National Institute of Nursing Research Strategic Plan Working Group Draft Framework for 2022-2026

Introduction

The National Institute of Nursing Research (NINR) convened, under the auspices of the National Advisory Council for Nursing Research, a working group of external experts that was charged with providing recommendations to the Council to help identify strengths, limitations, challenges, and opportunities in nursing science and help inform the development of the NINR 2022-2026 Strategic Plan for Research.

From November 2020 to May 2021, the Strategic Plan Working Group (SPWG) met virtually every two weeks to review NINR's current strategic direction, brainstorm future directions, and develop a framework of goals and objectives to guide the direction of NINR research and activities in the next five years.

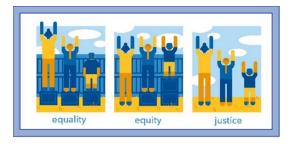
From December 2020, NINR provided the SPWG with a professional meeting facilitator and a series of surveys designed to guide the brainstorming process. The format of the meetings typically was structured around breakout groups with guiding questions aimed to generate ideas about the challenges and opportunities that influence nursing science today. NINR provided pre-meeting surveys to prompt the SPWG for specific topics, and post-meeting surveys to continue gathering feedback on the ideas that emerged during breakout discussions.

NINR synthesized the information gathered from the surveys and meeting discussions, identified primary and secondary themes that emerged from those surveys and discussions, and developed a draft outline of goals and objectives that represented those themes. The SPWG reviewed and revised this draft outline, resulting in the Strategic Framework included in this report for presentation to the Council. Although not every idea was included in this Strategic Framework, NINR will review and consider all information collected from the SPWG as it develops its final strategy.

The SPWG Strategic Framework represents the *major themes* organized into goals, objectives and strategies, which are defined as:

- Goals—the broad statement of strategic direction towards which NINR aims
- Objectives—the measurable steps NINR can take towards achieving the goal
- Strategies—the methods, tools, and activities required to support the objectives

Figure 1 depicts the three overarching goals recommended by the SPWG and is followed by the full SPWG Framework.



Goal 1

Nursing Science will Focus on Dismantling Structures that Perpetuate Racism and Impede Health Equity



Goal 2

Use Nursing Science's Multilevel Perspective to Develop and Implement Interventions to Address the Social Determinants of Health across the Lifespan



Figure 1: The SPWG Framework Goals

Goal 3

Use Nursing Science's Holistic Approaches to Advance Precision Health and Health Care across the Lifespan

Goal 1: Nursing Science will Focus on Dismantling Structures that Perpetuate Racism and Impede Health Equity

The COVID-19 pandemic and racial unrest of 2020 highlighted the dire effect of structural racism on health outcomes. Nursing science, with its insights in holistic, multilevel health care practices across the lifespan, has a unique opportunity to meet and address structural racism, which also occurs at multiple levels across the lifespan. Nursing professionals, in their role at the front line of health care, can combat structural racism through 1) an understanding of the implicit biases and structural factors that affect care, 2) implementation of tools to break down those barriers, and 3) increased trust from diverse representation throughout the workforce.

Objective 1.1: Identify the Components of Structural Racism that Impact Patient Care and Health Outcomes

- Determine mechanisms that explain how structural racism, perceived racism, and discrimination affect health outcomes across the lifespan, during life transitions, and across generational transition.
- Use systems modeling approaches from the molecular to the structural level to capture the impact of systemic racism on health and health outcomes, including historical processes and policies.
- Conduct socio-ecological analyses to capture the underlying processes of structural racism that impact health outcomes.
- Characterize intersectionality—the concept of how factors such as race, gender, and class interact—to understand how different communities experience structural racism.

Objective 1.2: Develop, Test, and Implement Multilevel Interventions that Work towards Dismantling Racism and Enhancing Health Equity in Nursing Care

- Identify structures across multiple levels that reinforce racism and discrimination and develop, study, and implement interventions to dismantle those structures across practices, programs, and policies.
- Examine the biological mechanisms that are affected by structural racism and discrimination.
- Prioritize interventions that reject the reinforcement of implicit bias and/or place responsibility for adherence on the individual rather than impeding structures.
- Test policy- and systems-level interventions intended to promote health equity through addressing underlying racist structures.
- Identify effective intervention strategies at each level of the socio-ecological model that address underlying racist structures.

Objective 1.3: Promote Equitable Access to Health Care and Health Information

- Determine the conditions necessary for historically excluded populations to have equitable access to health care information and services.
- Advance health literacy through research and technology that supports equitable access to health education, screening, and treatment.

Strategies

- Cultivate Trust
 - Initiate and sustain authentic, trust-building relationships with communities of historically excluded populations to understand their specific needs, barriers to health care, and facilitators of community-engaged care.
 - Commit to diverse representation in decision-making and leadership roles across the health care and research communities.
- Increase Diversity
 - Recruit a diverse workforce of scientists conducting research relevant to nursing practice to include multiple voices and points-of-view throughout all research activities.
 - Prioritize minority individuals in key leadership and principal investigator roles.
 - Invest in education, training, outreach, and career development to foster a diverse workforce and encourage inclusion across the scientific community.

• Ensure Equity

- In funding opportunity announcements, encourage all grant proposals to describe how the proposed research will advance health equity and contribute to the dismantling of structural racism.
- Establish study sections with diverse representation and expertise in diversity, structural racism, and health equity.
- Provide diversity and unconscious bias training to researchers, peer reviewers, and decision makers.
- Provide common data elements and reliable, validated tools for data collection and ensure that terms regarding equity are clear, operational, and facilitate comparisons of findings across studies.

• Promote Practical Methodology

- Create novel paradigms to capture and analyze the complexities of structural racism and intersectionality and translation this knowledge into interventions to improve patient-centered health outcomes.
- Develop research design and methodology that supports the development, analysis, and implementation of multilevel interventions.
- Prioritize research that promotes "upstream" interventions that have the greatest impact on achieving health equity.
- Support practice-based evidence research through researcher-practitioner partnerships.
- Require that grant proposals describe the feasibility, generalizability, acceptability, sustainability, and accessibility of research findings into interventions that are available to all, especially underserved and vulnerable populations.
- Apply informatics, big data, and user-centered design strategies to research focused on improving access to health care services.

Goal 2: Use Nursing Science's Multilevel Perspective to Develop and Implement Interventions to Address the Social Determinants of Health across the Lifespan

Social determinants of health are the nonmedical factors that affect health outcomes, such as where a person lives, their employment, their access to health and social services, their ability to access affordable transportation or food, or the amount of stress they endure. Re-focusing nursing science through the lens of these upstream factors can improve the understanding of barriers to health care and the interventions needed to break those barriers down. As patient educators and advocates, nursing professionals are uniquely positioned to identify and address the social determinants of health that affect their patients' care and promote health equity.

Objective 2.1: Identify Upstream Social Determinants that Impact Health Outcomes across the Lifespan

- Identify the upstream factors at the *structural level* such as policies, functions, services, and built/physical environments to delineate where there is impact on health outcomes.
- Identify the upstream factors at the *population level* such as environments (including climate change), behaviors, epigenetics, and social genomics that impact health outcomes.

Objective 2.2: Develop, Test, and Implement Interventions to Address Social Determinants of Health that Impede Health Equity

- Develop, rigorously study, and implement culturally-responsive interventions that address the impact of social determinants of health on uptake, utilization, and health outcomes across the lifespan and foster healthy decision-making.
- Use lessons learned about health disparities from the COVID-19 pandemic (e.g., health outcomes, decision-making, caregiving) to develop improved, culturally responsive strategies for responding to future health crises.
- Evaluate intervention effectiveness on reducing the impact of social determinants of health and improving health outcomes.

Objective 2.3: Identify Barriers and Facilitators to Decision-Making among Different Populations

- Identify barriers and facilitators to health and health care, focusing on *all* historically excluded or underserved populations (i.e., medically and socially disenfranchised individuals).
- Identify the unique factors related to how different communities experience risk, access health care, and make decisions about their health and health care.
- Use decision science to contribute to understanding the behavioral, environmental, and biological influences on health that impact nursing practice and health outcomes.
- Focus on the critical transition in life to understand the roots of behavior change, decisionmaking, self-management, access to care, and its impact on health and health outcomes.

Objective 2.4: Develop Targeted Interventions from a Socio-Ecological and Biobehavioral Framework

- Identify the mechanisms linking social determinants of health with health-related outcomes to aid in development, testing, and implementation of evidence-based multilevel interventions.
- Develop, rigorously study, and implement multilevel interventions that target the individual, family and social supports, community, population, and policy across the lifespan.

- Develop, rigorously study, and implement multilevel interventions that can be applied to all relevant settings (e.g., home, community, clinic) and related sectors (e.g., food insecurity, housing).
- Develop, rigorously study, and test intervention strategies to address barriers and facilitators to health and access to health care, focusing on historically excluded or underserved populations.

Strategies

- Foster Community-Based Participatory Partnerships
 - Initiate and sustain relationships with community-based organizations, academic centers, providers in rural and urban areas, and policymakers to better understand and address barriers and facilitators to health care and health behaviors.
 - Increase research resources to allow for sufficient time to conduct in-depth community engagement activities.
 - Ensure that community engagement is inclusive, share resources outcomes with communities, and connect communities with available tools and resources that encourage uptake of evidence-based knowledge.

• Strengthen Innovative Methods

- Establish review panels with reviewers who have experience and/or education with multilevel intervention strategies.
- Develop common data elements for social determinants of health and ensure researchers have access to data repositories.
- Ensure that research includes the collection of social determinants of health data from the micro- to the macro-level, and incorporate into review criteria—across significance, innovation, and approach—whether or not a proposal accounts for and measures social determinants of health.
- Support research and data collection that represents and addresses inequities in small populations.

Goal 3: Use Nursing Science's Holistic Approaches to Advance Precision Health and Health Care across the Lifespan

Precision health refers to personalized health care based on a person's unique genetic and genomic composition within the context of behavioral, social, cultural, and environmental factors that act synergistically. Syndemics refers to the synergistic interaction of multiple diseases and social, biological, environmental, or economic factors. Precision health care approaches in nursing science encompass not only an individual's risk for disease or response to intervention, but also the individual's lifestyle and its effect on health risk, behaviors, and outcomes. Precision health considers the whole person, a holistic approach for understanding, measuring, and developing interventions towards health and wellness across the lifespan. Precision health requires transdisciplinary collaboration and coordination of care that nursing professionals are uniquely positioned to lead.

Objective 3.1 Foster Research that Harnesses Holistic Approaches across the Lifespan

- Promote and support holistic and precision health and health care research that accounts for individual- and population-level interactions between social, environmental, biological, and economic factors that contribute to health, health care use, and health behaviors.
- Promote holistic, person-centered health care research that accounts for the effects of an individual's unique interaction of omics, lifestyle, environment, personal and family history, behaviors, and social determinants of health across the lifespan.
- Apply holistic, culturally appropriate approaches to the management and prevention of chronic conditions.
- Develop and rigorously test health management approaches that include the individual- and population-level perspectives, preferences, goals, culture, and values that influence health, health care, and health behaviors.

Objective 3.2: Apply a Syndemics Perspective for Improving the Management of Chronic Conditions and Associated Symptoms

- Evolve symptom management from a single disease perspective to a perspective of multiple chronic conditions.
- Study the interaction of biological, behavioral, and environmental (e.g., social, built/physical, resource) mechanisms impacting symptom manifestations and management to develop interventions that positively impact individual- and group-level experiences of symptoms.
- Develop and rigorously test symptom frameworks that move away from disease-specific models
 of care and self-management and advance mechanistic underpinnings of co-occurring symptoms
 across multiple chronic conditions.
- Evaluate symptom management interventions in populations with multiple co-morbid conditions and/or syndemics.
- Develop, rigorously test, and implement long-term strategies for symptom control, complications, and co-morbidities of complex conditions, such as COVID-19.
- Develop, rigorously test, and implement multilevel interventions targeted to the management of multiple chronic conditions and syndemics.
- Develop, rigorously test, and implement models of care coordination to optimize care for individuals with multiple chronic conditions and their families.

• Identify mechanisms and biomarkers of alterations in health and associated symptoms, and develop, rigorously test, and implement multilevel interventions and mechanistically targeted strategies for improving clinical care, health outcomes, and health equity.

Objective 3.3: Promote Strategies to Enhance Health and Well-Being

- Move towards the perspective of effective management of multiple chronic conditions and complete physical, mental, and social well-being by promoting strength and resiliency at every level of the socio-ecological model.
- Emphasize not only physical aspects of health, but other theory-driven domains of wellness such as economic, occupational, environmental, social, mental, and spiritual health.
- Study the milestones and transitions across the lifespan that influence the trajectory of health and wellness.
- Identify, rigorously test, and intervene upon the milestones, transitions, and impact of social injustices across the lifespan that influence the trajectory of health and wellness of individuals, families, and communities.
- Develop, rigorously test, and implement evidence-based complementary health practices.
- Conduct population-level research to identify the risk and protective factors of health and wellness to inform disease prevention strategies and how those strategies influence social norms, biases, and behaviors that impact health over the lifespan.
- Identify the factors that contribute to nurse wellness and develop, rigorously test, and implement interventions that support nurse well-being.

Objective 3.4: Support Transdisciplinary Approaches to Palliative and End-of-Life Care

- Identify and address the physical, psychosocial, psychological, spiritual, and social needs of individuals and families to foster holistic approaches to palliative and end-of-life care across the lifespan.
- Prioritize research on health literacy, coping, decision-making, self-management, and care coordination in serious illness, including intervention development, testing, and implementation.
- Identify and rigorously test personal, familial, community, environmental, economic, cultural, policy, and structural factors that impact palliative care effectiveness, uptake, access, and equity.
- Identify and rigorously test the mechanisms of multilevel palliative care interventions in order to optimize effectiveness, efficiency, cost, scalability, and equity.
- Conduct longitudinal cohort and big data studies to examine the natural and treated history of COVID-19 towards advancing palliative and end-of-life care.
- Promote and support research that accounts for the interdependence of patients, their larger social networks, and providers to understand the multilevel or mixed models that account for interactions that extend beyond patient- or caregiver-centric models.
- Identify and test ways to optimally support pediatric and adult family caregivers, including family caregivers from historically excluded backgrounds, to include their skills in care delivery and towards maintaining their own health and well-being.

Strategies

• Promote Transdisciplinary Team Science

- Provide nurse-led training and teaming opportunities to promote transdisciplinary team science and partnerships across NIH, industry, and communities to conduct research addressing complex health and health care issues through bold, innovative scientific approaches.
- Foster partnerships among scientists that promotes and accelerates deployment and adaptation of interventions across the lifespan.
- Advocate for representation of nurse scientists in NIH-led advisory boards, committees, and work groups to enhance research translation and nursing practices.
- Include research methodologies to incorporate additional clinical trial designs (e.g., factorial trials, SMARTs) to identify appropriate mechanisms, include effective methodological components, and design longitudinal intervention research that address factors such as dose and maintenance research questions.

• Cultivate Key Partnerships

- Engage and partner with individuals, families, clinicians, and communities—particularly those from historically-excluded populations—in all aspects of research design, execution, and dissemination of interventions and implementation of new models of health care.
- Partner with different public and private agencies towards transdisciplinary strategies to deliver and foster person-centered, precision, and holistic health care.
- Partner with communities and community-based organizations to develop and evaluate community-informed strategies that promote strength and resilience, and wellness across economic, occupational, environmental, social, and spiritual domains.

• Advance Translation and Implementation

- Partner with governmental and private entities to accelerate research uptake and dissemination at a population health level.
- Collaborate with industry to develop and disseminate technologies that integrate in daily life to better understand and promote health behaviors, health beliefs, and health management.
- Promote the development and implementation of evidence-based, pragmatic clinical trials through mechanisms that foster increased funding and time for multilevel intervention development and implementation research.
- Foster dissemination and implementation of evidence-based interventions for multimodal, wider-scale changes in health care.
- Foster dissemination and implementation of evidence-based interventions in a socially just way to promote health equity at a population level.
- Use population-level research findings to develop individual- and population-level interventions that increase access to health information, screening, treatment, and management of health conditions.
- Support practice-based evidence research through researcher-practitioner partnerships.

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