

# News from NINR

## Creating a healthier tomorrow through research, practice, and policy

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*“You must be the change you wish to see in the world.”*

—Mahatma Gandhi

To be leaders in the health sciences, we must be the change we wish to see in the world and lead by example. We must be trailblazers and pioneers in health sciences research and in clinical practice—saving lives, improving lives, and making our health care system more effective, more responsive, and more successful.

To accomplish this, we need to recognize that research and practice do not exist in isolation from the world around us—they are shaped by the same forces that operate at all levels of society, including geopolitical and socioeconomic factors. In this context, the parameters and policies that influence health and health care including environmental, educational, and economic policies, as well as those dealing directly with health and science, are intrinsically and dynamically linked to our scientific research and clinical practice.<sup>1-4</sup>

Policy is an integral part of the health sciences continuum, and as our research and practice inform and help to shape public policy, public policy, in turn influences our research and practice. Creation of a healthier society depends on top-tier research and practice, and on the implementation of policies that support these activities. Consequently, it is imperative that we understand and address the policy implications of our scientific findings and clinical practice as early as possible in our training and careers to facilitate the development of public policies that promote and support improvements to health and health care at local, national, and global levels.<sup>5-7</sup>

### THE RESEARCH-PRACTICE-POLICY LINK

As John Muir noted generations ago, “When we try to pick out anything by itself, we find it hitched to everything else in the universe”.<sup>8</sup> Research, practice, and pol-

icy are no exception. These areas are intrinsically linked through dynamic interrelationships, which are characterized by synergies, resonance, and reciprocity.

The links between research, practice, and policy occur at multiple levels, and the NINR—in conjunction with our colleagues across the NIH—develop and implement science policy on a daily basis. We shape these policies to better support and facilitate those areas of research that hold promise for advancing the health and well-being of our nation and people around the world, and for advancing basic scientific knowledge and technological capabilities. The expansion of biobehavioral research at the NIH typifies these linkages, and the growth of research in this area is being driven through the development of science policy initiatives designed to accelerate progress in the field.

Nursing science has long been at the forefront of biobehavioral research, and the NINR has been a principle supporter of this research since our establishment. In this capacity, we have developed a research portfolio that prioritizes biobehavioral approaches to health promotion and disease prevention. We have championed trans-NIH initiatives, providing strong leadership in this field and helping to make biobehavioral research a priority at the NIH. Two emergent policy-guided initiatives are the NIH Science of Behavior Change (SOBC) and the NIH Basic Behavioral and Social Science Opportunity Network (OppNet) programs.

The NIH Common Fund launched the SOBC to advance knowledge of human behavior change across a broad range of health-related behaviors.<sup>9,10</sup> This trans-NIH program is designed to integrate basic and translational efforts in cognitive and affective neuroscience, neuroeconomics, behavioral genetics, and behavioral economics. It also establishes “the groundwork for a unified SOBC that capitalizes on both the emerging basic science and the progress already made in the design of behavioral interventions in specific disease areas”.<sup>9</sup>

Subsequently, to reinforce and expand NIH efforts in biobehavioral research, the OppNet program was launched in November 2009. The mission of OppNet is to “pursue opportunities for strengthening basic behavioral and social science research at the NIH while innovating beyond existing investments”.<sup>11</sup> OppNet will complement SOBC and other initiatives across the NIH, and will contribute to our understanding of the complex biobehavioral factors that affect the health of individuals, families, and communities.

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These examples illustrate the interplay of research, practice, and policy and demonstrate that policy measures, informed by scientific and clinical data, can provide resources that are critical to better support research and to facilitate its translation into health improvements.

## BRINGING SCIENCE TO LIFE

The overarching mission of the NINR is to promote and improve the health of individuals, families, communities, and populations. We are dedicated to bringing the science that we do into the daily lives of people in our country and around the world, to improve their health and to enhance their quality of life. As scientists and clinicians, we understand that research, practice, and policy are integrally linked and we must engage the policy process to help ensure that scientific evidence is used to inform and guide public policy.

As a federal entity, the NINR participates in policy in a scientifically-based, nonpartisan manner. Our participation occurs across diverse policy-related areas and at multiple levels of the policy process, as we strive to ensure that health-related public policies are based on the best scientific data available. Examples of our interrelated policy activities include: our support of the health sciences research that informs and guides policy; and training and development of scientists and clinicians who provide expert consultation in policy matters. In addition, we provide scientific leadership and consultation at policy-related forums and for public health initiatives; we implement and help to evaluate policies; and we widely disseminate scientific data and articulate its policy implications to all of our stakeholders.

### *The NINR at 25*

The creation of the National Center for Nursing Research (NCNR) at the NIH, and its subsequent evolution into the National Institute of Nursing Research Institute, is itself a study in public policy, which reflects the critical juncture of health sciences research, practice, and policy.<sup>12</sup> Nursing research and clinical practice have co-evolved as disciplines, and as nursing research itself became an established academic discipline in the 20th century, science and health policy leaders recognized that this crucial component of the health sciences was lacking the strong support and robust infrastructure critical for the health and well-being of the Nation.

The Institute of Medicine, in their landmark report “Nursing and Nursing Education” recommended that a robust federal entity for nursing research be established that placed this research in the mainstream of scientific investigation in keeping with its significance to the health sciences, clinical practice, and its central role in improving health outcomes.<sup>13</sup> This IOM report was followed by a NIH Task Force report that determined that nursing research was relevant to the NIH mission.<sup>14</sup>

These findings helped to catalyze and coalesce national efforts to advance the discipline of nursing science through increased funding, and through the establishment of a national infrastructure that would support and expand nursing research and the nursing science workforce. As a result of this growing consensus, Congress implemented a series of policy measures that culminated in the authorization of the NCNR (Health Research Extension Act, P.L. 99-158, 1985) and its elevation to the National Institute of Nursing Research in 1993 (NIH Revitalization Act, P.L.103-43). Consequently, over the last 25 years, the NCNR and NINR—in collaboration with our colleagues at the NIH, across this nation, and around the world—have been “bringing science to life.”

### *Supporting Scientific Excellence and Leadership*

The research that the NINR supports, in the extramural community and in our intramural labs, encompasses every discipline and every stage of life, and our grantees embody scientific excellence coupled with strong leadership in all dimensions of the health sciences, as well as in related domains such as public policy. From schools to community centers, from town halls to the US Congress, from urban centers to remote rural areas—nationally and globally—we work in concert with our scientists to help ensure the translation of scientific advances into health and health care improvements, and to facilitate the integration of evidence-based research and practice into sound, rational, nonbiased health and health care policies.

Over the past 25 years, NINR scientists have redressed clinical and policy deficiencies across the health and health care spectrum, improving—often transforming—practice guidelines and public policies on the basis of their research findings. NINR grantees have led the way in bringing person-centered, point-of-care translational research to the forefront of the health sciences. This has been done by investigating all dimensions of health including: fundamental issues of quality-of-care and quality-of-life in disparate settings from the neonatal intensive care unit to the nursing home; preventive interventions and symptom management in acute critical care settings and in the realm of chronic disease; and health promotion for individuals, families, and communities across the lifespan and across generations. Moreover, our scientists have provided strong leadership in the public policy arena, working to ensure that public policies are aligned with scientific evidence and public health needs.

Persistence and dedication, as well as scientific excellence and leadership, are key to the successful incorporation of evidence-based research into public health policies, and there are countless examples of this in nursing science. One recent example of the successful translation of scientific findings into clinical practice and policy involves the work of Dr. Mary Naylor and her

colleagues who have been at the forefront of transitional care research for decades. As part of their research programs, they conducted a landmark series of NINR-funded, randomized, controlled clinical trials that demonstrated that nurse-managed transitional care improved health outcomes and reduced health care costs for seniors with chronic illnesses.<sup>15-17</sup>

While they have continued their rigorous research programs, they have simultaneously taken their evidence-based research far beyond the boundaries of science, advocating for health care policies that are informed by these clinical findings. For example, Dr. Naylor testified before Congress in 2009, clearly articulating the scientific data on transitional care and its policy implications.<sup>18</sup> Subsequent to this testimony, several legislative measures were introduced in the Congress with provisions addressing transitional care. Notably, the Patient Protection and Affordable Care Act contains several measures that support further exploration of transitional care and other coordinated care options.

In addition, Dr. Naylor and her colleagues have forged partnerships with major health insurers to further test the generalizability and validity of transitional care in clinical, community, and home-based settings.<sup>18,19</sup> In this manner—through excellence in science and scientific leadership—Dr. Naylor and her colleagues exemplify the research–practice–policy link and are helping to reshape the health services landscape, improve health across populations and settings, and substantially enhance our national health care practices and policies.

## “WHAT CAN WE DO?”

*“One person can make a difference, and every person should try.”*

—President John F. Kennedy

As individual scientists and as a scientific community, we can make a difference and, whenever possible, we must take our research and our practice beyond the bench and bedside to advocate for public health policies that support and facilitate the translation of scientific advances across populations and settings. To accomplish this, we must embrace every opportunity to participate in agenda and priority setting. Moreover, we must create such opportunities, and we must be highly visible, transparent, and cogent as we present scientific data and its policy implications.

I am often asked by our scientists how they can become more involved, and how they can more effectively translate their science into evidence-based practices and policies. In this context, the NINR and NIH encourage and welcome the input of the public, of our scientists, and of all of our stakeholders into our priority- and policy-setting activities. For example, individuals can serve on Federal Advisory Committees such as the NINR’s advisory board, the National Advisory Council for Nursing Research (NACNR).

The NACNR reviews the NINR’s programs and makes recommendations about extramural initiatives and intramural research activities. The Council also provides the second level of review of NINR grant applications and makes recommendations to the Institute Director based on considerations of scientific merit, and on the relevance of proposed applications to the Institute’s programs and priorities.<sup>20</sup> The NIH has more than 150 chartered advisory committees, authorized by the Public Health Service Act, where scientists contribute their expertise and experience.<sup>21</sup>

In addition, participation in research roundtables, workshops, symposiums, and other scientific planning meetings provide opportunities to shape research and clinical priorities, and to identify policy issues and needs. For example, forums such as the NIH Consensus Development Program and the NIH Public Trust Initiative enable individuals to contribute their expertise and insights to identify scientific and health priorities, challenges, and solutions.<sup>22,23</sup>

Other venues for participation include responses to Requests for Information (RFIs) and other conduits for public and scientific input such as the Healthy People 2020 initiative.<sup>24</sup> Such opportunities for participation in policy-related activities are frequently published in the Federal Register<sup>25</sup> or can be found at sites such as “Get Involved” (NIH),<sup>26</sup> and the NIH Public Bulletin.<sup>27</sup>

In recent years, we have seen a resurgence in the vitality and robustness of our national discourse on health and health care, and we must have the courage, the foresight, and the dedication to proactively embrace this opportunity for progress and change. We know that we must transform our research paradigms and models; our science and health-related public policies; and our clinical, community, and family-based practices to meet our 21st century health challenges.

As Health and Human Services (HHS) Secretary Kathleen Sebelius noted, “More than ever before, we’re working to bring the benefits of science to the American people. That means listening to our scientists. But it also means doing our best to take their insights and recommendations and turn them into more effective policies and more treatments and cures.”<sup>28</sup> The purpose of our work is to improve health and health care, but no matter how excellent our research and practice are, we will not achieve these goals unless we understand that we must be heard to affect change. From the way we write our scientific manuscripts to the discourse we have with the public and public legislators, to our employment of diverse and socioculturally relevant communication modalities, it is imperative that we clearly articulate our scientific findings, and that we explicitly state the policy implications of these findings.

Whether you contribute as a citizen, a scientist, a clinician, a legislator, or policy leader, you play an important role in the health sciences continuum and will help ensure that scientific research advances are translated into health

practices and healthcare policies that will benefit our world for generations to come. In moving forward, let us keep in mind what Louis Pasteur noted more than a century ago: “There are not two sciences. There is science, and the application of science, and these two are linked as fruit is to the tree.” As nurse scientists and clinicians, we inherently know that research, practice, and policy are intrinsically linked. We also know that we must be proactive in all 3 areas to ensure that the highest-caliber science provides the foundation for public policies, and that these policies align with the best interests of the public we serve.

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