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**Statement of the Coalition for the Advancement of Health Through Behavioral and Social Science Research (CAHT-BSSR) on FY 2009 Funding for the National Institutes of Health submitted for the record to the Subcommittee on Labor, Health and Human Services, Education and Related Agencies, Committee on Appropriations, U.S. House of Representatives  
The Honorable David Obey, Chair, March 31, 2008**

**Mr. Chairman and Members of the Subcommittee**, the Coalition for the Advancement of Health Through Behavioral and Social Science Research (CAHT-BSSR) appreciates and welcomes the opportunity to comment on the Fiscal Year (FY) 2009 appropriations for the National Institutes of Health (NIH). CAHT-BSSR includes 12 professional organizations, scientific societies, coalitions, and research institutions concerned with the promotion of and funding for research in the social and behavioral sciences. Collectively, we represent more than 120 professional associations, scientific societies, universities, and research institutions.

The behavioral and social sciences regularly make important contributions to the well-being of this nation. Due in large part to the behavioral and social science research sponsored by the NIH, we are now aware of the enormous contribution behavior makes to our health. At a time when genetic control over diseases is tantalizingly close but not yet possible, knowledge of the behavioral influences on health is a crucial component in the nation's battles against the leading causes of morbidity and mortality: obesity, heart disease, cancer, AIDS, diabetes, age-related illnesses, accidents, substance abuse, and mental illness. As a result of the strong Congressional commitment to the NIH in years past, our knowledge of the social and behavioral factors surrounding chronic disease health outcomes is steadily increasing. The NIH's behavioral and social science portfolio has emphasized the development of effective and sustainable interventions and prevention programs targeting those very illnesses that are the greatest threats to our health, but the work is just beginning.

Unfortunately, the President's request over the past few years has not allowed us to fully reap the research opportunities that the doubling campaign have made available. In recent years, NIH has been unable to keep pace with the biomedical rate of inflation. The agency's purchasing power has decreased by more than 13 percent since FY 2003. **To fulfill the extraordinary scientific promise of biomedical, behavioral and social science research, the Coalition joins the Ad Hoc Group for Medical Research in respectfully requesting a FY 2008 appropriation of \$31.1 billion for the NIH.** This level of funding will provide adequate resources to regain the momentum of set in place by the completed campaign to double the nation's investment in the promising research supported and conducted by the NIH.

The grandest challenge we face is understanding the brain, behavior, and society -- from global warming to responding to short term pleasures; from self destructive behavior, such as addiction, to life style factors that determine the quality of life, infant mortality rate and longevity. Nearly 125 million Americans are living with one or more chronic conditions, like heart disease, cancer, diabetes, kidney disease, arthritis, asthma, mental illness and Alzheimer's disease. The Centers for Medicare and Medicaid Services (CMS) recently reported that health care spending in the United States rose to \$1.6 trillion in 2002, up from \$1.4 trillion in 2001 and \$1.3 trillion in 2000. Health expenditures per person averaged \$5,440 in 2002, up from \$5,021 in 2001 and \$4,670 in 2000. Today, it is even more.

Significant factors driving this increase are the aging of the U.S. population, and the rapid rise in chronic diseases, many caused or exacerbated by behavioral factors: for example, obesity, caused by sedentary behavior and poor diet; addictions and resulting health problems caused by tobacco and other drug use.

Behavioral and social sciences research supported by NIH is increasing our knowledge about the factors that underlie positive and harmful behaviors, and the context in which those behaviors occur. NIH supports behavioral and social science research throughout most of its 27 institutes and centers. Numerous reports by the National Academy of Sciences (e.g. *The Aging Mind*, *New Horizons in Health: An Integrative Approach*, and *Health and Behavior*) have presented cutting edge research agendas and made eloquent cases for the applicability of the social and behavioral scientific disciplines to the myriad, complex problems of prevention, treatment and cure of diseases as well as the enhancement of quality of life.

**The NIH Office of Behavioral and Social Sciences Research (OBSSR)**, authorized by Congress in the NIH Revitalization Act of 1993 and established in 1995, purpose is to serve a convening and coordinating role among the institutes and centers at NIH. OBSSR focuses on cross-cutting behavioral and social research issues (e.g. “Long-term Maintenance of Behavior Change”) using its modest budget to seed cross-institute research initiatives. OBSSR has spurred cutting edge research in areas such as measures of community health, socioeconomic status, and new methodology development.

OBSSR’s recently released strategic plan emphasizes a Systems Science approach to health. In FY 2009, the Office is planning to support an initiative on the development and application of systems integrative science approaches to study how multiple factors – behavioral, social, and biological – interact with each other and change over time to influence health. It is the intent of the Office that these approaches can be incorporated into two additional programs that it plans to support in FY 2009: 1) research to improve adherence to treatments and 2) research to reduce or eliminate health disparities. The areas represent two persistent public health problems that have been resistant to solution. OBSSR plans to issue a new Funding Opportunity Announcements (FOA), Using Systems Science Methodologies to Protect and Improve Population Health, which will call for applicants to use one or more specific system science methodologies to address one or more specific opportunities to protect and improve population health. The initiative follows OBSSR’s success in attracting large global audiences for its webcasts of its 2007 Symposia Series on Systems Science and Health, and the 2007 Conference on Complex Approaches to Population Health.

Another strategy for OBSSR for FY 2009 consists of continuing to fund transdisciplinary research on prevention, policy, and health care, three broad areas influencing health disparities. The Office also intends to continue to fund multi-year programs which support its mission and goals, including community-based participatory research (CBPR) with new CBPR programs which apply intervention research methods to disease prevention and health promotion while targeting medically-served areas. Health literacy research is another area that the OBSSR plans to provide continued support, along with support for the NIH Blueprint for Neuroscience, its annual summer training institutes (behavioral interventions in randomized clinical trials and social work research methods); add new training programs in genetics for behavioral and social scientists, and in integrative systems science methodology. A second annual trans-NIH conference on dissemination

and implementation science is also being planned by the Office. The OBSSR also plans to initiate a program to support research on how interactions among social, behavioral, and genetic factors influence health. **CAHT-BSSR supports an appropriation of \$28.4 million for OBSSR.**

As highlighted by NIH Director Elias Zerhouni on the occasion of OBSSR's 10<sup>th</sup> anniversary in June 2006: *“the OBSSR has been a tremendous asset to NIH throughout its first ten years . . .we are faced with an enormous and evolving national burden of disease and disability, much of which has roots in personal behavior or socioeconomic influences. The need for behavioral and social research and intervention has never been greater, and its impact has never been clearer. We need but look at recent decreases in rates of cancer, largely due to dramatic decreases in tobacco use. We can point to a remarkable demonstration of the pronounced benefits of diet and exercise – more effective than drug therapy – in preventing the onset of type 2 diabetes among high-risk individuals. These are but two among many shining examples of the widespread benefits to public health realized through our investment in basic and applied behavioral and social science research, so critical to our understanding of health and disease.”*

The following research *Achievements Of The Social And Behavioral Sciences: Improving Health at Home and Abroad* compiled by the OBSSR research further illustrate why behavioral and social sciences research is a critical component in generating scientific knowledge to prevent, treat or cure illnesses or enhance health in a broader context.

**Reducing Tobacco Use** -- The biggest public health success story of the 20<sup>th</sup> century may very well be the reduction in tobacco use and related diseases. Behavioral and social science research has demonstrated successes in preventing youth uptake of smoking as well as in developing powerful behavioral and pharmacological interventions that help smokers quit. As a result, in 2006, overall cancer death rates dropped for the first time in a century, driven largely by the dramatic 50 percent reduction in male smoking from 47 percent in the 1960's to less than 23 percent today. While smoking still kills more women than breast cancer, rates are slowing as women quit and fewer adolescents start. Without this research, 40 million Americans might still be smoking today with about 12 million additional premature deaths and billions of dollars in excess cost.

**Improving Mental Health** -- Over the past 30 years, our understanding of the bio-behavioral mechanisms and treatment of mental disorders has advanced dramatically. Effective and cost-effective therapies that combine behavioral and pharmacological treatments are now available for treatment of depression, anxiety disorders, and the abuse of nicotine, alcohol and other drugs.

**Understanding Mind/Body Interactions** -- It is now widely recognized that stress plays an important role in heart disease, decreased immune system functioning, and premature aging. In addition, there is strong evidence that stress and social involvement are related to the progression of cancer and vice versa. In addition, other research has demonstrated that cognitions (attitudes, beliefs values), social support, prayer, and meditation can reduce psychological stress and contribute to positive health outcomes.

**Preventing Diabetes** -- For many years, scientists believed that medication was the only tool to prevent and treat diabetes. The Diabetes Prevention Program demonstrated that lifestyle interventions – modest weight loss and regular physical activity – can reduce the risk of developing type 2 diabetes

in high-risk adults by 58 percent, compared to 31 percent reduction with diabetes medication. These findings led to "Small Steps, Big Rewards", the first national diabetes prevention campaign.

**Reducing Sudden Infant Death Syndrome (SIDS)** -- SIDS is the leading cause of death among infants who are 1 month to 1 year old, and claims the lives of about 2,500 infants each year in the United States. One of the leading risk factors for SIDS is entirely behavioral – stomach sleeping. Behavioral and social science research on communication, diffusion, and behavior change led to the nationwide *Back to Sleep Campaign* which promotes infant back sleeping to prevent SIDS. Since the campaign was launched in 1994, back sleeping increased from 26.9 percent to 72.8 percent and SIDS has declined by more than 50 percent.

**Reducing the Health Burden of Poverty:** Discoveries in the behavioral and social sciences can inform life-saving environmental and policy changes. One example is the PROGRESA study (Programa Nacional de Educacion, Salud, y Alimentacion), an anti-poverty program begun in 1997 that provides aid to 2.6 million poor Mexican families. This study is comprised of an impressive collaboration across disciplines including biomedical, social/behavioral sciences, economics, epidemiology, and demography. The results have been dramatic, showing that the trajectory of health outcomes associated with poverty may be altered within a generation. The PROGRESA intervention was associated with better growth and lower rates of anemia in low-income, rural infants and children in Mexico. This large-scale, real-world study has demonstrated that antipoverty programs that combine education, health, and nutrition interventions can improve the capacity of families to pull themselves out of poverty and adverse health effects that often ensnare generations.

**Slowing the HIV/AIDS Epidemic** -- Although still devastating, HIV/AIDS is no longer the epidemic it once was in the U.S. thanks to research breakthroughs in the biological, behavioral, and social sciences. Mother-to-child-transmission of HIV has fallen dramatically due to the widespread use of new antiretroviral drugs during pregnancy and labor. Socio-behavioral studies of risky behavior have improved our ability to prevent risk through improved screening and adherence to treatment. Large scale educational campaigns have been delivered effectively. Lessons learned are being provided to other countries. The impact of these innovations is dramatic. Previously, 1500 to 1800 babies in the United States were born infected with HIV. Today, fewer than 50 HIV-infected babies are born each year. It is estimated that 16,000-20,000 lives have been saved by preventing mother-to-child transmission of HIV in the U.S. Globally, 280,000 cases of HIV infection in children could be averted each year using this effective psychosocial and drug therapy combination.

**Increasing Life Expectancy and Quality of Life** -- In the last century, life expectancy has extended by an astounding amount—from 47 years in 1900 to 77.5 years in 2003. While medical advances increasingly contribute to living longer and healthier lives, the vast majority of improvements in the quality of life have come from changes in our social, economic, and physical environments.

**Slowing the Cognitive Effects of Aging** -- Recent research has led to dramatic advances in knowledge of the psychosocial determinants of premature aging and effective interventions to slow degeneration and improve cognitive fitness and memory as we age.

**Understanding the Links Between Social and Cultural Factors and Health:** Social scientists have made significant strides in shedding light on the basic social and cultural structures and processes that

influence health. Social and cultural factors influence health by affecting exposure and vulnerability to disease, risk-taking behaviors, the effectiveness of health promotion efforts, and access to, availability of, and quality of health care. Social and cultural factors also play a role in shaping perceptions of and responses to health problems and the impact of poor health on individuals' lives and well-being. In addition, such factors contribute to understanding societal and population processes such as current and changing rates of morbidity, survival, and mortality.

**Improving Health Literacy:** Health literacy is defined as the “degree to which individuals have the capacity to obtain, process and understand basic health information and services needed to make appropriate health decisions.” In order for health care and public health systems to serve individuals and populations more effectively and to reduce health disparities in the population, it is critical to understand the nature of health literacy and its relationship to healthy behaviors, illness prevention and treatment, chronic disease management, health disparities, risk assessment of environmental factors, and health outcomes. Behavioral and social scientists have made great strides in improving knowledge of interventions that can strengthen health literacy and improve the positive health impacts of communications between healthcare and public health professionals.

Finally, CAHT-BSSR applauds the NIH’s recognition that the “scientific challenges in developing an integrated science of behavior change are daunting.” The recent designation of the “**Science of Behavior Change**” in the third cohort of the Common Fund Programs is to be commended. We agree with the goals of this Roadmap Pilot to “establish the groundwork for a unified science of behavior change that capitalizes on both the emerging basic science and the progress already made in the design of behavioral interventions in specific disease areas. By focusing basic research on the initiation, personalization, and maintenance of behavior change, and by integrating work across disciplines, this Roadmap effort and subsequent trans-NIH activity could lead to an improved understanding of the underlying principles of behavior change. This should drive a transformative increase in the efficacy, effectiveness, and (cost) efficiency of many behavioral interventions.”

CAHT-BSSR would be pleased to provide any additional information on these issues. We have attached a list of coalition member societies to the end of the testimony. We thank the Subcommittee for its generous support of the National Institutes of Health and for the opportunity to present our views.

#### CAHT-BSSR

American Educational Research Association  
American Psychological Association  
American Sociological Association  
Association of Population Centers  
Center for the Advancement of Health  
Consortium of Social Science Associations

Gerontological Society of America  
Institute for the Advancement of Social  
Work Research  
National Association of Social Workers  
Population Association of America  
Society for Research in Child Development  
The Alan Guttmacher Institute (AGI).