

UPDATE: National Institutes of Health ARRA Challenge Grants on Comparative Effectiveness Research for HSR, March 2010

Overview

On September 30, 2009, President Obama announced grant awards totaling \$5 billion in funding for the National Institutes of Health (NIH) through the American Recovery and Reinvestment Act of 2009 (ARRA). The funding includes more than \$380 million in awards for Challenge Grants, projects supporting research on topic areas that address scientific and health research challenges in biomedical and behavioral research.¹ Recovery Act funds allocated to NIH specifically for comparative effectiveness research (CER) totaled \$400 million. These funds may also support CER focused Challenge Grants.² CER is one of 15 high-priority Challenge Topics.

A recent analysis of the Challenge Grants focused on CER was conducted by AcademyHealth under the auspices of the Health Services Research Projects in Progress (HSRProj) program. A keyword search for 'comparative effectiveness' in the NIH RePORTER database shows that 76 Challenge Grants mentioning CER can also be classified as health services research (HSR). These projects represent more than \$35 million in new investment in HSR.³

HSRProj is funded by the National Library of Medicine (NLM) and the database is maintained by AcademyHealth and the Cecil G. Sheps Center for Health Services Research at the University of North Carolina, Chapel Hill. Since the program's inception in 1991, HSRProj staff have developed and sustained relationships with major funders and HSR investigators including federal and state agencies, foundations, private organizations, and universities. Projects included in HSRProj are either provided by the funder or extracted from other reputable sources, such as the NIH's RePORT⁴ Expenditures and Report (RePORTER) database, which is an online system that provides public access to information on federal funding activities.⁵

Findings

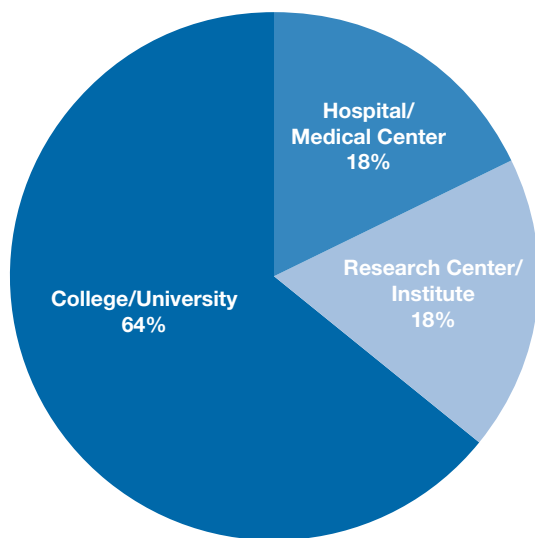
At the time of this analysis, the RePORTER database listed 841⁶ Challenge Grants funded by NIH under ARRA. Of these, 116 projects specifically focus on CER topics, 76 of which can be classified as HSR. These 76 projects represent 9 percent of the ARRA Challenge Grants and also account for 9 percent of all *funding* awarded to projects under the Challenge Grant program (Figure 1). In total, NIH ARRA funding for Challenge Grants focused on HSR-related CER represents more than \$35.4 million in new investment in the field.

Figure 1. NIH ARRA Challenge Grant Awards on HSR-Related CER, by Institute, November 2009

NIH Center/Institute	Number of Challenge Grants with Keywords "Comparative Effectiveness"	Number of HSR CER Challenge Grants	Funding (\$)
National Cancer Institute (NCI)	15	13	\$ 5,765,520
National Center for Complementary and Alternative Medicine (NCCAM)	4	2	\$ 995,326
National Center for Research Resources (NCRR)	5	4	\$ 1,915,783
National Center on Minority Health and Health Disparities (NCMHD)	9	7	\$ 3,316,135
National Eye Institute (NEI)	2	1	\$ 454,142
National Heart, Lung and Blood Institute (NHLBI)	13	9	\$ 4,446,708
National Institute of Allergy and Infectious Diseases (NIAID)	3	2	\$ 998,967
National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)	5	3	\$ 1,497,605
National Institute of Biomedical Imaging and Bioengineering (NIBIB)	6	3	\$ 1,488,120
National Institute of Child Health and Human Development (NICHD)	2	0	\$ 0
National Institute of Dental and Craniofacial Research (NIDCR)	4	4	\$ 1,882,347
National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)	5	2	\$ 986,399
National Institute of Mental Health (NIMH)	5	4	\$ 1,678,552
National Institute of Neurological Disorders and Stroke (NINDS)	6	3	\$ 1,494,999
National Institute of Nursing Research (NINR)	1	1	\$ 496,230
National Institute on Aging (NIA)	15	5	\$ 2,098,357
National Institute on Alcohol Abuse and Alcoholism (NIAAA)	6	6	\$ 2,609,113
National Institute on Drug Abuse (NIDA)	8	5	\$ 2,417,214
National Library of Medicine (NLM)	2	2	\$ 897,606
Total	116	76	\$ 35,439,123

Source: National Institutes of Health Research Online Portfolio Tool Expenditures and Report (RePORTER). Data shown are from records retrieved from RePORTER on November 13, 2009.

Figure 2. Distribution of Challenge Grant Funding for HSR Projects Across Performing Organizations



Appendix A lists all of the Challenge Grants related to CER that are classified as HSR. Projects are organized alphabetically within each Institute by principal investigator's last name.

Distribution of Funds by Institute

The National Cancer Institute (NCI), National Heart, Lung, and Blood Institute (NHLBI), and the National Center on Minority Health and Health Disparities (NCMHD) fund the greatest number and largest per-Institute amounts of HSR-related CER Challenge Grants. The NLM has provided nearly \$1 million for these types of projects.

Distribution of Awards by Performing Research Organization

HSR-related CER Challenge Grants awarded under ARRA have been allocated to more than 50 different research organizations, including universities, hospitals, medical centers, and research institutes across the country. Universities received 66 percent of HSR-related CER Challenge Grants and 64 percent of Challenge Grant funding (Figure 2). Hospital/medical centers and research institutes each received 18 percent of funding for Challenge Grants in HSR, respectively.

Methods

HSRProj staff conducted a search for HSR-related CER Challenge grants in the NIH RePORTER database by using the request for applications (REA) number ("RFA-OD-09-003") to identify all Challenge Grant proposals, and the keyword search term "comparative effectiveness."⁷ This search generated 116 projects. Staff then exported the list into an Excel spreadsheet and manually reviewed the project abstracts to determine which of the projects qualify as HSR according to the definition of the field used by the HSRProj program.⁸

Staff summarized the projects that qualify as HSR (n=76) and calculated the total amount of funds awarded by each of the NIH institutes. Staff also categorized the CER Challenge Grants classified as HSR by type of performing organization. The following categories were used: colleges/universities; hospital/medical centers; research institutes/centers; private organizations; and other.

Endnotes

- 1 The grants support specific Challenge Topics within each of the Challenge Areas and are selected by the institutes and centers due to their potential to impact biomedical or behavioral science and/or public health. For more information on CER and the Challenge grants, see the US Department of Health and Human Services website: http://grants.nih.gov/grants/funding/challenge_award/.
- 2 Definition of CER: "a rigorous evaluation of the impact of different options that are available for treating a given medical condition for a particular set of patients. Such a study may compare similar treatments, such as competing drugs, or it may analyze very different approaches, such as surgery and drug therapy." (Cited in grant announcement Recovery Act Limited Competition: NIH Challenge Grants in Health and Science Research (RC1): <http://grants.nih.gov/grants/guide/rfa-files/RFA-OD-09-003.html>).
- 3 AcademyHealth conducted a previous analysis of NIH ARRA awards in HSR, which is available at <http://www.academyhealth.org/files/publications/ARRAFactSheet.pdf>. This analysis showed that among ARRA awards with the keywords "health services," 178 projects funded by the NIH may be classified as HSR, representing \$80.5 million in new investment. There is limited overlap with the projects identified as part of this initial search and the current analysis of CER Challenge Grants. Only 14 of the projects included in this report were included in the previous analysis.
- 4 RePORT stands for "Research Portfolio Online Reporting Tool."
- 5 NIH's RePORT provides access to reports, data, and analyses of NIH research activities, including information on NIH expenditures and the results of NIH-supported research. Its database, RePORTER, allows users to gain access to information on research projects funded by federal institutes, agencies, and centers, including: all NIH centers and institutes, the Agency for Healthcare Quality and Research (AHRQ), the Centers for Diseases Control and Prevention (CDC), the Health Resources and Services Administration (HRSA), the Substance Abuse and Mental Health Services Administration (SAMHSA), the U.S. Food and Drug Administration (FDA), and the Department of Veterans Affairs (VA). (Source: http://projectreporter.nih.gov/RePORTER_Information.html).
- 6 As of November 2009, the total set of NIH Challenge Grants was largely (but not completely) established as of the date of this analysis. Change since the analysis was conducted has been small. As of January 19, 2010, RePORTER showed 843 Challenge Grants.
- 7 Search was conducted on November 13, 2009.
- 8 The HSRProj program uses definitions contributed by AcademyHealth and the Agency for Healthcare Research and Quality (AHRQ) to define HSR. In a 2000 report, AcademyHealth defined HSR as the "multidisciplinary field of scientific investigation that studies how social factors, financing systems, organizational structures and processes, health technologies, and personal behaviors affect access to health care, the quality and cost of health care, and ultimately our health and well-being. Its research domains are individuals, families, organizations, institutions, communities, and populations." In 2002, AHRQ developed the following definition: "Health services research examines how people get access to health care, how much care costs, and what happens to patients as a result of this care. The main goals of HSR are to identify the most effective ways to organize, manage, finance, and deliver high quality care; reduce medical errors; and improve patient safety." Please see the HSRProj fact sheet for more information on HSRProj and the definition of HSR.