Why GAO Did This Study

The American Recovery and Reinvestment Act of 2009 (Recovery Act) included $8.2 billion in funding for the National Institutes of Health (NIH) to be used to support additional scientific research—including extramural grants at universities and other research institutions. In 2009, the Acting Director of NIH testified that each extramural grant awarded with Recovery Act funding had the potential of supporting employment—full- or part-time scientific jobs—in addition to other impacts, such as contributing to advances in improving public health.

GAO was asked to examine the use of Recovery Act funds by NIH grantees. Specifically, GAO addresses the information available from NIH and its grantees about the extent to which NIH Recovery Act funding (1) supported jobs, and (2) had other impacts. To obtain information on job impacts, GAO reviewed a database containing information NIH Recovery Act grantees reported to the national data collection system and interviewed NIH officials.

To obtain more specific jobs information about individual grants, GAO administered a Web-based data collection instrument to 50 selected principal investigators who direct research at grantee institutions—10 principal investigators at each of five selected grantee institutions. The selected principal investigators had generally received awards of $500,000 or more. To obtain information on other Recovery Act impacts, GAO used information from the data collection instrument and interviewed NIH officials.

What GAO Found

Data reported by all of NIH’s Recovery Act grantees institutions to the national data collection system at www.federalreporting.gov and available to NIH indicate that the number of full-time equivalent (FTEs) jobs supported by NIH Recovery Act funds increased from December 2009 through September 2010, and then remained steady from December 2010 through June 2011—the most recent quarter for which data are available. The number of FTEs supported by NIH Recovery Act funds increased from about 12,000 in the reporting quarter ending December 2009 to about 21,000 in the quarter ending in June 2011. The 50 selected principal investigators who direct research at the grantee institutions in GAO’s review provided additional information explaining how the Recovery Act funding supported FTEs. Nearly one-third of the selected principal investigators reported that the NIH Recovery Act funding they received supported new positions, and about half of the principal investigators reported that the funding they received allowed them to avoid reductions in jobs or avoid a reduction in the number of hours worked by current employees. The selected principal investigators also reported that the Recovery Act funding they received primarily supported scientists and other faculty.

NIH officials we interviewed reported that they receive some information from principal investigators about the other impacts of NIH-funded research, such as preliminary research results included in annual progress reports. NIH is also participating in the Star Metrics program—a multiagency venture to monitor the scientific, social, and economic impacts of federally funded science—which NIH officials expect could provide more information about these impacts. While Star Metrics is currently developing an approach to capture information about the other impacts of NIH grant funding, there is no expected completion date for reporting this information. In response to GAO’s data collection instrument, selected principal investigators who direct research at the grantee institutions in GAO’s review reported that the use of Recovery Act funds resulted in purchases of research supplies, equipment, laboratory testing services, and scientific training of health care professionals. The majority of the 50 selected principal investigators in GAO’s review also reported preliminary results from their Recovery Act-funded research that could contribute to future scientific developments in prevention and early detection of disease, improvements in medical therapies, and improved research capabilities. The principal investigators in GAO’s review and NIH officials GAO interviewed reported that they track the scientific impact of NIH research—including the impact of research funded through the Recovery Act—primarily through peer-reviewed publications, but also through other metrics such as the filing and approval of patent applications. According to NIH officials, when a sufficiently large body of research results has accumulated, NIH plans to prepare reports—similar to its existing publicly available Investment Reports—that will highlight the impact of its Recovery Act-funded research.

The Department of Health and Human Services provided technical comments on a draft of this report, which GAO incorporated as appropriate.