NATIONAL INSTITUTE OF NURSING RESEARCH Five-Year Strategic Plan for Reducing Health Disparities

Submitted to The National Center for Minority Health and Health Disparities

For
The NIH Comprehensive Strategic Plan and Budget
To Reduce and Ultimately Eliminate Health Disparities

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NATIONAL INSTITUTE OF NURSING RESEARCH Submission for the NIH Comprehensive Strategic Plan and Budget To Reduce and Ultimately Eliminate Health Disparities

NATIONAL INSTITUTE OF NURSING RESEARCH MISSION/VISION STATEMENT

The National Institute of Nursing Research (NINR) supports clinical and basic research to establish a scientific basis for the care of individuals across the life span. Nursing research involves clinical care in a variety of settings including the community and home in addition to more traditional health care sites. The NINR's research spans both health and illness, and extends to problems encountered by patients, families, and care givers. NINR research emphasizes the special needs of the at-risk and underserved populations, and addresses health disparities. These efforts are crucial in the creation of scientific advances and their translation into cost-effective quality health care for all individuals.

OVERVIEW OF THE NINR STRATEGY FOR ADDRESSING HEALTH DISPARITIES

The overall focus of the NINR Health Disparities Strategic Plan is to provide leadership in emphasizing the inclusion of cultural and ethnic considerations throughout the areas of scientific inquiry within NINR's domain, and leadership in its research training and infrastructure development, and community outreach. The focus of its research areas of opportunity on health promotion activities and chronic illness management enable leadership in support of culturally sensitive interventions to decrease health disparities among groups. Historically, nursing research has had a major focus on minority health. NINR's research training and infrastructure goals focus on enhancing the development of nurse researchers through training, and developing research infrastructure in schools of nursing, with a specific emphasis on preparing minority nurse researchers. NINR's community outreach goals focus on obtaining input and recommendations from nurse associations for research, infrastructure, and subject participation.

NINR AREAS OF EMPHASIS

NINR has identified the following strategic plan objectives as requested for the years 2002-2006.

Rationale and Priority for Advancing Science

Critical gaps in knowledge about symptom management of acute and chronic illness, prevention of disease, and promotion of healthy lifestyles exist among minority populations. Health disparities among minority populations include an infant death rate among African Americans that is twice that of Whites, a rate of low birth weight infants among Puerto Ricans that is 50% higher than that of Whites, and a Native American Indians' infant death rate that is almost double that of Whites. The death rate from diabetes is two times more likely for Hispanics than for

Whites, and the death rate from diabetes among American Indians and Alaskan Natives is more than twice that of Whites. NINR research attempts to close these gaps by promoting research in science areas such as chronic illness, reproductive and infant health, women's health, children's health, and relevant conditions and diseases such as low birth weight and diabetes self-management in minority populations.

Priority I: Provide leadership for inclusion of cultural and ethnic considerations throughout the areas of scientific inquiry within NINR's domain.

This leadership emphasis includes support for culturally sensitive interventions to decrease health disparities among racial and ethnic minorities, individuals from lower socioeconomic classes, women and children -- minority population groups that may not be able to benefit from health care services because of limited access, low literacy, poverty, language barriers, and cultural differences between themselves and health care providers. NINR-supported research has a major focus on health promotion activities and chronic illness management strategies. Annually, at least one area of opportunity will specifically target the Institute's strategic goals of health promotion and chronic illness management strategies in at-risk populations. Priorities are determined with continuous input from communities working with NINR to discuss and identify health disparity issues, such as the National Coalition of Ethnic Minority Nurse Associations which is composed of representatives from five national minority nursing associations. In addition, interdisciplinary and collaborative efforts will be undertaken with other NIH institutes, centers, and offices, and with appropriate federal agencies.

Objective I.1: To solicit research applications in targeted areas that will address significant questions related to health disparities.

This objective is to advance research to decrease health disparities in specific areas of scientific inquiry. This solicited research will extend the application of clinical studies to minority populations and focus studies on increasing knowledge and understanding of underlying mechanisms that contribute to ethnic variations in health conditions.

Action Plan:

- a. This objective will be achieved via the sub-objectives (I.1.1-I.1.3), presented below.
- b. The timeline for this objective is from FY2002 to 2006, and continuing.
- c. Date of expected achievement is FY2006, and continuing with annual assessments.

<u>Performance Measures</u> (suggested aggregate and specific measures, applicable to all I.1 sub-objectives):

- Number of key questions asked in research, that would scientifically enrich and extend the scope of NINR-funded science for decreasing health disparities;
- Number of studies funded that include more than 50% minority subjects;
- Number of studies funded that target issues specific to minority subjects;
- Number of studies funded that target issues specific to health disparities;
- Number of new NINR announcements related to health disparities;

- Other measures to be named.

Outcome Measures (suggested aggregate and specific measures, applicable to all I.1 sub-objectives):

- Number of key research questions answered in publications, that scientifically enrich and extend the scope of NINR-funded science for decreasing health disparities;
- Number of characteristics/parameters identified that will contribute to improved care for chronically ill individuals of diverse ethnicities;
- Number of health behavior strategies demonstrated for decreasing health disparities in minority populations;
- Other measures to be named.

<u>Sub-Objective I.1.1</u> To focus studies on expanding understanding of the underlying mechanisms that contribute to ethnic variations in health conditions - Low Birth Weight in Minority Populations.

Action Plan:

- a. Support on-going studies submitted in response to the program announcement on Low Birth Weight in Minority Populations (PA-99-045), that develop innovative strategies to prevent low birth weight (LBW) in minority populations and that expand understanding of psychosocial and environmental effects on biologic and pregnancy outcomes; revise and reissue the PA as necessary to solicit submissions that focus on other areas of emphasis for decreasing health disparities related to LBW; solicit, review, and support submissions to reduce LBW in minority populations; conduct data collection and analysis of achievement, and disseminate information of exemplar studies from the program.
- b. The timeline for this objective, including data collection and analysis of achievement, is FY2002 to 2006, and continuing.
 - c. The date of achievement is FY 2006, with annual assessment of progress.

Performance Measures: Stated in Objective I.1.

Outcome Measures: Stated in Objective I.1

<u>Sub-Objective I.1.2</u>: To focus studies on expanding understanding of the underlying mechanisms that contribute to ethnic variations in health conditions - Diabetes Self-management in Minority Populations.

Action Plan:

a. Support on-going studies submitted in response to the program announcement on Diabetes Self-Management in Minority Populations (PA-00-113) that investigate sociocultural, environmental, and behavioral mechanisms that contribute to successful and enduring self-management of diabetes in minority populations; conduct data collection and analysis of

achievement and disseminate information of exemplar studies from the program.

- b. The time line for this objective, including data collection and analysis of achievement, is FY 2002 to 2006.
 - c. The date of achievement is FY 2006, with annual assessment of progress.

Performance Measures: Stated in Objective I.1

Outcome Measures: Stated in Objective I.1

<u>Sub-Objective I.1.3</u>: To focus research efforts and studies on exploring the use of effective strategies to reduce and eliminate health disparities - through a planned announcement on Community-Partnered Interventions in Nursing Research to Reduce Health Disparities.

Action Plan:

- a. To convene a workshop in FY 2002 to assess the state-of-the science issues related to community partnered interventions and their ability to address health disparities across the lifespan, in such areas as cancer prevention and detection, environmental health, and child/adolescent health in minority populations.
- b. To issue a PA for FY 2003 soliciting applications focused on innovative use of community-partnered interventions to decrease health disparities; support studies that address such topics as cancer prevention and detection in minority populations, health promotion in children/adolescents, and environmental health issues; to conduct data collection and analysis of achievement, and disseminate information of exemplar studies from the program.
- c. The timeline for this objective, including data collection and analysis of achievement, is FY2002 to 2006, and continuing.
 - d. The date of achievement is FY 2006, with annual assessment of progress.

Performance Measures: Will be as stated in Objective I.1.

Outcome Measures: Will be as stated in Objective I.1.

<u>Objective I.2</u>: To support investigator-initiated research applications that address significant questions related to health disparities and offer the best prospects for new knowledge and better health.

Action Plan:

- a. Continue to support on-going studies in diverse ethnic groups that encompass a broad range of health disparities topics such as:
 - health promotion for children living in urban and rural areas and in minority elders;
 - risk reduction in adolescent mothers and persons of Hispanic descent;
 - chronic disease management in Spanish speaking individuals and those of Native American descent;

- care of frail elderly African American nursing home residents and Asian American women caring for elderly parents;
- reducing sexual risk behaviors among economically challenged adolescents of color;
- cultural variations between White American and Hispanic responses, for example in end of life care, use of telehealth interventions for rural populations;
- improving HIV prevention programs in minority populations across the lifespan.

Continue to review and support submissions that address significant questions related to health disparities; conduct data collection and analysis of achievement, and disseminate information of exemplar studies from the program.

- b. The time line for this objective, including data collection and analysis of achievement, is FY 2002 to 2006, and continuing.
 - c. The date of achievement is FY 2006, with annual assessment of progress.

<u>Performance Measures</u> (suggested aggregate and specific measures):

- Number of key questions asked in research, that would scientifically enrich and extend the scope of NINR-funded science for decreasing health disparities;
- Number of studies funded that include more than 50% minority subjects;
- Number of studies funded that target issues specific to minority subjects;
- Number of studies funded addressing health disparity topics initiated by investigators;
- Others to be named.

Outcome Measures (suggested aggregate and specific measures):

- Number of key research questions answered in publications, that scientifically enrich and extend the scope of NINR-funded science for decreasing health disparities;
- Number of health behavior strategies demonstrated for decreasing health disparities in minority populations;
- Others to be named.

Rationale and Priority for Developing Minority Investigators and Institutions

The underrepresentation of racial/ethnic minority groups in biomedical and behavioral research in the United States has been underscored in many studies. NINR seeks to increase the number of minority investigators in nursing research through supporting research training opportunities at eligible institutions, through development of research centers focusing on minority health; through development of infrastructure for research partnerships involving minority institutions; through research career development of doctorally-prepared minority nurse investigators in tenured faculty positions at Traditionally Minority-Based Institutions and Minority Serving Institutions.

Priority II: Develop and expand the research infrastructure in schools of nursing and enhance the development of nurse researchers through training and career development opportunities.

An important strategy for eliminating health disparities is expanding the cadre of nurse researchers involved in minority health research, including minority nurse researchers. Nursing

research addresses the patients' and families' personal encounters with illness, disability, and treatment. Accordingly, nurse researchers are in a unique position to gain insights into the impact of health processes on health outcomes as well as the impact of personal behaviors and attitudes on health status.

<u>Objective II.1</u>: To enhance research infrastructure that will enable expansion of and emphasis on research relating to health disparities.

This objective is to expand NINR research infrastructure by supporting core centers for health disparities research at research-intensive institutions; exploratory centers at institutions that are developing programs in nursing research; and partnership centers at majority and minority institutions. Enhanced infrastructure will provide an opportunity for Centers to expand their capacity for minority health and health disparities research and to increase the cadre of minority nurse researchers.

Action Plan:

- a. This objective will be achieved via the sub-objectives (II.1.1-II.1.3) presented below.
- b. The timeline for this objective is from FY2002 to 2006, and continuing.
- c. Date of achievement is FY 2006, with annual assessment of progress.

<u>Performance Measures</u> (suggested aggregate and specific measures, applicable to all II.1 sub-objectives):

- Number of Core Centers funded;
- Number of Exploratory Centers funded;
- Number of Nursing Partnership Centers funded
- Number of pilot studies or other activities with a primary focus in health disparities at each Center;
- Number of minority investigators, and nursing students engaged in minority health and health disparities research;
- Others to be named.

Outcome Measures: (suggested aggregate and specific measures, applicable to all sub-objectives II.1)

- Number of R01s, R15s, K01s, etc., applications funded that were submitted from Center institutions related to health disparities research;
- Number of research questions related to health disparities addressed in scientific publications;
- Others to be named.

<u>Sub-Objective II.1.1</u>: To enhance research infrastructure that will enable expansion of and emphasis on research relating to health disparities - through the Core Centers (P30) (RFA NR-99-001).

NINR currently funds nine Core Centers, which focus on diverse areas of scientific inquiry consistent with the NINR mission. Four of these nine Core Centers funded by NINR have a primary emphasis on health disparities in minority populations. These four Centers are:

- Center for Preventing/Managing Chronic Illness in Vulnerable Populations (University of North Carolina Chapel Hill) addresses prevention and management of chronic illnesses in people with specific vulnerabilities such as poverty, minority status, rural residence, and developmental status;
- Center for Health Promotion and Risk Reduction in Special Populations (University of South Carolina) conducts interdisciplinary research in the science of health promotion and risk reduction in populations that may experience varying degrees of discrimination, subordination, and disenfranchisement;
- Center for Health Promotion and Disease Prevention Research for Underserved Populations (University of Texas at Austin) aims to reduce disparities in the health status of racial and minority populations such as women and children, people from impoverished backgrounds and those with chronic and disabling conditions; and
- Center for Vulnerable Population Research (University of California, Los Angeles) focuses on socially vulnerable individuals, including ethnic populations, women and children, the homeless, the elderly, and those exposed to hazardous conditions.

In FY2000 all nine Core Center grantees received administrative supplements to further develop their minority health or health disparities infrastructure, so an additional five Core Centers now include stronger components and activities related to research on health disparities or minority health. These five Core centers are:

- Gerontological Nursing Interventions Research Center (University of Iowa) supports intervention focused nursing research on the health of elders in care settings that include ethnic, urban, and rural populations, and training for collaborative research with minority and regional institutions;
- Center for Enhanced Quality of Life in Chronic Illness (University of Indiana) supports the development and testing of interventions to increase coping and health behaviors and quality of life in individuals with chronic conditions, for minority and non-minority populations;
- Center for Nursing Outcomes Research (University of Pennsylvania) provides the infrastructure to investigate variations in patient outcomes and apply them to the evaluation of health care of at-risk populations;
- Center for Women's Health Research (University of Washington) focuses on methods and measures appropriate for investigation of women of diverse sociocultural environments; and
- Center for Research in Chronic Disorders (University of Pittsburgh) focuses on
 outcomes of chronic disorders emphasizing quality of life and functional status, cognitive
 functioning, and adherence to interventions, expands the research base to include studies
 of comorbid conditions and socio-demographic characteristics on outcomes, within and
 across populations and disorders.

Action Plan:

- a. Continue to support NINR Core Centers (P30s) at research-intensive institutions. The Core Centers are conducting research in such areas of scientific inquiry as: prevention and management of chronic illness, improving quality of life, health promotion and disease prevention; gerontological intervention research, women's health, and outcomes research. Support research infrastructure development that will increase the conduct of health disparities research; conduct data collection and analysis of achievement, and disseminate information of exemplar studies from the program.
- b. The timeline for this objective, including data collection and analysis of achievement, is from FY 2002 to 2006, and continuing.
 - c. Date of expected achievement is FY 2006, with annual assessment of progress.

Performance Measures: Stated in Objective II.1.

Outcome Measures: Stated in Objective II.1

<u>Sub-Objective II.1.2</u>: To enhance research infrastructure that will enable expansion of and emphasis on research relating to health disparities - through Exploratory Centers (P20) (RFA:NR-01-001)

NINR currently funds nine Exploratory Centers, which focus on diverse areas of scientific inquiry consistent with the NINR mission. These Exploratory Centers are enhancing the research resources in these schools of nursing by facilitating the growth of research infrastructure to centralize resources and facilities in a specific area of inquiry that has a beginning base of research funding. Five of these nine Core Centers funded by NINR have a primary emphasis on health disparities in minority populations. These five Centers are:

- Center for Evidence-Based Practice in the Underserved (Columbia University) focuses on underserved populations (racial and ethnic minorities, women and children, persons of lower SES status, and persons with HIV/AIDS), and the utilization of information technology to support the building of evidence across research protocols and from clinical practice;
- Self-Management Interventions for Populations At-Risk (Yale University) conducts research to understand, develop, and test self-management interventions for individuals at high-risk for developing health problems;
- Center for Research on Chronic Health Conditions in Rural Areas (Montana State University) aims to better understand the specific challenges faced by persons with chronic illnesses who live in rural areas, and to address issues associated with the management of chronic illness within this rural context;
- Center on Injury Mechanisms and Related Responses (University of Arizona) focuses on advancing the scientific understanding about injury mechanisms and related responses by incorporating biological techniques and measures of different human physiologies into nursing and interdisciplinary studies with minority and non-minority participants; and
- Center for Research on Cardiovascular and Respiratory Health (University of Illinois at Chicago) seeks to advance nursing science related to the understanding of

cardiovascular and respiratory health, including extending the capacity for multi-ethnic community capacity-building research.

Action Plan:

- a. Continue to support NINR Exploratory Centers (P20s) at schools of nursing in institutions that are developing programs of research. The Exploratory Centers are conducting research in areas of scientific inquiry such as: prevention and management of biobehavioral research, the aging trajectory, symptom management, end of life care, and management of chronic illnesses. Support research infrastructure development that will increase the conduct of health disparities research; conduct data collection and analysis of achievement, and disseminate information of exemplar studies from the program
 - b. Timeline for this objective is FY 2002 to FY 2006.
 - c. Date of achievement is FY 2006, with annual assessment of progress..

Performance Measures: Stated in Objective II.1.

Outcome Measures: Stated in Objective II.1

<u>Sub-Objective II.1.3</u>: To enhance research infrastructure that will enable expansion of and emphasis on research related to health disparities - Nursing Partnership Centers on Health Disparities (P20) (RFA NR-02-004).

These Center grants will build on a successful pilot initiative that was funded by NINR and NCMHD in FY 2001. They will be targeted to schools of nursing at majority institutions that have existing research programs in health disparities and to schools of nursing at minority institutions that will enter in a partnership to expand the cadre of nurse researchers involved in minority health or health disparities research, to increase the number of research projects aimed at eliminating health disparities, and to enhance the training of minority nurse investigators; conduct data collection and analysis of partnerships; assess the mutual benefit to institutions.

Action Plan:

- a. Issue the RFA for this initiative, administer and monitor the review of applications, fund and monitor the grants; conduct program information and analysis of achievement.
- b. The timeline for this objective, including data collection and analysis of achievement is FY 2002 to FY 2007, and continuing.
- c. Date of achievement is anticipated FY 2007 based on program period beginning FY 2003, with annual assessment of progress.

Performance Measures: Stated in Objective II.1.

Outcome Measures: Stated in Objective II.1.

<u>Objective II.2</u>: To enhance mentorship, training and research opportunities for minority students and researchers.

It is anticipated that by training more nurses for the conduct of research, by increasing research opportunities and research mentoring for minority faculty and students, and increasing research partnering opportunities among majority and minority institutions, the volume of health disparities research will be increased.

Action Plan:

- a. This objective will be achieved via the sub-objectives (II.2.1 II.2.3), presented below.
- b. The timeline for this objective, including data collection and analysis of achievement, is FY2002 to FY 2006, and continuing.
 - c. Date of achievement is FY 2006, with annual assessment of progress.

<u>Performance Measures</u> (suggested aggregate and specific measures, and applicable to all II..2 sub-objectives):

- Number of applications funded for research supplements, career development awards, etc.;
- Number of minority students and scientists completing training;
- Number of funded proposals for research grants that were submitted by minority investigators;
- Number of applications funded as a result of minority targeted initiatives;
- Others to be named.

<u>Outcome Measures</u> (suggested aggregate and specific measures, and applicable to all II.2 sub-objectives):

- Number of research projects in health disparities funded;
- Number of students and faculty on research training trajectory;
- Number of students and faculty receiving independent funding after training experience;
- Others to be named.

<u>Sub-Objective II.2.1</u>: To enhance mentorship, training and research opportunities for minority researchers - through the Mentored Research Scientist Development Award for Minority Investigators (RFA:NR-00-002).

Action Plan:

- a. Continue to support the career development of doctorally-prepared nurse investigators in tenure positions at both majority and traditionally minority institutions; solicit, review, and support new research career development submissions; conduct data collection and analysis of achievement, and disseminate information of exemplar studies from the program.
- b. Time line for objective, including data collection and analysis of achievement, is FY 2002 to FY 2006, and continuing.

c. Date of achievement is FY 2006, with annual assessment of progress..

<u>Performance Measures</u>: Stated in Objective II.2.

Outcome Measures: Stated in Objective II.2.

<u>Sub-Objective II.2.2</u>: To enhance mentorship, training and research opportunities for minority students and researchers - through Research Supplements for Underrepresented Minorities (RSUM) (PA 01-079)

Action Plan:

- a. Continue to provide supplemental funding for minority students and faculty to work on research projects of NINR-funded investigators; solicit, review, and support new applications, from minority researchers and minority students interested in health disparities and nursing research; conduct data collection and analysis of achievement, and disseminate information of exemplar studies from the program.
- b. The timeline for this objective, including data collection and analysis of achievement, is FY 2002 to FY 2006, and continuing.
 - c. The expected date of achievement is FY 2006, with annual assessment of progress..

Performance Measures: Stated in Objective II.2.

Outcome Measures: Stated in Objective II.2.

<u>Sub-Objective II.2.3</u>: To enhance mentorship, training and research opportunities for minority students and researchers - through National Research Service Award Institutional Research Training Grants (T32) (NOT-NR-01-001)

Action Plan:

- a. Continue to support institutions with NINR T32 grants that have developed and implemented a specific plan to recruit and train underrepresented minorities into the training program; solicit, review and support new submissions that will develop and implement a specific plan to recruit and train underrepresented minorities; conduct data collection and analysis of achievement, and disseminate information of exemplar studies from the program.
- b. Time line for this objective, including data collection and analysis of achievement, is FY 2002 and FY 2006, and continuing.
 - c. Expected date of achievement is FY 2006, with annual assessment of progress.

Performance Measures: Stated in Objective II.2.

Outcome Measures: Stated in Objective II.2.

Priority III: Conduct community outreach with minority nurse communities for discussion of issues and input to identify health disparity issues.

A working relationship with informed members of minority nurse communities is of great importance to the success of NINR research and research infrastructure to decrease health disparities. These communities provide input to NINR regarding research needs and opportunity as well as training and career development needs.

<u>Objective III.1</u>: To enhance working relationships with minority nurse communities to discuss and assess issues crucial to eliminating health disparities.

Action Plan:

- a. To convene a conference every alternate year with the National Coalition of Ethnic Minority Nursing Associations (NCEMNA), and other professional and academic minority nurse associations, to discuss and assess issues important to reducing health disparities; conduct information assessment for input into NINR strategic planning..
 - b. Timeline for this objective is from FY 2002 to FY 2006.
- c. Date of expected achievement is FY 2002, and continuing, with assessment of achievement from each conference.

Performance Measures:

To be determined depending on the goals and objectives of each conference. These have not been decided at this time.

Outcome Measures:

To be derived from reports of accomplishment from the previous conference's (first one held in March 2000) action plans prepared by each attending organization.

NINR Health Disparities Budget (Dollars in Millions)

	FY 2002			FY 2003		
Institute /Center	Research	Infrastructure	Outreach	Research	Infrastructure	Outreach
NINR	\$24.40	\$6.80	\$0.00	\$25.90	\$7.30	\$0.00