2

NNRA PROCESS

The mandate of the National Center for Nursing Research (NCNR) -- to advance nursing care by building a strong scientific base for nursing practice--fits well with the mission of the National Institutes of Health (NIH) to improve the health of the people of the United States through research. In 1986, when the NCNR was a new component of the NIH, the highest priority was to establish the organization. Once the NCNR was firmly established, the development of a long-range plan to guide allocation of resources became paramount.

The National Nursing Research Agenda (NNRA) is the priority-setting component of NCNR's long-range planning effort, but priorities also result from recommendations from other sources. For example, the priority area "Nursing Resources and the Quality of Patient Care" was the result of a congressional mandate in response to the acute nursing shortage in the United States. Another area of special interest, bioethics, answered a need perceived by NCNR and NIH staff. In that case, the NCNR invited a small interdisciplinary group of experts in bioethics to a workshop. This workshop resulted in a report (NCNR, 1990a) upon which a small program in bioethics and clinical decision making is now based. However, this series of NNRA reports addresses only the priorities identified through the NNRA.

Planning is vitally important not only in the development of NCNR's programs, and in the optimal allocation of its resources, but also in ensuring that NCNR's programs are in harmony with the mission, programs, and planning process of the NIH and the United States Public Health Service (USPHS).

The objectives of the NNRA are to:

- Provide structure for selecting scientific opportunities and initiatives.
- Promote depth in developing a knowledge base for nursing practice.
- Provide direction for nursing research within the discipline.

The process used by the NCNR is modeled on the five-year planning effort of the National Eye Institute (NEI), which, in the early 1980s, brought together a number of expert panels to address research needs and opportunities related to eye diseases (National Eye Institute, 1983).

Collaboration

The process used for development of the NNRA requires collaboration between the NCNR and three groups: the National Advisory Council for Nursing Research (NACNR); the nursing research community; and members of other disciplines both within and outside of NIH and USPHS.

The National Advisory Council for Nursing Research (NACNR)

The NACNR participates in the NNRA largely through its NNRA Subcommittee. That subcommittee was established by the NCNR Director in September 1987 to provide policy direction to all efforts

addressed under the auspices of the NNRA. The subcommittee is co-chaired by the Director of the NCNR and a nurse member of the NACNR, and its members are drawn from both the senior NCNR staff and the members of the NACNR. This innovative committee structure expresses NCNR's philosophy of collaboration, symbolizing a partnership between the NCNR and its constituencies.

The Nursing Research Community

NCNR's philosophy is that the nursing research community must have primary responsibility for the defining of priorities in nursing science. This collaboration has taken three forms:

- In the very early stages of NNRA development, the literature was reviewed to assess priority-setting efforts by nursing organizations in the United States. This review resulted in a paper called "A Working Paper on Nursing Research Priorities" (NCNR, 1988a). In addition, general and specialized nursing organizations were asked about any priority-setting work they had done that had not yet been published. The 10 new responses to this request resulted in a companion working paper, entitled "Update to the Working Paper on Nursing Research Priorities" (NCNR, 1988b). These two papers were used as background information for NNRA participants. A third paper in this series, based on more recent information from nursing organizations, is in progress.
- In January 1988, the NCNR convened a two-day invitational conference, entitled "Conference on Research Priorities in Nursing Science (CORP)," to broadly delineate nursing research priorities for the NCNR. Approximately 50 nurse scientists with research expertise related to a broad array of nursing practice specialties participated in this conference, which is discussed in more detail below.
- Each priority area recommended by the CORP participants and finalized by the NNRA Subcommittee is refined by a "Priority Expert Panel" (PEP), a group of nurse and non-nurse scientists. The work of the panels is also discussed below.

Non-Nurse Scientists

Non-nurse scientists play a significant role in the development of the NNRA. Some who are members of the NACNR participate by virtue of their membership in the NACNR and/or in its NNRA Subcommittee. Others who are scientists in areas of NCNR priorities participate as full-fledged members of PEPs, which play a vital role in the development of the NNRA.

The Process of NNRA Development

The NNRA encompasses a number of components, most notably the Conferences on Research Priorities in Nursing Science (CORP) and the Priority Expert Panels (PEPs).

Conference on Research Priorities (CORP)

The first CORP, which took place on January 27-29, 1988, in Bethesda, Maryland, marked the formal beginning of NNRA development. Its purpose was to delineate the broad nursing research priority areas for the NNRA. Approximately 50 nurse scientists with different areas of expertise participated. Participants were keenly aware of the historic importance of the task they were chosen to carry out, and their excitement about the challenge was palpable.

The conference began with a plenary session. Dr. Kathryn Barnard, a nurse scientist from the University of Washington, presented a paper entitled "Nursing Research Priorities: Today and Tomorrow," and Dr. David Evans, Professor in the Departments of Philosophy and Computer Science at Carnegie Mellon University, addressed the group about "Alternative Models for the Organization of Knowledge." In the following days, the conferees met in working groups to delineate the major priority areas in nursing science.

Participants were asked to choose priorities on the basis of a set of criteria developed by the NNRA Subcommittee. A priority area should:

- Be on the cutting edge of science.
- Have high potential for nursing research to influence/resolve a health care or systems problem or phenomenon.
- Represent a major current and/or future societal need.
- Represent a costly health care burden for patients and/or the delivery system.

In delineating priorities, participants were asked to consider a number of dimensions, such as: the population group; individual, family, or community focus; biomedical and behavioral parameters; and the availability of nurse scientists to do the research.

To develop the priorities, the 50 nurse scientists were first divided into eight **homogeneous** working groups: two each for acute illness, chronic illness, health promotion/disease prevention, and nursing systems. Participants were then divided into eight **heterogeneous** cross-content groups whose task was to make choices among, and/or synthesize the priorities identified by the homogenous groups. Tough choices, based on where nursing can make the strongest contribution to the health care needs of society, had to be made to arrive at the most critical areas of research to be developed first. To develop the recommendations further, the groups met again in homogeneous and then again in heterogeneous groups. In between, an all-participant session allowed groups to report the findings to the total conference. The conference ended with each group presenting their major priorities for nursing research to the assembled participants. The resulting material served as the raw data on which further refinement was based.

Final Delineation of Priorities. Final delineation of the priorities was accomplished by the NNRA Subcommittee in February 1988. Subcommittee members used the priority information provided by the CORP groups to analyze, synthesize, and distill the CORP's broad priorities into a set of more specific priority statements. A dilemma was that the set of priorities could not, of course, encompass the total scope of nursing research.

The NNRA Subcommittee used a set of criteria for selecting and focusing the priority areas:

- Existing knowledge base/scientific development.
- Points of opportunity (influence due to access/ control).
- Value to society.
- Potential cost savings.
- Scientific personnel available.

- Areas of low emphasis by other NIH institutes.

Seven priority areas that were in harmony with the NIH and USPHS missions emerged (Hinshaw, Heinrich, & Bloch, 1988). The wording of the priorities has undergone some refinement since their publication in the 1988 editorial. The list presented here is a more recent version (NCNR, 1991). This set of priorities was approved for further development and implementation at the June 1988 meeting of the NACNR.

- Low Birthweight: Mothers and Infants. Research related to: preconceptional and prenatal nursing care, with a focus on pre-venting the delivery of preterm or growth-retarded infants; care of low birthweight infants in the acute care setting, with a focus on prevention of complications; and models of care delivery after discharge from the institution.
- HIV Infection: Prevention and Care. Study of: ethical issues; prevention of transmission; physiological and psychosocial factors; and issues relating to delivery of care to people with HIV infection or AIDS.
- Long-term Care for Older Adults. Research focuses on both the older adult and the family, and includes: clinical problems encountered in the long-term care of older adults in institutions or in the community, and issues related to the delivery of long-term care services, such as continuity of care and transitions across clinical settings.
- Symptom Management: Pain. Research concentrates on the development of effective assessment measures and intervention strate-gies for pain and other symptoms associated with acute and chronic illness, with an emphasis on bio-psycho-social parameters.
- Nursing Informatics: Enhancing Patient Care. This area of research is designed to strengthen patient care. Priorities will be selected from research into the collection, organization, processing, and dissemination of information for clinical practice, including the design and development of databases, classification systems, computer models, and expert systems.
- Health Promotion for Older Children and Adolescents. This area focuses on under-standing health behaviors in childhood and adolescence, a critical developmental period, and on testing theory-based interventions to facilitate health-enhancing behavior patterns and to reduce health-compromising ones.
- Technology Dependency across the Life-span. This research addresses technology used to support or replace lost function of body organs or systems when technology is an essential element in the treatment of chronic disease. Included are the study of individual and family responses, prevention of complications, bioethical issues, and demand for resources.

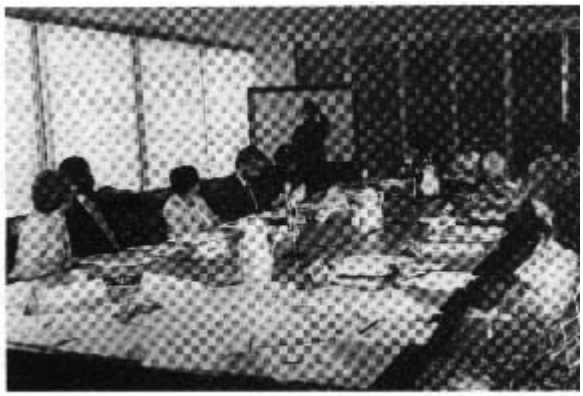
Priority Expert Panels (PEPs)

Although the NNRA Subcommittee delineated these seven broad priority areas using the CORP data, the responsibility to refine them is in the hands of multidisciplinary panels of scientists formed around each priority area. They are called "Priority Expert Panels" or "PEPs." Through this very concentrated effort, the nursing research community, along with colleagues from related disciplines, takes major responsibility to recommend very specific priorities for NCNR funding.

Participants. The multidisciplinary nature of the PEPs is integral to the NCNR's philosophy to build collaborative relationships across NIH and the broad scientific community. Each PEP is composed of approximately seven senior nurse scientists and three senior scientists from disciplines related to the area under consideration. In addition, PEPs generally include a member of the National Advisory Council for Nursing Research, at least two NCNR staff members, representatives from other government agencies with related interests who serve as consultants and collaborators, and consultants from the public and private sector, as needed.

As an example, the PEP entitled "HIV Infection--Prevention and Care" included six nurse scientists, one of whom served as chairperson; two physicians; one nurse scientist from the NACNR; four

NCNR intramural and extramural staff members; and one staff representative from each of the following five USPHS research programs: National Institute of Allergy and Infectious Diseases, NIH; National Institute of Child Health and Human Development, NIH; National Institute of Mental Health in the Alcohol, Drug Abuse, and Mental Health Administration; Centers for Disease Control; and Agency for Health Care Policy and Research. In addition, the PEP used eight consultants, of whom seven were nurse scientists and one was a staff member of the Office for Protection from Research Risks at NIH (NCNR, 1990b).



Priority Expert Panel on HIV Infection at work.

Process. The general pattern of the PEP process has been for PEPs to meet three or four times over the span of a year or two to: assess, critique, and report the state of the science in the PEP's area of interest; delineate the gaps in the research base and note the research needs and opportunities; and make recommendations for specific priority areas for NCNR research and research training funding.

The work of the PEPs is both time-consuming and demanding. It is time-consuming largely because the report must be drafted and redrafted between meetings. It is demanding because PEP members encounter many challenges. For example, they must survey the multidisciplinary state of the science in fields as extensive as low birthweight or long-term care, and they must narrow the focus to areas where nursing research can make the most significant and possibly a unique contribution. Further, making choices among multiple, favored, and competing areas of nursing research interest is difficult for a group, but that is the crux of the priority-setting process. If a PEP's recommendations were so broad as to encompass all possible research endeavors in its area, the purpose of the undertaking, namely the development of depth in science, would not be accomplished.

To assist the PEPs to make such choices, the NCNR staff reviewed and expanded the criteria used for the CORP participants, as follows:

- An area that represents a major current or future health care need.
- An area on the cutting edge of science, with potential to contribute significantly to the development of new knowledge.
- An area that constitutes an opportunity for nursing to make a unique contribution to basic research, or an area which constitutes a unique opportunity for nursing practice research because the knowledge base is adequate.
- An area with potential for nursing research to make a unique contribution in the resolution of a health care or system problem or phenomenon.
- An area that represents a costly health care burden for patients and/or the delivery system, with potential for health care cost savings.
- An area in which an adequate number of nurse scientists is available, or which is promising for training.
- An area of concern to nursing that receives minimal attention from other NIH components or other Department of Health and Human Services agencies.

Six of the seven projected panels have been convened to date. Although a tremendous amount of effort on the part of panel members and NCNR staff charged with guiding the priority setting enterprise is required, both PEP members and staff have noted the excitement and challenge of this endeavor. One panel report has been published (NCNR, 1990b), and the rest are in various stages of development.

Summary

Setting priorities for nursing research is not a new idea in nursing. For example, Oberst published priorities in cancer nursing research as early as 1978 (Oberst, 1978). It is, however, the first time that the Federal Government has proposed and implemented priorities for nursing research funding.

The recommendations of the first PEP panels have already formed the basis of requests for applications (RFAs) and program announcements (PAs), focusing the use of a portion of NCNR funds on specific priority areas. The recommendations have also been used by the NCNR staff to identify opportunities for joint initiatives with other NIH institutes and centers to expand funding and collaborative opportunities. They have also been applied within NCNR's intramural program. The remaining resources are allocated flexibly to support investigator-initiated projects and projects related to emerging societal needs.

A timetable has been developed by the NNRA Subcommittee to phase in priorities over several years. This timetable has been disseminated to the nurse scientist community through publications, speeches, and consultation.

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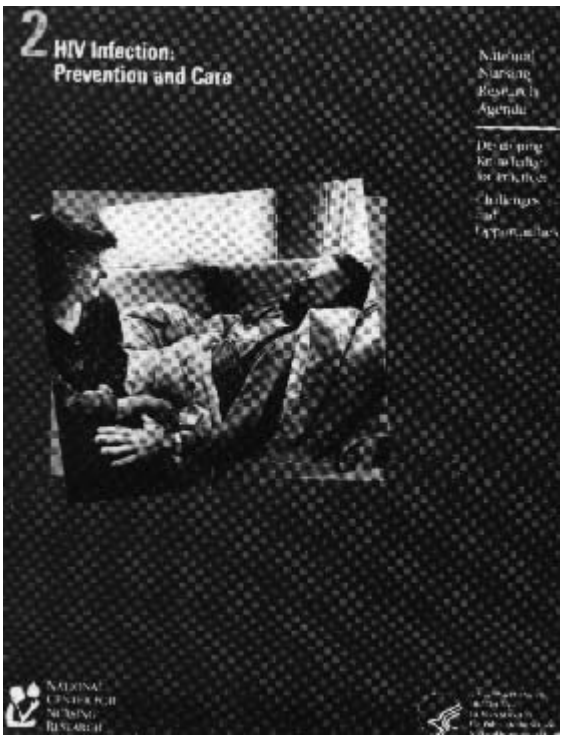

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TABLE OF CONTENTS **CHAPTER 3**