



**COALITION**  
FOR HEALTH SERVICES RESEARCH



# Federal Funding for Health Services Research

December 2006



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## Executive Summary

Health services research—a field of scientific study that explores health care costs, quality, and access and looks for ways to improve health care delivery, safety, availability, and affordability—is an important part of the overall health research continuum. This fourth annual baseline report documents health services research expenditures across the federal government. From information provided to us by what we have identified as the principal federal funders of health services research, we estimate that approximately \$1.5 billion was expended for health services research and related activities in fiscal year (FY) 2006 (see Table 1).

“Health services research helps provide insight and answers to the complex challenges we face in trying to address areas of cost, quality, and access in improving health care for all Americans.”

— Senator John (Jay) D. Rockefeller  
U.S. Congress

**Table 1: Estimated FY 2006 Funding for Health Services Research as Reported by Principal Federal Funders**

Federal Agency	Estimated FY 2006 Funding
Agency for Healthcare Research and Quality (AHRQ)	\$319 million
Centers for Disease Control and Prevention (CDC)	
• National Center for Health Statistics (NCHS)	\$109 million
• Public Health Research	\$31 million
Centers for Medicare and Medicaid Services (CMS)	\$57 million <sup>a</sup>
Department of Defense (DoD)	\$15 million <sup>b</sup>
National Institutes of Health (NIH)	\$938 million
Veterans Health Administration (VHA)	\$64 million
<b>Total</b>	<b>\$1.5 billion</b>

<sup>a</sup> The majority of CMS’s research budget represents congressional earmarks for specific activities; only a small portion represents CMS’s basic research and demonstrations.

<sup>b</sup> We were unable to collect funding data from the Department of Defense for fiscal years 2005 or 2006. This figure represents funding for FY 2004.

Without a uniform definition of health services research and common research categories, it is very difficult for Congress and the major users of this research—including the Coalition for Health Services Research—to track the federal government’s current investment in health services research and evaluate whether this investment is addressing the problems and challenges facing health and health care in America. For this reason, we recommend that:

- ◆ The Office of Management and Budget and the Department of Health and Human Services (HHS) collaborate to develop a standard definition and categories for use in reporting their expenditures for this research.
- ◆ The HHS Assistant Secretary’s Office for Planning and Evaluation establish a systematic mechanism for researchers, practitioners, policymakers, and funders to advise the Research Coordinating Council—which evaluates health services research spending within the Department—on the field’s research priorities and needs. This research agenda could then be used to assess current federal investments and inform future budget allocations.

Without a better understanding of the federal government’s investment in health services research, it is difficult to make judgments about how this funding can be best aligned to meet priority needs. We believe that these recommendations would ultimately help ensure that government research resources are used more effectively to guide needed improvements in America’s health care system.

## Introduction

Health services research—a field of scientific study that explores health care costs, quality, and access and looks for ways to improve health care delivery, safety, availability, and affordability—is an important part of the overall health research continuum.<sup>1</sup> It identifies what treatments work best, when, for whom, and at what sites of service. It also evaluates how best to finance health care and control spending. Health services research takes the innovations from basic bench science and translates them into medical practice, allowing providers, patients, health plans, and policymakers to make more informed health choices. In sum, health services research is the link between research and the patient care that Americans receive.

Health services research is changing the face of American health care, uncovering critical challenges facing our nation’s health care system—such as medical errors and disparities in health care related to race, ethnicity, and geography—and seeking ways to address them. Health services research is providing guidance in how to implement and make the best use of health information technology, and how to get the best care at the best value across a menu of treatment options. Two recent examples demonstrate how health services research is providing the scientific basis needed to make the right decisions:

- ◆ The Agency for Healthcare Research and Quality (AHRQ) found that episiotomies—a preemptory incision intended to prevent pregnant women from tearing tissue during labor—has no positive benefit, and probably results in more complications and causes more pain than if no incision was made during childbirth.<sup>2</sup>
- ◆ The National Institute of Mental Health (NIMH) found that, within a class of antipsychotic drugs, the older, less expensive drug (Perphenazine) was just as effective and caused no worse side effects than the three newer, more expensive drugs in treating patients with schizophrenia. One of the newer drugs (Zyprexa) was slightly more effective in controlling systems than the other drugs, but at the cost of serious side effects.<sup>3</sup>

These and other comparative effectiveness studies—where drugs, devices, and therapies used to treat the same conditions are evaluated for their relative safety, effectiveness, and cost—have great potential to improve health care quality and patient outcomes, while ensuring that consumers, both patients and purchasers, receive the best care at the best value. However, to date there has been minimal, systematic federal investment in this important work. The aforementioned studies cost \$67 million and \$42.6 million respectively, yet AHRQ has only been appropriated \$15 million annually to conduct comparative effectiveness research.

In fact, there has been a paucity of federal investment in the field of health services research, overall. Currently, less than one cent of every health care dollar is spent on health services research; and only about 5 percent of the federal government’s \$34 billion health research budget in 2002 was apportioned to this important field.<sup>4,5</sup> Nevertheless, as Table 2 demonstrates, investments made by the federal government have the potential to provide significant returns to policymakers, health administrators, providers, patients, and others in improving care and services.

**“Greater efforts are needed to help translate research discoveries into practice and apply them to patients; all phases of the research continuum are interdependent, and it is essential that these advances benefit patient care.”**

—Former Senator William Frist  
U.S. Congress

**Table 2: Examples of Health Services Research Impact**

Federally Funded Research Finding or Activity	Lives Affected	Waste Uncovered
Health services research found that children in hospitals often experience preventable medical injuries.	56,615 children experienced medical injuries in 2000.	Injuries result in increased costs of over \$121,000 per discharge; or a combined total of over \$1 billion.
Health services research discovered that preventable complications related to diabetes contribute to wasteful health care spending.	Of 18 million diabetics, one-third were hospitalized two or more times.	Preventing these complications could save \$2.5 billion overall; costs per hospital stay are three times higher for patients with multiple hospitalizations.
Data from CMS’s Medicare Current Beneficiary Survey allowed CMS to develop reliable information on the use and cost of services not covered by Medicare, including prescription drugs.	Data from the survey was instrumental in shaping the new Medicare Part D benefit, which is now available to over 40 million Medicare beneficiaries.	
Findings from AHRQ’s Child Health Insurance Research Initiative (CHIRI) helped policymakers uncover which health insurance and delivery features work best for low-income children.	As of FY 2005, 6.1 million children were enrolled in the State Children’s Health Insurance Program.	

Many federal agencies and programs support health services research to varying degrees. For purposes of this analysis, we collected and reported data from what we believe to be the principal federal funders of health services research, including:

- ◆ AHRQ, which is the lead federal agency for health services research. Its mission is to improve the quality, safety, efficiency, and effectiveness of health care for all Americans through research.
- ◆ The Centers for Disease Control and Prevention (CDC) and the National Center for Health Statistics (NCHS). CDC supports the evaluation of public health programs that use health services research. Housed within CDC, NCHS is the nation’s principal health statistics agency, providing data to identify and address the nation’s health care issues.
- ◆ The Centers for Medicare and Medicaid Services (CMS), where the Research, Demonstration, and Evaluation Office holds the majority of funding for CMS’s health services research. This office supports research and demonstration projects that develop and implement new health care financing and payment policies and examines the impact of CMS’s programs on beneficiaries, providers, states, and other customers and partners.
- ◆ The Department of Defense (DoD), which collects and analyzes customer satisfaction, utilization, and demographic data from enrollees’ in the military’s health plan, TRICARE.
- ◆ The National Institutes of Health (NIH). While better known for its work in clinical and biomedical research, NIH does conduct a significant amount of health services research—particularly research on translating clinical research findings into practice.
- ◆ The Veterans Health Administration (VHA), where the Health Services Research and Development Service (HSR&D) strives to improve quality of care by studying the effect of financing, organization, and management on health care quality, cost, and access.

Americans overwhelmingly recognize the value of health services research and its potential to impact the medical care they receive. According to a 2005 Research!America survey, roughly 95 percent of Americans agree that:

- ◆ It is important to support research that focuses on how well the health care system functions and how it could function better.
- ◆ Health care delivery should be based on the best and most recent research available.
- ◆ It is important to invest more in research to ensure there is a solid scientific base for health care.

Source: Woolley, M. & S. Propst. “Public Attitudes and Perceptions about Health-Related Research.” *Journal of the American Medical Association*, Vol. 294, No. 11, p. 1382, September 21, 2005.

For this, the fourth annual report on federal baseline funding for health services research, the Board of Directors of the Coalition for Health Services Research and staff acknowledge and appreciate the assistance that these federal agencies have provided in compiling this information.

## Data Collection and Limitations

Federal agencies have not developed or adopted a uniform definition for health services research, or standard categories for collecting and reporting data about the major research areas. We provided federal agencies with AcademyHealth’s definition of health services research to guide reporting of their spending data:

“Health services research is 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.”

It is important for the reader to understand that questions remain about the breadth and scope of activities included in the funding totals; investments in what any one agency has self-reported as “health services research” may not be equivalent to what is reported by another agency. For example, we know that the NIH expenditures include both health services research and research dissemination activities, whereas data reported by other agencies may include basic research activities and exclude spending on dissemination. In addition, budget numbers can reflect entire agency budgets, including overhead costs, or they can represent a rough estimate of dollars spent specifically on health services research. And in reporting spending on “research activities,” agencies do not separate overhead or program support from actual research expenditures.

Ideally, an assessment of federal research funding would provide not only aggregate spending, but also a detailed breakdown of the specific health services research categories or research topics (e.g., clinical quality, system quality, disparities, access, and cost) funded by the federal agencies. However, many studies address multiple research topics, making it difficult to disaggregate expenditures according to broad categories. Because it was not possible to obtain a comprehensive and consistent breakdown of current expenditures by research category or topic area, this report provides information on the total federal expenditures as reported by federal agencies.

This report does not discuss the extent to which agencies are funding intramural research (that is, research conducted internally by agency staff) versus extramural research (that is, research conducted by investigators working in nongovernmental research centers with federal research grants, contracts, or other awards). The reason: most agencies do not report the proportion of their research funding allocated to intramural versus extramural research. However, there is the perception among researchers that federal agencies are now devoting a smaller proportion of their research funding to extramural, investigator-initiated research than in the past. Some anecdotal evidence in the research community suggests that this trend may be attributable to the de facto funding cuts agencies supporting health services research have experienced over the last five years, as they have received “flat” appropriations from year to year that are not adjusted for inflation.

This report is intended to shed light on the federal government’s investment in this field; it does not include an assessment of philanthropic organizations’ or state governments’ funding of health services research. As with the federal government, information about the amount spent on health services research or the number of projects supported by foundations or state governments is not collected in a systematic, consistent way. Respondents to AcademyHealth’s 2006 Member Survey indicate that national and state/regional foundations and state governments are among the principal funders of their work; the top five sources of funding cited by respondents in 2006 included, in rank order, NIH, national foundations, state governments, AHRQ, and state/regional foundations.<sup>6</sup>

Without a uniform definition of health services research and common research categories, it is very difficult for Congress and the major users of this research to assess how the current investment in health services research—by the public, private, and philanthropic sectors—is addressing the problems and challenges facing health and health care in America. This report represents our best attempt to collect and report these important data to inform users’ future investments. However, given the questions about the accuracy of these data and about how these funds are now allocated, we are not able to draw conclusions about how these and additional resources might be best targeted to meet pressing new challenges in health and health care.

## Findings: Current Investment in HSR

From information provided to us by the following federal agencies, we estimate that \$1.5 billion was expended for health services research and related activities by the federal government in FY 2006. AHRQ received an annual appropriation of \$319 million. NIH, with funding of almost \$30 billion, spent approximately \$938 million or 3.3 percent of its budget on health services research. VHA spent \$64 million, or almost 16 percent of its research budget; DoD spent about \$15 million to evaluate military health care in FY 2004; NCHS, which monitors our health care system and provides critical data for research, received \$109 million; and CMS—with its 102 million beneficiaries in the Medicare, Medicaid, and State Children’s Health Insurance Program—received \$57 million in funding to meet its statutory requirements and complete studies or demonstrations required by Congress.

The balance of the government’s expenditure on health services research is heavily tilted toward clinical issues, such as translating clinical research to the bedside and informing clinical decision-making. The clinical research emphasis is aligned with one of the field’s priorities—to improve the quality of care—but it does not include important elements for improving the quality and efficiency of the health care system as a whole, such as measurement, incentives, and reporting. By comparison, relatively little funding is being provided to study overall system quality, to understand what is driving health care costs, and how to achieve the needed improvements in efficiency.

In the following sections we provide detail on health services research funding, by agency. Where possible, a history of funding is provided. Actual expenditure data are used for FY 2004 and FY 2005. For FY 2006, amounts appropriated by Congress are reported. Where available, estimated funding for FY 2007 is provided based on the President’s budget request.

### Agency for Healthcare Research and Quality

AHRQ’s mission is to improve the quality, safety, and efficiency of health care services. In conjunction with its partners, AHRQ is committed to ensuring that knowledge gained through health services research is translated into measurable improvements in the health care system and better care for patients. This mission is accomplished by supporting, conducting, and disseminating research that improves the effectiveness, quality, access to, cost, and use of health care services. AHRQ works to enhance patient safety while entering into active partnerships with those who use the research to ensure that it is translated into measurable improvements.

In FY 2005, AHRQ solicited and funded research projects in the following major areas: Comparative Effectiveness Research; Health Information Technology; Patient-Centered Care; Customizing Care to Meet Patients’ Needs; Impact of Payment and Organization on Cost, Quality and Equity; and Translating Research into Practice. In addition, AHRQ continued to sponsor research in the area of Patient Safety.

Table 3 provides a breakdown of AHRQ’s budget from FY 2004 to FY 2006. In FY 2006, AHRQ will have allocated:

- ◆ \$80 million to 251 research grants;
- ◆ \$9 million on 77 training grants;
- ◆ \$53 million to the Medical Expenditure Panel Survey (MEPS); and
- ◆ \$58 million on research management, including the overhead and infrastructure (e.g., staff, maintenance, etc.) required to run the agency.

For FY 2007, the President’s budget provides flat funding for AHRQ at approximately \$319 million. Table 4 shows the AHRQ FY 2005–2007 budget broken down into its four strategic goal areas. And figures 1 and 2 show trend data for AHRQ’s grants.

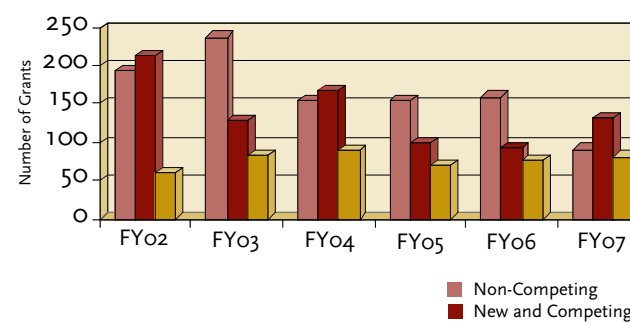
**Table 3: AHRQ Budget (dollars in millions)**

	FY 2004 (Actual)		FY 2005 (Actual)		FY 2006 (Appropriated)		FY 2007 (Estimated)	
	No.	Dollars	No.	Dollars	No.	Dollars	No.	Dollars
Total Research Grants	323	\$104.8	251	\$83.7	251	\$79.7	223	\$67.3
Non-Competing	155	\$60.3	153	\$66.9	159	\$62.5	91	\$25.4
New and Competing	168	\$43.9	98	\$16.2	92	\$16.7	132	\$41.4
Supplemental	0	\$0.7	0	\$1.0	0	\$0.5	0	\$0.5
Training Grants	88	\$10.5	69	\$8.0	77	\$9.8	81	\$10.1
Contracts and Inter-Agency Agreements		\$83.3		\$116.7		\$115.7		\$125.3
MEPS		\$53.3		\$55.3		\$55.3		\$55.3
Research Management		\$49.8		\$54.9		\$58.2		\$60.7
<b>TOTAL</b>		<b>\$303.7</b>		<b>\$318.7</b>		<b>\$318.7</b>		<b>\$318.7</b>

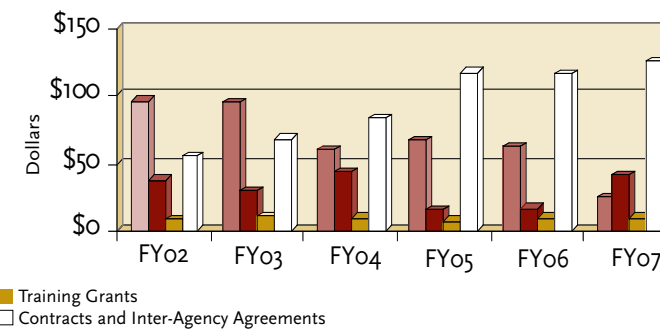
**Table 4: Summary of Full Cost of Performance Program Strategic Goals (in millions)**

Performance Program Strategic Goals	FY 2005	FY 2006	FY2007
Safety/Quality	\$166.9	\$167.2	\$169.0
Efficiency	\$71.7	\$71.8	\$72.7
Effectiveness	\$77.4	\$77.0	\$74.3
Organizational Excellence	\$2.7	\$2.7	\$2.7
<b>TOTAL</b>	<b>\$318.7</b>	<b>\$318.7</b>	<b>\$318.7</b>

**Figure 1: AHRQ Grants FY 2002-2006**



**Figure 2: AHRQ Grants FY 2002-2006 (in millions)**



**Centers for Disease Control and Prevention**

The CDC's mission is to promote health and quality of life by preventing and controlling disease, injury, and disability. CDC and its 11 centers and offices devote considerable resources to research and development (approximately \$600 million out of a total budget of \$7 billion). A portion of this research budget is allocated to the development and evaluation of public health programs that use health services research. However, based on the information we received, we were unable to disaggregate the portion of CDC's total research budget that is devoted to health services research.

- ◆ NCHS conducts a series of national surveys, the results of which are used by health services researchers and health policy analysts, including the National Health Care Survey and the National Health Interview Survey.
- ◆ The Extramural Prevention Research program, which received \$13.8 million in FY 2004, funded community-based research collaborations to transform research and knowledge into improved health programs and practices. This program is no longer funded through this appropriation.
- ◆ In FY 2004, the CDC developed a new "public health research" program. It is the successor to the Extramural Prevention Research program.

Table 5 displays the allocations for these CDC components for FY 2004-2007.

**Table 5: CDC Selected Programs' Budgets (in millions)**

	FY 2004 (Actual)	FY 2005 (Actual)	FY 2006 (Appropriated)	FY 2007 (Estimated)
National Center for Health Statistics	\$90	\$109	\$109	\$109
Extramural Prevention Research	\$13.8	\$0	\$0	\$0
Public Health Research	\$14	\$31	\$31	\$31

**Centers for Medicare and Medicaid Services**

CMS's Office of Research, Development, and Information (ORDI), where the majority of funding for CMS's health services research is located, supports research, demonstration, and evaluation projects that develop and implement new health care financing and payment policies or examine the impact of CMS's programs on beneficiaries, providers, states, and other customers and partners. These projects explore issues related to health care costs, access, quality, service delivery models, and financing and payment approaches related to its programs. In some years, most of the funding in CMS's research budget represents congressional earmarks for activities that are only remotely related to CMS research and demonstration interests.

- ◆ The majority of health services research at CMS takes place in the ORDI, which is the only office that supports extramural research. In FY 2005, \$77.3 million went to support these activities.
- ◆ Most CMS research funding in recent years has come from congressional earmarks or study requests made by Congress. CMS has had negligible funding for investigator-initiated research during the last four years.

Table 6 displays total research and development funding for CMS and illustrates how this funding has evolved over time. Table 7 summarizes the proportion of funding according to research type.

In an effort to provide greater understanding regarding what health services research topics are investigated by CMS, Table 8 shows broad topic areas and the percent of the CMS research budget devoted to those topics.

**Table 6: CMS Research, Demonstration, and Evaluation Budget (in millions)**

	FY 2004 (Actual)	FY 2005 (Actual)	FY 2006 (Appropriated)	FY 2007 (Estimated)
Investigator-Initiated	\$1.0	\$0.8	\$ 1.0	\$1.0
Targeted Earmarks	\$56.6	\$52.1	\$25.3	\$0
Medicare Modernization Act (MMA) <sup>a</sup>	\$0.0	\$0.0	\$5.7	\$13.6
Medicare Current Beneficiary Survey (MCBS)	\$13.2	\$13.7	\$14.8	\$14.0
Discretionary	\$6.8	\$10.7	\$10.6	\$12.9
<b>TOTAL</b>	<b>\$77.6</b>	<b>\$77.3</b>	<b>\$57.4</b>	<b>\$41.5</b>

<sup>a</sup>MMA research for FY 2004 and FY 2005 was funded from the funds appropriated by Congress for implementing the Act; it was not included in the President's budget.

**Table 7: Distribution of CMS Research, Demonstration, and Evaluation Budget**

	FY 2004 (Actual)	FY 2005 (Actual)	FY 2006 (Appropriated)	FY 2007 (Estimated)
Investigator-Initiated	1%	1%	2%	2%
Targeted Earmarks	73%	67%	44%	0%
MMA	0%	0%	10%	33%
MCBS	17%	18%	25.5%	34%
Discretionary	9%	14%	18.5%	31%

**Table 8: ORDI Portfolios as Percent of Total FY 2005 and FY 2006 Budgets**

Budget Line/Portfolio	FY 2005	FY 2006
Strengthen Medicaid, SCHIP, and Other State Programs	64%	44%
Expand Beneficiaries' Choices and Availability of Managed Care Options	4%	4%
Develop FFS Payment and Service Delivery Systems	4%	4%
Improve Quality of Care and Performance under CMS Programs	3%	3%
Improve the Health of Beneficiary Populations	5%	5%
Build Research Capacity	20%	40%

**National Institutes of Health**

Through the scientific study of the nature and behavior of living systems, NIH strives to extend healthy life and reduce the burdens of illness and disability. Specifically, the Institutes support research to improve the nation's health, provide scientific resources to aid in disease prevention, contribute information to medical and associated sciences to advance the nation's economic well-being, and conduct science in an exemplary and socially responsible manner. Most of the health services research conducted within the individual NIH Institutes is focused on translating the outcomes of clinical research to the bedside by attempting to identify barriers to translation and strategies for overcoming those barriers. NIH estimates a total of almost \$938 million for health services research in FY 2006 and \$934 million under the President's FY 2007 request.

Table 9 highlights the health services research budget for key Institutes, showing those with the largest total expenditures for health services research. The total budgets for the eight Institutes listed comprise nearly 89 percent of NIH's total health services research budget.

**Table 9: Health Services Research Allocations by NIH Institutes (in millions)**

	FY 2004 (Actual)	FY 2005 (Actual)	FY 2006 (Appropriated)	FY 2007 (Estimated)
NIMH	\$199.7	\$197.6	\$197.6	\$197.6
NIDA	\$149.2	\$150.2	\$149.3	\$148.6
NCI	\$129.4	\$132.1	\$132.1	\$131.0
NIDDK	\$72.8	\$85.8	\$85.8	\$85.8
NIA	\$74.3	\$77.8	\$77.2	\$76.4
NHLBI	\$71.7	\$73.6	\$73.9	\$74.3
NIAAA	\$67.0	\$65.3	\$64.8	\$64.2
NINR	\$16.6	\$52.3	\$51.9	\$51.4
Other NIH HSR	\$106.7	\$105.0	\$104.9	\$104.3
<b>Total</b>	<b>\$887.4</b>	<b>\$939.6</b>	<b>\$937.5</b>	<b>\$933.5</b>

NIMH: National Institute of Mental Health

NIA: National Institute on Aging

NIDA: National Institute on Drug Abuse

NHLBI: National Heart, Lung, and Blood Institute

NCI: National Cancer Institute

NIAAA: National Institute on Alcohol Abuse and Alcoholism

NIDDK: National Institute of Diabetes and Digestive and Kidney Diseases

NINR: National Institute of Nursing Research

Table 10 provides more detail about NIH's FY 2006 health services research budget as an example of the relative investment of the Institutes. The proportions each institute devoted to health services research in FY 2006 were similar to those reported for FY 2005. For example, the three Institutes funding the greatest amount of health services research account for 51 percent of the NIH total. The proportions these three Institutes spend for health services research ranges from 2.73 percent to 14.78 percent of their total budgets:

- ◆ The National Institute of Mental Health (NIMH) devoted nearly 14 percent of its budget in FY 2006 to health services research. In FY 2005 NIMH devoted about 14.5 percent of its budget to health services research.
- ◆ The National Institute on Drug Abuse (NIDA) spent 14.8 percent of its budget on health services research in FY 2006, down slightly from 15 percent in FY 2005.
- ◆ The National Cancer Institute (NCI) devoted nearly 3 percent of its overall budget for health services research in FY 2006; equivalent to health services research spending in FY 2005.

**Table 10: Analysis of Eight Leading NIH Institutes' FY 2006 Budgets for Health Services Research**

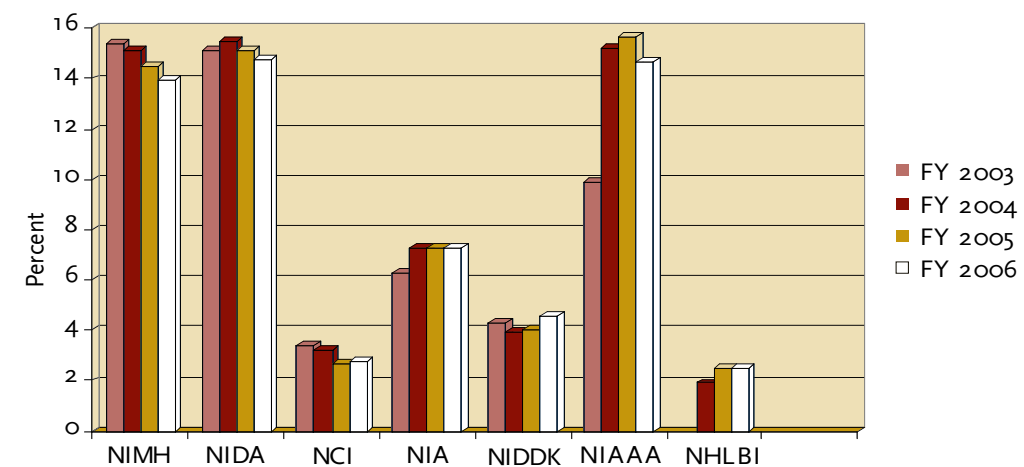
	Total HSR Budget FY 2006 (in millions)	HSR Share of Institute Budget	Share of NIH's Total HSR Budget
NIMH	\$197.6	13.94%	21.08%
NIDA	\$149.3	14.78%	15.93%
NCI	\$132.1	2.73%	14.08%
NIDDK	\$85.8	4.58%	9.15%
NIA	\$77.2	7.30%	8.23%
NHLBI	\$73.9	2.50%	7.89%
NIAAA	\$64.8	14.72%	6.91%
NINR	\$51.9	37.38%	5.53%
Other NIH HSR	\$104.9	0.69%	11.19%
<b>Total</b>	<b>\$937.5</b>		

Figure 3 shows the percentage of the total NIH budget that was devoted to health services research over six years. Shown in Figure 4 is the percentage the top eight Institutes spent on health services research over the past four years.

**Figure 3: Percent of NIH Total Budget Devoted to Health Services Research**



**Figure 4: Share of Institutes' Budgets Devoted to Health Services Research**



## Veterans Health Administration

The mission of the VHA's HSR&D is to improve quality of care by studying the effect of financing, organization, and management on quality, cost, and access. In concert with title 38 U.S.C., Section 7303, the Medical and Prosthetic Research Program (more commonly known as the VA Research and Development program within the VHA) operated on approximately \$400 million in appropriated funds for biomedical, clinical, rehabilitation, and health systems research in FY 2006. Medical and prosthetics research funding supports direct research costs, not clinician salaries or research overhead. The cost of clinician salaries as well as research overhead is supported by the VHA medical appropriation. The distribution of research funding to the HSR&D program will approach approximately \$64 million in FY 2006. This amount does not include VHA medical support.

## Department of Defense

The DoD's health services research function uses two methods to evaluate the efficacy of its programs, to determine necessary policy changes, and to assess the effect of those changes. Through surveys, the Department collects customer satisfaction data, utilization data, and demographic data. The Department also contracts with external organizations to analyze trends and to assess the likely effect of different policies.

Although there is not a separate line item for health services research in DoD's budget, it estimated that it spent about \$17 million on health services research-related studies in FY 2001 and FY 2002. In FY 2003 and FY 2004, approximately \$15 million of health services research was allocated. Most of these funds were spent on surveys, with the remainder going to contractors for policy analysis. We were unable to gather data from the Department for FY 2005 or FY 2006.

## Recommendations

Based on these findings, the Coalition for Health Services Research recommends the following actions:

- 1. Develop and adopt consistent definitions and standard categories across the federal agencies that fund and support health services research.**  
We recommend that the Office of Management and Budget and the Department of Health and Human Services (HHS) work together to develop a standard definition and categories for use in reporting their expenditures for this research. Congress should express its interest in achieving this goal. It would be helpful if agencies could report their health services research budgets by major portfolio areas.
- 2. Establish a systematic mechanism to assess current federal investments and identify future needs.**  
Researchers, practitioners, policymakers, and funders should be given an opportunity to advise the government on research priorities, and these priorities should inform budget allocations. During the past few years, HHS Assistant Secretary's Office for Planning and Evaluation has been using an internal Research Coordinating Council to review health services research expenditures within the Department. The Coalition requests that HHS provide periodic opportunities for leading health services researchers and private funders of this research to advise the Research Coordinating Council on current and future needs.

Without a better understanding of the federal government's investment in health services research, it is difficult to make judgments about how this funding can be best aligned to meet priority needs. We believe that these recommendations would move us closer to our goal of using government research resources more effectively to guide needed improvements in America's health care system.

## Appendix: Self-Reported Characterization of Agency Research

### Agency for Healthcare Research and Quality

- ◆ Planning grant to the Primary Care Coalition of Montgomery County. The objective of this grant is to implement the health information technology (HIT) infrastructure necessary to support a single, shared electronic medical record (EMR) application that, in turn, will promote the community-wide exchange of patient information for clinical decision support, research, and disease management on behalf of low-income, uninsured people.
- ◆ Implementation grant to Louisiana Rural Health Information Technology Partnership (LRHITP). LRHITP is an unincorporated association of rural health care providers and health care organizations. This grant will allow the Louisiana Critical Access Hospital Network, through its membership in the LRHITP, to implement the use of an emergency department EMR system and evaluate the use of this technology toward improving patient safety and quality of care.
- ◆ Refine an established economic model of health information exchange. Clinical data is required in order to derive value from most health information technology. This project will refine an established economic model of health information exchange (HIE), create a "laboratory" in which that model can be tested and, finally, test the model's predictions in a randomized controlled trial.
- ◆ AHRQ finds that children in hospitals frequently experience medical injuries. Out of 5.7 million hospital discharge records, the study found 51,615 patient safety events involving children during 2000, leading to serious complications. For example, infections resulting from medical care caused a 30-day increase in the average length of stay, and resulted in increased charges an average of over \$121,000 per discharge. Combined excess charges for all patient safety events are estimated at having exceeded \$1 billion.
- ◆ Comparative Effectiveness. These studies focus on ten top priority conditions affecting Medicare beneficiaries in order to improve the quality, effectiveness, and efficiency of health care delivered through the Medicare program. For example, AHRQ is conducting a science review that examines evidence for benefits and harms of treating osteoarthritis with oral medications (i.e., various agents including non-steroidal anti-inflammatory drugs, COX-2 inhibitors, acetaminophen, etc.), at different dosages and treatment durations.
- ◆ Clinical Decisions and Communications Science Center. In FY 2005, AHRQ established a Clinical Decisions and Communications Science Center that will translate complex scientific findings and evidence reviews into easy to understand language for clinicians, policymakers, and patients. The combination of explicit reviews of scientific evidence on clinical effectiveness of pharmaceuticals and other health care interventions and the translation of the findings into meaningful messages is a critical step in supporting informed decision making.
- ◆ Physician incentives. An evaluation of eight projects, called Rewarding Results, which uses physician incentives, reporting, and rewards to improve health care quality.
- ◆ Value based purchasing. Examines current patterns and impact of value based purchasing, a partnership with a leading healthcare purchaser organization using incentives to drive 'leaps' in patient safety-implementation.
- ◆ Preventive services. In FY 2005, AHRQ continued to support the efforts of the US Preventive Services Task Force (USPSTF), an independent panel of experts in the area of primary care that develop evidence-based recommendations on clinical preventive services during the whole lifespan. These include counseling, screening, and preventive medications. AHRQ's Evidence-based Practice Centers provide systematic reviews following the USPSTF analytic framework. The Task Force then determines the effectiveness of the service and the balance between harms and benefits to make recommendations. AHRQ also supports the dissemination of these syntheses and recommendations in peer-reviewed journals, clinical manual, and electronic tools.

A complete description of each project funded in FY 2006 can be found in the Grants On-line Database (GOLD) located at [www.ahrq.gov](http://www.ahrq.gov).

### Centers for Disease Control and Prevention<sup>7</sup>

- ◆ CDC study shows limited use of electronic medical records. The report found that less than a third of the nation's hospital emergency and outpatient departments use electronic medical records, and even fewer doctors' offices do. About 31 percent of hospital emergency departments, 29 percent of outpatient departments, and 17 percent of doctors' offices have electronic medical records to support patient care, as reported in CDC's ambulatory medical care surveys, conducted from 2001 to 2003.

### National Center for Health Statistics

NCHS provides the most current data for tracking health insurance coverage and access to care, critically important to understanding the impact of public policy and the economy on children and families through its surveys. The following summarizes the data collected and its usage:

- ◆ National Health Interview Survey (NHIS). NCHS provides tracking data on a quarterly basis, released only six months after each quarter's data collection. This data allows health services researchers to track changes in public and private health insurance coverage for the nation as well as for population subgroups. NCHS presents three key measures of health insurance coverage, using different time frames to measure coverage in order to reflect different policy-relevant perspectives. Every quarter, these NCHS estimates address persons who were uninsured at the time of the interview; uninsured at any time in the past year; and uninsured for more than one year. Estimates of persons with private and public coverage by poverty status are also presented.

New questions were recently added to the NHIS to improve the quality and scope of information available about health insurance coverage. Questions were added to improve the reporting of Medicare and Medicaid coverage. Other new questions will enable monitoring the impact of the Medicare prescription drug plans on private plan drug benefits and monitoring the utilization of federally sponsored drug discount cards.

- ◆ Disparities. NCHS data identify disparities in health status and use of health care by race/ethnicity, socio-economic status, region, and population characteristics.
- ◆ Prescription trends. NCHS data are used in examining trends in the use of prescription medications: increases in medication use (the types of medication increases and the populations receiving these medications), use of first-line versus non-first line drugs in the treatment of diseases (e.g., for hypertension), use of name-brand versus generic medications, appropriate use of medications (relative to scientific or clinical recommendations), and visits for adverse drug events.
- ◆ Long-term care. NCHS provides data for understanding patterns of long-term care utilization, such as median length of stay in hospice settings (as an indicator of appropriate referral and use), characteristics of "live" discharges from hospice care, the interplay between utilization of home and hospice care, the emergence of new health services (such as transitional, sub-acute, or rehabilitative care), disparities in the use of long-term care services, and the growing diversity of residential long-term care facilities in the United States.
- ◆ Use of services. NCHS data assess the population's use of health care services, including changing utilization patterns between inpatient and outpatient settings, trends in use of cardiac invasive procedures or other emerging technologies, and avoidable hospitalizations/ambulatory care sensitive conditions (as a marker of appropriate access and use of health services, for example).

- ◆ Capacity and performance. NCHS monitors the capacity and performance of our health care system by, for example, tracking waiting times in emergency departments. This information is critical to measuring unmet health care needs, as well as for assessing our capacity to respond to bioterrorism and other national emergencies.
- ◆ Improving ease of data access. NCHS develops new tools to improve ease of data access. The newest example is the "Health Data for All Ages" interactive data warehouse on the NCHS Web site. Users can access data by health topic, age, gender, race/ethnicity, and geographic area.

### Centers for Medicare and Medicaid Services

- ◆ Medicare Current Beneficiary Survey (MCBS). In FY 2006, CMS continued this multi-year longitudinal survey known as MCBS. This survey measures health care utilization, expenditures, insurance coverage, and associated variables in a representative sample of the persons served by the Medicare program. MCBS is a key source of data for researchers and policy analysts, providing detailed information about the Medicare population to supplement the data that is available from Medicare claims.
- ◆ Evaluation of the Low Vision Rehabilitation demonstration. The Low Vision Rehabilitation demonstration will test changes to improve quality of care for Medicare beneficiaries in need of low vision rehabilitation services without increasing Medicare costs. In six selected States and cities, the demonstration allows low vision rehabilitation specialists to serve Medicare beneficiaries incident to a physician's direct supervision and in the patient's home environment under general supervision. A rigorous evaluation will determine the quality and quantity of services to beneficiaries needing low vision rehabilitation, the effects of the changes on costs under Parts A and B of the Medicare program.
- ◆ Medicaid Analytic eXtract (MAX) Data Development 2003–2007. The purpose of this contract is to have Medicaid eligibility and services claims experts develop business "rules" to transform Medicaid (and SCHIP) person-level data records from the Medicaid Statistical Information System (MSIS) into records in the Medicaid Analytic eXtract (MAX) system. These business rules involve a number of activities related to eligibility, type of service and combination of MSIS claims to create MAX final action service records.
- ◆ Physician Group Practice (PGP) demonstration and evaluation. Under a contract with CMS, Research Triangle Institute (RTI) International continued to provide technical assistance to CMS by implementing and evaluating a demonstration involving large physician group practices, testing physician group's response to financial incentives for improving care coordination, delivery processes and patient outcomes, and the effect on access, cost, and quality of care to Medicare beneficiaries. This demonstration is one of the first projects to test pay-for-performance approaches under the Medicare program.
- ◆ Evaluation of the Cancer Prevention and treatment demonstration. The purpose of this project is to evaluate information about a demonstration involving beneficiaries of the Medicare program. Section 122 of the Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000 (BIPA) requires the Secretary to implement and evaluate demonstration projects focusing on new and innovative models that reduce disparities in the early detection and treatment of cancer.
- ◆ Evaluation of the Medicare Care Management for High Cost Beneficiaries (CMHCB) Demonstration. This demonstration is intended to test models of care management for high-cost beneficiaries under the Medicare fee-for-service program, incorporating relevant features from traditional disease management programs, but allowing sufficient flexibility to adapt the design of CMHCB programs to meet the unique needs of the high-cost Medicare population. RTI will study the design and implementation of these programs and evaluate the experience of the intervention group in each program compared to the relevant control group. The evaluation will test the ability of each program to improve the care and level of satisfaction of Medicare beneficiaries and produce savings for the Medicare program.

- ◆ Historically Black Colleges and Universities (HBCUs) and Hispanic Health Services Research Grant Programs. CMS continued supporting these grant programs which are designed to assist HBCUs and Hispanic researchers by supporting extramural research in health care development activities for the African American community and Hispanic African community. These programs assist CMS in implementing its mission, focusing on health care quality and improvements for its beneficiaries.
- ◆ Real Choice Systems Change Grants. In FY 2005, CMS awarded a new round of Real Choice Systems Change Grants to States to assist States in building infrastructure that will result in effective and enduring improvements in community long-term support systems.

### National Institutes of Health<sup>8</sup>

- ◆ Utilization and outcomes. Research on cancer-related health services utilization and outcomes among individuals in the general population and among selected population subgroups.
- ◆ Efficacy. Research to ascertain that interventions shown to be efficacious in rigorous clinical trials are, indeed, effective in routine practice settings.
- ◆ HIV effectiveness. Evidence-based research to test the effectiveness of an intervention to improve health outcomes in persons with HIV who are currently receiving treatment from community mental health centers.
- ◆ Alternative payment systems. Methods of alternative payment systems, public and private financing systems, and the design of insurance.
- ◆ Diversity. Research on ethnic/racial differences in the use of, processes associated with, and outcomes of various health care delivery systems and settings, and on the design of interventions for improving minority access to health care services.

### Veterans Health Administration

- ◆ VA uses web-based intervention to improve care for veterans with diabetes. More patients are accessing medical information on the Internet, but few studies have examined the effects of web-based interventions that incorporate an interactive component requiring feedback from patients. This study tested diabetes care management using a web-based system for veterans with poorly controlled diabetes mellitus. Participants had a VA-based primary care provider at one of four hospital-based clinics or ten community-based outpatient clinics within the VA Boston Healthcare System, and access to a telephone. The MyCareTeam™ secure Web site accepted uploads from blood pressure and glucose monitoring devices, and an internal messaging system allowed veterans to send and receive messages to the care manager via the Web site.

Findings show that web-based care management improves poorly controlled diabetes in veterans. Veterans participating in the web-based management program had significant improvements in HbA1c over one year compared to usual care, and persistent Web site users had even greater improvements compared to intermittent users.

- ◆ Telephone counseling increases smoking cessation. The US National Plan for Tobacco Cessation calls for quality improvement efforts to increase the delivery of tobacco cessation treatment in clinical settings. This plan also recommends the creation of a National Telephone Quitline Network that would provide access to counseling and smoking cessation medications without requiring tobacco users to visit their health care provider. This study sought to determine if telephone care consisting of counseling and the provision of smoking cessation medications increased abstinence from cigarette smoking compared to standard interventions as part of routine health care.

Findings show that that telephone counseling increases smoking cessation among veterans compared to standard primary care intervention. Telephone care increased the number of quit attempts, rates of participation in counseling programs, and the use of smoking cessation medications.

- ◆ Veterans with Post Traumatic Stress Disorder (PTSD) require more care following catastrophic event regardless of proximity. Proximity to a disaster may increase the influence of the disaster on patients' perceived health or use of health care. However, a previous study of health care visits in New York City, including veterans with PTSD or other mental disorders following the 9/11 attacks, found no increases in the number of visits. This study assessed site-specific differences in veterans' perception of their health and health care at two VA clinics—one in New York City and one in the Midwest in the year following the 9/11 attacks. Investigators examined the effects of site, demographics, and military service, as well as symptoms of PTSD on health status, care seeking, and satisfaction with health care on more than 500 outpatients.

Findings show that regardless of location, veterans with more PTSD symptoms were more likely to report poorer health, more 9/11 related symptoms, less satisfaction with care, and were more likely to seek care outside VA. Thus, veterans with PTSD may require more outreach after catastrophic events, regardless of their proximity to the event.

- ◆ Veterans with acute coronary syndrome have similar outcomes whether treated at primary or tertiary Care VA Hospitals. Studies support the efficacy of an early invasive strategy (e.g. cardiac catheterization, percutaneous coronary intervention (PCI), and coronary artery bypass graft surgery) for reducing recurrent cardiac events in patients with acute coronary syndrome (ACS). This creates concern about the ability of primary care hospitals, without onsite cardiac procedural capacity, to achieve comparable outcomes to tertiary care hospitals that have this capability. This is of particular importance to the VA healthcare system, whose primary care hospitals are often located some distance from their associated tertiary facilities. This study of 2,132 veterans with ACS sought to determine whether those admitted to 12 VA primary care hospitals without onsite cardiac procedural capacity were at elevated risk for adverse intermediate-term (7 months) health status and re-hospitalization outcomes compared to veterans admitted to 9 tertiary care VA hospitals in 1998-1999.

Findings show that veterans admitted to primary care VA hospitals without onsite cardiac procedural capacity had similar 7-month health status and re-hospitalization outcomes compared to veterans admitted to tertiary care VA hospitals, despite lower rates of cardiac catheterization and PCI.

To learn more about HSR&D research, visit the website at [www.hsrd.research.va.gov/research/](http://www.hsrd.research.va.gov/research/).

## Endnotes

- 1 AcademyHealth defines health services research 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.”
- 2 Viswanathan, M. et al. The Use of Episiotomy in Obstetric Care: A Systemic Review, May 2004, Agency for Healthcare Research and Quality. Available on the Web at [www.ahrq.gov/downloads/pub/evidence/pdf/episiotomy/episob.pdf](http://www.ahrq.gov/downloads/pub/evidence/pdf/episiotomy/episob.pdf).

- 3 Lieberman, JA. et al. Effectiveness of Antipsychotic Drugs in Patients with Chronic Schizophrenia, *New England Journal of Medicine*, September 22, 2005, Vol. 353:1209-1223, No. 12. Found on the Web at [www.content.nejm.org/cgi.content/abstract/353/12/1209](http://www.content.nejm.org/cgi.content/abstract/353/12/1209).
- 4 Levit, K. et al. "Health Spending Rebound Continues in 2002," *Health Affairs*, Vol. 23, No. 1, January/February 2004, p. 148.
- 5 Of this, we estimate that 75 percent goes to biomedical research, 20 percent to clinical research, and 5 percent to health services research.
- 6 AcademyHealth is the professional home for health services researchers, policy analysts, and practitioners. For the 2006 Member Survey, approximately 1,300—or 35 percent—of AcademyHealth's 3700 members participated.
- 7 CDC did not provide the Coalition with any public health research examples. This example comes from, Testimony Before the Subcommittee on Labor, Health and Human Services, Education and Related Agencies, Coalition for Health Services Research, April 15, 2005. Found on the Web at [www.chsr.org/041405.pdf](http://www.chsr.org/041405.pdf).
- 8 The NIH has not provided any research examples. The following were developed from "Research, Demonstration, and Evaluation Activities, FY 2003 Plan and Budget," United States Department of Health and Human Resources, February 2002.





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