Department of Health and Human Services

National Institutes of Health

National Institute of Nursing Research

Minutes of the National Advisory Council for Nursing Research

January 31, 2023

The 109th meeting of the National Advisory Council for Nursing Research (NACNR) was convened on Tuesday, January 31, 2023, at 11:00 a.m. The open session was held by National Institutes of Health (NIH) videocast, and all observers, including members of the public, attended virtually. The open session adjourned at 3:45 p.m. The closed session of the meeting, which included consideration of grant applications, was convened on Tuesday, January 31, 2023, at 3:50 p.m. and continued until adjournment at 3:59 p.m. Dr. Shannon N. Zenk, Chair, NACNR, presided over both meeting sessions.

OPEN SESSION

I. CALL TO ORDER, OPENING REMARKS, AND COUNCIL PROCEDURES

Dr. Shannon N. Zenk, Director, National Institute of Nursing Research (NINR)

Dr. Zenk called the 109th meeting of the NACNR to order and welcomed all Council members, visitors, and staff. She noted that the open session of the meeting was being videocast live and will be archived on the NIH videocast website. Dr. Zenk welcomed new Council members Drs. Guadalupe X. Ayala and Betty Bekemeier and acknowledged retiring Council members Drs. Peter A. Lewin and Joanne Wolfe for their service to the Institute and the field of nursing research.

Dr. Elizabeth Tarlov, Director, NINR Division of Extramural Science Programs (DESP) and Executive Secretary of NACNR, conducted a roll call of NACNR members and noted for the record that a quorum had been met.

Minutes of the Previous NACNR Meeting

Minutes of the September 13, 2022, NACNR meeting were distributed to Council members through the Electronic Council Book. A motion to accept these minutes was made, seconded, and

unanimously approved. The approved minutes of each NACNR meeting become part of the Institute's official record and are posted on the NINR website (www.ninr.nih.gov).

Dates of Future Council Meetings

Dates for future Council meetings were included in the NIH Electronic Council Book. The next Council meeting will be held in person on May 23, 2023.

Conflict of Interest and Confidentiality Statement

Dr. Tarlov noted that the conflict of interest and confidentiality statements were included in the Council materials; reminded Council members that as special government employees, they may not engage in lobbying activities; and noted that she would provide specific instructions about conflict of interest and confidentiality at the beginning of the Closed Session in the afternoon.

II. REPORT OF THE NINR DIRECTOR

Dr. Shannon N. Zenk, Director, NINR

The Director's report focused on activities and news from NIH and NINR since the September 22 Council meeting. Highlights of Dr. Zenk's report included:

Strategic Plan: Year in Review—A great deal of activity has happened since launching the strategic plan in May 2022 during National Nurses Week. NINR funded 109 competing applications in calendar year 2022, published 7 Funding Opportunity Announcements (FOAs), and signed onto many others aligned with Institute priorities. Dr. Zenk has discussed the strategic plan in presentations to more than 50 groups at NIH, the Department of Health and Human Services (HHS), and throughout the nursing science community. Community interest in the Institute's new strategic direction is reflected by 57,000 visits to NINR website pages related to the strategic plan and nearly 9,000 downloads of the strategic plan factsheet. The 2022 NINR Director's Lecture Series has focused on the strategic plan lenses, starting with a lecture on social determinants of health (SDOH) in July and health equity in August; nearly 1,500 individuals attended these virtual events.

Budget—On December 29, 2022, President Biden signed the Fiscal Year (FY) 2023 budget, which provides a 9.3 percent increase for NINR, including \$10 million to enhance health disparities research at NINR. This is a significant acknowledgment of nursing researchers' expertise in understanding the root causes of health disparities and identifying solutions that will lead to health equity. Concepts that illustrate how NINR can best use this funding will be presented later in this meeting.

NINR Division of Extramural Science Updates—Since the September NACNR meeting, NINR has signed onto 13 FOAs and notices, including opportunities to prevent and manage chronic pain in rural populations (RFA-NR-23-001); examine community-level interventions for prevention of violence, injury, and mortality related to firearms and other causes (PAR-23-066); and address maternal morbidity and mortality. NINR has expressed special interest in recognizing mentorship in Diversity, Equity, Inclusion, and Accessibility (DEIA, NOT-OD-23-002) and promoting diversity in the data science workforce (NOT-OD-23-041).

NINR-funded research continues to yield results, as demonstrated by two recently published papers. Dr. Robyn Gershon is Principal Investigator (PI) of a project to help reduce COVID-19 disparities in New York City mass transit workers. Findings provide insight into how age and race or ethnicity contribute to vaccine hesitancy among high-risk essential workers, an important step toward developing vaccine hesitancy interventions for these populations. The study found that younger or non-White union workers were more likely to be vaccine hesitant than those who were older or White. Another study led by Dr. Suzan Carmichael, PI of two NINR projects on severe maternal morbidity, examined the ongoing impact of redlining on severe maternal morbidity. Redlining is a historical practice of designating Black neighborhoods as undesirable for mortgage loans, leading to underinvestment in these neighborhoods. Dr. Carmichael and her team found that living in historically redlined census tracts was associated with greater risk of severe maternal morbidity among Black and Hispanic participants in California, after adjusting for sociodemographic characteristics, pregnancy-related factors, and present-day neighborhood deprivation. These findings demonstrate that historical mechanisms that support structural racism continue to contribute to current ongoing health disparities.

Community Partnerships to Advance Science for Society (ComPASS) directly funds community organizations to lead research on health equity structural interventions that leverage partnerships across multiple sectors to reduce health disparities. ComPASS initiatives include the Community-Led Health Equity Structural Interventions, Health Equity Research Hubs, and the ComPASS Coordination Center. NINR is a founding co-chair of this unique NIH Common Fund program. Dr. Zenk reported an overwhelming response of letters of intent for the first funding opportunity; updates on awards will be provided during an upcoming Council meeting.

Advancing Integrated Models of Care (AIM) to Improve Maternal Health Outcomes among Women Who Experience Persistent Disparities supports intervention research to develop, implement, and evaluate integrated models of supportive care that address structural inequities to prevent adverse maternal health outcomes. NINR-funded AIM studies focus on care navigation; Medicaid policies, benefits, and

beneficiaries; and the role of technology in maternal health. Care navigation projects include a pragmatic trial of community-based patient navigation for Black women who receive care in prenatal clinics of a metro Atlanta safety-net hospital system and a study that is exploring efficacy of an evidence-based, group-centered prenatal intervention coupled with care navigation to reduce health disparities among Pacific Islanders living in the United States. Medicaid-related projects include a study in Pennsylvania where the state is testing equity-based Medicaid policy changes that explicitly focus on Black populations; a study examining the impact of prenatal care coordination on maternal health outcomes; and a study to understand whether Tennessee's expanded Medicaid coverage leads to improved postnatal health outcomes in Medicaid-receiving mothers with hypertensive disorders of pregnancy. Funded projects involving technology include a Nebraska study testing a mobile technology intervention aimed at improving maternal wellness and reducing health disparities through a strengths-based approach and a Brooklyn-based study testing a novel digital screening and social services linkage system intervention among Black immigrant women.

NINR is playing a leading role in an initiative to evaluate the impact of COVID-19-related housing and food policies on health outcomes among health disparities populations (RFA-NR-22-001). One study is examining the effects of state housing policies on rates of substance use treatment and drug overdoses; another is looking at the impact of pandemic eviction prevention policies on morbidity and mortality rates and racial and gender inequalities; and a third is using Veteran's Administration data to study the impact of U.S. eviction moratoria on acute healthcare resource use. A funded study is examining the effect of a nutritional policy change (a 15% increase of Supplemental Nutrition Assistance Programs payments) on mental health, including adherence to recommended care services.

NINR funded 5 of 37 grants supported by an NIH initiative focused on the impact of structural racism and discrimination on minority health and health disparities (RFA-MD-21-004). In a study co-funded with the National Institute of Child Health and Human Development (NICHD), researchers are examining the impact of historical discriminatory policies on infant mortality rates. Other funded studies are exploring neighborhood-level structural and racial barriers to healthcare access for individuals with serious illness and improving efficacy of an evidence-based SDOH intervention for caregivers and patients of color. NINR funded two studies focused on HIV and AIDS through a structural racism lens. One study is testing an intervention aimed at improving organizational behavior of outpatient HIV and AIDS services with a goal of increasing antiretroviral therapy among African Americans living with HIV. A second study is drawing on evidence-based stigma-reducing theories to target structural racism and discrimination at federally funded HIV/AIDS clinics toward improving well-being of Black, Indigenous, and people of color living with HIV and improve the wellbeing of healthcare staff at federally-funded HIV/AIDS clinics.

NINR funded a study on firearm injury risk among Asian Americans. Researchers are examining multilevel risks and promotive resilience factors that affect Asian Americans, with an emphasis on understanding neighborhood structural-level racism and discrimination to better understand how they influence firearm outcomes.

NINR Division of Intramural Research Updates—Recently, four Division of Intramural Research (DIR) staff—Catherine Blumhorst, Joyce Kreskow, Mary Ley, and Suzanne Wingate—received an NIH Director's Award for their work on the NIH COVID vaccine and booster clinic team and their extraordinary efforts related to implementation and administration of NIH COVID vaccine clinics.

Recently published research papers from DIR staff include a pilot study of a 12-week <u>aerobic exercise</u> <u>program among women with systemic lupus erythematosus</u> (SLE). The authors concluded that the program improved cardiorespiratory function and fatigue; data also suggested an improvement in mitochondrial function. A second DIR publication reviewed 95 <u>studies of blood-based biomarkers of cognitive</u> <u>impairment in cancers</u> other than those of the central nervous system; the review aimed to clarify biological correlates of cancer-related cognitive impairment, identify research gaps, and inform future research.

Dr. Lichen Xiang, an NINR Research Fellow in the Division, has developed a low-cost, rapid molecular diagnostic device for multiple pathogens, bacteria, and parasites. The device combines two recently patented core technologies and will support fast diagnosis and appropriate treatment for affected individuals and families in underdeveloped countries.

Diversity, Equity, Inclusion, and Accessibility—In November, NINR and several other Institutes, Centers, and Offices (ICOs) issued a Notice of Special Interest (NOSI) to fund <u>Administrative Supplements to Recognize Excellence in Diversity, Equity, Inclusion, and Accessibility (DEIA) Mentorship.</u>
Supplements will support scientists who have demonstrated compelling contributions to mentorship and enhancing DEIA in the biomedical sciences.

Reports and recommendations from the Council Working Groups on Diversity of the NINR-Supported Scientific Workforce and Inclusion in NINR-Supported Studies (presented at the September 2022 Council meeting) are available on the NINR website. Updates on implementation of Working Group recommendations will be presented during a future Council meeting.

NINR Partnerships and Collaborations—Dr. Zenk provided an update on partnerships and collaborations in which NINR engages across NIH, HHS, and beyond. NINR is co-lead for the NIH Transformative Research to Address Health Disparities and Advance Health Equity Common Fund Program that supports innovative translational research projects to prevent, reduce, or eliminate

health disparities and advance health equity; this program earned a 2022 NIH Director's Award. As co-chair, NINR brings the nursing research perspective to the NIH Coordinating Committee for Maternal Morbidity and Mortality (CCM3), which coordinates the IMPROVE Initiative (Implementing Maternal health and Pregnancy Outcomes Vision for Everyone) to address the nation's high maternal morbidity and mortality rates. Dr. Zenk is a member of the leadership team of the HHS-wide SDOH working group; in December, she shared NIH interests and commitments to SDOH research on behalf of the NIH-wide SDOH Research Coordinating Committee. NINR is partnering with the Office of Research on Women's Health and other NIH ICOs to solicit public comment on scientific gaps and research opportunities to address longstanding and emergent factors that perpetuate violence against women; the Request for Information (RFI) will be released in mid-February.

NINR serves on the executive committee for the NIH-wide Climate Change and Health Initiative and will host nurse scientist Dr. Patrice Nicholas, one of eight scholars in the pilot cohort of the Climate and Health Scholars Program; Dr. Nicholas leads the Center for Climate Change, Climate, Justice, and Health at the Massachusetts General Hospital Institute of Health Professions. Dr. Zenk co-authored a *Lancet* commentary on the Initiative.

Rural Health—In October, NINR hosted a meeting of investigators funded under the Institute's "Strategies to Improve Health Outcomes and Reduce Disparities in Rural Populations" Request for Applications (RFA). Dr. Zenk presented opening remarks at a National Rural Health Day celebration organized by the NIH Rural Health Interest Group.

NINR News and Announcements—The NINR Director's Lecture scheduled for February 14, 2023, will focus on the <u>Systems and Models of Care</u> research lens and feature Dr. Lusine Poghosyan, an internationally recognized health services researcher, and Dr. Ellen-Marie Whelan, Chief Population Health Officer at the Centers for Medicare and Medicaid Services.

During the past year, two congressional staff delegations visited NINR research projects. Organized by staff of Senator Roy Blunt (R-MO), staff visited the Alaska Native Tribal Health Consortium to learn about using traditional foods to address childhood obesity; a second delegation visited the Kenya Medical Research Institute to learn about a study focused on improving HIV treatment outcomes among adolescents and young adults in low-resource settings.

Several new staff have joined NINR recently, including Jacki Wilson, Hope Mabry, Mary "Libbey" Bowen, and Nisan Bhattacharyya. Hristina Denic-Roberts and Maureen Akubu-Odero have joined NINR as Presidential Management Fellows (PMF). The PMF program develops leadership skills in holders of advanced degrees. Dr. Zenk thanked long-time NINR staff members Deborah Jennings and Mary Kelly for

their service to the Institute; both retired at the end of December 2022.

In November, NINR held a 2-day workshop on the potential of nurse-led research on firearm injury prevention. According to 2021 data, firearms are the number one cause of death in the United States for those 20 years and younger, a public health problem with over \$1 billion spent annually on hospital costs. Firearm injuries and deaths are not evenly distributed across race, ethnicity, and gender; they are a health equity issue. Firearm injury prevention will be NINR's first strategic imperative in 2023.

NIH News—The new NIH Data Management and Sharing (DMS) Policy is in effect for competing applications, contracts, and other research proposals submitted on or after January 25, 2023. Resources for investigators are available through the NIH Scientific Data Sharing Website. ScHARe (Science Collaborative for Health Disparities and Artificial intelligence bias REduction) is a cloud-based research collaboration platform developed by the National Institute on Minority Health and Health Disparities (NIMHD) and NINR.

In October, President Biden appointed Renee Wegrzyn as Director of the Advanced Research Projects Agency for Health (ARPA-H) and Dr. Monica Bertagnolli as Director of the National Cancer Institute (NCI). NIH Acting Director Dr. Lawrence Tabak appointed Dr. Joni L. Rutter to lead the National Center for Advancing Translational Sciences (NCATS). Dr. Nina Schor has been named the new Deputy Director of NIH Intramural Research.

In December, Dr. Anthony Fauci retired after over 50 years in federal service and Ms. Andrea Norris retired as NIH Chief Information Officer and Director of the Center for Information Technology. In January, Dr. Roger Glass retired as Director of the Fogarty International Center and NIH Associate Director for International Research. Dr. John Gallin, NIH Associate Director for Clinical Research and Chief Scientific Officer of the NIH Clinical Center, will retire in March 2023.

Dr. Zenk concluded her remarks by acknowledging Joan Dawson and Jo-Ann Kriebel for assistance in compiling the Director's Report.

Discussion

Council members remarked on the amazing depth and scope of NINR's focus on health disparities and their root causes, and the opportunities for nursing science engagement in rural health and firearm injury prevention.

III. RECOMMENDATIONS OF THE CENTER FOR SCIENTIFIC REVIEW ADVISORY COUNCIL WORKING GROUP ON PEER REVIEW OF NRSA FELLOWSHIP APPLICATIONS

Dr. Bruce Reed, Deputy Director, Center for Scientific Review (CSR), Office of the Director, NIH

Dr. Reed summarized CSR Advisory Council Working Group recommendations for <u>improving peer review of National Research Service Award (NRSA) applications</u>. NRSA Fellowships support intensive research training for individual predoctoral and postdoctoral trainees. Applicants and reviewers have voiced concerns that review may disadvantage some highly qualified applicants.

The Working Group was charged with evaluating the Fellowship review process and providing recommendations to make the peer review process more fair, effective, and efficient. After gathering data, public input, and NIH input, the Working Group prepared a final report; in December 2022, NIH Institute Directors approved major report recommendations and NIH leadership directed their implementation.

Public input themes included concerns about bias and a cumbersome application process. Additional comments suggested changing the application information base (e.g., undergraduate grades, emphasis on publications) and enhancing reviewer training to increase bias awareness and encourage constructive feedback.

Application outcomes data show that applications are highly concentrated in a small number of institutions; applications from institutions submitting lower numbers of applications have worse review outcomes; and junior sponsors perform poorly relative to senior sponsors. NIH may be leaving out highly promising young scientists because of a process that heavily favors elite institutions and senior, well-known scientist sponsors and has a narrow emphasis on traditional markers of early academic success.

The Working Group Report recommendations aim to improve the chances that the most promising applicants—no matter who they are or where they are based—will be identified by peer review in a consistent manner. Major recommendations include (1) modifying review criteria and (2) changing information provided to reviewers (i.e., the Fellowship Supplemental Section of the Public Health Service [PHS] Form 424).

The recommendation to modify review criteria focuses on sharpening reviewer attention to the core criteria—applicant potential, strength of the science, and quality of the training plan—and defining criteria that offer a better chance to less advantaged applicants without disadvantaging others. The latter could be accomplished by evaluating personal characteristics that contribute to success and assessing accomplishments in the context of the applicant opportunities. Evaluating the sponsor and institution with

respect to the quality of the science and the training plan will decrease inappropriate consideration of sponsor and institutional reputation.

Revisions to the Fellowship Supplemental Section of the PHS Form 424 include modifying content to align with review criteria; discouraging use of incomplete and misleading indicators; emphasizing substantive statements pertinent to the individual student; and restructuring the content as word-limited statements to shorten the application. The revised application requires courses completed instead of grades; assesses applicants' scientific thinking; and emphasizes the sponsor's training and mentorship approach toward creating a plan that fits the student's goals and needs. A revised letter of reference format requires trainee-specific answers intended to discourage boilerplate language. The application allows an optional statement of special circumstances that might have hindered the applicant's progress.

Implementation of these changes is a complex, multipronged process requiring changes to the application, funding announcements, NIH business systems, and NIH information resources as well as a major training and outreach effort targeting reviewers, applicants, applicant organizations, and NIH staff. The implementation goal is 1.5 to 2 years.

Discussion

Drs. Patricia Stone facilitated the discussion. Dr. Stone commented on ensuring that the "diamonds in the rough" have necessary resources and the need for diverse review panels. Dr. Reed emphasized the value of engaging reviewers who can provide a range of perspectives and pointed to the importance of targeted outreach. Dr. Cindy Munro expressed concern that applicants may not be ready to describe their scientific vision early in their programs, that this may be a source of further disadvantage for some people. Dr. Reed acknowledged that the changes may not completely level the playing field but do offer applicants a chance in a way that credentials and grades do not always provide and gives the reviewers an opportunity to hear directly from the applicant and to hear what the applicant thinks about science and what drives them. Other Council members asked about whether the committee considered the value of leveraging the CTSAs to support potential applicants in institutions where there is less research and noted the great need for support in lower resourced institutions. Dr. Reed agreed that the need is clear and that the NIH should think about these questions from the perspective of the institutions that need it the most.

IV. NINR CONCEPTS—SOCIAL DETERMINANTS OF HEALTH/SOCIAL NEEDS

NINR Staff

Integrating Social Determinants of Health into Education and Training for Nursing Scientists to Advance Health Equity

Dr. Hristina Denic-Roberts and Dr. Kristopher Bough, Division of Extramural Science Programs, NINR

The concept aims to provide support for development of education and training opportunities that will expand the diversity of the workforce and equip scientists with the scientific knowledge and skill set to conduct rigorous, innovative, solutions-oriented nursing research to address SDOH and the impacts of their systematic maldistribution on health and health equity. Possible initiatives include, for example, a course, curriculum, or conference to expand the knowledge base and research skills in SDOH research; institutional education or research training programs focused on SDOH research that engages communities; and an immersive summer training program

Discussion

Drs. Robert Atkins facilitated the discussion, expressing enthusiastic support for the concept, noting its emphasis on health equity is critical and that it provides an opportunity to be intentional about focusing on communities of greatest need. He also noted that its focus aligns with Dr. Reed's presentation on improving peer review of NRSA fellowship applications. Dr. Lowe described the concept as progressive, forward thinking, and timely and encouraged intentionally focusing on communities at the greatest disadvantage and engaging underrepresented nurse scientists; identifying mechanisms that do not require relocation to an institution far from home that lacks relevance to community needs. Dr. Stone commented on the need for these opportunities and strongly supported bringing people together to increase SDOH knowledge and build networks across universities as a way to strengthen support for trainees from groups underrepresented in nursing research.

Clinical-Community Linkages to Address Social Needs and Social Conditions to Advance Health Equity among Populations Experiencing Health Disparities: The Bridge-to-Care Initiative

Shalanda Bynum, Program Director, Division of Extramural Science Programs, NINR

Recognizing the excess burden of social conditions and needs that disproportionately influence the health of marginalized populations, the proposed concept aims to support research that builds evidence on effectiveness of addressing social needs, identifies approaches for addressing social needs in low-resourced healthcare settings, creates opportunities to optimize meaningful clinical-community partnerships, and measures the impact of interventions implemented in collaboration with healthcare and community organizations. The Initiative will advance research that bridges clinical care with community resources to address unmet social needs of individuals and families and adverse social conditions in the community among populations who bear an excess burden of morbidity and mortality.

Discussion

Dr. Lowe noted that the concept will support studies that are needed to provide evidence of the impact of well-positioned healthcare entities that support family and community clients dealing with social

challenges and raise awareness of the human cost of suffering arising from poverty, discrimination, violence, and social exclusion. Missed opportunities to address healthcare needs of individuals within their social context have been identified as major factors leading to inefficiencies in healthcare. Grant mechanisms are required that support not only formative intervention and evaluation studies but also enhanced research training programs to prepare cohorts of nurse scientists to conceptualize and operationalize SDOH constructs with individuals, organizations, and community systems across populations experiencing health disparities. Council members Dr. Ayala, Lee, and Provencio-Vasquez expressed support, commented on nursing research understanding of fidelity to treatment and the importance of evaluation, tiered bridge approaches, and inclusion of nurse-led clinics as partners with nurse scientists.

V. NIH RESEARCH SUPPORT: FIREARM INJURY AND MORTALITY PREVENTION

Dr. Christine Hunter, Acting Director, Office of Behavioral and Social Sciences Research (OBSSR), NIH

Dr. Hunter presented an overview of firearm violence, an urgent public health crisis that OBSSR is uniquely positioned to coordinate. In 2020, 79 percent of homicides and 53 percent of all suicides involved firearms, and firearm-related injuries became the leading cause of death for children and youth ages 1 to 19. From 2019 to 2020, the firearm homicide rate increased by 35 percent to its highest recorded rate in over 25 years. Large disparities exist by race, ethnicity, and poverty—significantly impacting African American and American Indian/Alaska Native populations. Nonfatal injury and witnessing violent victimization increases the risk of acute and chronic physical or behavioral health conditions.

NIH has been and remains committed to supporting scientific research to advance efforts to understand and prevent firearm violence injury and mortality. NIH has always funded firearms research within its overall violence portfolio; three associated FOAs issued in FY 2013 and expiring in FY 2017 focused on health determinants, consequences of violence, and prevention of firearm violence. Recent firearms research awards have focused on firearm safety promotion as a universal suicide prevention strategy, understanding impacts of childhood exposure to violence, modifying SDOH to reduce firearm-related mortality, and disparities within specific populations.

Appropriations acts in FY 2020, FY 2021, and FY 2022 provided \$12.5 million of funding for each year to NIH and to the Centers for Disease Control and Prevention (CDC) to conduct research on firearm injury and mortality prevention. The appropriation language requires the research to be ideologically and politically unbiased; no funds made available may be used in whole or in part to advocate or promote gun control. In FY 2020/2021, FOAs using the appropriation included 2-year pilot R61 awards, competitive

supplements to existing awards, 3-year R01 awards, and pilot R21/R33 awards. Awards took a broad public health approach, including breadth in emphasis, types of violence and populations, and type of research.

In FY 2022, OBSSR worked with other ICs, including NINR, to coordinate <u>PAR 22-120</u> to support a coordinating center and <u>PAR-22-115</u> to support a network of research projects for development, implementation, and evaluation of prospective interventions at the community- or community organization-level: *Research on Community Level Interventions for Firearm and Related Violence Injury and Mortality Prevention (CLIF-VP)*. In FY 2022, the coordinating center and three projects were funded. In FY 2023, OBSSR published PAR-23-066, in partnership with multiple ICOs to expand the network.

OBSSR also coordinated issuance of other violence and firearms injury and mortality prevention FOAs not tied to appropriations funding. NOT-OD-23-039 highlights interest in research to improve understanding of identification of those at risk of firearm injury; development, piloting, and testing of preventive interventions; and examination of approaches to improve implementation of existing, evidence-based interventions. NOT-OD-22-167 highlights interest in addressing the role of violence in health outcomes and integration of violence-related screening and interventions into healthcare settings. NINR signed onto both NOSIs.

OBSSR and NICHD co-lead an NIH-wide working group focused on violence research that aims to implement coordinated activities that build on IC-specific efforts. Dr. Hunter expressed excitement about the move toward increased IC-specific initiatives (such as NINR) and increased integration of ICO priorities. Violence research has also been integrated into the IMPROVE initiative and the Transformative Health Disparities program. Current priorities include capacity building and training support, particularly for PIs from traditionally underrepresented populations (PAR-23-107 and PAR-23-108), and ongoing collaboration with CDC, the National Institute of Justice, and other federal partners.

Discussion

Dr. Munro led the discussion by noting that understanding underlying causes and multilevel risk factors is critical to the development of effective interventions that are so desperately needed to address firearm injury and mortality. NINR and the nursing community have much to contribute. Council members expressed enthusiasm about cooperation among multiple ICs that are supporting research on a problem that has substantial impact on the nation's health.

Dr. Hunter shared ways that NIH is maintaining connections with other agencies to create synergy in this area while avoiding duplication. Interagency representatives are included on multiple White House and Office of Science and Technology Policy (OSTP) groups, and the NIH Office of Disease

Prevention regularly coordinates with CDC and the U.S. Preventive Services Task Force.

Council members commented that the \$12.5 million appropriation seems inadequate for addressing the leading cause of death in children and adolescents. Dr. Hunter pointed out that NIH was funding work in this area prior to the recent appropriations. The appropriated funds can be viewed as a launching point to engage multiple ICs in building IC-specific portfolios. In response to a question about types of community partners that will be engaged in the CLIF-VP network research, Dr. Hunter noted that the FOA language is intended to engage a broad range of partners.

VI. CDC FIREARM VIOLENCE AND INJURY PREVENTION RESEARCH AND ACTIVITIES

Dr. Thomas Simon, Senior Director for Scientific Programs, Division of Violence Prevention, National Center for Injury Prevention and Control, CDC

Dr. Simon presented an overview of CDC firearm violence and injury prevention activities. He reported that the firearm homicide rate is the highest since 1993, and the firearm suicide rate is the highest since 1990.

CDC's approach to preventing firearm injuries focuses on providing data; conducting research and applying science to identify effective solutions; and promoting collaboration across multiple sectors to address the problem. Like NIH, CDC received a \$12.5 million appropriation to address firearm injury and crime in FY 2020, FY 2021, and FY 2022. CDC has issued five firearm research funding announcements; two 2020 RFAs funded 16 awards and two new investigator awards, a 2022 RFA funded 4 additional awards, and two 2023 RFAs have been posted.

Objectives of firearm injury research include improving understanding of firearm injury and informing development of interventions and identifying effective strategies to keep individuals, families, schools, and communities safe from firearm-related injury, death, and crime. Etiologic research examines risk and protective factors underlying firearm-related attitudes, behaviors, access, and safety practices; risk and protective factors related to different forms of firearm-related injury; and direct and indirect neighborhood-level exposures. Efficacy and effectiveness research supports the rigorous evaluation of prevention strategies, including hospital-based interventions, bystander approaches, crisis intervention approaches, and firearm safety interventions. Funding supports research related to preventing firearm homicides and assaults, firearm suicides and self-harm, unintentional firearm injuries, and firearm-related crime.

New investigator studies include (1) development of a social media-based intervention to enhance street outreach programs and (2) a study of neighborhood exposures most predictive of youth firearm violence and impact of neighborhood interventions on rates of firearm-related injury and crime.

Current firearm RFAs include <u>RFA-CE-23-005</u> to support research that informs firearm-related violence and injury prevention strategies (R01) and <u>RFA-CE-23-006</u> to support rigorous evaluation of innovative, promising strategies to prevent firearm-related violence and injuries (R01).

The <u>FASTER program</u> (Firearm Surveillance Through Emergency Rooms) funds 10 state health departments as part of a competitively funded initiative to provide surveillance data in near-real time on emergency department visits for nonfatal firearm injuries. The program enables delivery of timely and actionable data at the state and local levels to inform prevention and detect trends, clustering of visits, and changing patterns in near real time.

Additional information is available on the CDC Firearm Violence Prevention website.

Discussion

Dr. Bekemeier led the discussion and highlighted relevance to nursing science and the work of nurses around trauma-informed care, safe and healthy communities, and addressing systemic racism. She asked about funding opportunities that support policy research.

Dr. Simon responded that the FOAs explicitly include rigorous evaluation of policies, including those that address underlying drivers and reduce inequities toward population-level benefits.

Dr. Bekemeier asked about possible lessons to be learned from what factors lowered firearm-related homicide and suicide rates between 1990's and 2020. Dr. Simon described how multiple factors likely played a role in both prior decreases and recent increases and emphasized the need to understand what conditions and circumstances, including those related to the COVID-19 pandemic, influenced the recent rate increases.

Council members expressed excitement about the FASTER program. Dr. Simon noted that a Notice of Funding Opportunity has been released that expands the program's focus beyond firearm injuries; with additional funds, CDC hopes to expand the number of states that are funded.

Dr. Lowe commented on an increase in the number of hunting-related firearms and expressed interest in initiatives focused on injury prevention among Native populations.

VII. NINR CONCEPTS—FIREARM INJURY PREVENTION

NINR Staff

Firearm Injury Prevention in Community Healthcare Settings

Drs. Shweta Singh, Karen Huss, and Karen Kehl, Division of Extramural Science Programs, NINR

The proposed concept would advance research to reduce firearm injury and related health sequelae through development, evaluation, and translation of primary and secondary preventive interventions in community healthcare settings at multiple points along the prevention continuum. Nursing's contributions to injury prevention in the varied settings where nurses practice will be emphasized.

Discussion

Dr. Mallory Johnson discussed the proposed concept, which would involve a wide range of settings. Noting the current polarization in society, he recommended looking at how prior public health initiatives have grappled successfully with safety precautions that may be at odds with an individual's sense of free will; for example, seat belt requirements and prohibition of smoking in public spaces. Important considerations will include identifying trusted persons in communities and developmentally appropriate approaches for children, adolescents, adults, and older adults.

Education and Training Initiatives: Building Capacity for Firearm Injury Prevention Research

Dr. Elizabeth Tarlov, Director, Division of Extramural Science Programs, NINR

The proposed concept aims to build capacity for firearm injury prevention research by creating multiple educational and training initiatives. A well-trained, integrated, collaborative workforce is needed to conduct research on viable strategies that mitigate the risk of firearm injury and its sequelae. Nurse scientists are well poised to step forward. Multiple initiatives would be required to prepare nursing researchers in firearm injury prevention research; build cohorts that bring together established firearm injury prevention researchers with those new to the field; develop partnerships across research programs and interface with community leaders, societies, and advocates; and address health disparities through training in domains where nurses work.

Discussion

Dr. Anne Fitzpatrick facilitated the discussion. She noted that hospital trainees are interested in firearm injury prevention. She encouraged considering how to reach and engage people who might not be included in traditional training mechanisms such as the T32. Council members commented on the key aspects of the concept: a cohort approach that will provide strength in numbers in the face of political barriers; bringing a nursing perspective into this important area; and enabling generalizability of training to other areas of importance in the NINR portfolio. One Council member noted that nurses and nurse

scientists are well respected in tribal and other communities; they can provide entrée for other scientists. Council members also expressed support for NINR's continued support of other areas of emphasis. Dr. Zenk stated that firearm injury prevention is NINR's first strategic imperative but is not intended to be the entire NINR focus. This is an important area where nursing science can have a big impact.

VIII. COUNCIL OPEN DISCUSSION

Dr. Stone remarked that researchers at some under-resourced institutions, particularly those serving underrepresented minority populations, could benefit from opportunities for collaboration and resource sharing with other universities. With a focus on increasing diversity of the workforce and SDOH, perhaps there is something NINR can do to help build those collaborations. Other members mentioned experience with mechanisms intended for that purpose; some were successful and others, less so.

Adjournment

Dr. Zenk thanked meeting attendees and adjourned the open session of the meeting at 3:45 p.m.

IX. CLOSED SESSION

This portion of the meeting was closed to the public in accordance with the determination that this session concerned matters exempt from mandatory disclosure under Sections 552b(c)(4) and 552b(c)(6), Title 5, U.S. Code and Section 10(d) of the Federal Advisory Committee Act, as amended (5, USC Appendix 2).

Dr. Tarlov reminded members of the requirement to leave the room prior to discussion and voting on any application with which they are in conflict and instructed them to speak up if they are in conflict, and staff will move them to a virtual waiting room. Members were asked to sign and submit a statement to this effect.

Review of Applications

Council members considered 55 research and training grant applications on which NINR was the primary Institute; these applications requested a total of \$21,701,218 (direct costs year 01). The Council also considered 319 applications on which another Institute/Center was primary and NINR was secondary. These applications requested a total of \$337,993,622 (direct costs year 01). The Council concurred with the Institutional Review Group recommendations on these 374 applications.

ADJOURNMENT

The 109th meeting of the NACNR was adjourned at 3:59 p.m. on Tuesday, January 31, 2023.

CERTIFICATION

I hereby certify that the foregoing minutes are accurate and complete.

Shannon N. Digitally signed by Shannon N. Zenk -S

Zenk -S

Date: 2023.05.11 08:55:13 -04'00'

Shannon N. Zenk, PhD, MPH, RN

Chair Executive Secretary

National Advisory Council for Nursing Research

National Advisory Council for Nursing Research

Digitally signed by Elizabeth C. Tarlov -S

Date: 2023.05.11 09:13:22 -04'00'

Elizabeth C.

Elizabeth Tarlov, PhD, RN

Tarlov -S

COUNCIL MEMBERS PRESENT

Dr. Shannon N. Zenk, Council Chair

Dr. Elizabeth Tarlov, Executive Secretary

Dr. Robert L. Atkins

Dr. Guadalupe X. Ayala

Dr. Betty Bekemeier

Mr. Daniel E. Dawes

Dr. Anne M. Fitzpatrick

Dr. Grayson N. Holmbeck

Dr. Mallory O. Johnson

Dr. Christopher Lee

Dr. John Lowe

Dr. Cindy L. Munro

Dr. Elias Provencio-Vasquez

Dr. Patricia W. Stone

Dr. Sheila Cox Sullivan, Ex Officio

Dr. Joanne Wolfe

NIH STAFF PRESENT at OPEN SESSION

Olga Acosta

Maureen Akubu-Odero

Brian Albertini

Anita Ambs

Frances Bevington

Nisan Bhattacharyya

Darius Bickham

Kris Bough

Eddy Boutsady

Libbey Bowen
Yvonne Bryan
Shalanda A. Bynum
Edmond Byrnes
Joanie Dawson
Hristina Denic-Roberts
Bill Duval
Demond Gibson
John Grason
Kevin Green
David Higgins
Cheryl Howard
Christine Hunter
Karen Huss
Dona Jones
Karen Kehl
Weiqun Li
Jessica McIlvane
Michelle Mitchell
Liz Perruccio
Wendy Pond
Amanda Alise Price
Bruce Reed
Federico Rosales
Louise Rosenbaum
Samantha Sanchez
Shweta Singh

David Tilley

Samantha Sanchez
Shweta Singh
David Tilley
Sean Tolliver
Ming Yan
Sarah Yoon
The entire meeting was held virtually, and all observers, including members of the public, attended virtually.