the future. These events provided the framework for NACNEP's work.

In its first report, NACNEP analyzed the role of RNs in the public's health care and set forth its perspectives on the issues surrounding the nursing shortage with its view on the steps to be taken to increase the RN supply and alleviate the shortfall. This report also highlighted the work undertaken under Title VIII to enhance the effectiveness of nursing in the health care system and discussed the joint activities with the Council on Graduate Medical Education (COGME) initiated during the period to further patient safety.

The second report summarized the continuing interdisciplinary activities and discussed projects supported by the nursing and medicine divisions of the Health Resources and Services Administration (HRSA) that arose out of NACNEP's and COGME's earlier joint activities. The report also concentrated on a major issue affecting the ability to significantly increase the RN supply, that of the nurse faculty shortage.

In this third report, NACNEP demonstrates its continuing concerns with the state of nursing in the country and looks toward changes that would enhance nursing's contribution to improvements in the health care of the Nation's population. In August 2002, as NACNEP was completing its review of its activities for the second report, Congress enacted the Nurse Reinvestment Act (NRA) (P. L. 107-205). That Act amended Title VIII of the Public Health Service Act by initiating a number of major new authorities designed to help with efforts to recruit new nurses and to make nursing a more attractive and rewarding career. (See Appendix B.) The steps Congress took in enacting the NRA responded to a number of the actions NACNEP suggested in its first and second reports. Therefore, NACNEP looked forward to the implementation of the NRA and was pleased to be called upon to provide advice during the decision-making process at its November, 2002 meeting. A fuller discussion of the initiation of the NRA appears in Chapter II of this report.

The November 2002 meeting also focused on the subject of responding to potential threats of bioterrorism. Through a panel of presenters consisting of representatives from the Department of Health and Human Services (DHHS) and the nursing community, NACNEP examined response steps undertaken within the Department and within nursing following the events of 9/11. As key health professional workers, nurses are first line responders to any such threats. For example, it was pointed out that, should there be a need for mass prophylaxis and vaccination, nurses would be carrying out these activities. In the event of a biological attack, nurses in the emergency rooms and in physician's offices will probably be the first ones to be involved with the patient.

The discussions of the speakers from the Department on its bioterrorism activities centered on the structure of its surveillance and response teams and the programs established to provide education and training to health care providers. In addition, Dr. Linda Norman, a member of the Council, made a presentation on the steps taken by a number of nursing organizations and the nursing education community, working jointly with agencies in the Federal government, to ensure that nurses were organized and prepared to assist in responding to threats. The International Nursing Coalition for Mass Casualty Education (INCMCE) was set up with membership from nursing educational programs, the American Association of Colleges of Nursing (AACN), National League for Nursing (NLN), the National Council of State Boards of Nursing (NCSBN), and a number of Federal agencies. The Coalition's purpose is to provide concerted leadership for development of policies on nursing practice, education, regulation and research for mass casualty incidents. As NACNEP considered the presentations, the discussion centered on the need for careful planning and coordination to ensure that both local community and broader national considerations are taken into account. Educational opportunities that prepare nurses to respond to possible bioterrorism attacks could be encompassed within the various public health components of the NRA.

As part of its continuing interest in promoting interdisciplinary activities to ensure quality health care in this country NACNEP at the April 2003 meeting reviewed the report from the Institute of Medicine (IOM) entitled Health Professions Education: A Bridge to Quality. The report was prepared by the interdisciplinary committee convening and guiding the June 2002 multidisciplinary invitational summit in which NACNEP had participated as described in its Second Report to the Secretary of Health and Human Services and the Congress. Representatives from NACNEP and COGME were among the members of the committee. The ideas proposed by the summit participants were taken into account in the deliberations of the committee as it developed the discussion and conclusions of the report. (See Appendix C.)

In the April 2003 meeting, NACNEP also continued its exploration of approaches to dealing with the nursing shortage. Following its earlier work, which was focused on nursing as a profession and ensuring an increase of individuals into the profession, NACNEP at this time turned to the working environment with its possible effect on patient safety and the retention of nurses in this nursing shortage climate. Studies have shown the relationship between nurse staffing and the quality of patient care. Numerous articles have been written about nurses experiencing "burn out" because of increased workloads with concerns for the ability to provide "safe" care to patients. Major research efforts within nursing have looked at the effects of the organizational and clinical role of nursing within the workplace on the recruitment and retention of nurses. The grant program initiated in the NRA entitled "Enhancing Patient Care Delivery Systems" specifically relates to this subject.

As part of its review of the nursing working environment and steps to alleviate the nursing shortage, NACNEP explored approaches to widening the diversity of nursing within practice and educational settings. NACNEP's continuing goal has been to broaden nursing's base as a means of both providing more effective care to an increasingly diverse patient population and increasing nursing resources. Chapter III expands on NACNEP's examination of the issues affecting the workplace environment from the perspectives of nursing practice and education.

The subject matter covered by the November 2002 and April 2003 meetings brought out suggestions for steps that could be taken to further the recruitment of nurses, provide a more positive environment to attract and retain the critical nursing personnel needed and enhance the delivery of safe and effective health care to the population. These recommendations along with NACNEP's considerations for future activities are summarized in the conclusions of this report appearing in Chapter IV.

II. TITLE VIII AND THE NURSING SHORTAGE

Congress reacted to the pervasive nursing shortage and its implications for provision of health care to the Nation's population by passing legislation in 2002 designed to stimulate the growth of the nursing profession and to enhance the attractiveness of nursing as a profession. The Nurse Reinvestment Act (NRA), Public Law 107-205, was signed August 1, 2002. While retaining the provisions of Title VIII as set forth in Public Law 105-392, the NRA enhanced several of those provisions and established new initiatives to further the recruitment and retention of nurses. At its November 2002 meeting NACNEP focused its attention on the provisions of the NRA and on providing advice to the Division of Nursing, BHPr, HRSA in implementing these provisions.

In passing the NRA, Congress was looking toward both increasing recruitment into nursing and retaining those already in the field through providing support for career enhancement and development. In order to retain nurses in the workforce through better job satisfaction and career advancement, it provided the means by which nurses could expand their clinical knowledge and skills to better qualify them to deliver care in the complex arena of today's health care. In recognition of the role that the involvement in decision-making plays in increased nurse job satisfaction and improved patient care, Congress provided for support to programs that enhance collaboration and communication among nurses and other health care professionals and promote nurse involvement in health facilities' organizational and clinical decision-making. Mindful of the need to take care of an aging population, Congress specifically provided for educational programs for nurses in providing geriatric care for the elderly.

Staff of the Division of Nursing, charged with the responsibility for carrying out the NRA provisions, made a detailed analysis of each aspect of this new legislation and developed key questions relevant to the interpretation of these legislative mandates. NACNEP's advice, along with that of professional organizations with membership from and interests in the nursing community, was used in devising the implementation plans pertinent to these new initiatives.

All concerned with the critical issues facing nursing, Congress, the Department of Health and Human Services, NACNEP and the nursing community at large, felt the need to implement these new initiatives as rapidly as possible. Funds were appropriated in February 2003. The Request for Applications was made available toward the end of April 2003 and the funding of grants was accomplished in September 2003.

Building Career Ladders

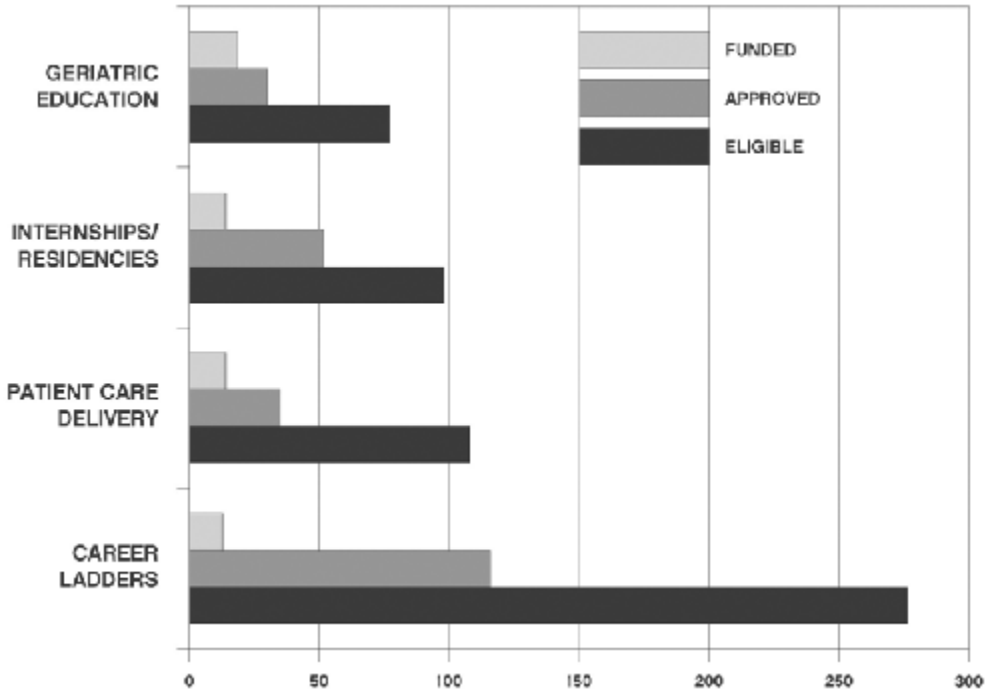
As a means of retaining personnel in the health care area the NRA added to Section 831 of Title VIII provisions for grants to encourage nursing career ladders. The career ladder grant program had two aspects to it: promoting career ladders and assisting individuals. As indicated in the legislation Congress saw this program as one that would "promote career advancement for nursing personnel in a variety of training settings, cross training or specialty training among diverse population groups, and the advancement of individuals including to become professional nurses, advanced education nurses, licensed practical nurses, certified nursing assistants, and home health aides." NACNEP agreed with the interpretation that the intent of these provisions was to focus on both recruiting individuals into the nursing workforce and to retain in nursing those who have already shown an interest in working with people in need of nursing interventions.

In response to questions about the educational levels to be considered, the Council stressed that the focus should be on pathways and career mobility models that would further the achievement of NACNEP's goal that by 2010 two-thirds of the RN workforce should have at least a baccalaureate degree and, also, help to develop those eligible to become faculty members. As shown in the First and Second Reports of NACNEP to the Secretary and Congress, both these objectives are critical to the assurance of an adequate, appropriately qualified, nurse workforce. A recent study carried out by researchers in the school of nursing in the University of Pennsylvania provided additional support for NACNEP's educational goal. The authors of this study of staffing in surgical units in hospitals concluded that surgical patients had greater survival advantages and were more likely to survive serious complications if higher proportions of the direct-care RNs had baccalaureate or higher degrees. (Aiken, 2003)

The Council recommended that the new career ladder projects should be based on existing models of articulation and "accelerated" tracks. The Council felt that individual projects should not be required to include multiple educational levels. However, the Council indicated that the overall goal to be accomplished was that of articulation through the RN. NACNEP itemized several outcome measures that it felt would appropriately reflect the intent of these legislative provisions. Among these were: progress within individual projects; numbers graduating and obtaining licensure as a result of funded programs; the future advancement through the nursing educational levels and the retention within the workforce of those attending the funded programs, and the impact of these programs in increasing the capacity for providing health care to reduce health disparities of the population.

The overwhelming response to the request for applications for the Career Ladder Program with 301 applications in the little over one month's time given for response demonstrated the potential for the program to make a difference in increasing the nurse supply. Of the applications received, 276 were eligible for review and 116 were approved through the peer review process. But, because of the limited amount of money available for the program, only 11 of the approved applications could be funded. (See Chart 1.) Five of the 11 funded grants were for articulation of education programs for nursing personnel. Of the six others, three provided accelerated pathways for RN education for second-degree students; two related to increasing access to specialty education for the preparation of nurse faculty, and one covered multiple purposes.

Chart 1: Number of Applications in New NRA Initiatives, FY 2004



Enhancing Patient Care Delivery Systems

Another amendment to Section 831 of Title VIII designed to assist with nurse retention, as well as assist in enhancing patient care, called for grants related to collaboration and communication among nurses and other health professionals and to promotion of nurse involvement in the organizational and clinical decision-making processes of a health care facility. Considerable documentation exists in the literature about the increased job satisfaction leading to improved nurse retention and better patient care that comes from increased collaboration, including good physician-nurse relations, and nurse involvement in the institutional structure and decision-making process. These organizational characteristics are key variables in "Magnet" hospitals, those identified as having good success in recruiting and retaining their nurse workforce.

NACNEP, in reviewing the considerations for implementation, discussed whether there should be differing funding levels based on the size and scope of the services of the institution in which the program was to be carried out. Consistent with its continuing support of interdisciplinary education and practice NACNEP defined "collaboration" for purposes of this provision as activities among the variety of health care disciplines such as physician-nurse interaction.

Since the main purpose for including provisions related to collaboration and communication and nurse involvement in organizational and clinical decision-making was to improve the retention of nurses so that the quality of patient care would be increased, the Council itemized the outcome measures needed to accomplish enhanced patient care. These included consistency of care and continuity of the caregivers; evidence-based practice; good physician-nurse relations; interdisciplinary team standards of practice; nursing's involvement in institutional structure; use of standardized instruments to measure outcomes, and acuity-sensitive staffing.

Out of the 125 submitted applications 108 were considered eligible for review. Among those, 35 were approved and 14 of the approved applications were funded under the provisions of this program. These funded grants all spoke to improving team communications, patient care and/or patient safety, and nursing governance. The entities directly involved in the activities to be carried out within these grants reflect an interesting mix of institutions and consortiums including 103 rural hospitals, 22 disproportionate share hospitals, 105 acute care hospitals and 100 long-term care institutions.

Internships and Residencies

Section 831 was also amended to provide for awards for the purpose of "developing and implementing internship and residency programs to encourage mentoring and the development of specialties." The Council considered the questions posed to it in the light of the intent of this legislative provision to enhance the ability to retain nurses.

Of particular importance to the interpretation of this provision was the scope of its coverage. Should it encompass programs designed for students prior to graduation from the nursing educational program or those designed for nurses who are reentering practice? Given the focus on retention of nurses, the Council advised that awards under this provision should benefit nurse graduates and registered nurses. They should be helpful in assisting the transition of nurses into the workforce setting; provide the means to better deal with the complex health care arena, and assist with the transition into specialty areas. Although several Council members spoke positively about including student internships in the implementation, NACNEP was mindful of this provision's legislative intent to educate nurses to remain in the workforce or to change nurse specialties with its implication that the nurse interns and/or residents be active members of the workforce.

The scope of the programs to be supported also engendered considerable discussion. It was agreed that the programs should contain both didactic and clinical aspects but questions arose as to how much should be learning and how much service. In terms of the latter, it was agreed that care needs to be taken that the individual is in a learner rather than a practitioner role. Questions of length, minimum requirements or standardization were addressed with the overall consideration of allowing for creativity and flexibility.

The Council considered the outcomes to be sought in determining the success of the program in retaining nurses. Among these were the reduction in turnover (except promotion, considered "good" turnover); reduction in vacancy rates in high-need clinical areas, and increased job satisfaction. For the programs, it was important that needed resources including people, time, expertise, and training for the mentors be provided and that there be an overall plan for retention of nurses.

Of the 125 applications submitted for funding under this program, 98 were eligible and reviewed and 52 were approved. However, again, the limited amount of funds available resulted in only 14 of the 52 approved submissions being funded. Half of the 98 applications considered appropriate for review included more than one of the three purposes for which it was determined that grants would be made. Among those submitted for a single purpose, only five were to implement the purpose of returning RNs to the workforce. The purpose of providing graduate nurse transition into the first professional role attracted 26 of the 98 applications and that of changing a nursing specialty, 18 applications. Both of these latter purposes are critically important to creating a

nurse workforce capable of quality patient care and enhancing patient safety. Studies show that newly graduated nurses have considerable uncertainties about their role and ability to function effectively in the health care setting.

Comprehensive Geriatric Education

Title VIII was further amended by the NRA to include Section 855 calling for "programs and initiatives to train and educate individuals in providing geriatric care for the elderly." Eligible entities to receive grants under this provision were schools of nursing, programs leading to certification as a certified nurse assistant (CNA), health care facilities, and partnerships between a facility and a school or a CNA program. Section 855 provided that the purposes for which the grants were to be awarded in connection with geriatric care were to provide training to individuals giving care; develop and disseminate curricula; train faculty members, and provide continuing education to those providing care.

In determining coverage of the provision, NACNEP advised that individuals providing care should have a broad interpretation within the nursing community. It suggested that, among the purposes for these grants, the focus should be on continuing education, strengthening nursing faculty, and strengthening geriatric content in nursing curricula. The Council thought that programs under these grants could appropriately include English-as-a-second-language/linguistic competence and multidisciplinary training. As required in the legislation, the Council suggested effective and efficient coordination should be demonstrated with local/State Geriatric Education Centers, where appropriate. NACNEP also thought that the proposed programs should be required to demonstrate that recipients had achieved competency in geriatrics.

A total of 98 applications were received for this initiative of which 77 were eligible and reviewed. Thirty of those reviewed were approved with 17 of these funded. These grants will provide education/training for RNs providing care to older adults to enhance their leadership skills and to increase their knowledge base in geriatrics. As leaders in geriatric nursing, the RNs will provide training in geriatrics for licensed practical nurses and CNAs.

Nurse Faculty Loans

In addition to the new competitive grant programs described earlier, the NRA also included another new program of particular significance. The Nurse Faculty Loan Program (Section 846A) is specifically geared to increasing the pool of nurses prepared to be faculty members in schools of nursing. As described in Chapter I, NACNEP focused the work of its prior year on the critical shortage of nurse faculty members noting that "a well-qualified faculty is the foundation of a well-qualified nurse workforce." The current lack of sufficient numbers of faculty members serves as a serious deterrent to attempts to expand the nursing student body. The agreement entered into with each institution carrying out a loan program under this NRA provision provides for the recruitment of nurses to become full-time students to prepare as nurse faculty with loans up to $30,000 per year for 5 years which may be used for full tuition, fees, books and other educational expenses. Retention of loan recipients as faculty members is encouraged through a loan cancellation provision that would cancel 85 percent of loan and interest for working full-time as a faculty member in a school of nursing. Of the 65 applications received from institutions, 55 were complete and eligible for funding. However, once again, the limited funds available meant that the 55 schools of nursing received only 29 percent of the almost $10,000,000 in total funds they requested.

Nurse Scholarship Program

The NRA also amended Section 846 of Title VIII to provide for a scholarship program in addition to the loan repayment program. This program provides scholarships to nursing students in exchange of a service commitment of at least two years on a full-time basis, or the equivalent on a part-time basis, at an eligible health facility with a critical shortage of nurses. Eligible individuals could be those enrolled or accepted for enrollment in a school of nursing on a full or part-time basis. Congress specifically provided that preference be given to qualified applicants with the greatest financial need.

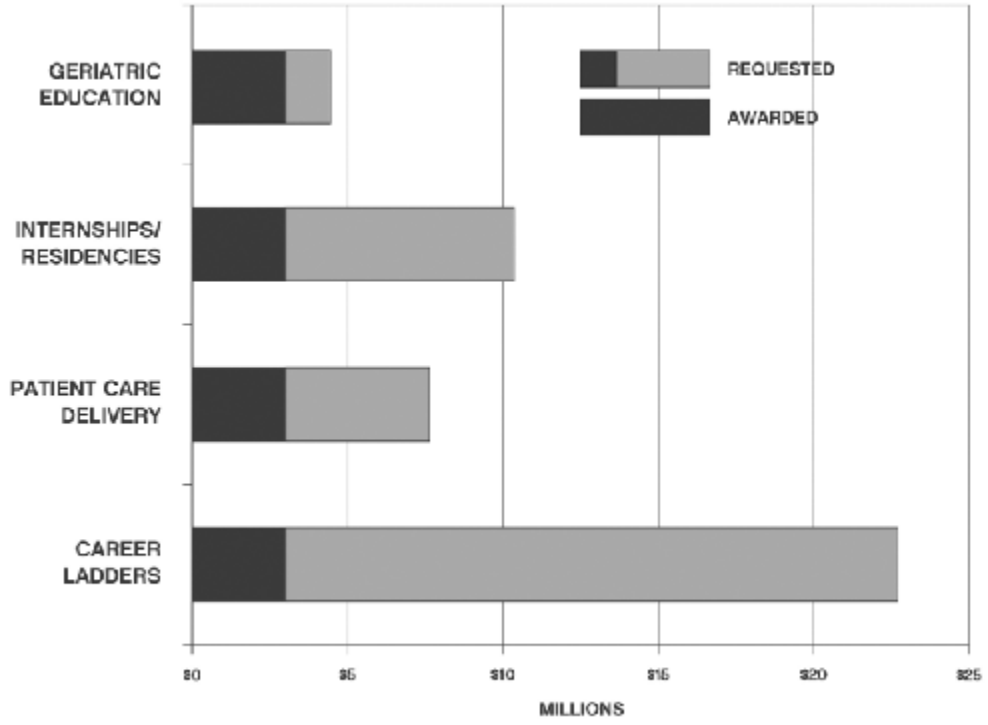
The Council in its review of this program suggested that enrollment should be considered full-time in accordance with the individual school's definition and that part-time enrollment should be half that of full-time. It recommended that priority be given to entry-level students to increase the nurse supply. The Council also considered the service provisions and recommended that a four-year time frame be established for completion of the service requirements.

Given the intent in awarding scholarships to increase the nurse supply, it was determined that preference be given to full-time students and in undergraduate programs. The scholarships include an amount for tuition, fees and other reasonable educational costs. Full-time students also receive a monthly stipend of $1,098. Of the approximately 4,400 eligible applications received, about 500 met the first preference (full-time students with no expected family contributions). Of these 500, 81 recipients received awards totalling $3,308,016. Given the total request, about $15 million additionally would have been required to fund the remaining eligible applications with first preference.

Looking Toward the Future

The addition of the initiatives in the NRA to those already in Title VIII is seen by NACNEP and other segments of the nursing community as important steps toward overcoming the critical nursing shortage. Given the relatively short period of time allowed, the large response of the nursing community to these new initiatives documented the need. However, as the data in Chart 2 show, only a relatively small proportion of the submitted projects that were considered worthwhile could be funded with the appropriations available.

Chart 2: Requested Finding in Approved Applications and Awards in NRA Initiatives, FY 2004



III. NURSE WORK ENVIRONMENT FOR IMPROVED PATIENT SAFETY

Numerous studies have pointed to the relationship between nurse staffing and patient safety. Inherent in these is an ability to obtain and maintain a sufficient number of staff to provide the care level necessary to assure a safe climate for patients. In this time of nursing shortages many health care provider organizations are experiencing significant levels of vacant nursing positions. However there are others that are able to maintain an adequate staff. In many instances, this has been attributed to the organization's positive work environment attracting and retaining its nursing staff. Safe patient care resulting from declines in medical errors and decreases in adverse outcomes from care is an important goal of the health care system. In the face of today's critical nursing shortages active attention to the nurse work environment with its implications for nurse staffing and appropriate nursing care is an important component of achieving this goal. As part of NACNEP's consideration of these issues at its April 2003 meeting, a number of presenters provided reports on relevant research and demonstration projects.

Effects of Work Environment

Concerns about the work environment are uppermost in the minds of nurses as they discuss their careers. An analysis of 15 study reports on the nursing shortage to identify common "themes" found a considerable amount of emphasis on work environment and nurse satisfaction data. (See Appendix D and Bleich et al, 2003) Dr. Karen Cox in reporting to NACNEP on her nurse focus group study of working conditions for inpatient RNs referenced nurses' comments about heavy workloads and chaotic work environments. (See Appendix E.) She indicated that the nurses, while commenting on their heavy workloads, expressed concerns about the safety of their patients. In an article reporting on a North Carolina Center for Nursing study, the authors concluded that the level of nurses' satisfaction with their jobs and their careers was greatly affected by "the frequency with which short staffing interferes with patient care." (Shaver, 2003)

Within recent years a considerable amount of research efforts have been centered on documenting the relationship between nurse staffing and outcomes of patient care. Using varying data and methodologies, the studies generally showed that higher nurse staffing ratios were related to lower probabilities of adverse patient outcomes. The Oregon Health & Science University Evidence-based Practice Center under a contract from the Agency for Healthcare Research and Quality (AHRQ) analyzed 26 such studies for evidence on impacts on patient safety. (Hickam et al, 2003) The study concluded that evidence showed that higher nursing workload is associated with higher rates of non-fatal adverse outcomes in both inpatient and nursing home settings. It further concluded that higher nursing workload is also associated with higher incidence of medication errors.

The Institute of Medicine (IOM), at the request of AHRQ, established a committee to look at the work environment for nurses and patient safety. Dr. Ada Sue Hinshaw provided NACNEP with a review of the scope and objectives of the then on-going study. (See Appendix F.) She pointed out that IOM was asked to look at the key aspects of the work environment for nurses, including extended hours and workload, that likely have an impact on patient safety and to identify potential improvements that might result in enhancement of patient safety. Through the examination of published research, commissioned "white papers" and testimony, the study is addressing such issues as nursing work hours and fatigue including mandatory overtime, nursing workload including state regulation of nurse-to-bed ratios, design of health care delivery

processes including support systems for decision making, and barriers to effective communication among care team members.

The report of this study entitled Keeping Patients Safe: Transforming the Work Environment of Nurses, issued in November 2003, has wide-ranging recommendations touching on many of the issues discussed at NACNEP's meeting and covered in this report to the Secretary of Health and Human Services and the Congress. The recommendations ranged from those that were specific to staffing and the design of the work processes and environment to those pertaining to needed research and the development of substantial databases.

The discussion in the IOM report reinforced the workload and staffing concerns expressed at NACNEP's meeting. Specific minimum licensed nurse staffing ratios for nursing homes and hospital intensive care units were among the recommendations included in the report along with calling for hospitals and nursing homes to establish nurse staffing practices based on needs for each patient care unit per shift and for studies of nurse staffing ratios. The report also recognized the effect of fatigue from lengthy work hours on the possibility of medical errors by recommending that nurses be prohibited from working more than 12 hours in any given 24-hour period and more than 60 hours per 7-day period. The report also supported the need for a work environment involving nurses' direct participation in the decision-making process within the health care facility as a means of determining appropriate nurse staffing levels and practices. (Page, 2003)

Creating a Positive Work Environment

Work environment issues have been considered to have a direct impact on patient safety as they relate to the ability of health care providers to recruit and maintain their particular workforces. Research carried out in the 1980s on the organizational structure of hospitals with greater ability than others to attract and retain nurses on their staff led to the concept of Magnet hospitals. These have been summarized as having highly qualified nursing executives with participation in the hospital's top decision-making body and involvement of nurses in the operation and patient care decision-making at the unit level. (McClure et al, 1983) Subsequently, the American Nurses Credentialling Center (ANCC) established a "Magnet" program to recognize hospitals that had similar characteristics to those of the originally identified Magnet hospitals. Hospitals apply for this designation on a voluntary basis. As of October 15, 2003, 88 facilities have applied for and received such designation. (ANCC, 2003)

An important aspect of the Magnet hospitals is the quality of their nurse leadership. The climate established by the nurse leaders plays an important role in nurse satisfaction. For example, Dr. Cox in her presentation to NACNEP pointed out that nurse managers could make a significant difference in how nurses perceive their jobs. Nurses were concerned about nurse managers being responsible for multiple units rather than being able to focus on the patient care needs within a unit and, also, about the manager's ability to influence administrative decisions. In an article summarizing a review of the literature on factors related to staff retention, Dr. Nancy Wells and her colleagues indicated that the development of autonomy and group cohesion and the reduction of job stress were key aspects of job satisfaction eading to retention of nurses. They stressed the importance of the management role in the work environment. (Wells, 2002)

Dr. Valda V. Upenieks who carried out a comparative study of nurses employed in Magnet and non-Magnet hospitals points to the importance of the nurse leadership role to clinical nurses and

the effect of nursing leadership in Magnet hospitals. (Upenieks, 2002) She summarized her findings with respect to nurse satisfaction as indicating that "Magnet hospital nurses with resources, support, information, and the opportunity to use their expertise were more satisfied than nurses in non-Magnet hospitals." (Upenieks, 2003) She points out that these results supported previous studies.

Another aspect of the Magnet hospital is that the facility's climate is one in which the staff can function within a collaborative working relationship. In an article focusing on the attributes in the work place that contribute to nurse satisfaction, Dr. Kathi Kendall Sengin stated "Studies have found that relationships with co-workers and supervisors, team work, as well as collaboration with physicians in decision-making about patient care are important correlates of job satisfaction." (Sengin, 2003) While the provision of the climate for collaborative practices in the work setting is crucial, the conditions under which such practices will be successful must first be established in the disparate health care occupations' educational experiences.

The recognition of the need for such experiences and their impact on patient safety was the crux of NACNEP's joint interest with COGME in interdisciplinary health professions education. The councils held a joint meeting in 2000 on interdisciplinary education, which resulted in the support of five interdisciplinary education projects, centered on patient safety. These projects began their final years of support in the Fall of 2003. Through participation on the committee established to guide IOM's national invitational summit of June 2002 and attendance at the summit, the councils furthered their interdisciplinary activities. At the summit discussion centered on developing proposed strategies and actions for addressing five competency areas: provide patient-centered care, work in interdisciplinary teams, employ evidence-based practice, apply quality improvement, and utilize informatics. As pointed out in Health Professions Education: A Bridge to Quality, the document summarizing the outcomes from the summit and the committee's deliberations, the cross-cutting changes in clinical education and related training environments that are needed to ensure the implementation of the core competencies requires leaders across the professions to work together. The report concludes with a call for biennial summits of health care leaders responsible for education to further efforts of reform-minded leaders.

Effects on Patient Care

Positive work environments, as represented by the work settings in Magnet hospitals, have an impact on the outcomes of patient care. Magnet hospitals generally have higher nurse-to-patient ratios than non-Magnet hospitals. Dr. Linda Aiken indicated that in a study contrasting the mortality rates in Magnet and non-Magnet hospitals the rates were lower in the Magnet hospitals. She states that "Higher nurse-to-patient ratios in magnet hospitals were the major factor explaining their lower mortality rates." In this paper providing an examination of research on Magnet hospitals, Dr. Aiken concludes, "The evidence base in support of superior outcomes for magnet hospitals is extensive. Magnet hospitals have been shown to achieve substantially more favorable outcomes for patients when compared to non-magnet hospitals."

Positive Patient Care Environment

These data all lead to the conclusion that quality health care with positive patient outcomes can best be achieved with well-staffed nursing services. The expectation of obtaining and sustaining the necessary staff in the current nursing climate is greatly enhanced by an organizational

structure that provides effective leadership in an atmosphere of shared responsibility and the ability of nursing at all levels to affect patient care decisions.

Basic to the achievement of a good working environment is creating an environment that recognizes the needs of today's diverse staff and patient population. A critical aspect of serving the patient population is recognizing the disparities in the availability and delivery of care and actively taking steps to mitigate them. A recent study by IOM, carried out at the request of Congress, indicates that racial and ethnic minorities experience lower quality and more limited health services than others within the country's population. The study identifies the many factors that lead to such differences in health care delivery and recommends a variety of approaches to alleviate the problems. Among these it considers the role of providers through calling for increased awareness of health care providers of the disparities in care, enhanced patient-provider communication and the integration of cross-cultural education into the training of health professionals. (Smedley et al, 2002)

Organizations need to take a conscious approach to accomplishing these goals with leadership in the active forefront. Dr. Rose Rivers, the Vice President for Nursing and Patient Services at SHANDS HealthCare at the University of Florida, in her paper presented by Dr. Linda Burnes Bolton at NACNEP's meeting, indicated that to achieve its mission to provide excellent patient care, improve community health and create an environment supportive of education and research the institution had to be able "to serve in a very diverse environment from the perspective of staff and patients." In support of this goal the Diversity Awareness Program was established involving the total staff at all levels in training with the Vice President for Nursing leading the Diversity Steering Committee. (See Appendix G.)

Doreen Frusti and her colleagues at the Mayo Clinic, in an article discussing their organization's approach to ensuring a "culturally competent organization", state that "the fiscal health of hospitals depends not only on an adequate supply of nurses but also on a nursing workforce that reflects the racial and ethnic diversity of the population for whom it cares." The goals of the strategic plan to assist in building a diverse workforce developed and implemented by the nursing administrators in the organization related to active and visible leadership support, minority recruitment, diversity competence among employees, and a work environment supportive of employee success. (Frusti et al, 2003)

As pointed out in this article, creating an appropriate environment for good patient care involves both active approaches to assuring that the staff work environment takes into account cultural competency and that the staff reflects the population diversity. The need to attract individuals from diverse backgrounds into nursing is also critical to the assurance of an adequate supply of nurses in these times of nursing shortages. The largest expansion of the country's population, particularly among the youngest age groups, is coming from those with minority backgrounds. Yet a significant gap exists between the proportion of individuals with minority backgrounds in the population as a whole and in nursing.

Dr. Bolton in her talk to the Council on improving the nursing practice environment indicated the importance of both employer organizations and schools of nursing creating and implementing new models designed to attract, prepare and retain individuals from diverse backgrounds into nursing practice. (See Appendix H.) Dr. Nilda Peragallo in her presentation to NACNEP pointed to the need for specific directed efforts toward promoting nursing as a career choice in the Hispanic population. She pointed out that Hispanic nursing students constitute a very low

proportion of all nursing students in the face of the fact that the fastest growing minority group in the country is Hispanics. Dr. Peragallo stressed the need for programs that both seek to recruit Hispanics into nursing schools and those that actively work to retain them. Barriers to retention include possible inadequate secondary education, inability to pay tuition, feelings of isolation, lack of faculty contact/support, and perceived discrimination. (See Appendix I.)

Dr. Janet S. Rami, the Dean of the Southern University School of Nursing, in her paper presented at the meeting by Dr. Constance Hendricks from the school's faculty, demonstrated the achievements of the university's efforts to enroll and graduate a predominantly African American student body. Her strategies for successful retention and graduation of minority students included eliminating barriers to admissions by using multiple variables for admission; focus on graduation and entry into practice rather than retention alone, and ensuring that standards for minority students be consistent with those of majority students. She stressed that faculty commitment; attitudes toward minority students, and knowledge were key to success. (See Appendix J.)

Thus creating an adequate nursing workforce to achieve a quality, safe, patient care is dependent on actions on the part of both the schools, which prepare the nurses for practice and the organizations in which they practice. Schools need to reach out and develop programs that provide for the needs of students from a variety of backgrounds. They need to set the stage for a practice environment where decision-making and patient care are shared responsibilities among the disparate health care practitioners and the care needs of all patients are taken into account. Employing organizations need to ensure that they provide the leadership and environment where the staff can participate in the joint decision-making and practice necessary to provide quality, safe, patient care to patients from all segments of our society. The congressional action in the passage of the NRA was an important part of accomplishing these objectives. The models developed by the projects supported under the NRA programs should provide the stimulus for the changes in the educational and practice environment to achieve an adequate nurse workforce for quality patient care.

IV. CONCLUSIONS AND RECOMMENDATIONS

Over the course of the three years in which NACNEP has reported to the Secretary of Health and Human Services and the Congress on its activities and recommendations for the future it focused most directly on the critical need to enhance patient care quality and safety through alleviating the pervasive nursing shortage. In the first two years NACNEP examined the dimensions of the nursing shortage and, in this connection, looked broadly at those activities within nursing education and practice that would further the Nation's health care system to provide quality and safe care. In the third year NACNEP concentrated its efforts on two areas. It participated in and reviewed the activities implementing the legislative approach taken by the Federal government to assist in alleviating the nursing shortage. NACNEP also turned its attention very specifically to aspects of the nurse work environment that have been shown to promote the quality of patient care and safety and affect the recruitment and retention of the nurse workforce.

The conclusions and recommendations in the first report presented a wide view of steps that could be taken to support the nursing education and practice arena in working toward alleviating the nursing shortage. In the second report, NACNEP concentrated on presenting a review of actions that could help to address an underlying need in allaying the nursing shortage, the shortage of nurse faculty. NACNEP looked to community-wide activities, government at all levels, the profession, and the health care industry to effect the changes envisioned by the cited measures. Congress, by enacting the NRA has responded significantly to a number of the suggested actions. NACNEP is also mindful of the many actions undertaken by the nursing community, private organizations and others in working toward effecting the necessary changes.

Recommendations

Providing solutions to the continuing critical nursing shortage requires continuing cooperation from all segments. NACNEP sees a critical leadership role for the Federal government within these efforts through encouraging and fostering new creative and innovative approaches. To this end it recommends the following six actions designed to affect the nursing education, practice and work environment leading to improved access to and quality of the Nation's delivery of health care to its disparate population:

- Broaden the impact of the Nurse Reinvestment Act initiatives by increasing the funding appropriations, consistent with national demand, to further improvements in nursing practice and education and the retention of the nurse workforce.
- Expand the resources available to develop models that will effectively recruit and graduate sufficient numbers of racial/ethnic students to reflect the Nation's diverse population.
- Building on the five years of work, beginning with the joint COGME/NACNEP activities on fostering health professions interdisciplinary practice and education in patient safety and cultural competence, support continuing efforts through the implementation of the recommendations arising out of the IOM summit as outlined in Health Professions Education: A Bridge to Quality.
- Create a positive environment for enhancing the recruitment and retention of the nurse workforce by fostering the development of working conditions that provide for the involvement of nurses in the operation and patient care decision-making at the unit level,

the participation of nurse executives in the employment setting's top decision-making body and the promotion of programs to actively incorporate a diverse workforce at all levels of the organization.

- Support the development and evaluation of culturally competent interventions that lead to reductions in gaps contributing to disparities and show improved quality of care in very diverse nurse/patient environments through demonstration projects in one or more nursing specialties using cooperative agreements.
- Develop a regular, periodic, survey mechanism to create a database on the elements of the nurse work environment through establishing cooperative agreements with professional hospital-affiliated organizations.

Future Activities

As NACNEP moves forward with its examination of the issues relating to the nurse workforce it will continue to monitor the availability of an appropriate nurse supply necessary to provide quality health care for the Nation's population. It will in its examination of the state of nursing education and practice look toward changes that might lead to improved recruitment from all segments of the population and enhanced retention of the nurse workforce. In its consideration of measures that might strengthen the provision of nursing care to the Nation's population, NACNEP will examine the outcomes that have been accomplished through support of the NRA and other aspects of Title VIII and suggest ways of building on these. It will also continue its particular focus on interdisciplinary education and practice on the improvement of patient safety, the influence on the recruitment and retention of nurses and the effects on educational costs through an examination of the results of the medicine and nursing divisions' jointly sponsored cooperative agreements described in NACNEP's second report.

LIST OF REFERENCES

Aiken, L.H., "Superior Outcomes for Magnet Hospitals: The Evidence Base", in McClure, M.L. and Hinshaw, A.S., Magnet Hospitals Revisited: Attraction and Retention of Professional Nurses, Washington, D.C., American Nurses Publishing, 2002.

Aiken, L.H., Clarke, S. P., Cheung, R. B., Sloane, D. M., and Silber, J. H., "Educational Levels of Hospital Nurses and Surgical Patient Mortality", (reprinted) Journal of American Medical Association, September 24, 2003, 290:12, 1617-1623.

American Nurses Credentialling Center, http://nursingworld.org/ancc/magnet/faqs.html, December 6, 2003.

Bleich, M.R., Hewlett, P.O., Santos, S.R., Rice, R.B., Cox, K.S., and Richmeier, S., "Analysis of the Nursing Workforce Crisis: A Call to Action", American Journal of Nursing, April 2003, 103:4, 66-74.

Frusti, D.K., Niesen, K.M., and Campion, J.K., "Creating a Culturally Competent Organization: Use of the Diversity Competency Model", Journal of Nursing Administration, January 2003, 33:1, 31-38.

Hickam, D.H., Severance, S., Feldstein, A., et al, The Effect of Health Care Working Conditions on Patient Safety, Evidence Report/Technology Assessment Number 74. (Prepared by Oregon Health & Science University under Contract No. 290-97-0018.) AHRQ Publication No. 03-E031, Rockville, MD., Agency for Healthcare Research and Quality, May 2003.

McClure, M.L., Poulin, M.A., Sovie, M.D., and Wandelt, M.A., Magnet Hospitals: Attraction and Retention of Professional Nurses, Washington, D.C., American Nurses Association, 1983.

National Advisory Council on Nurse Education and Practice, First Report to the Secretary of Health and Human Services and the Congress, U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Division of Nursing, Rockville, Maryland, 2001.

National Advisory Council on Nurse Education and Practice, Second Report to the Secretary of Health and Human Services and the Congress, U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Division of Nursing, Rockville, Maryland, 2002.

Page, A., editor, Keeping Patients Safe: Transforming the Work Environment of Nurses, Committee on the Work Environment for Nurses and Patient Safety, Board of Health Care Services, Institute of Medicine, The National Academies Press, Washington, D.C., 2003, Prepublication copy.

Sengin, K.K., "Work-Related Attributes of RN Job Satisfaction in Acute Care Hospitals", Journal of Nursing Administration, June 2003, 33:6, 317-319.

Shaver, K.H. and Lacey, L.M., "Job and Career Satisfaction Among Staff Nurses: Effects of Job Setting and Environment", Journal of Nursing Administration, March 2003, 33:3, 166-172.

Smedley, B.D., Stith, A.Y., Nelson, A.R., editors, Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care, Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care, Board on Health Sciences Policy, Institute of Medicine, National Academy Press, Washington, D.C., 2002, Prepublication copy.

Upenieks, V.V., "Assessing Differences in Job Satisfaction of Nurses in Magnet and Nonmagnet Hospitals", Journal of Nursing Administration, November 2002, 32:11, 564-576.

Upenieks, V.V., "What's the Attraction to Magnet Hospitals", Nursing Management, February 2003, pp. 43-44.

APPENDIX A

Excerpted from the Nurse Education and Practice Improvement Act of 1998 (P.L. 105-392, Section 845)

PART GNATIONAL ADVISORY COUNCIL ON NURSE EDUCATION AND PRACTICE.

(a) ESTABLISHMENT. The Secretary shall establish an advisory council to be known as the National Advisory Council on Nurse Education and Practice (in this section referred to as the ‘Advisory Council').

(b) COMPOSITION.

(1) IN GENERAL. The Advisory Council shall be composed of

(A) not less than 21, nor more than 23 individuals, who are not officers or employees of the Federal Government, appointed by the Secretary without regard to the Federal civil service laws, of which

(i) 2 shall be selected from full-time students enrolled in schools of nursing;

(ii) 2 shall be selected from the general public;

(iii) 2 shall be selected from practicing professional nurses; and

(iv) 9 shall be selected from among the leading authorities in the various fields of nursing, higher, secondary education, and associate degree schools of nursing, and from representatives of advanced education nursing groups (such as nurse practitioners, nurse midwives, and nurse anesthetists), hospitals, and other institutions and organizations which provide nursing services; and

(B) The Secretary (or the delegate of the Secretary (who shall be an ex officio member and shall serve as the Chairperson)).

(2) APPOINTMENT. Not later than 90 days after the date of enactment of this Act, the Secretary shall appoint the members of the Advisory Council and each such member shall serve a 4 year term. In making such appointments, the Secretary shall ensure a fair balance between the nursing professions, a broad geographic representation of members and a balance between urban and rural members. Members shall be appointed based on their competence, interest, and knowledge of the mission of the profession involved. A majority of the members shall be nurses.

(3) MINORITY REPRESENTATION. In appointing the members of the Advisory Council under paragraph (1), the Secretary shall ensure the adequate representation of minorities.

(c) VACANCIES.

(1) IN GENERAL.A vacancy on the Advisory Council shall be filled in the manner in which the original appointment was made and shall be subject to any conditions which applied with respect to the original appointment.

(2) FILLING UNEXPECTED TERM. An individual chosen to fill a vacancy shall be appointed for the unexpired term of the member replaced.

(d) DUTIES. The Advisory Council shall

(1) provide advice and recommendations to the Secretary and Congress concerning policy matters arising in the administration of this title, including the range of issues relating to the nurse workforce, education, and practice improvements;

(2) provide advice to the Secretary and Congress in the preparation of general regulations and with respect to policy matters arising in the administration of this title, including the range of issues relating to nurse supply, education and practice improvement; and

(3) not later than 3 years after the date of enactment of this section, and annually thereafter, prepare and submit to the Secretary, the Committee on Labor and Human Resources of the Senate, and the Committee on Commerce of the House
of Representatives, a report describing the activities of the Council, including findings and recommendations made by the council concerning the activities under this title.

(e) MEETINGS AND DOCUMENTS.

(1) MEETINGS. The Advisory Council shall meet not less than 2 times each year. Such meetings shall be held jointly with other related entities established under this title where appropriate.

(2) DOCUMENTS. Not later than 14 days prior to the convening of a meeting under paragraph (1), the Advisory Council shall prepare and make available an agenda of the matters to be considered by the Advisory Council at such meeting. At any such meeting, the Advisory Council shall distribute materials with respect to the issues to be addressed at the meeting. No later than 30 days after the adjourning of such a meeting, the Advisory Council shall prepare and make available a summary of the meeting and any actions taken by the Council based upon the meeting.

(f) COMPENSATIONS AND EXPENSES.

(1) COMPENSATION. Each member of 0the Advisory Council shall be compensated at a rate equal to the daily equivalent of the annual rate of basic pay prescribed for level IV of the Executive Schedule under section 5315 of title 5, United States Code, for each day (including travel time) during which such member is engaged in the performance of the duties of the Council. All members of the Council who are officers or employees of the United States shall serve without compensation in addition to that received for their services as officers or employees of the United States.

(2) EXPENSES. The members of the Advisory Council shall be allowed travel expenses, including per diem in lieu of subsistence, at rates authorized for employees of agencies under subchapter I of chapter 57 of title 5, United States Code, while away from their homes or regular places of business in the performances of services for the Council.

(g) FUNDING. Amounts appropriated under this title may be utilized by the Secretary to support the nurse education and practice activities of the Council.

(h) FACA. The Federal Advisory Committee Act shall apply to the Advisory Committee under this section only to the extent that the provisions of such Act do not conflict with the requirements of this section."; and

(6) by redesignating section 855 as section 810, and transferring such section so as to appear after section 809 (as added by the amendment made by paragraph (5)).

APPENDIX B

Nurse Reinvestment Act, P.L. 107-205

An Act

To amend the Public Health Service Act with respect to health professions programs regarding the field of nursing. Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the ŒNurse Reinvestment Act".

SEC. 2. TABLE OF CONTENTS.

The table of contents for this Act is as follows:

TITLE INURSE RECRUITMENT

SEC. 101. DEFINITIONS.

Section 801 of the Public Health Service Act (42 U.S.C. 296) is amended by adding at the end the following:

(9) AMBULATORY SURGICAL CENTER. The term 'ambulatory surgical center' has the meaning applicable to such term under title XVIII of the Social Security Act.

(10) FEDERALLY QUALIFIED HEALTH CENTER. The term 'Federally qualified health center' has the meaning given such term under section 1861(aa) (4) of the Social Security Act.

(11) HEALTH CARE FACILITY. The term 'health care facility' means an Indian Health Service health center, a Native Hawaiian health center, a hospital, a Federally qualified health center, a rural health clinic, a nursing home, a home health agency, a hospice program, a public health

clinic, a State or local department of public health, a skilled nursing facility, an ambulatory surgical center, or any other facility designated by the Secretary.

(12) HOME HEALTH AGENCY. The term 'home health agency' has the meaning given such term in section 1861(o) of the Social Security Act. H. R. 34872

(13) HOSPICE PROGRAM. The term hospice program has the meaning given such term in section 1861 (dd)(2) of the Social Security Act.

(14) RURAL HEALTH CLINIC. The term rural health clinic has the meaning given such term in section 1861(aa)(2) of the Social Security Act.

(15) SKILLED NURSING FACILITY. The term skilled nursing facility has the meaning given such term in section 1819(a) of the Social Security Act..

SEC. 102. PUBLIC SERVICE ANNOUNCEMENTS REGARDING THE NURSING PROFESSION.

Title VIII of the Public Health Service Act (42 U.S.C. 296 et seq.) is amended by adding at the end the following:

PART HPUBLIC SERVICE ANNOUNCEMENTS

SEC. 851. PUBLIC SERVICE ANNOUNCEMENTS.

(a) IN GENERAL. The Secretary shall develop and issue public service announcements that advertise and promote the nursing profession, highlight the advantages and rewards of nursing, and encourage individuals to enter the nursing profession.

(b) METHOD. The public service announcements described in subsection (a) shall be broadcast through appropriate media outlets, including television or radio, in a manner intended to reach as wide and diverse an audience as possible.

(c) AUTHORIZATION OF APPROPRIATIONS. There are authorized to be appropriated to carry out this section such sums as may be necessary for each of fiscal years 2003 through 2007.

SEC. 852. STATE AND LOCAL PUBLIC SERVICE ANNOUNCEMENTS.

(a) IN GENERAL. The Secretary may award grants to eligible entities to support State and local advertising campaigns through appropriate media outlets to promote the nursing profession, highlight the advantages and rewards of nursing, and encourage individuals from disadvantaged backgrounds to enter the nursing profession.

(b) USE OF FUNDS. An eligible entity that receives a grant under subsection (a) shall use funds received through such grant to acquire local television and radio time, place advertisements in local newspapers, or post information on billboards or on the Internet in a manner intended to reach as wide and diverse an audience as possible, in order to

(1) advertise and promote the nursing profession;

(2) promote nursing education programs;

(3) inform the public of financial assistance regarding such education programs;

(4) highlight individuals in the community who are practicing nursing in order to recruit new nurses; or

(5) provide any other information to recruit individuals for the nursing profession.

(c) LIMITATION. An eligible entity that receives a grant under subsection (a) shall not use funds received through such grant to advertise particular employment opportunities.

(d) AUTHORIZATION OF APPROPRIATIONS. There are authorized to be appropriated to carry out this section such sums as may be necessary for each of fiscal years 2003 through 2007.

SEC. 103. NATIONAL NURSE SERVICE CORPS.

(a) LOAN REPAYMENT PROGRAM. Section 846(a) of the Public Health Service Act (42 U.S.C. 297n(a)) is amended

(1) in paragraph (3), by striking "in an Indian Health Service health center" and all that follows to the semicolon and inserting at a health care facility with a critical shortage of nurses"; and

(2) by adding at the end the following: After fiscal year 2007, the Secretary may not, pursuant to any agreement entered into under this subsection, assign a nurse to any private entity unless that entity is nonprofit.".

(b) ESTABLISHMENT OF SCHOLARSHIP PROGRAM. Section 846 of the Public Health Service Act (42 U.S.C. 297n) is amended

(1) in the heading for the section, by striking "LOAN REPAYMENT PROGRAM" and inserting "LOAN REPAYMENT AND SCHOLARSHIP PROGRAMS";

(2) by redesignating subsections (d), (f), (g), and (h) as subsections (f), (h), (i), and (g), respectively;

(3) by transferring subsections (f) and (g) (as so redesignated) from their current placements, by inserting subsection (f) after subsection (e), and by inserting subsection (g) after subsection (f) (as so inserted); and

(4) by inserting after subsection (c) the following subsection: (d) SCHOLARSHIP PROGRAM.

(1) IN GENERAL. The Secretary shall (for fiscal years 2003 and 2004) and may (for fiscal years thereafter) carry out a program of entering into contracts with eligible individuals under which such individuals agree to serve as nurses for a period of not less than 2 years at a health care facility with a critical shortage of nurses, in consideration of the Federal Government agreeing to provide to the individuals scholarships for attendance at schools of nursing.

(2) ELIGIBLE INDIVIDUALS. In this subsection, the term "eligible individual" means an individual who is enrolled or accepted for enrollment as a full-time or part-time student in a school of nursing.

(3) SERVICE REQUIREMENT.

(A) IN GENERAL. The Secretary may not enter into a contract with an eligible individual under this subsection unless the individual agrees to serve as a nurse at a health care facility with a

critical shortage of nurses for a period of full-time service of not less than 2 years, or for a period of part-time service in accordance with subparagraph (B).

(B) PART-TIME SERVICE. An individual may complete the period of service described in subparagraph (A) on a part-time basis if the individual has a written agreement that

(i) is entered into by the facility and the individual and is approved by the Secretary; and

(ii) provides that the period of obligated service will be extended so that the aggregate amount of service performed will equal the amount of service that would be performed through a period of full-time service of not less than 2 years.

(4) APPLICABILITY OF CERTAIN PROVISIONS. The provisions of subpart III of part D of title III shall, except as inconsistent H. R. 34874 with this section, apply to the program established in paragraph (1) in the same manner and to the same extent as such provisions apply to the National Health Service Corps Scholarship Program established in such subpart.

(c) PREFERENCE. Section 846(e) of the Public Health Service Act (42 U.S.C. 297n(e)) is amended by striking "under subsection (a)" and all that follows through the period and inserting "under subsection (a) or (d), the Secretary shall give preference to qualified applicants with the greatest financial need."

(d) REPORTS. Subsection (h) of section 846 of the Public Health Service Act (42 U.S.C. 297n) (as redesignated by subsection (b)(2)) is amended to read as follows:

(h) REPORTS. Not later than 18 months after the date of enactment of the Nurse Reinvestment Act, and annually thereafter, the Secretary shall prepare and submit to the Congress a report describing the programs carried out under this section, including statements regarding

(1) the number of enrollees, scholarships, loan repayments, and grant recipients;

(2) the number of graduates;

(3) the amount of scholarship payments and loan repayments made;

(4) which educational institution the recipients attended;

(5) the number and placement location of the scholarship and loan repayment recipients at health care facilities with a critical shortage of nurses;

(6) the default rate and actions required;

(7) the amount of outstanding default funds of both the scholarship and loan repayment programs;

(8) to the extent that it can be determined, the reason for the default;

(9) the demographics of the individuals participating in the scholarship and loan repayment programs;

(10) justification for the allocation of funds between the scholarship and loan repayment programs; and

(11) an evaluation of the overall costs and benefits of the programs.

(e) FUNDING. Subsection (i) of section 846 of the Public Health Service Act (42 U.S.C. 297n) (as redesignated by subsection (b)(2)) is amended to read as follows:

(i) FUNDING.

(1) AUTHORIZATION OF APPROPRIATIONS. For the purpose of payments under agreements entered into under subsection (a) or (d), there are authorized to be appropriated such sums as may be necessary for each of fiscal years 2003 through 2007.

(2) ALLOCATIONS. Of the amounts appropriated under paragraph (1), the Secretary may, as determined appropriate by the Secretary, allocate amounts between the program under subsection (a) and the program under subsection (d).

TITLE IINURSE RETENTION

SEC. 201. BUILDING CAREER LADDERS AND RETAINING QUALITY NURSES.

Section 831 of the Public Health Service Act (42 U.S.C. 296p) is amended to read as follows:

SEC. 831. NURSE EDUCATION, PRACTICE, AND RETENTION GRANTS.

(a) EDUCATION PRIORITY AREAS. The Secretary may award grants to or enter into contracts with eligible entities for

(1) expanding the enrollment in baccalaureate nursing programs;

(2) developing and implementing internship and residency programs to encourage mentoring and the development of specialties; or

(3) providing education in new technologies, including distance learning methodologies.

(b) PRACTICE PRIORITY AREAS.

The Secretary may award grants to or enter into contracts with eligible entities for

(1) establishing or expanding nursing practice arrangements in noninstitutional settings to demonstrate methods to improve access to primary health care in medically underserved communities;

(2) providing care for underserved populations and other high-risk groups such as the elderly, individuals with HIV/AIDS, substance abusers, the homeless, and victims of domestic violence;

(3) providing managed care, quality improvement, and other skills needed to practice in existing and emerging organized health care systems; or

(4) developing cultural competencies among nurses.

(c) RETENTION PRIORITY AREAS. The Secretary may award grants to and enter into contracts with eligible entities to enhance the nursing workforce by initiating and maintaining nurse retention programs pursuant to paragraph (1) or (2).

(1) GRANTS FOR CAREER LADDER PROGRAMS. The Secretary may award grants to and enter into contracts with eligible entities for programs

(A) to promote career advancement for nursing personnel in a variety of training settings, cross training or specialty training among diverse population groups, and the advancement of individuals including to become professional nurses, advanced education nurses, licensed practical nurses, certified nurse assistants, and home health aides; and

(B) to assist individuals in obtaining education and training required to enter the nursing profession and advance within such profession, such as by providing career counseling and mentoring.

(2) ENHANCING PATIENT CARE DELIVERY SYSTEMS.

(A) GRANTS. The Secretary may award grants to eligible entities to improve the retention of nurses and enhance patient care that is directly related to nursing activities by enhancing collaboration and communication among nurses and other health care professionals, and H. R. 34876 by promoting nurse involvement in the organizational and clinical decision-making processes of a health care facility.

(B) PREFERENCE. In making awards of grants under this paragraph, the Secretary shall give a preference to applicants that have not previously received an award under this paragraph.

(C) CONTINUATION OF AN AWARD. The Secretary shall make continuation of any award under this paragraph beyond the second year of such award contingent on the recipient of such award having demonstrated to the Secretary measurable and substantive improvement in nurse retention or patient care.

(d) OTHER PRIORITY AREAS. The Secretary may award grants to or enter into contracts with eligible entities to address other areas that are of high priority to nurse education, practice, and retention, as determined by the Secretary.

(e) PREFERENCE. For purposes of any amount of funds appropriated to carry out this section for fiscal year 2003, 2004, or 2005 that is in excess of the amount of funds appropriated to carry out this section for fiscal year 2002, the Secretary shall give preference to awarding grants or entering into contracts under subsections (a)(2) and (c).

(f) REPORT. The Secretary shall submit to the Congress before the end of each fiscal year a report on the grants awarded and the contracts entered into under this section. Each such report shall identify the overall number of such grants and contracts and provide an explanation of why each such grant or contract will meet the priority need of the nursing workforce.

(g) ELIGIBLE ENTITY. For purposes of this section, the term "eligible entity" includes a school of nursing, a health care facility, or a partnership of such a school and facility.

(h) AUTHORIZATION OF APPROPRIATIONS. There are authorized to be appropriated to carry out this section such sums as may be necessary for each of fiscal years 2003 through 2007.

SEC. 202. COMPREHENSIVE GERIATRIC EDUCATION.

(a) COMPREHENSIVE GERIATRIC EDUCATION. Title VIII of the Public Health Service Act (42 U.S.C. 296 et seq.) (as amended by section 102) is amended by adding at the end the following:

PART ICOMPREHENSIVE GERIATRIC EDUCATION

SEC. 855. COMPREHENSIVE GERIATRIC EDUCATION.

(a) PROGRAM AUTHORIZED. The Secretary shall award grants to eligible entities to develop and implement, in coordination with programs under section 753, programs and initiatives to train and educate individuals in providing geriatric care for the elderly.

(b) USE OF FUNDS. An eligible entity that receives a grant under subsection (a) shall use funds under such grant to

(1) provide training to individuals who will provide geriatric care for the elderly;

(2) develop and disseminate curricula relating to the treatment of the health problems of elderly individuals;

(3) train faculty members in geriatrics; or

(4) provide continuing education to individuals who provide geriatric care.

(c) APPLICATION. An eligible entity desiring a grant under subsection (a) shall submit an application to the Secretary at such time, in such manner, and containing such information as the Secretary may reasonably require.

(d) ELIGIBLE ENTITY. For purposes of this section, the term 'eligible entity' includes a school of nursing, a health care facility, a program leading to certification as a certified nurse assistant, a partnership of such a school and facility, or a partnership of such a program and facility.

(e) AUTHORIZATION OF APPROPRIATIONS. There are authorized to be appropriated to carry out this section such sums as may be necessary for each of fiscal years 2003 through 2007.

(b) TECHNICAL AMENDMENT. Section 753(a)(1) of the Public Health Service Act 42 U.S.C. 294c) is amended by striking ŒŒ, and section 853(2), and inserting ŒŒ, and section 801(2),.

SEC. 203. NURSE FACULTY LOAN PROGRAM.

Part E of title VIII of the Public Health Service Act (42 U.S.C. 297a et seq.) is amended by inserting after section 846 the following:

NURSE FACULTY LOAN PROGRAM

SEC. 846A. (a) ESTABLISHMENT. The Secretary, acting through the Administrator of the Health Resources and Services Administration, may enter into an agreement with any school of nursing for the establishment and operation of a student loan fund in accordance with this section, to increase the number of qualified nursing faculty.

(b) AGREEMENTS. Each agreement entered into under subsection (a) shall

(1) provide for the establishment of a student loan fund by the school involved;

(2) provide for deposit in the fund of

(A) the Federal capital contributions to the fund;

(B) an amount equal to not less than one-ninth of such Federal capital contributions, contributed by such school;

(C) collections of principal and interest on loans made from the fund; and

(D) any other earnings of the fund;

(3) provide that the fund will be used only for loans to students of the school in accordance with subsection (c) and for costs of collection of such loans and interest thereon;

(4) provide that loans may be made from such fund only to students pursuing a full-time course of study or, at the discretion of the Secretary, a part-time course of study in an advanced degree program described in section 811(b); and

(5) contain such other provisions as are necessary to protect the financial interests of the United States.

(c) LOAN PROVISIONS. Loans from any student loan fund established by a school pursuant to an agreement under subsection (a) shall be made to an individual on such terms and conditions as the school may determine, except that

(1) such terms and conditions are subject to any conditions, limitations, and requirements prescribed by the Secretary;

(2) in the case of any individual, the total of the loans for any academic year made by schools of nursing from loan funds established pursuant to agreements under subsection H. R. 34878 (a) may not exceed $30,000, plus any amount determined by the Secretary on an annual basis to reflect inflation;

(3) an amount up to 85 percent of any such loan (plus interest thereon) shall be canceled by the school as follows:

(A) upon completion by the individual of each of the first, second, and third year of full-time employment, required by the loan agreement entered into under this subsection, as a faculty member in a school of nursing, the school shall cancel 20 percent of the principle of, and the interest on, the amount of such loan unpaid on the first day of such employment; and

(B) upon completion by the individual of the fourth year of full-time employment, required by the loan agreement entered into under this subsection, as a faculty member in a school of nursing, the school shall cancel 25 percent of the principle of, and the interest on, the amount of such loan unpaid on the first day of such employment;

(4) such a loan may be used to pay the cost of tuition, fees, books, laboratory expenses, and other reasonable education expenses;

(5) such a loan shall be repayable in equal or graduated periodic installments (with the right of the borrower to accelerate repayment) over the 10-year period that begins 9 months after the individual ceases to pursue a course of study at a school of nursing; and

(6) such a loan shall

(A) beginning on the date that is 3 months after the individual ceases to pursue a course of study at a school of nursing, bear interest on the unpaid balance of the loan at the rate of 3 percent per annum; or "(B) subject to subsection (e), if the school of nursing determines that the individual will not complete such course of study or serve as a faculty member as required under the loan

agreement under this subsection, bear interest on the unpaid balance of the loan at the prevailing market rate.

(d) PAYMENT OF PROPORTIONATE SHARE. Where all or any part of a loan, or interest, is canceled under this section, the Secretary shall pay to the school an amount equal to the school¹s proportionate share of the canceled portion, as determined by the Secretary.

(e) REVIEW BY SECRETARY. At the request of the individual involved, the Secretary may review any determination by a school of nursing under subsection (c)(6)(B).

(f) AUTHORIZATION OF APPROPRIATIONS. There are authorized to be appropriated to carry out this section such sums as may be necessary for each of fiscal years 2003 through 2007..

APPENDIX C

IOM Committee on Health Professions Education: A Bridge to Quality Abbreviated Executive Summary

Committee on the Health Professions Education Summit
Board on Health Care Services

Ann C. Greiner, M.C.P.

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Editors

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Abbreviated Executive Summary

Abstract

The 2001 Institute of Medicine report Crossing the Quality Chasm: A New Health System for the 21st Century recommended that an interdisciplinary summit be held to develop next steps for reform of health professions education lead to enhancement of patient care quality and safety. In June 2002, the IOM convened this summit, which included 150 participants across disciplines and occupations. This follow-up report focuses on integrating a core set of competenciespatient-centered care, interdisciplinary teams, evidence-based practice, quality improvement and informatics into health professions education.

The report's recommendations include a mix of approaches related to oversight processes, the training environment, research, public reporting, and leadership. The recommendations targeting oversight organizations include integrating core competencies into accreditation, and credentialing processes across the professions. The goal is an outcome-based education system that better prepares clinicians to meet both the needs of patients and the requirements of a changing health system.

The summit and follow up report were supported by the Health Resources and Services Administration (HRSA), the Agency for Healthcare Research and Quality (AHRQ), the ABIM Foundation, and the California HealthCare Foundation (CHCF).

Education for the health professions is in need of a major overhaul. Clinical education simply has not kept pace with or been responsive enough to shifting patient demographics and desires, changing health system expectations, evolving practice requirements, new information, a focus on improving quality, or new technologies (Institute of Medicine, 2001):

- Health professionals are not adequately prepared to address shifts in the nation's patient population, including increased prevalence of chronic conditions (Cantillon and Jones, 1999; Council on Graduate Medical Education, 1999; Davis et al., 1999; Grantmakers in Health, 2001; Halpern et al., 2001; Health Resources and Services Administration, 1999; Pew Health Professions Commission, 1995, (Calabretta, 2002; Frosch and Kaplan, 1999; Gerteis et al., 1993; Mansell et al., 2000; Mazur and Hickam, 1997; Wu and Green, 2000). This changing landscape requires that clinicians be skilled in providing ongoing patient management; deliver and coordinate care across teams, settings, and time frames; and support patients' endeavors to change behavior and lifestyletraining for which is in short supply in today¹s clinical education settings (Calabretta, 2002).
- Once in practice, health professionals are asked to work in interdisciplinary teams, often to support those with chronic conditions, yet they are not trained in team-based skills.
- These same clinicians are confronted with a rapidly expanding evidence base, but are not schooled in how to evaluate and apply this evidence base to practice (American Association of Medical Colleges, 1999; Detmer, 1997; Green, 2000; Shell, 2001).
- Although there is a spotlight on the serious mismatch between what we know to be good-quality care and the care that is actually delivered, students and health professionals have

few opportunities to learn how to analyze the root causes of quality problems and to design systemwide fixes (Baker et al., 1998; Buerhaus and Norman, 2001).
- While clinicians are trained to use an array of cutting-edge technologies related to care delivery, they often are not provided a basic foundation in informatics (Gorman et al., 2000; Hovenga, 2000).
- While there are notable pockets of innovation, these are by and large exceptions to the rule.

Building a Bridge to Cross the Quality Chasm

Numerous recent studies have led to the conclusion that "there is abundant evidence that serious and extensive quality problems exist throughout American medicine, resulting in harm to many Americans" (Schuster et al., 1998). Crossing the Quality Chasm: A New Health System for the 21st Century (Institute of Medicine, 2001) emphasizes that safety and quality problems exist largely because of system problems, and that browbeating health professionals to just try harder is not the answer to addressing the system's flaws and future challenges. The report concludes that change around the edges will not work and sets forth an ambitious redesign agenda. Further, it provides initial guidance on what kinds of competencies clinicians would need to carry out this agenda and emphasizes additional examination to better understand how the workforce should be educated, how it should be deployed, and how it should be held accountable.

Specifically, the Quality Chasm report recommends that a multidisciplinary summit of leaders within the health professions be held to discuss and develop strategies for restructuring clinical education across the full educational continuum. The Committee on the Health Professions Education Summit was convened to plan and hold this summit which was held on June 1718, 2002 and to produce a follow-up report. Summit participants were asked to develop proposed strategies and actions for addressing the five competency areas recommended by the committee (described below) for health professions education. The committee reviewed the ideas proposed by summit participants as part of its deliberations.

A New Vision for Health Professions Education

With the ideal health care system described in the Quality Chasm report as a backdrop, the committee developed a new, overarching vision for clinical education in the health professions that is centered on a commitment to, first and foremost, meeting patients' needs.

All health professionals should be educated to deliver patient-centered care as members of an interdisciplinary team, emphasizing evidence-based practice, quality improvement approaches, and informatics.

This vision is apparent in selected institutions around the country, but is not incorporated into the basic fabric of health professions education, nor is it supported by oversight processes or financing arrangements. Accordingly, the committee proposes a set of five core competencies that all clinicians should possess, regardless of their discipline, to meet the needs of the 21st-century health system. Competencies are defined here as the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice (Hundert et al., 1996).

- Provide patient-centered care respect patients' differences, values, and expressed needs; communicate with and educate patients; share decision making and management; and continuously advocate disease prevention and promotion of healthy lifestyles.
- Work in interdisciplinary teams cooperate, collaborate, communicate, and integrate care in teams to ensure that care is continuous and reliable.
- Employ evidence-based practices integrate best research with clinical expertise and patient values for optimum care, and participate in learning and research activities to the extent feasible.
- Apply quality improvement identify errors and hazards in care; continually measure quality of care; and design and test interventions to change processes and systems of care in order to improve quality.
- Utilize informatics communicate, manage knowledge, mitigate error, and support decision making using information technology.

To formulate the core competencies, the committee examined the skills outlined in the Quality Chasm report, various health professions' efforts to define competencies, and relevant literature (ABIM Foundation, 2002; Accreditation Council for Graduate Medical Education, 1999; American Association of Medical Colleges, 2001; Brady et al., 2001; Center for the Advancement of Pharmaceutical Education [CAPE] Advisory Panel on Educational Outcomes, 1998; Halpern et al., 2001; O'Neil and the Pew Health Professions Commission, 1998). The five competencies are meant to be core, overlap with other health professions' efforts to define competencies, and should not be viewed as an exhaustive list. The committee also acknowledges that the core competencies will differ in application across the disciplines and across educational settings, e.g., didactic versus training.

Next Steps

With some notable exceptions, most current and past reform efforts have focused within a particular profession (Bellack and O'Neil, 2000; Christakis, 1995; Harmening, 1999; Jablonover et al., 2000), however the committee believes the time has come for leaders across the professions to work together on the cross- cutting changes that must occur to affect comprehensive reform in clinical education and related training environments.

The committee believes that integrating a core set of competencies one that is shared across the professions into the health professions oversight spectrum would provide the most leverage. The committee also recommends pursing other leverage points such as enhanced information, e.g., performance metrics, and improved training environments but the preponderance of its 10 recommendations are directed at oversight bodies, which include accrediting, licensing and certifying organizations. Health professions oversight processes, such as accreditation and certification, function at the national level and thereby afford a mechanism for system wide change.

The call for accrediting and certifying organizations to move toward a competency-based approach to education is in response to growing concerns about patient safety (Institute of Medicine, 2000), the persistent and substantial variation in patient care across geographic settings unrelated to patient characteristics (O'Connor et al., 1996; Wennberg, 1998), and the desire on the part of public payers and consumers for increased accountability (Leach, 2002; Lenburg et al., 1999). Competency-based education focuses on making the learning outcomes for

courses explicit and on evaluating how well students have mastered these outcomes or competencies (Harden, 2002). The evidence base on the efficacy of various educational approaches is slim. However, the limited evidence that does exist points to improvements, such as better performance on licensing exams, for outcome-based educational approaches (Carraccio et al., 2002)

A competency-based approach to education could result in better quality because educators would begin to have information on outcomes, which could ultimately lead to better patient care. Defining a core set of competencies across educational oversight processes could also reduce costs as a result of better communication and coordination, with processes being streamlined and redundancies reduced. Integrating core competencies into oversight processes would likely provide the impetus for faculty development, curricular reform, and leadership activities.

Common Language and Adoption of Core Competencies

Before steps can be taken to integrate a core set of competencies into oversight processes, an interdisciplinary group will need to define common terms. A number of studies have shown that any collective movement to reform education must begin by defining a shared language (Halpern et al., 2001; Harden, 2002). Such an effort can help set in motion a process focused on achieving a threshold level of consensus across the disciplines around a core set of competencies.

Recommendation 1: DHHS and leading foundations should support an interdisciplinary effort focused on developing a common language, with the ultimate aim of achieving consensus across the health professions on a core set of competencies that includes patient-centered care, interdisciplinary teams, evidence-based practice, quality improvement, and informatics.

Integrating Competencies into Oversight Processes

Recommendations 2-5 address further integration of competencies into existing oversight processes varies. Such efforts would be strengthened if predicated on a core a set of competencies shared across the professions. During the last decade, competencies have begun to redefine accreditation, particularly in pharmacy and medicine, and such competencies overlap with the core competencies recommended by the committee (American Council on Pharmaceutical Education, 2002) (Accreditation Council for Graduate Medical Education, 2002). Until they are fully incorporated and evaluated, it remains to be seen what effect these competencies will have on pharmacy and medical education. In nursing, the two accrediting organizations also have defined competencies which do not fully overlap with the core competencies defined here but differ in whether they require demonstration of such competencies (Commission on Collegiate Nursing Education, 2002; National League for Nursing Accrediting Commission, 2002).

The competency movement, however, does not have as much of a foothold in licensure and certification processes. Requirements for maintaining a license vary considerably, as do requirements for those who pursue recognition of clinical excellence. Further, research has raised questions about the efficacy of continuing education courses, the most common way to demonstrate ongoing competency (Cantillon and Jones, 1999; Davis et al., 1999).

Efforts to incorporate a core set of competencies across the professions into the full oversight framework accreditation, licensing, and certification would need to occur on the national, state, and local levels; coordinate both public- and private-sector oversight organizations; and solicit

broad input. Again, the involvement of DHHS, and specifically the Health Resources and Services Administration, would be important in getting this effort off the ground. It is imperative to have linkages among accreditation, certification, and licensure; it would mean very little, for example, if accreditation standards set requirements for educational programs, and these requirements were not then reinforced through licensing exams.

Recommendation 2: DHHS should provide a forum and support for a series of meetings involving the spectrum of oversight organizations across and within the disciplines. Participants in these meetings would be charged with developing strategies for incorporating a core set of competencies into oversight activities, based on definitions shared across the professions. These meetings would actively solicit the input of health professions associations and the education community.

Strategies for incorporating the competencies into oversight processes would necessarily differ across the oversight framework based on history, regulatory approach, and structure. In all cases, the oversight bodies should proceed with deliberation. The experiences of ACPE and ACGME are instructive, with both organizations undertaking decade-long efforts to reform their processes (Byrd, 2002).(Batalden et al., 2002). What has not yet occurred is coordination across various professional accrediting bodies. Such coordination would obviate the need for each to reinvent the wheel, promote synergies, and enable better communication and working relationships, as well as more consistent integration of the core competencies across schools.

Recommendation 3: Building upon previous efforts, accreditation bodies should move forward expeditiously to revise their standards so that programs are required to demonstratethrough process and outcome measuresthat they educate students in both academic and continuing education programs in how to deliver patient care using a core set of competencies. In so doing, these bodies should coordinate their efforts.

With the exception of patient-centered care, which is consistently included in examinations across the professions, licensing exams for health professionals vary considerably in whether they test for competency in the core areas (National Association of Boards of Pharmacy, 2002; National Council of State Boards of Nursing, 2001; United States Medical Licensing Exam, 2002). This situation also needs to be addressed and could be the focus of a subset of the oversight organizations described in recommendation 2. In addition, geographic restrictions on licensure and separate and sometimes conflicting scope-of-practice acts need to be examined to determine whether they are a serious barriers to the full integration of the core competencies into practice, and if so, how to modify them so that all clinicians can practice to the fullest extent of their technical training and ability. Although beyond the scope of this report, the committee believes that this matter deserves further examination because licensure and scope of practice influence how clinicians are deployed, which in turn affects decisions about education.

Finally, the committee believes that there should be a focused effort to integrate a core set of competencies into oversight processes focused on practicing clinicians. Such an effort would require coordination among an array of public- and private-sector licensing and certification organizations, within which there is a currently little uniformity in approach across the professions or within a given profession across the states. At present, many boards require only a fee for license renewal (Swankin, 2002b; Yoder-Wise, 2002), and many others view continuing education courses as evidence of competence, even though this has not been shown to be a reliable measure of such ability (Davis et al., 2000; O'Brien et al., 2001).

To begin with, state legislatures would need to require state licensing boards to insist through rigorous means that their licensees demonstrate competence, not just pay a license renewal fee, to maintain their authority to practice. Licensing boards also would need to consider clinician competency at varying career stages. The committee believes that all health professions boards need to require demonstration of continued competency, and that they should move toward adopting rigorous tests for this purpose. Beyond licensure examinations, there is evidence to suggest that structured direct observation using standardized patients, peer assessments, and caseand essay-based questions are reliable ways to assess competency (Epstein and Hundert, 2002; Murray et al., 2000)

Recommendation 4: All health professions boards should move toward requiring licensed health professionals to demonstrate periodically their ability to deliver patient careas defined by the five competencies identified by the committeethrough direct measures of technical competence, patient assessment, evaluation of patient outcomes, and other evidence-based assessment methods. These boards should simultaneously evaluate the different assessment methods.

There is more uniformity among certifying organizations as compared with professional boards, in that nearly all require some means of demonstrating continuing competence. The vast majority allow for two or more approaches, and many also consider competency at various career stages. Moreover, in response to the paucity of evidence that taking continuing education courses improves practice outcomes, some certifying organizations are beginning to emphasize alternative measures that are more evidence based (American Board of Medical Specialties, 2000; American Nurses Association/ NursingWorld.Org, 2001; Bashook et al., 2000; Board of Pharmaceutical Specialties, 2002; Federation of State Medical Boards, 2002; Finocchio et al., 1998; National Council of State Boards of Nursing, 1997-2000; Swankin, 2002a). Certification bodies should recognize continuing education courses as a valid method of maintaining competence if there is an evidence-based assessment of such courses; if clinicians select courses based on an assessment of their individual skills and knowledge; and if clinicians then demonstrate, through testing or other methods, that they have learned the course content. The committee recognizes that there is a monetary and human resource cost to moving to evidence-based assessment, whether it is related to licensure or certification. Consequently, such assessments may need to be phased in, or less costly assessment methods identified.

Recommendation 5: Certification bodies should require their certificate holders to maintain their competence throughout the course of their careers by periodically demonstrating their ability to deliver patient care that reflects the five competencies, among other requirements.

Training Environments

Education does not occur in a vacuum; indeed, much of what is learned lies outside of formal academic coursework. A "hidden curriculum" of observed behavior, interactions, and the overall norms and culture of a student's training environments are extremely powerful in shaping the values and attitudes of future health professionals. Often, this hidden curriculum contradicts what is taught in the classroom (Ferrill et al., 1999; Hafferty, 1998; Maudsley, 2001).

Consequently, the committee believes that initial support should be provided for existing exemplary practice organizations that partner with educational institutions, and are already providing the interdisciplinary education and training necessary for staff to consistently deliver

care that incorporates the core competencies. These learning centers could test various approaches for incorporating the core competencies into education for students, clinicians, and faculty, and provide guidance to practice and educational organizations about key operational issues. Is problem-based learning the best approach to teaching these competencies? Should the teaching of these competencies be infused into other courses, or should they be stand-alone? These learning centers should also consider how, after an initial investment, they could become self-sustaining in 3-5 years.

Recommendation 6: Foundations, with support from education and practice organizations, should take the lead in developing and funding regional demonstration learning centers, representing partnerships between practice and education. These centers should leverage existing innovative organizations and be state-of-the art training settings focused on teaching and assessing the five core competencies. There are many barriers to incorporating the five competencies into the practice environment, where medical residents and new graduates in allied health, nursing, and pharmacology obtain initial training that leaves an important imprint on their future practice (Partnership for Solutions, 2002). In addition to the barriers of time constraints, oversight restrictions, resistance from the professions, and absence of political will, the health care financing system is a large impediment to integrating the core competencies into practice settings. Therefore, the committee believes steps must be taken to explore alternative ways of paying clinicians to foster such integration.

As the largest payer, Medicare has a major effect on the system when it innovates (Institute of Medicine, 2002). Moreover, the committee believes that patients with chronic conditions‹a sizable proportion of whom are covered by Medicare‹would benefit greatly from integration of the five competencies into practice. There are a number of different options that could serve as models for these payment experiments, including capitation, bundled payments, bonuses, withholds, and various ways to share risk and responsibility between clinicians and payers (Bailit Health Purchasing, 2002; Guyatt et al., 2000). The committee encourages other payers to follow suit.

Recommendation 7: Through Medicare demonstration projects, the Centers for Medicare and Medicaid Services (CMS) should take the lead in funding experiments that will enable and create incentives for health professionals to integrate interdisciplinary approaches into educational or practice settings, with the goal of providing a training ground for students and clinicians that incorporates the five core competencies.

Research and Information

Along with oversight changes and supportive training environments, the committee believes that evidence of the efficacy of an educational intervention can be a catalyst for change. To this end, evidence related to the link between clinical education and health care quality needs to be better developed, as does evidence about various teaching approaches.

In a review of 117 trials in continuing education, fewer than 20 percent were found to use health care outcomes as their measure of effectiveness (Davis et al., 2000). Teaching itself is dominated by intuition and tradition, which do not always hold up when submitted to empirical verification (Tanenbaum, 1994; van der Vleuten et al., 2000). The committee believes the time has come to focus energy and resources on developing a more robust and compelling evidence base about what matters in patient care and what works in teaching clinicians so that educators, payers, and

regulators can assess objectively what needs to be emphasized in the health professions curricula and what should be eliminated. The research should also span disciplines.

Recommendation 8: The Agency for Healthcare Research and Quality (AHRQ) and private foundations should support ongoing research projects addressing the five core competencies and their association with individual and population health, as well as research related to the link between the competencies and evidence-based education. Such projects should involve researchers across two or more disciplines.

The committee believes that incorporation of education-related measures into quality-reporting efforts and ongoing monitoring will be required to realize the vision articulated in this report. The lack of standardized information about the quality of clinical education makes the job of leaders seeking to reform such education more difficult. The lack of standardized measures also sets clinical education apart from the broader health care quality movement. A focused effort to develop education-related measures must begin now, given the amount of time required to develop and test prospective measures before they can be incorporated into report cards. The committee recognizes that initially there will be a small number of measures ready for public reporting.

Recommendation 9: AHRQ should work with a representative group of health care leaders to develop measures reflecting the core set of competencies, set national goals for improvement, and issue a report to the public evaluating progress toward these goals. AHRQ should issue the first report, focused on clinical educational institutions, in 2005 and produce annual reports thereafter.

Providing Leadership

Significant reform in health professions education is a challenge to say the least. The oversight framework is a morass of different organizations with differing requirements and philosophies, now under considerable pressure to demonstrate greater accountability (Batalden et al., 2002; Finocchio et al., 1998; Leach, 2002; O'Neil and the Pew Health Professions Commission, 1998). In academia, deans, department chairs, residency directors, and other leaders face a stream of requests for adding new elements to a curriculum that is already overcrowded. Shortages of key professionals are another significant challenge. Moreover, funding for some academic health centers has been under pressure, and states trimming education budgets (Griner and Danoff, 2000).

When change happens in health professions education, it does not happen overnight. Multiyear processes are required to develop, review, and achieve consensus on new requirements before they can be implemented. Given this environment, the committee believes that reform of clinical education will be possible only with the skill and commitment of a broad range of health care leaders. A recent analysis and synthesis of 44 curriculum reform efforts revealed that leadership is the factor most often cited as affecting curriculum change (Bland et al., 2000).

Recommendation 10: Beginning in 2004, a biennial interdisciplinary summit should be held involving health care leaders in education, oversight processes, practice, and other areas. This summit should focus on both reviewing progress against explicit targets and setting goals for the next phase with regard to the five competencies and other areas necessary to prepare professionals for the 21st-century health system.

Conclusion

The committee has set forth 10 major recommendations for reforming health professions education to enhance quality and meet the evolving needs of patients. The staging of these recommendations is important. The first step is to articulate common terms. Once the disciplines have agreed on a core set of competencies, oversight bodies can consider how to incorporate such competencies into their processes. The committee believes that the development of common language and definition of core competencies should happen as rapidly as possible and by no later than 2004, given that oversight process changes take considerable time. As this work proceeds, the efforts of leading practice organizations to integrate the core competencies into care delivery should be fostered through regional demonstration learning centers and Medicare demonstration projects. Simultaneously with these efforts, AHRQ and private foundations should provide support for research focused on the efficacy of the competencies and competency education and, most importantly, develop an initial set of measures reflecting the core set of competencies, along with national goals for improvement. Finally, the committee believes that biennial summits of health care leaders who control and shape educationstarting in 2004will be an important mechanism for integrating and furthering the efforts of reform minded leaders.

Building a bridge to cross the quality chasm in health care cannot be done in isolation. The committee hopes that this report will jump start other efforts to reform clinical education, both individually and collectively, so that it focuses on continually reducing the burden of illness, injury, and disability, with the ultimate aim of improving the health status, functioning, and satisfaction of the American people (President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry, 1998b). The public deserves nothing less.

References

ABIM Foundation. 2002. Medical professionalism in the new millennium: a physician charter. Annals of Internal Medicine 136 (3):243-6.

Accreditation Council for Graduate Medical Education. 1999. "General Competencies."

Accreditation Council for Graduate Medical Education. "ACGME Outcome Project."

Agency for Health Care Research Quality. 2002. "NHQR Preliminary Measure Set."

American Association of Medical Colleges. 1999. Evidence Based Medicine Instruction. Vol 2, No.3 edition Washington, DC: AAMC. 2001. "Medical School Objectives Project."

American Board of Medical Specialties. 2000. 2000 ABMS Annual Report and Reference Handbook.

American Council on Pharmaceutical Education. 2002. "ACPE Web site."

American Nurses Association/NursingWorld.Org. 2001. "On-line Health and Safety Survey: Key Findings."

Bailit Health Purchasing. 2002. Provider Incentive Models for Improving Quality of Care. Washington DC: National Health Care Purchasing Institute.

Baker, G.R., S. Gelmon, L. Headrick, M. Knapp, L. Norman, D. Quinn, and D. Neuhauser. 1998. Collaborating for improvement in health professions education. Quality Management in Health Care 6 (2):1-11.

Bashook, P.G., S.H. Miller, J. Parboosingh, and S.D. Horowitz. 2000. "Credentialing Physician Specialists: A World Perspective."

Batalden, P., D. Leach, S. Swing, H. Dreyfus, and S. Dreyfus. 2002. General competencies and accreditation in graduate medical education. Health Affairs 21 (5):103-11.

Bellack, J.P., and E.H. O'Neil. 2000. Recreating nursing practice for a new century: recommendations and implications of the pew health professions commission's final report. Nursing & Health Care Perspectives 21 (1):14-21.

Bland, C.J., S. Starnaman, L. Wersal, L. Moorhead- Rosenberg, S. Zonia, and R. Henry. 2000. Curricular change in medical schools: How to succeed. Academic Medicine 75 (6):575-94.

Board of Pharmaceutical Specialties. 2002. "Recertification."

Brady, M., Leuner J.D., Bellack J.P., Loquist R.S., Cipriano P.F., and O'Neil E.H. 2001. A Proposed Framework for Differentiating the 21 Pew Competencies by Level of Nursing Education. Nursing & Health Care Perspectives 22 (1):30-35.

Buerhaus, P.I., and L. Norman. 2001. It's time to require theory and methods of quality improvement in basic and graduate nursing education. Nursing Outlook 49 (2):67-9.

Byrd, G. 2002. Can the profession of pharmacy serve as a model for health informationist professionals? Journal of Medical Library Association 90 (1):68-75.

Calabretta, N. 2002. Consumer-driven, patient-centered health care in the age of electronic information. Journal of Medical Library Association 90 (1):32-7.

Cantillon, P., and R. Jones. 1999. Does continuing medical education in general practice make a difference? British Medical Journal 318 (7193):1276-79.

Carraccio, C., S.D. Wolfsthal, R. Englander, K. Ferentz, and C. Martin. 2002. Shifting

paradigms: From flexner to competencies. Academic Medicine 77 (5):361-67.

Center for the Advancement of Pharmaceutical Education [CAPE] Advisory Panel on Educational Outcomes. 1998. "Educational Outcomes."

Chassin, M.R., R.W. Galvin, and the National Roundtable on Health Care Quality. 1998. The urgent need to improve health care quality. Journal of the American Medical Association 280 (11):1000-1005.

Christakis, N.A. 1995. The similarity and frequency of proposals to reform US medical education: constant concerns. Journal of American Medical Association 274 (9):706-11.

Collier, S. March 2002. Workforce Shortages. Personal communication to (Ann Greiner).

Commission on Collegiate Nursing Education. 2002. "CCNE Accreditation."

Council on Graduate Medical Education. 1999. Physician Education for a Changing Health Care Environment. Rockville, MD: Health Resources and Services Administration.

Counsell, S., R. Kennedy, P. Szwabo, N. Wadsworth, and C. Wohlgemuth. 1999. Curriculum recommendations for resident training in geriatrics interdisciplinary team care. Journal of the American Geriatrics Society 47 (9):1145-48.

Davis, D., M.A. O'Brien, N. Freemantle, F.M. Wolf, P. Mazmanian, and A. Taylor-Vaisey. 1999. Impact of formal continuing medical education: do conferences, workshops, rounds, and other traditional continuing education activities change physician behavior or health care outcomes? Journal of American Medical Association 282 (9):867-74.

Davis, D., M.A. Thomson O'Brien, and N. Freemantle. 2000. Review: Interactive, but not didactic, continuing medical education is effective in changing physician performance. Database of Abstracts of Reviews of Effectiveness Volume 132 (2):75.

Detmer, D.E. 1997. Knowledge: a mountain or a stream? Science 275 (5308):1859.

Epstein, R.M., and E.M. Hundert. 2002. Defining and assessing professional competence. Journal of the American Medical Association 287 (2):226-35.

Federation of State Medical Boards. 2002. "Post-Licensure Assessment System."

Ferrill, M.J., L.L. Norton, and S.J. Blalock. 1999. Determining the statistical knowledge of pharmacy practitioners: A survey and review of the literature 1. American Journal of Pharmaceutical Education 63 (3).

Finocchio, L. J., C. M. Dower, N. T. Blick, C. M. Gragnola, and the Taskforce on Health Care Workforce Regulation. 1998. Strengthening Consumer Protection: Priorities for Health Care Workforce Regulation. San Francisco, CA: Pew Health Professions Commission.

Frosch, D.L., and R.M. Kaplan. 1999. Shared decision making in clinical medicine: past research and future directions. American Journal of Preventive Medicine 17 (4):285-94.

Gerteis, M., S. Edgman-Levitan, J. Daley, and T. Delbanco, Editors. 1993. Through the Patient Eyes. Vol. San Francisco, CA: Josey-Bass.

Gifford, A.L., Laurent D. D., V.M. Gonzales, et al. 1998. Pilot randomized trial of education to improve self-management skills of men with symptomatic HIV/AIDS. Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology 18 (2):136-44.

Gorman, P.J.M., A.H.M. Meier, C. Rawn, and T.M.M. Krummel. 2000. The future of medical education is no longer blood and guts, it is bits and bytes. American Journal of Surgery 180 (5):353-56.

Grantmakers in Health. 2001. Training the Health Workforce of Tomorrow. Washington, DC: Grantmakers In Health .

Green, M.L. 2000. Evidence-based medicine training in internal medicine residency programs a national survey. Journal of General Internal Medicine 15 (2):129-33.

Griner, P.F.M., and D.M. Danoff. 2000. Sustaining Change in Medical Education. Journal of American Medical Association 283 (18):2429-31.

Guyatt, G. 1992. Evidence-based medicine. A new approach to teaching the practice of medicine. Evidence-Based Medicine Working Group. Journal of American Medical Association 268 (17):2420-5.

Guyatt, G.H., R.B. Haynes, R.Z. Jaeschke, D.J. Cook, L. Green, C.D. Naylor, M. Wilson, and W.S. Richardson. 2000. User's guide to the medical literature: XXV. Evidence-based medicine: Principles for applying the user's guides to patient care. Journal of American Medical Association 284 (10):1290-1296.

Hafferty, F. 1998. Beyond curriculum reform: confronting medicine's hidden curriculum. Academic Medicine 73 (4):403-7.

Halpern, J. 1996. The Measurement of Quality of Care in the Veterans Health Administration. Medical Care 34 (3):55-68.

Halpern, R., M.Y. Lee, P.R. Boulter, and R.R. Phillips. 2001. A synthesis of nine major reports on physicians' competencies for the emerging practice environment. Academic Medicine 76 (6):606-15.

Harden, R.M. 2002. Developments in outcome-based education. Medical Teacher 24 (2): 117-20.

Harmening, D.M. 1999. "Pioneering Allied Health Clinical Education Reform. A National Consensus Conference."

Health Resources and Services Administration. 1999. Building the Future of Allied Health: Report of the Implementation Task Force of the National Commission on Allied Health. Rockville, MD: Health Resources and Services Administration.

Hovenga, E.J. 2000. Global health informatics education. Studies in Health Technology & Informatics 57:3-14.

Hundert, E.M., F. Hafferty, and D. Christakis. 1996. Characteristics of the informal curriculum and trainees' ethical choices. Academic Medicine 71 (6):624-42.

Hyde, R.S., and J.M. Vermillion. 1996. Driving quality through Hoshin planning. Joint Commission Journal on Quality Improvement 22 (1):27-35.

Ingersoll, G. 2000. Evidence-based nursing: What it is and what it isn't. Nursing Outlook 48:151-2.

Institute of Medicine. 2000. To Err Is Human: Building a Safer Health System. Linda T. Kohn, Janet M. Corrigan, and Molla S. Donaldson, eds. Washington, DC: National Academy Press. 2001. Crossing the Quality Chasm: A New Health System for the 21st Century. Washington, DC: National Academy Press.

Institute of Medicine. 2002. Leadership By Example. Washington, DC: National Academies Press.

Jablonover, R.S., D.J. Blackman, E.B. Bass, G. Morrison, and A.H. Goroll. 2000. Evaluation of a national curriculum reform effort for the medicine core clerkship. Journal of General Internal Medicine 15 (7):484-91.

Jordan, S. 2000. Educational input and patient outcomes: Exploring the gap. Journal of Advanced Nursing 31 (2):461-71.

Lavin, M.A., I. Ruebling, R. Banks, L. Block, M. Counte, G. Furman, P. Miller, C. Reese, V. Viehmann, and J. Holt. 2001. Interdisciplinary health professional education: A historical review. Advances in Health Sciences Education 6 (1):25-47.

Leach, D.C. 2002. Competence is a habit. Journal of the American Medical Association 287 (2):243-4.

Lenburg, C., R. Redman, and P. Hinton. 1999. "Competency Assessment: Methods for Development and Implementation in Nursing Education."

Mansell, D., R.M. Poses, L. Kazis, and C.A. Duefield. 2000. Clinical factors that influence patients' desire for participation in decisions about illness. Archives of Medicine 160:2991-96.

Marwick, C. 2000. Will evidence-based practice help span gulf between medicine and law? Journal of American Medical Association 283 (21):2775-76.

Maudsley, G. 2001. What issues are raised by evaluating problem-based undergraduate medical curricula? Making healthy connections across the literature. [Review] [93 refs]. Journal of Evaluation in Clinical Practice 7 (3):311-24.

Mazur, D.J. and D.H. Hickam. 1997. Patients' preferences for risk disclosure and role in decision making for invasive medical procedures . Journal of General Internal Medicine 12:114-17.

Mazurek, B. 2002. Strategies for overcoming barriers in implementing evidence-based practice. Pediatric Nursing 28 (2):159-61.

Mitchell, G. 1999. Evidence-based practice: Critique and alternative view. Nursing Science Quarterly Vol. 12, No. 1:30-35.

Murray, E., L. Gruppen, P. Catton, R. Hays, and J.O. Woolliscroft. 2000. The accountability of clinical education: its definition and assessment. Medical Education 34 (10):871-79.

National Association of Boards of Pharmacy. 2002. "Examinations NAPLEX."

National Committee for Quality Assurance. 2002. "What Does NCQA Review When It Accredits and HMO?"

National Council of State Boards of Nursing. 2001. "NCLEX - RN@ Examination: Test Plan for the National Council Licensure Examination for Registered Nurses."

National Council of State Boards of Nursing, I. 1997-2000. "Nursing Regulation: Examination Pass Rates & Licensure Statistics."

National League for Nursing Accrediting Commission. 2002. "National League for Nursing Accreditation Commission Website ."

O'Brien, T., N. Freemantle, A.D. Oxman, F. Wolf, D.A. Davis, and J. Herrin. 2001. Continuing education meetings and workshops: effects on professional practice and health care outcomes. Cochrane Database System Review (2):CD003030.

O'Connor, G.T., S.K. Plume, E.M. Olmstead, J.R. Morton, C.T. Maloney, W.C. Nugent, F. Hernandez Jr, R. Clough, B.J. Leavitt, L.H. Coffin, C.A. Marrin, D. Wennberg, J.D. Birkmeyer, D.C. Charlesworth, D.J. Malenka, H.B. Quinton, and J.F. Kasper. 1996. A regional intervention to improve the hospital mortality associated with coronary artery bypass graft surgery. The Northern New England Cardio-vascular Disease Study Group. Journal of the American Medical Association 275 (11):841-6.

O'Neil, E. H. and the Pew Health Professions Commission. 1998. Recreating health professional practice for a new centuryThe fourth report of the pew health professions Commission. San Francisco, CA: Pew Health Professions Commission.

Partnership for Solutions. 2002. "Physician Concerns: Caring for People with Chronic Conditions."

Pew Health Professions Commission. 1995. Critical Challenges: Revitalizing the Health Professions for the Twenty-First Century. San Francisco, CA: UCSF Center for the Health Professions.

Phillips, R.L. Jr, D.C. Harper, M. Wakefield, L.A. Green, and G.E. Fryer Jr. 2002. Can nurse practitioners and physicians beat parochialism into plowshares? Health Affairs 21 (5):133-42.

Platt, D., and C. Laird. 1995. CQI: using the Hoshin planning system to design an orientation process. Radiology Management 17 (2):42-50.

Pomeroy, W.M., and I. Philp. 1994. Healthcare teams: An interdisciplinary workshop for undergraduates. Medical Teacher:6p.

President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry. 1998a. "Quality First: Better Health Care for All Americans."

Satya-Murti, S. 2000. Evidence-based clinical practice: concepts and approaches. Journal of the American Medical Association 282 (17):2306-7.

Schuster, M.A., E.A. McGlynn, and R.H. Brook . 1998. How good is the quality of health care in the United States?. Milbank Quarterly 76 (4):517-63, 509.

Shell, R. 2001. Perceived barriers to teaching for critical thinking by BSN nursing faculty. Nursing & Health Care Perspectives 22 (6):286-91.

Superio-Cabuslay, E., M.M. Ward, and K.R. Lorig. 1996. Patient education interventions in osteoarthritis and rheumatoid arthritis: A meta-analytic comparison with nonsteroidal antinflammatory drug treatment. Arthritis Care Research 9 (4):292-301.

Swankin, D. 30 May 2002a . Continuing Competence. Personal communication to Elisa Knebel.

Swankin, D.S. 2002b. Results of Survey of Selected State Health Licensing Boards and Health Voluntary Certification Agencies Concerning their Continuing Competence Programs and Requirements. Washington, DC: Citizen Advocacy Center.

Tanenbaum, S.J. 1994. Knowing and acting in medical practice: the epistemological politics of outcomes research. J Health Polit Policy Law 19 (1):27-44.

U.S. News and World Report. "Latest Hospital Rankings."

United States Medical Licensing Exam. 2002. "United States Medical Licesning Examination - Steps 1, 2, 3."

van der Vleuten, C.M., D.M. Dolmans, and A.A. Scherpbier. 2000. The need for evidence in education. Medical Teacher 22 (3):246-50.

Von Korff, M., J.E. Moore, K.R. Lorig, et al. 1998. A randomized trial of a lay person-led self-management group intervention for back pain patients in primary care. Spine 23 (23):2608-51.

Wagner, E.H., R.E. Glasgow, C. Davis, A.E. Bonomi, L. Provost, D. McCulloch, P. Carver, and C. Sixta. 2001. Quality improvement in chronic illness care: a collaborative approach. Joint Commission Journal on Quality Improvement 27 (2):63-80.

Wass, V., C. Van der Vleuten, J. Shatzer, and R. Jones. 2001. Assessment of clinical competence. Lancet 357 (9260):945-9.

Weed, L.L. and L. Weed. 1999. Opening the black box of clinical judgment. Part II: consumer protection and the patient's Role. British Medical Journal. November 13

Wennberg, J.H. 1998. The Dartmouth Atlas of Health Care 1998. Hanover, NH: Center for the Evaluation Clinical Sciences, Dartmouth University.

Woolf, S.H. 2000. Taking critical appraisal to extremes: The need for balance in the evaluation of evidence. Journal of Family Practice 49 (12):1081-85.

Wu, S., and A. Green. 2000. Projection of Chronic Illness Prevalence and Cost Inflation. California: RAND Health.

Yoder-Wise, P.S. 2002. State and association/certifying boards: CE requirements. Journal of Continuing Education in Nursing 33 (1):3-11.

APPENDIX D

New Perspectives on the Workforce Crisis

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Thank you Dr. Miller for the kind introduction and to the Division of Nursing for the invitation to present our recently completed analysis of the major reports issued on the imminent workforce shortage. The knowledge we gained from this effort is exemplified in the title of our presentation, NEW PERSPECTIVES ON THE WORKFORCE CRISIS: Defining the Problem and Assuring and Adequate Response. As a result of our research, we strongly believe that while many thought and change leaders are striving to address the crisis the magnitude of demand and the supply demographics are unrecognized, and the gap is severe enough to fundamentally alter health care delivery, the traditional roles of health care workers, and the overall health of the public. Too few are envisioning the severe realities of the problem and the social implications lurking ahead of us.

The presentation will cover these objectives:

- How the RWJ Executive Nurse Fellows Program served as a catalyst for this work; and,
- How the project component of the Fellowship is exemplified in the work that will be presented today by Dr. Coxon the work environment, and by Dr. Hewlett and her team on the workforce shortage.
- As the individual charged by Dr. Hewlett with leading the research team, I will present the research methodology used, the problem/ solution themes uncovered, and the results of the gap analysis; and
- Dr. Hewlett will present a framework for a comprehensive strategy that addresses and could forestall the workforce crisis through a three-tiered, action-oriented list of "imperatives" to guide efforts and issue development.

The Robert Wood Johnson Executive Nurse Fellows Program is an advanced leadership program for nurses in senior executive roles in health services, public health, and nursing education who aspire to help lead and shape the US health care system of the future.

Since 1998, 15 to 20 Fellows per year have participated in this program, which consists of a core leadership curriculum, seminar and workshop session, pursuit of an individual learning plan, experience selecting and working with senior executive mentors, and the completion of a project jointly funded by fellowship resources and matching funds from the employing institution.

The mission of this program is to inspire experienced nurses in executive roles to continue the journey toward achieving the highest levels of leadership in the health care system of the 21st century. As Shirley Chater, the chair of the national advisory committee for the program states,

"Leading is learning." And so, we build on nursing strength and capacity for leading change and-as Fellowspursue learning.

Learning comes about in five competency domains:

- Interpersonal and communication effectiveness;
- Strategic vision (where we connect broad social, economic, and political changes to the strategic directions of institutions and organizations);
- Risk taking and creativity;
- Inspiring and leading change; and
- Self-knowledge and self-renewal.

Our cohorts span the health care industry and each of us in some way begins to transcend "self" to greater spheres of influence. Ultimately, each Fellow is supported through a collaborative process that involves the Core Resource Team, the National Advisory Committee, and Mentors/Consultants. Participating in this program is an opportunity that lasts a lifetime, and we are grateful to have had this experience!

The workforce project is an exemplar of the types of projects that Fellows use to grow in the competency domains. Supporting this effort have been Core Resource Team members Dr. Maryann Fralic and Dr. Jan Bellack; Mentors Sister May Roch Rocklage, RSM and Dr. Karen Miller; and a collaborator, Dr. Diana Mason, the editor-in-chief of the American Journal of Nursing (AJN), who we sought out early in our research and writing. Working with Dr. Mason and the staff of the AJN met two important goals of ours: to present a major workforce report in a nursing journal, and to reach a broad constituency which AJN certainly does. Our research is featured in the April 2003 edition of AJN. We appreciate the permission given us to replicate the article and the handouts from the Journal.

In addition to Dr. Hewlett and me, our other primary author and systems researcher was Dr. Susan Santos, who is currently affiliated with the University of MissouriKansas City. Our secondary authors, who coded individual reports included: Drs. Rebecca Rice and Karen Cox, and a graduate student, Sheila Richmeier. We could not have done this work without the commitment of each of these individuals.

This work came about in several ways:

- during an RWJ seminar that addressed changing supply and demand demographics with social policy ramifications;
- in conversations with colleagues about workforce reports, where we realized that "many reports were cited, but few had actually been read;"
- and, significantly through Dr. Hewlett¹s experience with Sr. Roch, who during this span of this work was the Chair of the American Hospital Association. During a board meeting, one of the members asked, "Who is looking at all of the workforce reports and what is common among them? And, who is doing what to solve the problem?"

In June, 2002, Dr. Hewlett convened a summit of leaders (RWJ Fellows that included Karen Cox, Fran Roberts, Catherine Garner, and me) and affiliates of the Colleagues in Caring workforce initiative (including Susan Santos, Rebecca Rice, Wanda Polen, Helen Connors, and

Marge Bott). These participants were assigned to review and report on some 35 reports. By the end of the summit, an agenda emerged that included a decision to conduct a formal research analysis on the reports; a Phase II research team (that included Drs. Hewlett and Santos and me) then conducted the integrative review, prepared the analysis and framed the results for dissemination.

In January of 2003 our research was completed, and we believe our efforts have resulted in three major contributions to the profession: (a) a methodology that can be replicated for analyzing reports of this type in the future, (b) a thematic analysis of workforce problems and solutions expressed through a gap analysis, and (c) a framework around which a national comprehensive strategy to address the nursing shortage can be developed. Now, let's examine the methodology.

The methodology we chose was an integrative review, to guide the analysis and coding of data and subsequent theme generation. This method provided structure and analytical rigor to multi-document review, it promoted credibility through triangulation, peer debriefing, reflexive journaling, and purposive sampling and, it fostered dependability through dependability and confirmability audits and reflexive journaling. Interpret this to mean that we were scrupulous in the study of these reports and acknowledged this as serious work with important consequences.

Meta-synthesis is to the analysis of qualitative studies, as meta-analysis is to the comparison of multiple quantitative studies. Using the set of meta-synthesis principles was relevant because of the commonality of subject matter being pursued and the design of most of the documented workforce reports. Key principles helped us (from the very first summit and throughout the study) formulate the research questions, define the research outcomes, set the inclusion/exclusion criteria for reports, select data sources, and develop the coding system.

Further, these principles guided our categorization of the data, obtainment of intercoder consensus, the discussion and interpretation of findings, the identification of paradigms, the uncovering of assumptions, and relating results to a larger context. Finally, the research method and principles helped us to interpret the strengths and limitations of each workforce report, so we could examine paradoxes and contradictions within the reports; and determine gaps.

From the summit and after listening to the critical review of the workforce reports, three research questions were generated:

- What types of data were used to substantiate the health care workforce crisis?
- What descriptive themes expressed the scope and intensity of the workforce problems?
- To what extent did the solutions address the problems?

Although 35 reports were reviewed at the onset of the summit, 15 reports met the inclusion criteria we set for this study. A listing of these reports can be found in your handouts. To be included in the study, each of these reports had a national perspective; were issued between 2000-2002; represented a unique stakeholder perspective (our goal was to generate research outcomes that encompassed the broadest possible view of the workforce problem so we intentionally examined reports that represented philanthropic organizations, professional and trade organizations, and government and accreditation agencies. These classifications are reflected in your handouts. While we sought the patient-consumer perspective, at that time, no such report could be identified. Also, the reports studied had a primary focus on nursing. Although we recognized that workforce shortages existed within other healthcare disciplines,

statements about those disciplines were rare and issued subsequent to nursing reports. Excluded were reports that were limited to state groups, special interest groups, or individual agencies or persons. At this time, I would like to segue into the results of our study.

The first research question was, "What types of data were used to substantiate the health care workforce crisis?" Each of the 15 reports used data in some fashion and some very extensively to create the argument that a nursing shortage existed. Our interest was to explore the consistency of the data and to determine whether the sources were both valid and reliable. Turn to the handouts, where you will find our data definitions. Here is what we found: the data populating the reports included facts about nursing supply (current and projected), population demographics (relating primarily to the aging of the nursing workforce, and the number of baby-boomers about to retire), demand (current and projected), and an "other" category (for instance, data about nurse satisfaction with the work environment, or, intent to stay in nursing).

The data cited is valid and reliable, which is good news in terms of report credibility and the resources being expended to recruit and retain nurses. However, the sources of data are not widely dispersed in the reports. Three primary data sources exist: the government (Bureau of Labor Statistics and the National Center for Health Workforce Analysis), Buerhaus and his colleagues (who make strong references to supply and demand), and Aiken and her associates (who pursue nurse staffing and patient outcomes). Generally, a report made use of one of these three key sources as their reference point and then supplemented the report with citations of lesser-known or published authors. Of the data presented, the widest variation occurred associated with the projection of nurses needed, which ranged from shortfalls of 400,000 to 1.5 million by 2020.

The second research question addressed was: "What descriptive themes expressed the scope and intensity of the workforce problems?" The question was answered by coding each key concept and/or paragraph of each report and then grouping like- or related concepts across all reports into themes." From the narrative descriptions, we "teased out" what the various stakeholders saw as "the cause/causes" of the workforce problem. When all was coded, we found that problem themes fell into two categories: those that were national in scope and those that were institutional /organizational in nature. The themes that were identified in our study are also available in the handouts. To be included as a theme and to eliminate/ minimize the "noise" of a potential stakeholder's bias, a theme had to be present in five or more reports. For instance, looking at the handout you see that the theme "health care economics" is a national theme meaning that stakeholders believe that the workforce problem has its roots in national economics in 10 of the 15 reports we analyzed. Note the operational definition. In all cases, the operational definitions summarize what stakeholders described in their reports. Also, notice the bulleted sub-themes. A sub-theme was present in at lease three reports in order to be added to our typology. In the example of economics, the concepts "costs of labor" and "reimbursement for nursing services" are sub-themes present in at least three of the ten reports that discussed health care economics. Take just a moment to examine the four national themes and the four institutional themes and the related sub-themes.

One final comment on these problem themes: Explicit problem statements were rare. We were able to ascertain the problem themes quite easily, but a pervasive clarity about exactly what the problem is, usually had to be inferred: if you are not close to/familiar with the subject, this makes communication about the nursing shortage to various constituencies difficult, to be sure.

We carefully reviewed each report, using the same procedures mentioned before, to identify strategies aimed at solutions to the problems. This answered the third research question: "To what extent did the solutions address the problems?" Because we coded for themes, we did not look for "problem-solution matches" within a single report. For instance, a report may have a solution statement about leadership, but may not have reported leadership as a problem. For our purposes, this was acceptable because we were looking thematically at total effort expended. Four reports stood out as exemplary in the clarity of their solution recommendations: those issued by the American Hospital Association, the Robert Wood Johnson Foundation (Kimball and O'Neil), the Joint Commission on the Accreditation of Healthcare Organizations and the American Organization of Nurse Executives.

Again, by dealing with themes across reports, we believed that we captured the magnitude and impact of problems and solutions getting the majority of effort. We found substantial solutions in the following categories: supply, work environment, research and data support, leadership, workforce development, and technology. Before moving on, recall that I mentioned that problem statements were not explicit. In fact, the text that described solutions was also somewhat problematic. Solutions tended to fall into two categories: they were either very broad (i.e., "increase the supply of nurses"), or were exceedingly specific to a stakeholder¹s interest, such that the "bigger picture" was overlooked.

Through the coding of problems and solutions, we were able to establish what is, to date, in a single snapshot, the most revealing perspective on the workforce crisis. It is presented in the form of a Gap Analysis and noted in the last remaining handout in your presentation materials.

We believe this slide is significant because it portrays the complexity of the workforce problem noting the themes in the left hand column; and it shows where solutions are being recommended, in the right hand column. Notice, however, that there is not a congruent "mapping" of problems to solutions. Gaps in solutions exist. And, solutions are being reported that seem to be "searching for a problem." We surmise that this might reflect that additional problem areas exist that has not been fully documented.

This we know: the nursing workforce problem is more complex than we originally believed as evidenced by the problem themes. To communicate precisely what the problem areas are is a challenge yet to be solved. And, solutions strategies are not yet comprehensive enough to address the problems. The complexity reflected in the gap analysis sheds insight into why a comprehensive workforce plan may be beyond what could be defined and solved by any one stakeholder.

I will turn the presentation over now to my colleague, Dr. Peggy Hewlett, who will describe a framework that would further the development of a comprehensive workforce plan and a call to action.

Remarks by Peggy O'Neil Hewlett, Ph.D., R.N.
Associate Dean for Research and Director of the Doctoral Program, University of Mississippi School of Nursing
Jacksonville, Mississippi

Thank you, Dr. Bleich. You did a wonderful job discussing the gap analysis. From my perspective, this is the heart of our work.

What we set out to do was synthesize key national reports trying to make some sense out of what they mean collectively. We accomplished that. However, it was at this point that we realized the need to develop a framework, based on our findings, that will help groups and individuals across the country address this problem. This is how it could work.

What we observe happening around the country are groups (at the national and state levels) making good efforts in attempting to address certain parts of the workforce problem. But the problem is far too complex and resources are scarce therefore, it makes perfect sense for there to be some type of an orchestrated response from the healthcare industry. Groups could more judiciously use their resources and with greater impact such that the problems are more likely to be solved.

From our research, and based on the gap analysis that resulted, we have determined that a comprehensive workforce plan requires a multilevel approach that fosters national, institutional and nurse-specific efforts. We propose a three-tiered framework for action plans:

- National-level requiring nationally orchestrated strategies;
- Regional/Institutional level recognizing that shortages require localized strategies; and,
- Individual/Nurse-specific level recognizing that each nurse is called to involvement.

Each of these three tiers has associated with them what we have termed "imperatives" to drive the call for focused action planning. There are seven imperatives: a) three at the national level, b) two at the institutional level, and c) two at the individual level. I will discuss each of them briefly.

National Imperatives. The nursing shortage varies regionally and that is likely to continue. Yet there are overarching concerns, trends, and patterns that merit national consideration, especially around a comprehensive, collaborative approach to solutions. To be sure, national strategies will require public and private efforts. The government should not be expected to "fix" all of the problems, but obviously there are some areas that the government is better positioned to solve.

At the national level, there are three imperatives:

- Economic,
- Workforce Planning and Development, and
- Research and Data.

As we examine each, I will discuss the context of the imperative and share sample strategies that might be developed into action plans. The examples are not intended to be inclusive, but simply serve to give you a flavor of how we see action plans being developed from the problem themes mentioned earlier.

The first national imperative is Economic. The sheer numbers of nurses, compared to other health care professionals, make even slight incremental changes in the workforce potentially stressful on the economy. Therefore, we must develop action plans around sound economic strategies. Samples of these might be:

- Create and adopt public policy that favors fair reimbursement of basic and advanced nursing services, and secondly,
- Establish a venue for public-private sector discussions on the economics of socio-political issues impacting healthcare financing (i.e. re-examine social security regulations limiting employment for older professionals. We are losing large numbers of experienced health care providers from the workforce under current regulations)

The second national imperative considers workforce policy and planning. Nationally, there is a role for public and private sector cooperation in this area. We believe that the current and worsening supply/ demand imbalance will force the reinvention of all health care provider roles. Forums to create new work roles, innovate systems change and promote comprehensive national health care services will require a cooperative spirit among stakeholders. And leadership at the national level will be summoned to higher levels of creativity to influence these changes. Sample strategies to address workforce planning include:

- Increasing support for the six regional Centers for Health Workforce Studies. In fact, this is one of the top three recommendations our research team believes needs immediate action. HRSA¹s National Center for Health Workforce Analysis is charged to "collect, analyze and disseminate health workforce information and facilitate national, state and local workforce planning efforts." These six regional centers hold small HRSA grants to assist in meeting the charge. We understand that these centers will soon test the Nurse Supply Model and Nurse Demand Model datasets. Increased funding needs to be appropriated to support these centers in an effort to disseminate these data and educate healthcare leaders in every state in the use of the models.
- A second sample strategy would be a continued marketing and recruitment campaign, much like the one sponsored by Johnson & Johnson. The other component of this imperative relates to workforce development. From several of the reports it is clear that there is great sentiment toward education reform. This conversation must take place at the national level with key stakeholders at the table. But action must play out at the institutional and regional levels.
- Factors to consider in solving the development issue should focus on increasing the supply of nurses to meet the demand of the service sector, but the importance of the faculty shortage cannot be overlooked. It matters not how many students we can recruit into the pipeline if we don't have sufficient numbers of faculty teach them. Therefore, the second of the top three recommendations made by the research team for action is this: Recruitment into the teaching ranks and improving faculty compensation must become a top priority at the national level.
- A second sample strategy is to enhance continuing education to align with marketplace realities. With a rapidly changing technological workplace and a reduced supply of care providers, support for continuing education should increase accordingly.

The final national imperative I would like to discuss centers on Research and Data. Timely national data regarding the workforce and changing demographics are crucial. Data become increasingly important when the decision-making stakes are high. Without data, sound economic policy cannot be derived, changing workforce trends cannot be accurately projected, and program evaluation & effectiveness cannot be determined. The need will only increase for expanding national databases that include more frequent data collection, standardization and coordination of data, and more specific types of data going beyond supply and demand, to include, for instance, competency requirements. As strategies, we believe that:

- Both federal and non-federal agencies should be identified and charged with the authority and responsibility to collect valid and reliable workforce data; being careful not to duplicate but to augment the work of the National Center for Health Workforce Analysis. Public and private funding should be marshaled and provided to those selected entities. A clearinghouse of some sort should be developed to improve data accessibility. There might be more than one model, but the idea of using the six regional centers already mentioned is one viable suggestion.
- In spite of well-accepted recognition of, and funding for the role of research in promoting diagnosis and treatment of disease, that national support for systems and program evaluation research is desperately needed. The research and data imperative carries a high price tag, necessitating both public and private funding. It also demonstrates the need for a collaborative approach to the shortage, marking resources for specific action plans by specific groups and limiting duplication of efforts.

Regional and Institutional Imperatives. Not all strategies and action plans are best suited for national work. The role of entities at the regional and institutional level to address the workforce problem themes is supported by our findings. The major institutional strategy addressed in various reports was associated with the work environment. Additionally, the need for enhanced leadership was identified. Therefore, we have developed two imperatives at this level:

- Work climate and
- Leadership and innovation

From our research, the bulk of work and resources are currently being expended is on the work environment. By winnowing out the work that is better suited for national level action, institutions might be able to more clearly focus on these two charges, from which could rise the great demonstration projects so badly needed for education and practice reform. The first institutional level imperative is Work Climate. For multiple reasons, the work climate is in need of dramatic change in order to serve patients, families and care providers. Many providers have had a limited voice in organizational decision-making. As population demographics shift, as reimbursement issues create organizational hardships, when health conditions associated with chronicity add to high patient acuity, and as societal violence acts out in the health care setting, the effects are felt across all practice venues. Sample strategies for this imperative include:

- Ensuring that the basic satisfiers are in place for wages and working conditions; and, second,
- Integrating technology to help nurses work more efficiently and improve patient safety.

- The second institutional-level imperative is based on Leadership and Innovation. Without a doubt, one of the leading reasons that nurses leave the workforce is directly related to their relationship with their immediate supervisor. There is a true call for leadership development across all levels of management and administration. Further, we need leaders to identify and support academic/service partnerships to lead us toward innovative education and practice models. This was identified as a priority in many of the reports we studied. Innovation is often stifled by regulatory and accrediting constraints. Stakeholders must successfully lobby to obtain waivers for some of these guidelines in order to encourage and support creative and innovative solutions to the workforce problems.

This leads to the third "action recommendation" made by our research team: stakeholders must stimulate and support innovation in both education and practice. We must move toward redefining how we educate and utilize our nursing workforce and this will require broad-based involvement, support and acceptance. Turf issues must be set aside in the effort to adequately develop an action plan. Finally, under this imperative, we call for a reform in human resource practices, with human resource competencies built into critical job roles, and for human resource departments to take a leadership role in creating an enhanced workplace! We must encourage leadership to emphasize the need for healthy relationships within the workplace and value and reward those efforts.

Individual Imperatives. We would be remiss if we did not identify the critical role that each of us as individual nurses plays in resolving the workforce problems. Whether a nurse works in a hospital, clinic, or school of nursing the business of nursing today is quite difficult. Nurses frequently have little time, energy or capacity to influence institutional change, whether at the national or local level. Yet the involvement of nurses with knowledge, skills and abilities to work effectively with other policy-makers, provider disciplines and consumers will be critical in influencing the transformation of the health care system.

We have two imperatives at the nurse-specific level: Involvement and Adaptive.

Strategies under the Involvement imperative include:

- Committing personal time to, and seeking a voice in, organizational and professional decision-making; second,
- Understanding pressure points within the economic and political systems to influence change at just the right level.

Individual nurses also need to make every effort to support colleagues actively involved in work around the shortage issues.

The second imperative at this level is being Adaptive. Change is the one certainty in what lies ahead:

- We must maintain consumer confidence in nursing through appropriate behaviors while system changes occur; and,
- We must reflect on our personal attitudes on change while respecting the complexities of transition in health care delivery.

In repeated surveys, nurses are consistently highly rated in holding the public's trust. The role we play in maintaining that trust cannot be overstated. Nursing will not be the only discipline experiencing changeit is our belief that education and healthcare delivery will evolve quickly into forms and models unfamiliar to us now. And it is our charge to work diligently to be part of the solution. The health and welfare of the people we serve will likely rest on the level of our involvement and our adaptability. The charge to each of us is clear.

We recognize that there have been emerging efforts and issues. Work has not stopped since these studies were issued. We acknowledge the efforts and initiatives that have been implemented. We also recognize the need for a comprehensive, three-tiered plan that addresses the gaps reflected in this study. Evolving issues include: a) faculty demographics and diminished supply is critical to workforce preparation; b) coordinated solutions are required; c) the problem complexity extends beyond supply, and d) the need for innovation is paramount. Nurse staffing and patient safety linkages are now public.

Based on our work, we have developed a clear Call to Action. A comprehensive workforce plan should include:

- Clear problem statements aligned to each theme;
- Agreement over desired outcomes based on the seven imperatives; and
- Focused, tiered strategies to achieve goals.

There is no longer any merit in groups or individuals claiming that they do not know the workforce problems and solutions from the broader view! Our work has focused both the issues and the charges and there is no longer any place for us to hide. There is also no credible reason for any one entity to approach the broader workforce issues in an effort to articulate them or solve them unilaterally. Our research has demonstrated the complexity of the problems and the unlikelihood that one group can adequately address them.

But, if all stakeholders work together, we can meet the challenges. However, if we choose not to respondcooperatively working toward high-impact solutions we stand to compromise our mission of protecting and improving the health of the people we serve.

So, what do we do now? National leaders should convene key stakeholders who must:

- prioritize the imperatives;
- move quickly to fill in essential gaps;
- marshal resources to get work done; and
- be accountable for its completion.

This is our charge to "change leaders:"

- First, use the gap analysis framework. Until now, we have not had a synthesized "report on the reports." Our work has filled in that gap and provides leaders with the bigger picture.
- Second, stimulate innovation in practice. We cannot meet the challenges of this crisis until we grapple with system changes so badly needed.

- Third, respond to the nursing education crisis. Recruiting individuals into the profession must be a high priority and must be mirrored by equal efforts to recruit and retain talented nursing faculty
- Fourth, we must expand data capacity. The need for accessible, reliable and usable data is critical for workforce planning and development across all levels.
- Lastly, throughout each of these efforts, we must establish clinical, financial and operational outcomes.

In conclusion, we now have a road map. It is our job to use it, cite it, and put it into practice. If we do this we will meet the challenges of solving the nursing shortage head-on.

On behalf of Dr. Bleich, Dr. Santos and myself, I thank you for the opportunity to share our research results with you today.

APPENDIX E

The State of Working Conditions for Inpatient Registered Nurses

Karen Cox, Ph.D., R.N., C.N.A.A.
Senior Vice President For Patient Care Services Children¹s Mercy Hospitals and Clinics
Assistant Dean for Clinical Partnerships
University of Missouri ‹ Kansas City School of Nursing

Thank you for the invitation to present to the council. My name is Karen Cox. I have had the opportunity to assess the perception of the work environment of inpatient registered nurses locally, regionally and nationally. Nurses are clearly dissatisfied with their work environment. Determining the root causes of this dissatisfaction will provide the basis for developing interventions to improve the work environment.

As a Robert Wood Johnson Executive Nurse Fellow, I had the opportunity to coordinate the nursing focus groups for the report "Health Care¹s Human Crisis: The American Nursing Shortage" prepared by Bobbie Kimball, RN, MBA and Edward O¹Neil, MPA, PhD. The report was prepared for the Robert Wood Johnson Foundation in April 2002.

The results are similar to local work I conducted. I will provide an overview.

The State of Working Conditions of Inpatient Registered Nurses

Presentation to National Advisory Council on Nurse Education Practice

1. Most nurses plan to stay in nursing. However, they have concerns that as they age, they will be unable to continue given the heavy workloads and chaotic work environment. Even though nurses were satisfied with their career choice, most of them could not imagine continuing in a patient setting for any length of time unless work conditions dramatically improved. Most would not recommend nursing to others unless they believe the individual had a realistic understanding of the demanding and physical work required of them. The overall belief was that an individual must possess the intrinsic desire to work in service to others to be successful for the long term.

2. The number one concern of nurses in all the groups was their increased daily workload. The respondents have seen their patient assignments increase over the last several years with either the same or higher acuity. Many are assigned eight to ten patients with little or no ancillary support. Because of shortened lengths of stay, they may have as many as 12 patients during a 12-hour period. This increase in work intensity is physically and emotionally exhausting and raises concerns in their minds about safety of the care they provide. The other concerning factor that the nurses brought up related to workload was that they perceive managers and administrators really saw each nurse as equally capable of performing the same functions and level of work and little consideration was given to how an in experienced or agency nurses, who require more supervision and have more questions, increased the burden on those more senior or competent staff. Managers seem to ignore the differences with their true goal of maintaining staffing at a defined number per shift based on census and it generally failed to take patient acuity into account. Many nurses believed that hours per patient per day was the only factor considered when

determining staffing levels.

Ancillary support also impacts the perception of workload. In the past hospitals may have said they were not going to make any decreases to nursing staff. However, cuts were made in ancillary and allied health staff. As a result, nurses end up taking more responsibilities outside their typical scope. Those things may include spending considerable time answering phones, obtaining equipment, supplies, medications, transporting patients off the unit and in some cases assuming some allied health responsibilities. This best illustrates by an example in one market where the staff had recently been given heavier patient. Shortly after they were assigned more patients to be responsible for, patient satisfaction scores dropped. This was very concerning to hospital leadership. Many executives performance bonuses or pay are tied directly to these scores. The administrative staff brought in outside consultants to do mandatory "be nice classes". This was not only irritating but demonstrated to the nurses that the administrators had little or no appreciation for that connection between workload and how it impacts patient satisfaction.

3. Nurses are confused about the financial issues surrounding healthcare. The nurses in the groups were pretty savvy in their financial understanding and the challenges facing hospitals. For instance they understand the Balanced Budget Act and decreased reimbursement by third party payors. That being said, they still had difficulty understanding some of the things done about the organization level. The focus group findings do support that nurses, as most hospital employees, probably do not understand the difference between capital and operating budgets and see them much more interchangeable that they are. It is difficult, they said, to see new construction when they have been told to cut end-of-shift overtime and when patient care supply levels are decreased. They see an increased reliance on costly temporary nurses and bonus pay as incongruent with hospital claims that they cannot afford to increase nurses¹salaries or benefits. Probably the biggest issue around the finances that directly impacted nurses was salary compression. They felt it was very demoralizing when the practice of paying higher rates to entry level nurses and offering sign-on bonuses were used. Many felt that the entry level salary for nurses was quite adequate; however, the compression where by a nurse with five years of experience and a nurse with fifteen years of experience had very little difference in their salaries was hard to understand. They felt this detracts from people being satisfied or even going into the nursing profession. Also, nurses in one market really did describe feeling like a commodity. One day they are begged to come in to work and the next day they are told they have to stay home. Often times they felt that this was a resource allocation issue and gave the example that there were days where all the surgeons wanted to operate so the hospital made every effort to let them operate the day they wanted and the next day there were very few surgeons working. They talked about the stress that puts on the system.

4. Nurses felt relatively powerless to change things they dislike in their work environment. Now, the nurses who felt most positive about their jobs believed that there were ways to make their concerns known. Unfortunately, they were the minority of the nurses in the groups. The majority, who felt powerless, had two different perspectives on this. One felt that they were in a work environment where structures existed that allowed input and

administrators and managers were generally empathetic, but that empathy did now always take form in seeing actions or changes made. The other group felt that not only people had not interest in their opinions but that they were expected to do as they were told and that they might be labeled in a very negative way when they did bring issues. Even those who did not really support unions philosophically, thought that organizing might be the only way to make substantial improvements in that environment.

5. Nurse managers can make a significant difference in how nurses perceive their jobs and several respondents reported that they had supportive first-line managers. They described these managers as very committed to patient care and they are clinically competent to provide care and frequently do so. They view these managers as advocates and partners with administration. They work hard to make sure there are enough staff and adequate equipment and supplies for them to do their work. Most nurses said that they were no longer able to be supported by nurse managers because they had two to four units to oversee and they also had very little influence or input at the administrative level. Interestingly, one focus group suggested that completely eliminating this role would be a way to free-up dollars to increase staff salaries. Nurses also said that they felt like their managers were just as frustrated as they were.

6. Respondents felt little commitment from nursing schools and employers to adequately educate, train and orient new nurses. There is also limited support for continuing education. This was very interesting in one market across several hospitals nurses reported getting only two weeks of clinical orientation regardless if they had experience in the sub-specialty or if they were new graduate nurses. Nurses also felt nursing education is doing a disservice to students by not preparing them adequately for what the realities of their workload would be like. This in many ways creates a vicious cycle of nurses who come in, get oriented and quickly overwhelm and leave.

   The issue of continuing education is also a concern. Very few of the nurses reported being paid to attend education classes and seminars, even when employers required it. Most seemed unaware that this is a violation of the Fair Labor Standards Act. For nurses, this lack of interest in their ongoing professional development further reinforces the perception that a nurse is not valued as a professional.

7. The nurses' suggestions to address the nursing shortage.

Workload and Work Environment

- Decrease individual workloads.
- Provide support staff: clerical staff, nurse technicians, transport technicians, etc.
- Empower nurse managers to be able to fully support their units.
- Listen and take action regarding concerns in the work environment.

Financial

- Increase salaries

Respect and Support

- Encourage physicians to treat nurses as colleagues

Education and Professional Development

- Improve the orientation process
- Provide paid continuing education

In summary, generally nurses from the focus groups express similar concerns regarding work environment, a sense of powerlessness to effect change and physical and emotional exhaustion.

In addition, as part of my work as a Robert Wood Johnson Nurse Fellow, I conducted work environment assessments at seven hospitals in the Kansas City area. Using both quantitative and qualitative research methods yielded very similar findings. The most pervasive theme in the Kansas City focus groups was the role of the nurse manager and the lack of support nurses perceived having from front-line managers. Many felt that the nurse managers were not clinically competent and; therefore, not able to provide them with the support they needed and not being able to advocate for them.

The Positive Work Environment

We know what works. The Magnet designation process developed by the American Nurses Credentialling Center has identified the gold standard of nursing care. Hospitals can use the criteria to assess their actual environment with the preferred environment and implement changes.

The Magnet program works to promote an environment that supports professional nursing practice. It recognizes the need for strong nursing leadershipleaders that are knowledgeable and advocate for staff. Nurses are given autonomy and encouraged to use their independent judgment. Significant emphasis is placed on professional development i.e., inservice continuing education and career development.

The American Association of Colleagues of Nursing (AACN) had developed the hallmarks of professional practice. This document describes eight key characteristics that nursing students can use to examine the work environment of potential employers. This document is currently used by nurses from baccalaureate education as they begin their initial job searches.

It will likely take action at the regulatory/policy level to encourage hospitals to formally or informally adopt Magnet standards. Funding from the National Reinvestment Act could give priority to Magnet designated facilities to further define the impact on cost and quality. Medicare and Medicaid funding rates could be higher to Magnet designated facilities, acknowledging that there may be some additional costs to be offset. The JCAHO could incorporate designation and give a more prestigious ranking to hospitals. Hospitals often say they cannot afford to embrace Magnet criteria. The evidence would say they cannot afford not to.

We are at a crossroads in the practice of inpatient nursing. Addressing nurses[1] perception of their work environment must be a priority. The health of the population is at risk.

APPENDIX F

Progress Report: IOM Committee on Work Environment for Nurse and Patient Safety

Ada Sue Hinshaw, Ph.D., R.N., F.A.A.N.
Vice Chair,
Institute of Medicine
Committee on Work Environment for Nurses And Patient Safety

The Institute of Medicine (IOM) constituted a study committee to examine the "Work Environment for Nurses and Patient Safety" under the sponsorship of the Agency for Healthcare Research and Quality (AHRQ). This study addresses a major component of the national shortage of nurses; i.e., the retention of nurses within major hospitals and long term care facilities as it relates to patient safety. In the past, the IOM addressed the supply issues involved with the shortage of nurses as is traditional in the field. This address is to provide an in-progress report for the National Advisory Council on Nurse Education and Practice.

The charge for the IOM committee study from the AHRQ was to identify:

- key aspects of the work environment for nurses, including extended hours and workload, that likely have an impact on patient safety, and
- potential improvements in healthcare working conditions that would likely result in enhancements in patient safety.

The study was directed to include examination of acute care, long term care, home care and community care environments. The topics that needed to be addressed were:

- nursing workload including state regulation of nurse-to-patient ratios,
- nursing work hours and fatigue, including mandatory overtime issues,
- he design of healthcare delivery processes (not intended to include ergonomics) and systems, including support systems for decision making, and
- barriers to effective communication among care team members.

In essence, the study recommendations were to address possible steps for enhancing patient safety through improved working conditions of nurses.

This Work Environment for Nurses and Patient Safety committee study is part of a series of IOM studies focusing on the quality of healthcare and patient safety. The initial study outlined the errors and adverse events that occur in healthcare; i.e., To Err is Human: Building a Safer Health System (IOM, March 2000). A major second report; Crossing the Quality Chasm: A New Health Care System for the 21st Century (IOM, 2001), identified a number of health system issues and a series of recommendations to redesign the healthcare system to make the system "patient-centered" with a higher quality of care. A third report focused on developing a higher quality of healthcare and patient safety through interdisciplinary health professional education; i.e., Health Professions Education: A Bridge to Quality (IOM, 2003). The work environment study for nurses and patient safety reinforces the importance and centrality of nurses to high quality healthcare and the safety of patients.

The three important features of the charge to the study committee; work environment, nurses and patient safety framed the selection of member expertise for the committee; experts on safety-sensitive industries, patient safety, healthcare delivery, nursing, medicine, interdisciplinary healthcare, informatics, acute care, chronic care, health professions education, organizational behavior, operations management and human factors engineering. The committee membership was strongly interdisciplinary reflecting the scholarship of a number of major fields; e.g., nursing, health services research, organizational psychology, high reliability organizations, informatics, organizational design, nursing administration, hospital administration and nursing facility researchers.

Two major types of recommendations will be provided in the final report; substantive/content and further research recommendations. This report, similar to earlier quality of care patient safety reports will take a "systems" approach to dealing the work environment of nurses as it influences patient safety. Thus, the report will address recommendations to multiple stakeholders who are responsible for providing high quality of care and keeping patients safe. The audience for the recommendations will include, but is not limited to: federal/ state policy makers, healthcare organizational leaders, health professionals, healthcare payors and others.

The recommendations from the IOM study committee will be based on published research from numerous disciplines, white papers commissioned from experts and testimony from multiple stakeholders. Examples of the research examined include:

- High reliability organizations where the risk of errors/adverse events is high but the accident rate is low,
- Organizational psychology with concepts such as "stranger on site" helping to understand the effect of temporary nurses in agencies,
- Design of work environment; e.g., the influence of centralized vs. decentralized structures on decision making of nurses with patients or residents,
- Magnet hospitals as examples of strong, positive work environments with reportedly higher retention of nurses and lower adverse events occurring,
- Safety-sensitive industries and the models and strategies for increasing safety,
- Areas of high risk for errors in nursing at the individual practice and system levels,
- National Centers for Patient Safety in the Veterans¹ Administration hospitals and the Wellspring program in long term care facilities as models for lowering errors/ adverse events,
- Nurse staffing, case mix and adverse events includes numerous studies substantiating a strong relationship between higher nurse staffing levels and positive patient outcomes, and
- Economic costs of nurse turnover in hospitals and nursing facilities.

A number of white papers were commissioned by experts in the research fields cited above. These include, for example:

- "Nurse and nurse-aid workforce profiles, trends and projections" by Julie Sochalski PhD, RN, FAAN
- Evidence-based design of nursing workspace in hospitals" by Ann L Hendrich MS, RN
- The work of nurses and nurses aides"

- In Acute Care Settings by Barbara Mark PhD, RN, FAAN
- In Long Term Facilities by Barbara Bowers PhD, RN, FAAN
- In Home, Community and Public Health Nursing by Karen Martin MSN, RN, FAAN
- Work groups and patient safety by Gail Ingersoll EdD, RN, FAAN, FNAP and Madeline Schmitt PhD, RN, FAAN, FNAP
- Work hour regulation in safety sensitive industries by Ann Rogers, PhD, RN, FAAN

These white papers contributed major concepts and issues to the committee's consideration of the work environment of nurses and how it influences patient safety. The papers also touched on the issue of nurse safety in various work environments but the committee did not include that information since the charge for the study focused only on patients.

In addition, testimony was heard from a number of different stakeholders such major nursing organizations including, for example, the American Academy of Nursing (AAN), the American Association of Colleges of Nursing (AACN), the American Nurses' Association (ANA) and the American Organization of Nurse Executives (AONE). Other major stakeholders provides information such as the American Healthcare Association, the American Association for Homes for the Aged, the SCIU, the American Hospital Association, the United American Nurses, the Joint Commission on Accreditation of Healthcare Organizations, and the Veteran's Administration. Synthesizing the information from published research, the White Papers, and the testimonies, it became apparent that the study committee would be able to address only hospitals and long term nursing facilities in the recommendations. The research base for home care and for community care on nursing work environment and client safety was not available which posed a major area for future research opportunities.

The timeframe for the study committee's completion of the report was projected to be in mid-fall of 2003.

UPDATE: Following this "in-progress" report to the National Advisory Council on Nurse Education and Practice, the IOM study report; entitled, Keeping Patients Safe: Transforming the Work Environment of Nurses was released on November 4, 2003. The IOM chose to showcase the report to the public and the multiple stakeholders. The report provides 18 recommendations on redesigning and enhancing the work environment of nurses and shows the strong relationship among the nurses work environment, the characteristics needed for a positive environment and the relationship to high quality care and patient safety. Ten of the recommendations focus on healthcare organizations and the system changes that need to be instituted. A copy of the Executive Summary for the report is attached to this submission. The prepublication copy of the report can be accessed at (http://www.iom.edu/CMS/3809/4671/16173.aspx). The report will be available in published form in January of 2004.

APPENDIX G

Diversity as an Organizational Strength

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SHANDS at the University of Florida (Shands UF) established in 1958 is the flagship hospital for Shands HealthCare. Shands UF is a 570-bed academic medical center offering highly specialized services and complex medical and nursing care. Four Centers of Excellence include cancer, cardiovascular, neurological, and transplantation services. Shands UF includes the SHANDS Children's Hospital (168 bed hospital within a hospital) established in 1996 and the SHANDS Rehab Hospital (40 bed rehabilitation and physical medicine hospital) established in 1987.

The SHANDS HealthCare Mission is to provide excellent patient care, to collaborate in improving community health and to create an environment that supports education and research in the health sciences. In order to achieve our mission, we realized that as an organization we must be prepared to serve in a very diverse environment from the perspective of staff and patients.

Shands UF defines "diversity" as "all the ways in which people differ, and how those differences affect the way we think and act. By managing and valuing diversity, our goal is to create an environment which ensures that all employees and customers are respected and included, that utilizes the full potential of every employee to improve productivity, and that is flexible enough to adapt to change." We began our journey to recognize diversity as our strength in 1998. Our human resource department provided leadership for the journey. Members of the executive team played an essential role in demonstrating support for diversity in both words and actions. The Vice President for Nursing served as the co-chair for the Diversity Steering Committee.

Our initial actions were based on the results of an employee survey. The results from the Diversity Questionnaire (April 1998) showed the majority of the respondents felt positively about change and diversity, felt that teams and group with diverse membership worked harmoniously, felt that managers and policies were flexible and fair, and felt that turnover was low.

Although the overall results were positive, respondents identified improvements needed in methods and procedures for dealing with language differences, clashes in culture, jokes and slurs about ethnicity and gender, participation at meetings by all employees, hiring and promoting a diverse staff, and training managers about diversity.

Armed with this information, the Diversity Advisory Team (DAT) began their work in November 1998. The DAT was challenged to build on our strengths and address issues identified by respondents. Given that the DAT was responsible for designing a diversity strategy, team members represented many diverse cultures as well as all employment levels and areas of Shands UF.

The DAT participated in a 2-day workshop with diversity consultants in January 1999. The Team chose the title, Diversity Ambassadors and selected the motto, "Our Differences Are Our Strength."

The Diversity Ambassadors' initial focal areas were : (1) create an atmosphere of openness and trust, where employees are encouraged to say what they feel, and create an internal reputation for fairness, respect, and humane treatment for all employees. and (2) increase awareness of the positive impact of diversity and empower managers to make diversity an asset.(These started out as two separate focus areas, however based the similarity between the two, these areas were combined into one;)

A Diversity Awareness Campaign was kicked off in 1999. One of the Shands awareness building activities included an "Express Yourself" Art Contest where employees submitted various art forms conveying what diversity means to them. One of the art submissions from members of Shands Publications Services department included a recipe for embracing diversity.

Diversity ambassadors participated in Diversity Train-the-Trainer Workshops for Managers in January 2000. The purpose of the training was to enhance the skills and confidence of the ambassadors to deliver diversity training. The primary objectives were for ambassadors to learn how to develop self as a diversity trainer, create a productive learning environment, deal with difficult diversity situations, and role play to practice and receive feedback.

After ambassadors were trained, diversity training for managers and staff was initiated. The focus of this training was to enhance participants' awareness and understanding of how cultural programming impacts the way we think and act as well as how we communicate with and interpret the actions of others. After managers were trained, additional diversity educational programs were developed and implemented. Educational programs are summarized in Table 2.

To complement traditional educational programs, other diversity activities were encouraged and supported (summarized in Table 3). For example, the Diversity Store was developed to promote and financially support diversity activities. This on-line intranet virtual store promotes the awareness of diversity at Shands by offering a variety of quality diversity-related products at affordable prices, e.g., mugs, golf shirts, t-shirts, and limited edition items. Profits from the Diversity Store are used to sponsor employee diversity events and support the diversity training programs.

With continual focus on "Diversity Is Our Strength," our primary goal was to create an environment that is open and accepting of individual differences and in which all employees can maximize their potential. The results of our efforts to date include diversity training provided for over 3,000 employees and managers; positive responses received from employees and managers regarding diversity training and activities. Managers and/or staff are voluntarily developing unit-based diversity initiatives with support of the ambassadors; employees are comfortable suggesting revisions to policies and procedures to accommodate diverse perspectives; increased number of employee-sponsored diversity groups and cultural awareness events; enhanced trust between managers and staff evidenced by less formal union grievances and complaints to employee relations department; and increased effective informal problem-solving at the department level evidenced by fewer requests to escalate diversity-related issues to senior management.

Since beginning the program in 1998, we have a greater awareness and appreciation for diversity as an organizational strength. We are aware that diversity is much more than race, ethnicity, and gender. Diversity refers to all the ways in which we differ. Understanding and valuing diversity is an essential component of employee and patient advocacy.

Although we are pleased with our progress to date, there are many challenges ahead. We are challenged to sustain the momentum year after year. We must consider the ongoing training needs of a diverse community. We are grappling with concerns such as, is there a place in the institution for dissenters, i.e., employees whose fundamental beliefs are antithetical to the concept of valuing differences? What are the organizational implications of embracing minority populations, e.g., homosexuals?

In the year 2003, we are expanding our diversity strategy to include community outreach, development and support of sanctioned employee support groups, further integration of diversity principles in the job descriptions and expected behaviors for managers and staff, and overall broadening of training and awareness events.

Based on our experiences, the following recommendations (tips) may be helpful to others who are beginning the journey to use diversity as a tool to improve the practice environment: (a) strong and visible support from executive leadership is a must so that managers and staff understand that a focus on diversity is not a fad but a sound organizational strategy to improve performance; (b) use a consulting firm to assist with education of senior leadership and to kick off the initiative. Expertise in diversity is critical to uncover blind spots and place sensitive issues on the table; (c) educate leadership before developing training materials, benchmark for best practices, use the services of a consultant to help develop training materials/methods. Multiple strategies are necessary to teach diversity. It is much more complex than reading an article or module. Given that leadership support is required to maximize the benefit of training, these individuals require education before initiating the training program. This is necessary in order to get support for funding as well as access to employees for reasonable amounts of time to participate in training activities. Diversity training is a one-hour commitment; (d) engage a committed group to work with consultants and prepare to carry the work forward as diversity training is more than a classŠ it¹s a journey; (e) ensure that leadership is in it for the long haul as diversity must remain a priority; (f) train managers first and set expectations for staff training and the managers¹ role as coach. Be prepared to provide ongoing support to managers as not all management individuals are ready to serve in the role of diversity coach. Make it safe for managers struggling with diversity issues to get assistance without blame and ridicule; (g) train significant numbers of current employees and then incorporate training into hospital orientation for all new employees; (h) begin with the basics, i.e., awareness training, including working with diverse co-workers; focus on differences in communication styles and not just the traditional cultural differences, e.g., food, language, etc.; (I) follow with skill building training regarding caring for diverse patient populations use available resources, e.g., the CRM learning video, Patient Diversity: Beyond the Vital Sign.; (j) set and reinforce expectations for managers to "talk the talk and walk the walk"; (k) encourage unit-based and departmental level diversity activities in staff meetings; (l) sponsor cultural awareness celebrations; (m) publish diversity articles in institutional newsletters; (n) review policies and procedures for alignment with value of diversity, (o) involve medical staff in diversity training; and (p) show the human side of the workforce, e.g., personal stories, testimonials, etc.

A key point to remember is that training alone does not enhance culture, climate, morale, behavior, or productivity. Respecting diversity must be a clear institutional value. Offer communication through a variety of media. Remember that one size does not fit all. Where possible link diversity messages in all training classes, newsletters, special events, websites, etc. to increase awareness and maintain focus. Focus on the people, not just the corporate message. Employees are sure to pick up on behaviors inconsistent with the diversity message.

All things said the main thing is to START. You do not need everyone on board to begin. Start where you are and with whom you can. Don¹t underestimate small impacts as they become large impacts over time. I have learned that patience is one of the keys to success. People are where they are based on years of cultural conditioning and this does not change overnight. Vision becomes reality through perseverance. By virtue of the organization focusing on diversity, diversity awareness will increase and as a result of increased dialogue, employees will become more aware of the impact of existing practices and issues. Therefore, be prepared to manage the situations that may arise. Once people know that they are not expected to suffer in silence, they get a voice and their expectations change!

Conclusion

Managers and staff morale is impacted by how well diversity issues are managed thus impacting recruitment and retention and ultimately, quality patient care. Valuing and appreciating diversity is a powerful tool for improving collaboration and productivity in the practice environment. However, diversity awareness and appreciation training is a long- term investment requiring commitment from all levels of leadership and especially executive leadership. The organization must be prepared to venture beyond surface level awareness if the desire is to create an environment where all employees feel recognized and appreciated for who they are and are given the opportunity to maximize their talents. The organization must be prepared to address issues that are uncovered in the pursuit of valuing and appreciating all employees otherwise the efforts will be viewed as another fad that will go away within a short time. The goal is to address issues in a manner that is blame free and yet enforce clear behavioral expectations in the work environment.

Table 1: Diversity Program Developmental Summary

The Diversity Initiative What We Have Done at Shands UF 1998-1999	April 1998 -Diversity questionnaire used to survey all staff November 1998 -Formation of the Diversity Advisory Team (DAT) January 1999 -Conducted 2-day workshop for training of the Diversity Advisory Team with diversity consultants Throughout 1999 -Communication and Awareness Campaign with several celebration events and activities

1999-2000	August 1999 -Began development of the training programs for management January 2000 -Held 2-day Train-the-Trainer workshop for Management Diversity Training Facilitators January 2000 -Began roll-out of the Management Diversity Training June 2000 -Executives participated in Job Shadowing June 2000 -Formation of several Departmental Diversity Teams
2001-2002	January 2001 -Conducted Train-the- Trainer Workshop for Staff Diversity Facilitators January 2001 - Began roll-out of Diversity Training for Staff January 2001 -Opened Diversity Store May 2001 -Diversity Training added to the New Employee Orientation Program May 2001 -Discontinued the Diversity Training for Managers (98% of management staff was now trained) May 2002 -Over 50% of staff have attended initial Awareness Building Diversity Training May 2002 -Piloted 2 new diversity classes: "Managing Generational Differences" and "Patient Diversity: Beyond the Vital Signs."

Table 2: Description of Diversity Training Programs

Program Title		
Diversity Training for Managers and Staff		
Purpose	Format	Primary Objectives
Enhance	Four-hour workshops	• Define diversity and explain

participants' awareness and understanding of how cultural programming impacts the way we think and act as well as how we communicate with and interpret the actions of others.	using interactive and participative activities including: • individual, small and large group exercises • building of an action plan to lessen the impact of cultural misunderstandings	how valuing our differences and managing diversity are critical to Shands' success • Differentiate between affirmative action, valuing differences, and managing diversity. • Communicate effectively with others whose communication styles are different. • Give feedback in culturally sensitive ways. • Define "stereotype" and differentiate between making assumptions and stereotyping individuals based on cultural demographics. • Develop an action plan to help: 1. recognize when a shift in thinking or behaving is appropriate 2. lessen the impact of potential cultural misunderstandings based on different communication styles.

Program Title		
Patient Diversity: Beyond the Vital Signs		
Purpose	Format	Primary Objectives
To help caregivers deal more effectively with the cultural diversity of our patients, and enhance	A four-hour workshop using video vignettes and interactive and participative activities including individual,	• Identify several beliefs and practices of the patient population they serve.

the delivery of culturally appropriate care	small and large group exercises.	• Recognize the influence of their own culture on their values and healthcare practices. • Utilize their knowledge of cultural diversity to provide culturally competent healthcare. • Effectively solve problems created by diversity. • Develop a more tolerant attitude of differing beliefs and customs.

Program Title		
Managing Generational Differences		
Purpose	Format	Primary Objectives
A program designed to help managers understand how to attract, motivate, and retain valuable employees and enhance professional relationships by focusing on Baby Boomers, Generation X, and Nexters.		• Use the information to positively affect relationships with employees of different generations. • Relate behaviors to cultural differences of

		the three generations. List the positive attributes of differing behaviors, influences, motivators.

Table 3: Summary of Other Diversity Activities

- Awards and recognition events
- Internal communications/public relations strategies including Connections newsletter column "Spotlight on Diversity."
- Diversity "lunch and learn" sessions
- Career shadowing
- African American Leadership Development support group
- Male nurses focus groups
- Diversity theme incorporated into Filipino nurses acculturation
- Cultural holiday celebrations

APPENDIX H

Improving our Practice Environments: A Key Strategy to Nurse Retention and Recruitment of Ethnically and Racially Diverse Nursing Personnel

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The number of nurses working in acute care settings has not diminished significantly over the last four years (Spetz, O''Neill, National Nursing Sample 2000). However, the retention and turnover rates have continued to rise over the same time period (American Hospital Association, VHA). Improving the practice environment is a key strategy to achieving the following strategic goals:

1. Improve the quality of the work life for all nursing professionals
2. Attracting and retaining a diverse nursing populace.
3. Improve nursing and other health professional's productivity through enhancement of interdisciplinary communication and practice.
4. Redesign systems and environments to achieve safety and quality goals.
5. Promoting career ladder, mentorship and community and consumer connectedness as tactical imperatives to achieving strategic goals.

Background

The current and future shortage of registered nurses across the United States has significant implications for the American public. Most initiatives including proposals from local, state and federal governmental agencies focus on gradually increasing the supply of registered nurses through improving the production capacity of America's nursing schools. In addition, there are attempts to increase the number of foreign trained nurses in the American workforce. Finally, there are efforts underway to extend the amount of worked hours any one RN performs in her/his career. In a recent study sponsored by the Robert Wood Johnson Foundation Ed O'Neill and colleagues present data suggesting that focusing solely on increasing supply will not resolve the nursing shortage crisis. In fact, if we fail to address the demand side of the equation the public's health will be adversely affected by the year 2005. The Division of Nursing Health Resources Service Administration, American Organization of Nurse Executives, National Black Nurses Association, National Black Nurses Foundation, Coalition of Ethnic Minority Nursing Associations, American Nurses Association and the American Hospital Association agree that we must design a practice environment that decreases the burden of providing nursing care to improve nursing retention and patient care outcomes.

Improving the quality work life of all nursing personnel

The number of individuals in healthcare performing a nurse function continues to grow. The fastest growing group of individuals is technical and unlicensed assistive personnel. Many of these individuals are from diverse ethnic populations, including foreign born and trained

registered nurses. Registered nurses, licensed vocational nurses, nurse aides and home health workers are all victims of a system that has failed to recognize the value of the humans providing care to humans. As a result the environments in which they work have been characterized as cesspools, slave centers and unfriendly and discriminating places to work. The organization without regard of the conditions in which they work is viewed as important. The importance of caring for employees and achieving positive work-life balances a key strategy to improving retention. Ethnic people of color continue to experience discrimination in the workplace. This factor alone has deterred health care workers in general and registered nurses from encouraging their sons, daughters, nieces, nephews grandchildren, godchildren or the neighbors across the way from entering the nursing profession.

The continued shortage of nurse professionals from ethnically and racially diverse background in leadership contributes to the inability to attract and retain nurses or to support the career advancement of entry level workers. The health personnel shortages in the nursing field are a product of a system that has failed to value the work provided by the nursing population. As a result members of the nursing workforce are reluctant to promote the profession as a career that will be of social benefit to the individual, their family and cultural group and the communities they wish to serve.

Attracting and retaining a diverse workforce across practice settings

The best recruitment strategy is the retention and professional development of nursing personnel in all healthcare settings. Providing career development opportunities from patient care sitters to the chief executive officer role has increased the number of individuals from diverse ethnic and racial backgrounds. Examples include Shands Regional Medical Center in Florida. The leadership of the center established goals to promote a culturally competent and satisfying work environment. The institution has been recognized for its outstanding results in attracting and retaining a diverse workforce to meet the health needs of a diverse community.

Robert Wood Johnson University Medical Center is another example of outstanding efforts to attract and retain a diverse workforce. Since 19xx the medical center has worked with a coalition of primary and secondary schools, business community and employees of the organization to promote nursing and other health professions as valuable careers.

East Alabama Medical Center was identified as one of the top Fortune 100 best places to work in the United States. The center deploys a variety of strategies to promote a positive working environment connected with the community through its employees.

The Minnesota Hospital and Healthcare Partners launched a project with the Minnesota Organization of Nurse Leaders to strengthen practice environments. Their goals are to create environments that demonstrate respect and recognition for a diverse nursing workforce that meets the needs of urban and rural communities.

Southern University School of Nursing in Baton Rouge, Louisiana used a "community needs" as rallying vehicle to increase the number of ethnic and racially diverse nurses. The school successfully increased the number of nurses prepared to shape the practice environment in acute and community settings. The nurse managed clinics provide primary care services and serve as culturally appropriate practice settings for all students and faculty.

Northwestern Memorial Hospital in Chicago has an academy staffed by advanced practice nurses, educators and administrators to improve the cultural competence, clinical skills, literacy and service skills of its employees. The center has led to improved retention and promotion of ethnically and racially diverse personnel.

Cedars-Sinai Medical Center in Los Angeles, California created an Institute for Professional Nursing to assure the availability of a qualified nursing workforce. The Institute has six programmatic thrusts including the development and testing of innovative practice.

Developing new practice models to retain and attract a diverse nursing populace. Implement Culturally and Linguistic standards in to clinical practice programs.

The United States population will continue to expand its racial and ethnic groups over the next twenty years. The population will also continue to age and live longer with disease and illness. The current preparation programs must be changed to provide health professionals with the knowledge and skills to care for a chronically ill populace across settings. Nurses in the role of educators in acute and primary care settings to assist, coach and mentor individuals and populations in the management of their disease and illness are needed.

The opportunity to provide care that is meaningful for ones family and community will attract and retain nurses. However the practice environment must enable the nurses to provide that type of care. Individuals must be supported to advance their knowledge of motivational theory, self care theory and evidenced based nursing practice. Simultaneously, individuals must be developed to provide technical care in a satisfying and culturally relevant manner. Differentiated practice models that reward and recognize each practice level can assist in promoting nursing as a career vs. job. The University of Iowa Medical Center has developed a collaborative differentiated practice model with the school of nursing The model has enabled nurses at the baccalaureate and master level to implement initiatives to improve nursing retention and patient care outcomes.

Career clinical ladders that enable nurses to advance without leaving their direct patient care roles have proven efficacy and attracting and retaining nurses according to McClure and Hinshaw (2002). Providing incentives to promote the mentoring of new nurses is the cornerstone of retention. The University of California San Diego Medical Center Preceptor Incentive Program is an example. The program has decreased the turnover of Hispanic and African-American nurses from their outreach efforts.Their outreach program include a coalition to support increased enrollment and graduation of ethnic and racially diverse nurses into associate and baccalaureate nursing programs.

National forum to develop solutions to retain and develop the workforce

The American Nurses Association, American Hospital Association, Institute of Medicine, American Academy of Nursing and others have identified the need for a national forum to improve the practice environment. The Division of Nursing should assume a key leader role in the organization and launching of such a forum. This forum would represent the cornerstone of a major change in the deployment and utilization of nurses to meet the needs of a chronically ill, aging, multigenerational and ethnic and racially diverse American public.

The Division should seek to partner with professional nursing associations, employers of nursing personnel, funding agencies and other federal agencies to promote and support the development

of innovative models that result in the achievement of goals identified in the NACNEP Action Agenda in 2000. The Division should use its existing and new funding sources to stimulate local and regional efforts to achieve ethnic and racial diversity in practice settings and improvement in the ability of all nurses to provide culturally relevant care. The following strategic initiatives are recommended for the Councils consideration.

Strategic Initiatives

I. Launch a national forum on improving the practice environment and nursing's ability to provide culturally relevant care.
II. Issue a request for proposals to support the creation of innovative practice models.
III. Promote applications under advance nursing practice and diversity to on practice enrichment to retain and develop ethnic and racially diverse nurses.
IV. Partner with ethnic nursing organizations and others to promote a national agenda on improving the practice environments across settings and communities.
V. Encourage the provision of full living stipends to support career advancement for entry, mid and advanced career level nursing personnel.
VI. Expand the National Nursing Sample Survey to include questions on diversity in the workplace and effective models of nursing practice.

Summary

The data on ethnic and racial diversity in nursing indicates no significant improvement over the last decade. To stimulate growth and development of diverse nurses across practice settings requires the initiation of new practice models, development and deployment of nurse leaders from diverse backgrounds, launching of new roles that support the career advancement and mentorship of nurses and collaboration of federal, public and private institutions. The Division of Nursing has a rich history of launching initiatives through its funding priorities that have improved the preparation and utilization of nurses to meet the health care needs of the American public. The funding of advance nurse practice programs increased access to primary care. The nurse managed clinic initiative enabled advanced practice nurses to work in primary care, provided clinical practicums for students and provided quality health care for diverse populations. The traineeships help to expand the basic nursing workforce and stimulated interest of nursing as a career. The launching of a practice environment improvement initiative that focuses on enabling all nurses to provide culturally relevant and appropriate care, attracting and retaining ethnic and racially diverse nurses, linking nursing diversity with the ability of practice settings to achieve quality goals will help the Division of Nursing and the US Public Health Service to achieve its goals of closing the health disparity gap.

References

Kimball, Bobbi and O¹Neil Edward. 2002. Health Care¹s Human Crisis: The American Nursing Shortage. Robert Wood Johnson Foundation.

United States General Accounting Office. 2001. Nursing Workforce: Emerging Nurse Shortages Due to Multiple Factors. Washington, DC.

Villarosa, L. 2001. Working to Burnish Nursing¹s Image. New York Times, May 22, 2001.

Yasin, S. and Albert. 1999. Minority Teacher Recruitment and Retention: A National Imperative. American Association of Colleges for Teacher Education.

AHA Commission on Workforce for Hospitals and Health Systems. 2002. In Our Hands. American Hospital Association, April 2002.

AHA Division of Nursing.1987. Surving the Nursing Shortage: Strategies for Recruitment and Retention of Hospital Nurses. American Hospital Association.

American Organization of Nurses Executives Institute for Patient Care Research and Education. 2000. Nurse Recruitment and Retention Study. AONE.

McClure,M and Hinshaw,AS. 2002. Magnet Hospitals Revisited. American Academy of Nursing.

McClure, M., Poulin, M., Sovie, and Mandelt, M. 1983. Magnet Hospitals Attraction and Retention of Professional Nurses. American Academy of Nurses.

Aiken, L 2001. "Evidenced based management: Key to workforce stability." Journal of Health Administration Education. 19 (4), 117-24.

Aiken, L.and Patrician, P. 2000. "Measuring Organizational traits of hospitals: The revised nursing work index." Nursing Research, 49 (3), 146-53.

Mitiguy, J. 2002. "Shining a light on solutions: The Institute for Professional Nursing Development- Cedars-Sinai Medical Center." Nursing Spectrum September 2002.

APPENDIX I

Increasing Diversity in the Nursing Workforce: The Hispanic Challenge

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Abstract

The impact of the critical shortage of nurse nationwide is even more profound in the minority population. With an increase in Hispanic population growth and a subsequent increase in their health care needs, there too must be an increase in the availability of services provided. An increase in the number of professional nurses who are Hispanic is crucial in the provision of health care service to minority populations. The health care needs of a minority population are uniquely addressed by nurses who are from the same minority group. A directed effort must be make to promote nursing as a career choice in the Hispanic population and programs need to be designed to support and mentor Hispanic nursing students, as well as recruit, retain, and graduate them in a timely manner. Similar programs must be developed and directed toward increasing Hispanic nursing faculty. Cultural appropriate care which is essential to the Hispanic nurse-patient relationship is similarly critical to the development of the faculty-student relationship. In order to achieve success, an increase in funding must be allocated and available to prospective student to allow them to attend baccalaureate and higher degree nursing programs and to Schools of Nursing to develop, initiate, and evaluate programs specifically addressing the needs of Hispanic and other minority students. The Hispanic population will continue to grow nationally; it is crucial that Hispanic professional nurses are available to address their concern and meet their overall health care needs.

Increasing Diversity in the Nursing Workforce: The Hispanic Challenge

Racial and ethnic minority populations are surging in the United States, among these, Hispanics. As this growth continues, the change in demographics will create a challenge in meeting the health care needs of these populations (Buerhaus & Auerbach, 1999; Soroff, Rich, Rubin, Strickland, & Plotnick, 2002). As minority health care needs rise, so must the availability of services. To best care for a diverse patient populace, an increase in minority health care providers is crucial. Growth in the diversity of health care professionals must parallel that of the nation in order to avoid a crisis in the health care delivery system.

There is a severe overall nursing shortage which in time will magnify the under representation of minorities in the nursing workforce. Some fundamental reasons for the shortage are the rise in age of nurses and their impending retirement, the increase in pace at which nurses are leaving the profession, and the slow growth rate of nurses entering the profession. According to the March 2000 National Sample Survey of Registered Nurses the average age of the RN population is 45.2 years (HRSA, 2001). In the last two decades there has been a 41% decline in working RNs under the age of 30. In the same time period, the decline in the U.S. workforce under the age of 30 was only 1% (Buerhaus, Staiger, & Auerback, 2001). Buerhaus et al. (2001) maintain that by 2010 almost 40% of RNs will be over the age of 50. As these aging nurses retire, the profession will see an even more devastating decline in the workforce. The amount of nurses leaving the field

compounds the shortage issue. According to Sochalski (2002) there were 81,000 nurses not working in 2000 that were under 44 years of age. More satisfying jobs in other fields, with better compensation and hours, were most common reasons for leaving (Sochalski, 2002). The number of new RNs not working in nursing is also of concern. Between 1996 and 2000, the number of new male RNs not working increased from 4.6% to 7.5%, while females displayed a smaller jump from 2.7% to 4.1% (Sochalski, 2002). It can only be assumed that this trend will continue if retention strategies and barriers are not investigated. The nursing profession is not growing at an adequate pace to replace those nurses retiring and leaving the profession. Although the number of licensed nurses in the U.S. increased by 5.4% between 1996 and 2000, this is down from the 14.2% increase seen between 1992 and 1996 (HRSA, 2001). A survey conducted by The American Association of Colleges of Nursing revealed a 17% decline in enrollment in schools of nursing from 1995 to 2001 (AACN, 2002). The data suggest recruitment of nurses and nursing students must be a priority, to prevent future health care demands from exceeding the supply of providers. Projections for 2020 leave the nation with a shortage of over 800,000 nurses, which is an estimated 29% below estimated requirements (HRSA, 2002). Minority populations are growing at a record pace. The fastest growing minority group in the United States is Hispanics. They comprise 13% of the nation's population and this figure is projected to climb to 17% by the year 2020 (U.S. Census Bureau, 2002). At 13%, Hispanics are now the largest minority group in the U.S. What is alarming is the fact that as the most populace minority group in the nation, Hispanics are the second most underrepresented group in the nursing workforce (HRSA, 2001). Although the number of Hispanic nurses rose from 1.6% of the total workforce in 1996 to 2% in 2000, this is not substantial enough to close the gap between the growth of the Hispanic population and that of Hispanic nurses in the workforce (HRSA, 2001).

Over 1.4 million Hispanics are enrolled in post-secondary education; they comprise 9.3% of all college students in the U.S. In comparison 78.3% of students are White and 14.1% are Black (U.S. Census Bureau, 2002). In nursing programs, enrollment of Hispanics is even more dismal. According to a 2000-2001 survey conducted by the American Association of Colleges of Nursing, Hispanics made up 4.9% of baccalaureate enrollment and 3.9% of graduate enrollment in nursing programs (Staiger, Auerbach, & Buerhaus, 2001). The profession needs to identify why more Hispanics are not pursuing nursing as a career. It is then imperative to address the implementation of recruitment and retention programs specifically designed for the Hispanic student. Professional organizations, schools of nursing, and health care organizations together must commit to increasing Hispanics in nursing. This is a crucial step toward lessening the gap between cultural backgrounds of nurses and patients. It is not true that only minority nurses can provide culturally competent health care to the same minority population. However, studies of nurses and nursing students' attitudes towards diverse patient populations have shown there is a deficit in knowledge and confidence when it comes to caring for diverse groups (Bond, Kardong-Edgren, & Jones, 2001). The National Advisory Council on Nurse Education and Practice 2000 report stresses the need for a diverse nursing workforce. It states that while the number of minority nurses is small, they play a of care that address the unique needs of racial/ethnic minority populations" (NACNEP, 2000). Heller (2002) also asserts it is known that minority health care providers contribute significantly to caring for poor and uninsured patients, and for those in their own minority group.

In order to promote more Hispanics to pursue nursing as a career, schools must be sensitive to the academic and cultural needs of the students. Recruitment of minorities into nursing programs

has been an enduring challenge (Dowell, 1996). Poor academic preparation, lack of social support, lack of financial resources, poor English skills, and lack of knowledge about college are among some of the barriers perspective students face (Dowell, 1996; Soroff et al., 2002). If at all possible it is best to address these issues early in their education. To accomplish this recruitment must start at the high school level (AACN, 2001; Soroff et al., 2002). Schools of nursing must take initiative and develop relationships with high schools to connect with students and spark interest in nursing. Hispanic students can be targeted specifically and advised by Hispanic nurses and faculty members. Advisement should go beyond the student and reach out to parents and families as well (Soroff et al., 2002). The students[1] cultural needs must be considered during recruitment and strategies for minorities must be more personal and family-oriented (Williams, 2001). Bilingual brochures and media advertisements are appropriate to get information in circulation. However, offering information sessions at schools of nursing, or directly in Hispanic communities allows prospective students and their families to interact with Hispanic students, nurses, and faculty. This allows prospective students to identify with role models of similar backgrounds (Evans, 2003; Soroff et al., 2002). In any recruitment effort, the value of growth in the Hispanic student body and in the Hispanic nurse population must be emphasized.

Implementing a recruitment program is the first step, but efforts are futile if a retention program doesn't exist to follow students through to success. Once enrolled, there's a new set of obstacles that Hispanic nursing students face. If they weren't adequately prepared, in their secondary education program, they struggle more in science courses, and may have poor study and time management skills. Other barriers to retention include the inability to pay for tuition, feelings of isolation, lack of faculty contact/support, and perceived discrimination (Soroff et al., 2002; Villarruel, Canales, & Torres, 2001; Williams, 2001). These barriers contribute to the display of low confidence and self-esteem seen in minority students, which further hinders performance (Williams, 2001).

The rising cost of tuition and changing financial aid rules are making the inability to pay a common problem among minorities (Williams, 2001). An adequate financial aid package is important to both recruiting and retaining minority students. A strong commitment from governmental agencies, professional organizations, and school administrators is vital to help lobby for and generate appropriate funds. Once relieved of financial stress, students can focus more on academics, however other barriers remain to be overcome.

Feelings of isolation integrated with feelings of neglect by faculty contribute to minority students' failure in nursing school (Goba, 2001). Minority students feel faculty members are unsupportive and do not provide adequate advisement (Villarruel et al., 2001). Nursing faculty need to provide a nurturing environment to all students, but especially to minorities who are already feeling isolated. Building self-esteem through support and advocacy improves minority students' success rates (Campbell & Davis, 1996; Villarruel et al., 2001). A study by Shelton (2003) revealed students were more likely to complete a nursing program when they perceived greater faculty support than other students. In their study on mentor/student relationships, Campbell and Campbell (1997) found students with a mentor had higher grade point averages and a lower drop out rate than those without a mentor. Given this, a minority faculty/student mentor program should be in place to increase retention and success rates in nursing schools. Hispanic faculty can serve as role models, and exemplify competence and success. When positive interactions with minority faculty were experienced, students reported feeling accepted, encouraged, motivated, and having increased confidence to succeed as nurses (Campbell &

Davis, 1996; Soroff et al., 2002). One obstacle to implementing a faculty/ student mentor program for Hispanic students is the shortage of Hispanic faculty (Dowell, 1996). When minority faculty members are not available majority faculty can advocate for minority students. If a majority faculty member is committed to helping a minority student who is accepting of the relationship, the faculty member can be just as effective in promoting confidence and success (Campbell & Campbell, 1997).

The key to success is to have faculty members committed to and accepting of students' cultural as well as academic needs, especially during their first year of school (Wood & Chwedyk, 2001). A successful mentor is knowledgeable, encouraging, caring, acts as a role model and counselor, and is a good teacher (Pinkerton, 2003). Another attribute of a successful mentor is to be proactive. Mentors should be involved enough to recognize and help students in need instead of waiting for them to fail (Shelton, 2003). Clearly mentors must be chosen carefully; preferably faculty members would volunteer for the role. Benefits to the mentor would hopefully include a sense of pride, empowerment, and overall personal satisfaction.

The faculty/student mentor relationship increases feelings of acceptance and bolsters success in minority students (Campbell & Davis, 1996; Shelton; Soroff et al., 2002). But, isolation and failure can also be attributed to students experiencing perceived discrimination (Villarruel et al., 2001). In a study conducted by Villarruel, Canales and Torres (2001), perceived discrimination from faculty and peers was a common theme for Hispanic students in schools of nursing. This caused students pain and anger, and made building relationships with faculty members impossible. This is detrimental given the aforementioned correlation between student success and faculty support. When experiencing discrimination from peers, students felt isolated and alienated from the school (Villarruel et al., 2001). All students should feel they are of value and that they are an important and respected part of the nursing student body. Discrimination, regardless of the source, engenders low self-worth and a poor self-image, which is linked to failure in school (Griffiths & Tagliareni, 1999). Schools of nursing must address theses attitudes of cultural bias and insensitivity to achieve higher retention rates of minority students. The academic environment should have a "zero tolerance" policy for such behavior.

It is also necessary to consider the implications of the nursing faculty shortage. Results from a study by the Southern Regional Education Board revealed there were 432 vacant nursing faculty positions and 343 resignations in 2000-2001 in the 16 SREB states (SREB, 2002b). A national survey by the American Association of Colleges of Nursing predicts, between the years 2004 and 2012, approximately 250 doctoral level nurse educators will be eligible for retirement annually (AACN, 2003). The shortage of faculty will strain nursing school enrollment and magnify the nursing shortage even further. Of the 491 institutions surveyed by SREB, 86 reported falling short of faculty for their undergraduate and graduate nursing programs (SREB, 2002b). Attracting more graduate prepared nurses into the educational arena must be a priority of schools of nursing. Unfortunately, only 10% of nurses hold a graduate degree (NACNEP, 2001). This number is insufficient to replace retiring faculty and fill current vacant positions. In order to keep the faculty pipeline full, the profession must promote graduate education, especially at the doctoral level to prevent further exacerbation of the faculty shortage. The SREB survey reported that only 34% of nurse educators held a doctoral degree in nursing or a related field (SREB, 2002a).

It is of particular importance to achieve greater representation of Hispanics among nursing faculty. The American Association of Colleges of Nursing reported that for the academic year 2000-2001, Hispanics comprised only 1.2% of the total full-time nursing faculty (Staiger et al., 2001). This deficit in Hispanic faculty will severely impact recruitment and retention efforts of Hispanic students (Dowell, 1996; AACN, 2001). It is important to provide mentors and role models to Hispanic nursing students. More Hispanic students must be encouraged to earn a graduate degree to address the deficit in faculty representation. According to the March 2000 National Sample Survey of Registered Nurses, only 8.4% of Hispanic nurses hold a graduate degree in nursing (HRSA, 2001). Current enrollment doesn't look promising, as Hispanics only comprise 3.9% of graduate enrollment in nursing programs (Staiger, Auerbach, & Buerhaus, 2001). The profession needs a continuous supply of faculty members as mentors to guide the future generations of Hispanic nurses.

There are many other reasons, academic, social, and psychological, that contribute to the lack of Hispanics in the nursing profession. Ongoing studies are needed to point the nursing profession in the right direction so that more aggressive and relevant recruitment and retention strategies can be implemented relevant to the Hispanic nursing workforce. More importantly, there needs to be a financial commitment to recruit, retain, and support Hispanic nursing students while in school. Together with this, there has to be accountability for the utilization of these funds that should be earmarked for minority students and faculty, to increase the number of nurses available to serve the health care needs of the growing Hispanic population. The issues are critical; they deserve more attention and research to address the demands of a more diverse nursing workforce, and the health care needs of our Hispanic population.

More information on racial and ethnic diversity in the nursing workforce is available at ftp://ftp.hrsa.gov//bhpr/nursing/divreport/DivFull.pdf

References

American Association of Colleges of Nursing. (2001, December). AACN issue bulletin: Effective strategies for increasing diversity in nursing programs. Washington DC: Author.

American Association of Colleges of Nursing. (2002, September). AACN's nursing shortage fact sheet. Washington DC: Author.

American Association of Colleges of Nursing. (2003, May). AACN white paper: Faculty shortage in baccalaureate and graduate nursing programs: Scope of the problem and strategies for expanding the supply. Washington DC: Author.

Bond, M. L., Kardong-Edgren, S., & Jones, M. E. (2001). Assessment of professional nursing students¹ knowledge and attitudes about patients of diverse cultures. Journal of Professional Nursing, 17(6), 305-312.

Buerhaus, P. I., & Auerbach, D. (1999). Slow growth in the United States of the number of minorities in the RN workforce. Image: Journal of Nursing Scholarship, 31(2), 179-183.

Buerhaus, P. I. & Staiger, D., & Auerbach, D. (2001). Implications of an aging RN workforce. Orthopaedic Nursing, 20(3), 97.

Campbell, A. R. & Davis, S. M. (1996). Faculty commitment: Retaining minority nursing students in majority institutions. Journal of Nursing Education, 35, 298-303.

Campbell, T. A. & Campbell, D. E. (1997). Faculty/Student mentor program: Effects on academic performance and retention. Research in Higher Education, 38(6), 727-742.

Dowell, M. A. (1996). Issues in recruitment and retention of minority nursing students. Journal of Nursing Education, 35, 293-297.

Evans, B. C. (2003). "That spirit, that thing inside": Using qualitative research techniques to produce a recruitment film for Hispanic/Latino and American Indian students. Nursing Education Perspectives, 24(5), 230-237.

Goba, M. R. (2001,). Mixed messages: Are nursing programs doing enough to make minority students feel welcome? Minority Nurse, Winter, 46-47.

Griffiths, M. J. & Tagliareni, M. E. (1999). Challenging traditional assumptions about minority students in nursing education: Outcomes from project IMPART. Nursing & Health Care Perspectives, 20(6), 290-295.

Health Resources and Services Administration (HRSA), Bureau of Health Professions. (2001, February). The registered nurse population: National sample survey of registered nurses, March 2000. Washington DC: U.S. Department of Health and Human Services.

Health Resources and Services Administration (HRSA), Bureau of Health Professions. National Center for Health Workforce Analysis. (2002, July). Projected supply, demand, and shortages of registered nurses: 2000-2020. Washington DC: U.S. Department of Health and Human Services.

Heller, B. R. (2002). Strategies for increasing student diversity in schools of nursing: Lesson learned. Hispanic Health Care International, 1(2), 68-70.

National Advisory Council on Nurse Education and Practice. (2000). A national agenda for nursing workforce racial/ethnic diversity: Report to the Secretary of Health and Human Services and the congress. U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Division of Nursing, Rockville, Maryland.

National Advisory Council on Nurse Education and Practice. (2001). Nursing: A strategic asset for the health of the nation: First report to the Secretary of Health and Human Services and the congress. U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Division of Nursing, Rockville, Maryland.

Pinkerton, S. (2003). Mentoring new graduates. (Retention and recruitment). Nursing Economics, 21(4), 202-204.

Shelton, E. (2003). Faculty support and student retention. Journal of Nursing Education, 42(2), 68-76.

Sochalski, J. (2002). Nursing shortage redux: Turning the corner on an enduring problem. Health Affairs, 21(5), 157.

Soroff, L., Rich, E., Rubin, A., Strickland, R. D., & Plotnick, H. D. (2002). A transcultural nursing education environment: An imperative for multicultural students. Nurse Educator, 27(4), 151-154.

Southern Regional Education Board. (2002a, November). 2002 SREB survey highlights. Atlanta,GA: Author.

Southern Regional Education Board. (2002b, February). SREB study indicates serious shortage of nursing faculty. Atlanta,GA: Author.

Staiger, D. O., Auerbach, D. I., & Buerhaus, P. I. (2001). Minority enrollments up, but not minority faculty. Minority Nurse, Summer, 74-75.

U.S. Census Bureau. (2002). Statistical abstract of the United States [online]. Available http://www.census.gov/prod/www/statistical-abstract-02.html.

Villarruel, A. M., Canales, M., & Torres, S. (2001). Bridges and barriers: Educational mobility of Hispanic nurses. Journal of Nursing Education, 40(6), 245-251.

Williams, D. (2001). Reach out, we¹ll be there: From pre-nursing programs and mentor to more accessible classrooms, nursing schools are using creative strategies to attract and keep minority students. Minority Nurse, Winter, 16-19.

Wood, D. L. & Chwedyk, P. (2001). Mentors to the max: When it comes to recruiting, developing and retaining American Indian nursing student, mentor programs can make all the difference in the world. Minority Nurse, Summer, 52-57.

APPENDIX J

Educating a Diverse Workforce Minority Students: Recruitment, Retention & Graduation

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Introduction

Southern University School of Nursing (SUSON) was established in 1986 in a Historically Black College University (HBCU). Southern University and A&M College at Baton Rouge (SUBR) was an open admissions institution until the year 2000 and therefore the only requirement for admission to the university was a high school diploma. In establishing the BSN program at SUBR, it was clear that potential students could represent disadvantaged backgrounds. In addition, the university had no prior history of education of health professionals.

The founding nurse faculty viewed the situation as a unique opportunity to develop a nursing education program to educate at risk students and produce potentially successful African American, baccalaureate prepared registered nurses. This early faculty group was aware of the national data on lack of success of students from disadvantaged backgrounds in nursing education but believed that if majority students could succeed in nursing then minority students could do the same. SUSON's story is about how we designed a program to validate our thesis, which is best, expressed through a statement by Harry Wong.

Our Thesis

"The greatest effect on student achievement is not race, not povertyit is the effectiveness of the teacher and the learning environment."

Retention And Graduation

The retention and graduation strategies used by SUSON are designed to speak to goals of national health agendas. The National Advisory Council on Nurse Education and Practice (NACNEP) recommends increasing the racial/ethnic diversity of the nurse workforce as an essential step in addressing the shortage. This group recommends a national effort between government, public and private sectors and educational institutions as a necessary measure to ensure an appropriate nurse workforce for the nation. Recommendations presented by NACNEP to enhance efforts to increase the recruitment, retention, and graduation of minority students are:

- Increase minority students' and their advisors/counselors' understanding of the academic requirements necessary to facilitate access to a professional nursing program.
- Increase the overall number and percentage of baccalaureate- prepared minority nurses in the basic nurse workforce. At least two-thirds should hold baccalaureates or higher degrees by the year 2010.

The American Association of Colleges of Nursing (AACN) suggests that nursing students of today do not "mirror the nation's population". According to AACN, baccalaureate-nursing

students are 91% female, and 73.5% represent non-minority backgrounds. In comparison the nations population is 51% female and 33% represent minority groups. Healthy People 2010 addresses nursing workforce issues in its 2000 companion document, The Key Ingredient of the National Prevention Agenda: Workforce Development. This document suggest that the health workforce is the "heart" of the national public health system that provides for the health of individuals, families, and communities. Objective 1-8 of this workforce document states, "increase the proportion of all degrees awarded to members of under-represented racial and ethnic groups in the health professions, allied and associated health profession fields, and the nursing field". Healthy People 2010 also provides a set of belief statements to support its objective 1-8. They suggest that communities care about this objective because:

- Minority Americans working in health care can help end disparities in health status.
- A diverse health workforce is important in assuring the delivery of culturally competent health care and preventive services.
- Minority health professionals can serve as role models in our diverse communities.
- Minorities are an increasing proportion of the U.S. population.
- Minority Americans are five times more likely to treat other under-represented minorities in underserved areas

Healthy People 2010 strategies to increase minority representation in the health professions include the following:

- Promote health professions in high schools with high minority populations.
- Establish local programs to prepare undergraduate minority students for admission to and success in health professions schools.
- Provide internships and field experiences for under-represented minority students to gain exposure to health professions and practice settings.
- Offer students preparatory programs to increase minority admissions to health professions schools.

Background

Southern University and A&M College, established in 1880 under a constitutional mandate to educate "persons of color", currently has a multi-cultural student and faculty population of nearly 10,000 and 450, respectively. The students, faculty, and staff of SUBR support nine colleges/schools which grant 66 undergraduate and 25 graduate degrees, including doctoral degrees in Special Education, Public Policy, Environmental Toxicology, Science Mathematics, and Nursing.

Southern University School of Nursing (SUSON) was granted initial approval by the Louisiana State Board of Nursing in 1985 and admitted the first baccalaureate level students to upper division courses in the fall of 1986. The School of Nursing currently offers three degrees: the bachelor of science in nursing (BSN), the master of science in nursing with a specialty in family health nursing (MSN) and role options as administrator, educator or family nurse practitioner, and the doctor of philosophy with a major in nursing (PhD). The school houses two academic departments (graduate and undergraduate), the Office of Nursing Research, The Learning Resource Center, and The Nurse Managed Clinics. The school has four funded Endowed

Professorships through The Baton Rouge Area Foundation, The Louisiana Board of Regents and three area health care agencies (Our Lady of the Lake, Woman¹s¹ Hospital, and The Baton Rouge General). The BSN and MSN programs are approved by the Louisiana State Board of Nursing, and accredited by the National League for Nursing Accrediting Commission (NLNAC), and the Commission on Collegiate Nursing Education (CCNE).

The Setting: Louisiana Perspective

In Health Care State Rankings for 2000, Louisiana ranked 49th, second worst in the nation in health indicators. According to this report, Louisiana ranked 1st in the nation in diabetes death rate (38.7 deaths per 100,000 population) and 2nd in the percent of births by cesarean section (25.4% of live births). Louisiana¹s performance related to prenatal care is dismal, with Louisiana ranking 1st in the percentage of low birth weight babies (10.1% of live births), 6th in the rate of neonatal deaths (6.2 neonatal deaths per 1,000 live births), and 5th in the rate of infant mortality (9.1 infant deaths per 1,000 live births). A major explanation for Louisiana¹s poor health status is the lack of access to routine and preventive health care.

As of January 2001, the US Bureau of Health Care Delivery and Assistance recognizes 66 primary care shortage areas in Louisiana (each of the 64 parishes has a shortage designation): 26 geographic areas, 20 population groups, 14 sub-areas, and 6 facilities. Of the 26 whole-parish designations, 24 are non-metropolitan parishes. In lieu of primary care practitioners, many people seek care at hospital emergency rooms. In 1998 Louisiana ranked 15th highest nationally in the number of emergency outpatient visits to community hospitals. The Louisiana State Department of Public Health makes the following recommendation to solve its poor health ranking.

"Louisiana must continue aggressively to attack the health professional shortage problem to meet the existing health needs of its residents. Lack of access to appropriate care in their communities is resulting in many ill persons becoming patients at state hospitals".

Decline in Louisiana Nurse Grads

Louisiana Nursing Supply and Demand Commission's, 2002 Annual Report provides eleven recommendations to address the Louisiana Nursing shortage including recommendations to "Enhance the image of health care careers" and " Develop a recruitment plan for screening an adequate number of future health care professionals". A third recommendation was to develop partnerships to assist in the cost of educating health professionals. Louisiana State Nurses Association in a March 2002 Report documented the decline in the number of new RN graduates from Louisiana schools. The following Table 1shows that the decline in RN graduates for Louisiana was more dramatic between 2000 and 2001 than in previous years. This could indicate that the RN workforce shortage is just beginning in Louisiana. The Louisiana Board of Regents provides data on number of BSN graduates by University, and shows that the decline in graduates was more dramatic in HBCUs than in majority schools. Table 2 shows that the African American population of Louisiana represents about 30% and according to the Louisiana Board of Nursing, African Americans represented 12.3 % of RNs in Louisiana in 2001.

Table 1: Decline in New Nurse Grads in Louisiana

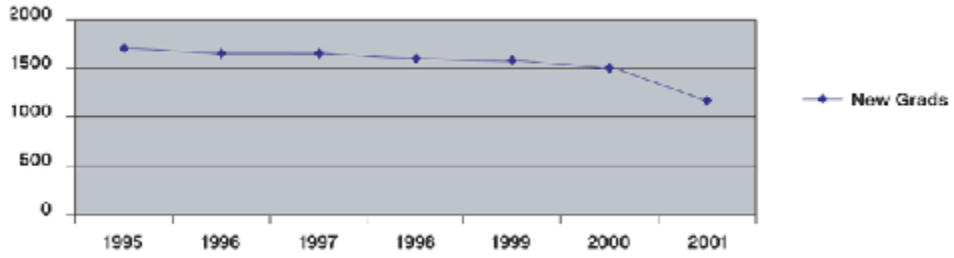
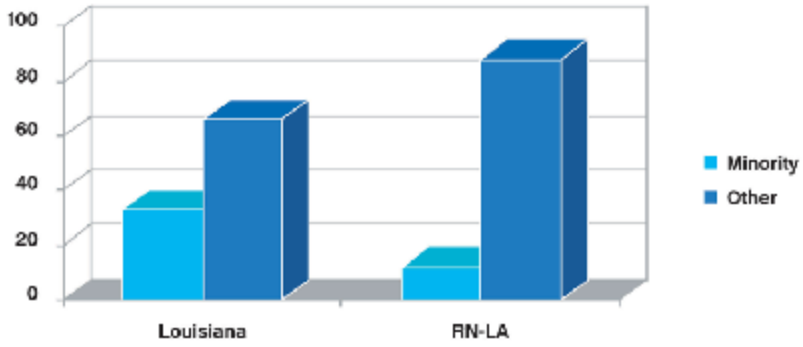


Table 2: RN Population in LA



SUSON's Diversity Profile 2002

SUBR enrollment in undergraduate courses in 2001 consisted of 85% Louisiana residents and 34% were residents of East Baton Rouge Parish in Louisiana. Of the 796 lower-division and upper-division nursing students enrolled at SUBR in 1999-2000, 511 were from disadvantaged backgrounds and of these 308 were from economically disadvantaged backgrounds. Tables 3, 4, and 5 profile the SUSON student and show the ACT scores for BSN students compared to state and national means. More than 80% of those currently enrolled in upper division nursing courses are from environmentally or financially disadvantaged backgrounds.

Table 3: Profile of Graduates BSN 1988-2002

ETHNICITY	NUMBER	PERCENTAGE
African American	657	88%
Other	86	12%
Total	743	

Table 4: Profile of Admits

Financial Aid 70% Reading Level 65% Below Level

Table 5: Mean ACT & GPA Scores

	ACT Scores	CUM GPA
National (2001)	21.0	
Louisiana (2001)	19.6	
SUSON		
1994 BSN Applicants	17.0	2.89
1998 BSN Applicants	17.5	2.87
2002 BSN Applicants	17.2	2.69

SUSON's Outcomes

Two key outcomes are used by SUSON to evaluate effectiveness in addressing minority student retention and graduation. These include 1) Are you graduating sufficient numbers? and 2) Are graduates successful on NCLEX-RN? Tables 6 and 7 show that SUSON has graduated the expected number of graduates compared to total RN graduates in Louisiana even when 80% of our student population represents disadvantaged backgrounds. In 1999, for example the 13 schools in Louisiana graduating BSN students produced 995 grads. SUSON would be expected under normal circumstances to produce 1/13 of the total or 77 graduates. During 1999 SUSON actually produced 80 graduates, exceeding the expected number. Since 1986 there has been a 164% increase in African American RNs in Louisiana from 1,771 to 4, 687. During the last decade SUSON could be the largest producer of African American BSN RNs in the nation. Table 7 shows the NCLEX-RN pass rates for SUSON first time writers. The NCLEX-RN pass rates for SUSON grads has been above the national average for 11 of the last 13 years even when 80% of our grads represent disadvantaged backgrounds.

Table 6: SUSON and RN Population in LA

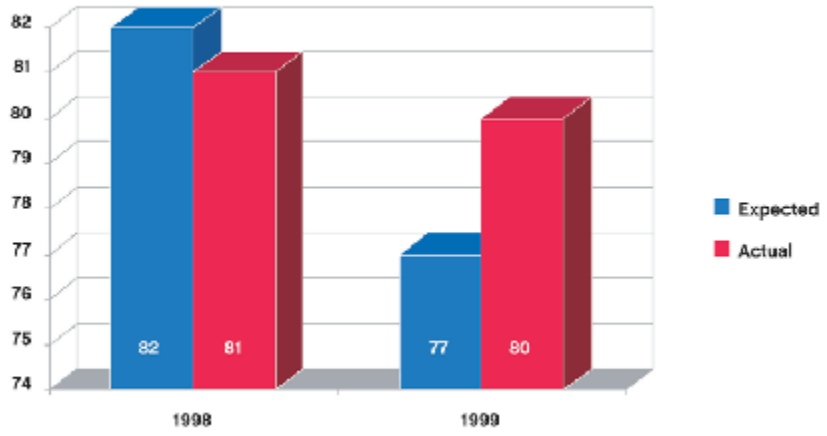


Table 7: SUSON NCLEXRN Pass Rates for First Time Writers

	1993	1995	1997	1998
SUSON	84%	95.8%	94%	86%
National Rate	90.5%	90.2%	88%	82.3%
	1999	2000	2001	2002
# Grads	80	74	69	52
SUSON	79%	88%	89%	90%

Our Success Strategies

The success of SUSON's educational enterprise is based on four major factors, the curriculum, the faculty, the students, and the environment in which they interact. We strive for a curriculum that is logically organized, internally consistent and appropriate to the science of nursing and liberal arts education. The curriculum includes Essential Content as described by AACN.

Success of students from disadvantaged backgrounds requires competent teachers. Faculty retreats, consultants and development activities are utilized to enhance teacher effectiveness and for team building. SUSON faculty adhere to the major concepts presented by Harry K. Wong, which follows:.

- The three characteristics of an effective teacher are: 1) has good classroom management skills, 2) teaches for mastery, 3) has positive expectations for student success.
- Expectations of your students will greatly influence their achievement in your class and in their lives.
- Treat students as though they already are what they can be, and you help them to be capable of becoming what they will be.
- Use criterion-referenced tests to evaluate the performance of the students.
- Mastery learning plus tutorial instruction results in higher achievement than students taught in a conventional manner.

SUSON's student selection process is based on continuous evaluation of success variables of our graduates and findings from research on minority student success in higher education. The goal of the admissions process is to eliminate barriers and focus on raduation and entry into practice rather than retention alone. SUSON's Admission Criteria (BSN) includes completion of pre-requisite courses with at least C grades, have ACT scores on file, and have a CUM GPA of at least 2.60. The following principles guide our admissions process.

- ACT and SAT scores are not best predictors for minority students
- Selection using multiple variables more predictive than a single variable process
- Elimination based on single variable should be avoided
- Prior success is best predictor of future success

The evaluation of our student selection process shows that ACT scores for our graduates are not significantly related to success on NCLEX-RN. ACT composite scores for SUSON graduates range from 08 to 30 with a mean of 17. SUSON's data on ACT scores and NCLEX-RN is unique in that the opened admissions process of the university allowed for students to enter with low scores. The result is a wide range of ACT scores included in the correlation procedure. Table 8 shows the results of the correlation procedure and a probability of greater than .05.

Table 8: Correlations Between NCLEXRN Success & ACT for SUSON Minority BSN Grads

NCLEX-RN	ACT r = . 0948 p = . 067 df = .266

SUSON strives for an educational environment that is caring. The school's philosophy and conceptual framework focus on assisting individuals to maximize their potential and is guided by theoretical frameworks including Orem's Self-care Deficit Theory, Caring as described by Watson, and Family Theory. The concept of caring for example helps to develop graduates who are critical thinkers and decision makers, have self-understanding, personal awareness, and appreciation of various cultures and environments. This type environment requires commitment from administrators, faculty, students and staff. Resources that support assessment, tutorials, testing and re-testing, mentoring, and faculty development are critical to a successful environment. Student financial support and appropriate technology are essential. Success with

students from disadvantaged backgrounds is resource intensive and external funding is a major component of SUSON's success. Our funding sources include Division of Nursing (DN), Bureau of Health Professions (BHPr), Health Resources and Services Administration (HRSA), Department of Health and Human Services (DHHS) under Southern University Retention Efforts in Nursing (5 D19 NU40048-02) 1990 to 1995; Scholarships for Disadvantaged Students (SDS) 1995-present; Nursing Capitation Grant Program-Louisiana Department of Health and Hospitals; and currently the university.

The educational environment that supports students from disadvantaged backgrounds includes a strong evaluation program. Retention rates are examined at mid-semester, and at the end of the course for all nursing courses. Sound test development strategies are utilized including a review panel, and item analysis. Evaluation results are communicated and examined, and program changes are supported by empirical data.

Summary

The educational enterprise developed by SUSON for students from disadvantaged backgrounds graduated its first class in 1988 and by the end of 2003 produced over 800 BSN graduates. The NCLEX-RN pass rates for SUSON grads has been above the national average for 11 of the last 13 years even when 80% of our grads represent disadvantaged backgrounds. Employers rated SUSON graduates above average on all eight graduate outcomes. Since 1986 there has been a 164% increase in African American RNs in Louisiana from 1,771 to 4, 687. During the last decade SUSON could be the largest producer of African American BSN RNs in the nation.

SUSON's success with students from disadvantaged backgrounds is due to, first elimination of barriers to admission, especially the ACT score. The most important factor in our success we believe is effective teaching. SUSON faculty teach for mastery and have positive expectations for student success. An environment that is supportive and an evaluation program that highlights success and examines failures is a significant component in our success story. SUSON's future success with students from disadvantaged backgrounds is dependent on our ability to secure external funding for the retention program. The rewards include faculty satisfaction, confidence of minority students, positive recruitment, and a positive image within community. SUSON's ultimate contribution is its positive impact on increasing the overall number and percentage of baccalaureate- prepared minority nurses in the state and national workforce.

References

National Advisory Council on Nurse Education and Practice (2001) A National Agenda for Nursing Workforce Racial/Ethnic Diversity: Executive Summary.

Moore, W. E., Rami, J. S., & Robinson, J. B. (1991). An immersion model for skills enhancement at historically black colleges and universities. The National Alliance of Black School Educators, Inc.

Rami, J. S. (2002). The Enterprise that Dillard University Graduates Built. The ABNF Journal, 13(4), 84-85.

Rami, J. S., Brown, S. (1999). Making Health Care Accessible: A Framework for Medically Underserved Rural and Inner-City Populations. Harvard Journal of African American Public Policy, Volume V, 33-44.

Rami, J. (1997). Successful recruitment and retention programs: The Southern University School of Nursing Story. Proceedings of Nurse Leadership 97 Invitational Congress. Caring for the Emerging Majority: A Blueprint in Action. (79-80). U.S. Department of Health & Human Services, Health Resources & Services Administration, Bureau of Health Professions, Division of Nursing.

Rami, J. S. & Hansberry, A. H. (1994). Educating minority students for the health professions: Taking a "quantum leap" to meet the challenge. Education, 115 (1), 80-86.

Rami, J. S. (1993). Nursing education: An agenda for health care reform in Louisiana. In Report to the White House Health Care Reform Task Force: Proceedings of the State of Louisiana Governor¹s Health Care Issues Forum. Office of the Governor, Baton Rouge, LA.

Rami, J. (1992). Predicting nursing student's success on NCLEX-RN. The ABNF Journal, 3(3), 67-71.

Wong, H., & Wong, R. T. (1998) The First Days of School. California: Harry K. Wong Publications, Inc.

U.S. Department of Health and Human Services. (2000) Healthy People 2010. 2nd ed. Washington, DC: U.S. Government Printing Office.

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