



# The Annual Minority Health and Health Disparities Report : A Tool for Assessing Minority Health and Health Disparities Related Research and Training Portfolio at NIH Institute Level

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## Introduction

Annually, all Institutes within the National Institutes of Health (NIH) must submit a report of their research activities and funding for addressing the perplexing and complex issues of health disparities and minority health status in the United States (PL 106-525). The report is commonly referred to as the Minority Health and Health Disparities (MHHD) Report. The report focuses mainly on Institute level funding of MHHD related research and training activities; but, additionally, the NCI CRCHD conducts annual programmatic portfolio analysis of the funded activities.

NIH defines **Minority Health Research (MH)** as basic, clinical, and social sciences studies that focus on identifying, understanding, preventing, diagnosing and treating such conditions as diseases and disorders, including mental health and substance abuse, that are unique to, more serious in, or more prevalent in racial and ethnic minorities (i.e., African Americans, Asian Americans, Hawaiian Islanders, Hispanic/Latino American, Native Americans/Alaska Natives, Pacific Islanders) for which the factors of medical risks or types of intervention may be different for such population groups.

**Health Disparities Research (HD)** is defined as basic, clinical and social sciences studies that focus on identifying, understanding, preventing, diagnosing and treating health conditions such as diseases, disorders, and such other conditions that are unique to, more serious, or more prevalent in subpopulations in socioeconomically disadvantaged (i.e., low education level, lives in poverty) and medically underserved, rural, and urban communities. Overall, health disparities research includes three components: 1) Minority health research and related activities; 2) Rural health research and related activities; and, 3) Research and other activities related to the socioeconomically disadvantaged in the urban setting.

At the National Cancer Institute (NCI) the data for such report is based on information submitted by Program Officials at each component Division, Office and Center (DOC).

## Purpose

The report informs the Director of the Center to Reduce Cancer Health Disparities (CRCHD) and NCI leadership regarding health disparities research activities and funding at the various DOC in the fiscal year (e.g., FY 2014), identify gaps in NCI's MHHD portfolio, as well as make recommendations for enhancing the reporting process and utility of the information generated for informed decision-making at the NCI. An analysis of the trend of funding and activities is also presented for FY 2003 through FY 2014. This presentation is to illustrate how NCI uses the MHHD Report for MHHD related portfolio analysis.

## Methods

In 2004, the guidelines and definitions for coding NIH research activities on minority health and health disparities were developed and finalized by the Trans-NIH Committee on Minority Health and Health Disparities Research Definitions and Application Methodology, which was established in FY 2002 at the request of the then Director of NIH. The Guidelines for Minority Health and Health Disparities (MHHD) Reporting describe reporting requirements for two reports—the Minority Health Report and the Health Disparities Report.

Based on these guidelines and using a DOC-specific spreadsheet generated by the Office of Budget and Finance (OBF), Program Officials code and report pertinent data about their individual grants and contracts funded in the fiscal year (Figure 1). The coding indicates percentage representation / inclusion of various racial and ethnic population groups as well as rural, low-SES underserved, and LGBT populations in each grant or contract activity; or, where appropriate, the percent relevance of the research or contract activity for various racial and ethnic population groups. Center to Reduce Cancer Health Disparities (CRCHD) applies computerized formulas to generate the amount of funding expended in various categories of research on minority health and health disparities, based on the information provided by the program officials.

Projects meeting or exceeding the 25 percent minority populations' inclusion threshold established by the Trans-NIH Committee are included in the final annual report. Generally, expenditures on *minority health* are a subset of the funding for *health disparities research* – according to the MHHD reporting guidelines.

Fig. 1 Annual NCI MHHD Portfolio Analysis and Reporting Process

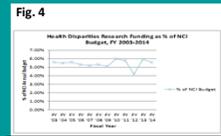
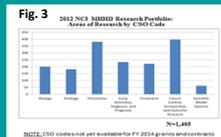
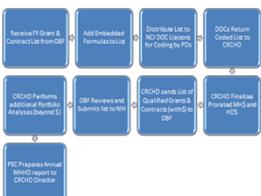


Table 1

Table 1: 2014 NCI MH and HD Research Funding, by DOC. A table with columns for DOC, MH, and HD funding amounts.

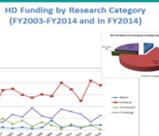
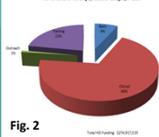


Table 2a

Table 2a: 2014 NCI MH and HD Research Funding, by DOC. A detailed table showing funding by DOC, MH, and HD.

Table 2b

Table 2b: 2014 NCI Minority Health and Health Disparities Research Grants, Research Areas by Division. A table showing research areas by division.

Table 3

Table 3: 2014 NCI Minority Health and Health Disparities Research Grants, Distribution by Race/Ethnicity and Rural/low SES. A table showing the distribution of research grants by race/ethnicity and rural/low SES status.

## Findings (continued)

**Cancer Types and Areas of Research**  
The most studied cancer types are breast; followed by lung, colorectal, cervical and prostate cancer. Using the internationally accepted Common Scientific Outline (CSO) codes, majority of the projects funded in 2012 (the last year for which the projects have been coded by DEA/RAEB) were on cancer control, survivorship, and outcomes research; followed by cancer prevention; early detection, diagnosis, and prognosis; and treatment. The biology, etiology and scientific model systems for basic research into cancer health disparities were relatively less studied (Figure 3).

**Training**  
Over 70 percent of CRCHD funds (or approximately \$61.2 million dollars) were spent on training of underrepresented students and biomedical researchers to promote diversity in the biomedical workforce. Center for Cancer Research (CCR) and DCTD were the only other component of NCI with reported funding for training in FY 2014. (Table 2 a)  
Uniquely, projects coded as "Training" could be on any of the three types/categories of research – clinical, basic, or community-based/ outreach. However, the projects coded as "Training" were not further broken down into types of research in the MHHD Report. A review of the research topics or project titles suggests that majority of the projects coded as training tended to be basic research.

**Population Groups**  
Currently, NCI is funding cancer related health disparities research in all population groups, mostly through extramural programs – except in the LGBT population which was recently added to the list of "health disparities populations" by HHS. Most of the projects are in Black or African American population (621 or 53.1 percent); followed by White/ Caucasian population (383 or 32.7 percent); American Indian/ Alaska Natives (179 or 15.3 percent); Native Hawaiian and Pacific Islanders (120 or 10.3 percent); 262 or 22.4 percent in persons of Unknown race; and 33 projects (2.8 percent) in rural/ low SES White/Caucasian populations (Table 3). Almost half of the projects (573 or 49.0 percent) included the Hispanic/ Latino population.

**Trends Analysis**  
Even though there seems to have been an increase in the number of health disparities research projects at NCI DOCs, funding for health disparities research and training has remained relatively flat since FY 2003 at an average of about \$250 million dollars (or approximately 5.4 percent of total NCI budget) per fiscal year – except for the \$51 million-dollar (or 21 percent) increase in FY 2010 over FY 2009 level. (Figure 4)  
In terms of types or categories of research, significantly more than half of funds spent at NCI between FY 2003 and FY 2014 were spent on clinical research; followed by training and outreach (Figure 4). Consistently, basic research into the biological aspects of cancer health disparities was the least funded area of health disparities research portfolio at the NCI. (Figure 5)

## Conclusions

It is believed that in-depth portfolio analyses based on the information in the annual MHHD report help identify areas of research in which NCI may need to intensify its efforts and funding in order to accomplish its strategic goal to eliminate cancer health disparities in the United States. Data submitted by the Divisions, Offices and Centers (DOCs) within NCI offer insight into the pattern of funding and programmatic activities within the Institute to address cancer health disparities. The FY 2014 Minority Health and Health Disparities (MHHD) data indicated that most of NCI was engaged in some aspect of cancer health disparities research in all population groups known to have disproportionate burden of cancer. Research activities were concentrated mostly in clinical research, with increasing emphasis on training. Obviously, more needs to be done in basic research and community outreach.  
An examination of the trends in funding and programmatic activities to address cancer health disparities between FY 2003 and FY 2014 showed that the level of funding remained relatively flat over the last several years. This reflects the NCI's continued commitment to reduce and ultimately eliminate cancer health disparities – especially at a time of national budgetary constraints. However, much remains to be done if this goal is to be realized. Reliability of the information presented in this report is dependent on the accuracy and reliability of the sources of the data.

## Findings

In FY 2014, the NCI funded a total of 1170 projects (which are eligible for inclusion in this report) and spent approximately \$274.9 million dollars (or 5.6 percent of its total non-ARRA annual budget) on health disparities research and related training activities. Of this amount, approximately \$260.6 million (or over 70 percent) was spent on minority health related research – expenditures on minority health are a subset of the funding for health disparities research. The level of funding and research activities varies between the component DOCs (Table 1) and by type / category of research (Tables 2a and 2b).

**Divisions, Offices and Centers**  
While most of NCI DOCs reported some activity in health disparities and minority health, others (including CCT and OCE) did not report any programmatic activity or funding in FY 2014. Majority of the funds was spent through extramural programs; intramural programs (i.e., CCR and DCEG) spent only \$17.4 million (or 6 percent of total) on health disparities related research. Of the 1170 projects funded, 90.5 percent (or 1059 projects) were funded through extramural programs (Table 2b).

**Research Categories**  
In FY 2014, as in the past 3 years, increasing number of NCI DOCs reported some health disparities research related programmatic activities. More than two-thirds (69 percent) of the funds expended on health disparities research by the DOCs was spent on clinical research; followed by Training with 22 percent (Figure 2). The least amount of health disparities research related activities were in basic research and outreach – with approximately 8 percent (or \$20.7 million dollars) on basic research and 1 percent (or \$2.5 million dollars) on Outreach, respectively (Table 2a, and Figure 2). The Center to Reduce Cancer Health Disparities (CRCHD) was the only component of NCI with activities reported in all areas of research and training; the other DOCs reported activities either in 1 or 2 research categories (Tables 2 a, b) – which seem to reflect the mission/ research focus of the DOCs.

## Recommendations

The current format for reporting on programs to address cancer health disparities should be retained – it facilitates trends analyses and comparability of data from year to year; and, NCI leadership should continue to encourage the collection and reporting of accurate and valid data on race and ethnicity in all its programs