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NATIONAL INSTITUTES OF HEALTH

Research Priority Setting, and Funding Allocations across Selected Diseases and Conditions

GAO Highlights

Highlights of GAO-14-246, a report to the Chairman, Subcommittee on Labor, Health and Human Services, Education, and Related Agencies, Committee on Appropriations, House of Representatives

Why GAO Did This Study

NIH is the nation's leader in sponsoring and conducting biomedical research. In fiscal year 2012, NIH had a budget of almost $31 billion, over 80 percent of which was used to fund extramural research that supports scientists and research personnel working at universities, medical schools, and other research institutions. Twenty-four of NIH's 27 ICs that support extramural research are focused on particular diseases, conditions, or research areas, and these ICs have their own appropriations. Decisions about which projects are funded are made by these individual ICs. NIH reports funding for 235 research, condition, and disease categories in RCDC.

GAO was asked to review NIH funding related to leading diseases and health conditions. GAO examined (1) how research priorities are set at NIH, and (2) NIH allocations of research funding across selected diseases and conditions. For five ICs—National Cancer Institute; National Heart, Lung, and Blood Institute; National Institute of Allergy and Infectious Diseases; National Institute of Diabetes and Digestive and Kidney Diseases; and National Institute of General Medical Sciences—GAO reviewed documents and interviewed IC officials about priority setting. GAO reviewed NIH fiscal year 2012 funding reported by RCDC for 40 research, condition, and disease categories related to the leading causes of death in the United States and globally, and the most prevalent chronic diseases and conditions in the United States.

View GAO-14-246. For more information, contact Linda T. Kohn at (202) 512-7114 or kohnl@gao.gov.

What GAO Found

Individual institutes and centers (ICs) at the National Institutes of Health (NIH) set their own research priorities, and GAO found that the five selected ICs—awarding the largest amount of research funding—that it reviewed did so considering similar factors and using various priority-setting approaches. Agency officials stated that the ICs' mission and appropriations inform priority-setting approaches. Some IC officials noted that because the costs of potential research projects generally exceed the available appropriation, the ICs must prioritize among research projects. In priority setting, IC officials reported taking into consideration scientific needs and opportunities, gaps in funded research, the burden of disease in a population, and public health need, such as an emerging public health threat like influenza that needs to be addressed. While each IC GAO examined had its own approach for setting priorities, they all considered the input of stakeholders, including the scientific community, and used some similar strategies. All five ICs developed strategic plans, though the process varied by IC. Some ICs also used annual planning activities in various forms, which then guided funding opportunity announcements. All five ICs also conducted reviews and evaluations of their research portfolios to ensure that their priorities align with scientific opportunities, research gaps, and emerging science. In addition to these efforts at the IC level, agency officials told GAO that the NIH Office of the Director provides leadership and coordinates priority setting activities, especially for those activities that involve multiple ICs.

NIH reported funding levels that varied widely for the 40 different Research, Condition, and Disease Categorization system (RCDC) categories GAO examined that correspond to the leading causes of death and the most prevalent chronic conditions. For example, NIH reported actual fiscal year 2012 funding levels ranging from $13 million for projects in the fibromyalgia category to more than $5.6 billion for projects in the cancer category. Although these categories are part of NIH's RCDC, which is used to categorize the research activities across the agency, agency officials said that the system cannot estimate a total, non-duplicated amount of funding that is specific to a given disease or condition. This is because RCDC categories are neither mutually exclusive nor exhaustive. For example, projects may be included in multiple RCDC categories, some categories are related to each other and therefore some categories may also be included within another, and funding for all diseases is not captured in the system. While RCDC is NIH's official system for reporting research funding across the ICs, two of the five ICs that GAO reviewed—the National Cancer Institute (NCI) and the National Institute of Allergy and Infectious Diseases—had their own systems for tracking their funding, which allowed them to provide more detailed information than that available from RCDC. For example, NCI has a publicly available website that specifies funding for more than 40 specific cancer types as well as almost 50 research topics that are not disease-specific. Funding for individual projects may be separated for specific studies into those cancer types. According to officials, the system enhances NCI's ability to plan and monitor its scientific investment.

The Department of Health and Human Services provided technical comments, which GAO incorporated as appropriate.