

# DEPARTMENT of HEALTH and HUMAN SERVICES

**Fiscal Year** 

2024

**Agency for Healthcare** 

**Research and Quality** 

Justification of

Estimates for

**Appropriations Committees** 



Agency for Healthcare Research and Quality

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I am pleased to present the Agency for Healthcare Research and Quality's (AHRQ) FY 2024 Congressional Justification. This budget details the activities and efforts needed to advance AHRQ's unique mission to produce scientific evidence that makes healthcare more accessible, equitable, affordable, safer and therefore of higher quality, and to work with our U.S. Department of Health and Human Services (HHS) and other governmental and private-sector partners to ensure that evidence is understood, adopted and used.

My colleagues and I thank Congress for supporting AHRQ so we may serve communities nationwide to improve their healthcare delivery systems by reducing fragmentation and realigning financial incentives that improve the quality of care provided to all. Specifically, with our increase in funding of \$23.1 million in FY 2023, AHRQ is supporting healthcare delivery improvements in urban, suburban, and rural locations focusing on critical priorities of the Biden-Harris Administration and the U.S. Department of Health and Human Services. Key among them is addressing the healthcare needs of patients suffering from Long COVID in the aftermath of the pandemic by providing evidence-based research, data, and tools needed by clinicians and patients to manage their symptoms appropriately and effectively. AHRQ continues meeting other pressing needs by making investments in much-needed diagnostic safety research, reducing the ongoing epidemic of opioid and polysubstance abuse, increasing the resilience of our healthcare systems mitigating the impact of natural disasters and climate change, and promoting equity in a healthcare system that too often fails minority and other underserved communities, especially in maternal and child healthcare improvements.

The FY 2024 President's Budget moves AHRQ a step further down the path to achieving these goals. The budget provides \$19.0 million (an increase of \$9.0 million over the FY 2023 Enacted) to continue our research on **Long COVID care delivery.** This condition is impacting a growing number of people, who experience problems across multiple organ systems (e.g., neurologic, cardiac, pulmonary, musculoskeletal), which can be complicated by underlying disease conditions. These "long haulers" experience reduced quality of life and health. AHRQ's \$19.0 million investment will support health systems research on how best to deliver patient-centered, coordinated care to those living with Long COVID. This will include the development and implementation of new models of care to help treat the complexity of symptoms those with Long COVID experience.

In addition, the FY 2024 President's Budget focuses resources on patient safety, specifically to **prevent errors and delays in diagnosis**, which affects 12 million Americans each year. As a result, more than 4 million people experience illness or death at a staggering financial cost estimated to be over <u>\$100 billion annually</u>. AHRQ will invest \$20 million in research grants and contracts to explore how to address different diagnostic safety challenges and create the infrastructure for continued research in this area. Contract funds will be used to disseminate and assist in implementing existing evidence-based tools and resources to improve diagnostic safety.

The FY 2024 President's Budget also supports AHRQ's work on key HHS and national priorities assisting local healthcare systems and providers recover from the COVID-19 pandemic, including:

- \$59.0 million in new and continuing investigator-initiated health services research funding to improve the performance of healthcare systems in producing high quality care, including \$3.0 million to advance health equity in healthcare delivery.
- \$11.0 million in research funding directed to revitalizing and reforming **primary care**.
- \$10.0 million for research to prevent, identify, and provide integrated treatment for **opioid and multiple substance abuse disorders** in ambulatory care settings.
- \$5.0 million in new funding to expand **behavioral healthcare** activities by supporting primary care practices in providing integrated care in under-resourced communities and with under-served populations.
- \$7.4 million to support the Administration's initiative to improve **maternal healthcare**. The Agency's activities will be aimed at ensuring that Federal, State, and local policymakers have not only timely and accurate data, but also the analytic resources to help inform policy.
- \$6.5 million increase to allow the **U.S. Preventive Services Task Force** to expand the number of clinical preventive services reviews in FY 2024, thereby increasing the number of final recommendations in future years and increase transparency and patient engagement.
- \$2.0 million to establish **Centers of Excellence in Telehealthcare Implementation** to generate essential new evidence to understand telehealthcare's effect on access, equity, and quality that may inform key policy decisions to maximize telehealthcare's impact.
- \$7.4 million to advance HHS efforts to coordinate and align on-going state-level efforts to develop **all-payer claims databases** (APCDs). AHRQ will partner with states and other data holders to create a framework for a secure national-level APCD that will enhance value to the states and provide analytics to federal and state policy makers to inform decision making.

AHRQ is committed to supporting the <u>President's Executive Order</u> on **advancing racial equity** and support for underserved communities. AHRQ's annual report to Congress on quality and disparities illustrates the vast opportunities for improving care for all. AHRQ's work continues to identify how we can achieve this goal through research, practice improvement, and data and analytics. Finally, as an effective steward of federal resources, AHRQ will continue to promote economy, efficiency, accountability, and integrity in managing our resources to ensure those investments will have the greatest impact on the health of all Americans.

> Robert Otto Valdez, Ph.D., M.H.S.A. Director, Agency for Healthcare Research and Quality

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## U.S. Department of Health and Human Services Agency for Healthcare Research and Quality





### **EXECUTIVE SUMMARY**

### **Introduction and Mission**

I am pleased to present the Agency for Healthcare Research and Quality's (AHRQ) FY 2024 Congressional Justification. This budget details the activities and efforts needed to advance AHRQ's unique mission to produce scientific evidence that makes healthcare more accessible, equitable, affordable, safer and therefore of higher quality, and to work with our U.S. Department of Health and Human Services (HHS) and other governmental and private-sector partners to ensure that evidence is understood, adopted and used.

We accomplish our mission by focusing on our three core competencies.

- Health Services and Systems Research: AHRQ invests in research that generates evidence about how to deliver high-quality, equitable, safe, high-value healthcare.
- Practice Improvement: AHRQ creates tools and strategies to help health systems and frontline clinicians deliver high-quality, equitable, safe, high-value healthcare.
- Data and Analytics: AHRQ data and analysis help healthcare decision makers understand the complex US healthcare system's performance and where there are opportunities for improvement.

The FY 2024 President's Budget provides \$447.5 million in discretionary funding. The FY 2024 President's Budget supports the following priorities:

- <u>Improving Diagnostic Safety</u>: Approximately 12 million Americans suffer a diagnostic error each year, and more than 4 million people experience severe consequences as a result of these errors or from diagnostic delays. The cost of diagnostic errors to the U.S. healthcare system may be well over \$100 billion annually. To discover and test solutions to avoid diagnostic error, AHRQ will invest \$20 million in continuing research grants and contracts to improve diagnostic safety.
- <u>Long COVID Care</u>: As the nation and our healthcare system turn our attention towards recovering from the pandemic, Long COVID care must be a central focus and serves as an opportunity to reduce care fragmentation, a key and undesirable feature of our nation's care delivery systems. AHRQ will invest \$19 million to expand accessibility to multidisciplinary Long COVID clinics and to support the primary care community in caring for people with Long COVID. In FY 2024 AHRQ will establish three new regional Long COVID Primary Care Hubs that will enhance the ability of primary care clinicians, particularly those practicing in underserved and rural communities, to care for people with Long COVID. Delivering appropriate Long COVID care provides an additional opportunity to understand how to transition care delivery from its acute disease focus to a chronic disease focus necessary to care for an aging society.

- <u>Behavioral Healthcare</u>. Primary care providers are often the first point of contact with the health care system for people living with behavioral and mental health conditions but often lack the resources, experience, training, and tools to integrate behavioral health care into their physical care practice without support. Integrating behavioral health into primary care is one of the essential strategies for making behavioral healthcare widely available and accessible, thereby addressing the rising rates of mental illness (e.g., depression and anxiety), alcohol abuse, overdose, and suicide. The FY 2024 President's Budget requests \$5.0 million in new funding to research and better understand how to scale and spread existing Local Integrated Care Network models to support primary care practices in providing integrated care in underresourced communities or with under-served populations. These activities align with HHS's Roadmap for Behavioral Health Integration.
- <u>Investigator-initiated Research in Healthcare Delivery</u>: The FY 2024 President's Budget also increases support for investigator-initiated research grants from \$53.1 million in FY 2023 to \$59.0 million at the FY 2024 President's Budget level. Additionally, the FY 2024 President's Budget continues \$3.0 million in investigator-initiated research grants focused on making care more equitable. This investment in equity is fully aligned with the Administration and Department's Equity priority.
- <u>Investments in Primary Care Research</u>: The FY 2024 President's Budget provides \$11.0 million for primary care research, an increase of \$9.0 million from the FY 2023 Enacted level. AHRQ will invest in primary care research to help answer critical questions that improve the health of patients and their families, enhance the patient experiences and outcomes, reduce the per capita cost of care and improving the provider experience. For example, AHRQ investments in developing new models of primary care that improve individual and population health while increasing access to care and increasing health equity. Primary care research contributes to multiple Administration and HHS priorities including expanding access to affordable and better care, addressing substance abuse disorders, improving access to mental health care, and advancing health equity.
- <u>Building the Evidence Base for Telehealthcare</u>: The rapid expansion of telehealthcare during the COVID-19 pandemic created both historic opportunities and unique challenges. As the pandemic abates, a myriad of telehealthcare solutions has been newly embedded into medical practice. Many have gained favor with the public by offering convenience and at times copayment-free service. With this unprecedented rapid expansion of telehealthcare, it is important to evaluate the effect of telehealthcare on healthcare quality, safety, equity, access, utilization, and value. The FY 2024 President's Budget includes \$2.0 million to establish Centers of Excellence in Telehealthcare Implementation to generate essential new evidence to understand telehealthcare's effect on access, equity, and quality that may inform key policy decisions to maximize telehealthcare's impact.
- <u>Addressing the Substance Abuse Crisis</u>: This proposal includes new research grants totaling \$7.0 million to support the Department's efforts to end the opioid crisis and combat the growing polysubstance abuse crisis. While the COVID-19 pandemic exacerbated substance abuse and increased deaths due to overdose, the underlying drivers of the surge increasing

methamphetamine and polysubstance use, fragmented and unequal access to care, and the social drivers that shape vulnerability to drug use – will persist beyond the pandemic. AHRQ will provide \$7.0 million in new research grants and \$2.5 million in non-competing research grants in FY 2024 to increase equity in treatment access and outcomes, accelerate the implementation of effective evidence-based care in primary care, and develop whole person models of care that address both co-existing conditions and social factors which shape treatment adherence and long-term recovery. An additional \$0.5 million, for a total of \$10.0 million, will be invested to develop and disseminate tools and resources to amplify the impact of the research grants.

- <u>Ensuring Maternal Healthcare</u>: A total of \$7.4 million in new funding will support the Administration's initiative to improve maternal healthcare. This coordinated initiative focuses on ensuring safe and healthy pregnancies and childbirth among African American, Native American and other underserved women who are at substantially higher risk of complication and death. This funding is the first year of a five-year initiative to ensure that Federal, State, and local policymakers have timely and accurate data and useful analytic resources about maternal morbidity and mortality with which to make informed policy decisions.
- <u>Powering Decision Making Through Data and Analytics</u>: AHRQ will invest \$7.4 million to develop the infrastructure to regularly create and disseminate a National All-Payers Claims Database (APCD) a nationally representative sample of health insurance claims data. AHRQ will partner with states with APCD systems, federal agencies, and other public/private organizations that possess health insurance claims and other relevant data. This new data initiative will allow AHRQ to create measures and information to inform public and private policy making, address equity issues, and improve healthcare quality. Additionally, the budget allows AHRQ to continue expansion and innovation of our major data platforms, including the Medical Expenditure Panel Survey (MEPS) and the Healthcare Cost and Utilization Project (HCUP), making them more comprehensive, timely, and relevant.

### **Overview of Budget**

AHRQ's FY 2024 President's Budget supports AHRQ's unique mission to improve healthcare by creating, disseminating, and assisting in implementing actionable knowledge and our priority areas of research that produce and assemble the scientific evidence that generates actionable knowledge. Our FY 2024 discretionary request totals \$447.5 million, an increase of \$74.0 million or 19.8 percent from the FY 2023 Enacted level. Of this total, \$402.5 million is requested in budget authority and \$45.0 million is allocated from Public Health Service (PHS) Evaluation Funds. AHRQ's total program level at the FY 2023 Enacted level. The total program level includes \$116.0 million in mandatory funds from the Patient-Centered Outcomes Research Trust Fund (PCORTF) for dissemination and implementation initiatives and training future researchers prepared to implement evidence-based care improvement innovations, an increase of \$5.0 million from the prior year.

Details by budget activity and research portfolio are provided in the table on the following page.

#### AGENCY FOR HEALTHCARE RESEARCH AND QUALITY

	FY 2022 Final	FY 2023 Enacted <sup>1/</sup>	FY 2024 President's Budget
Research on Health Costs, Quality and Outcomes (HCQO)	\$205,509	\$228,609	\$296,924
HCQO: Patient Safety	79,615	89,615	90,615
HCQO: Health Services Research, Data and Dissemination (HSR) <sup>1/</sup>	98,003	111,103	169,960
HCQO: Digital Healthcare Research	16,349	16,349	18,349
HCQO: U.S. Preventive Services Task Force (USPSTF)	11,542	11,542	18,000
Medical Expenditure Panel Survey	71,791	71,791	71,791
Program Support	73,100	73,100	78,785
Total, Budget Authority AHRQ	\$350,400	\$373,500	\$402,500
Total, PHS Evaluation Fund, AHRQ			\$45,000
Total, Discretionary Funds, AHRQ	\$350,400	\$373,500	\$447,500
PCORTF Transfer <sup>2/</sup>	105,112	111,000	116,000
Total, AHRQ Program Level	\$455,512	\$484,500	\$563,500

#### **Budget Detail by Activity and Research Portfolio** (Dollars in Thousands)

<sup>1</sup>/ The FY 2023 Enacted has been a djusted to include research grants and contracts requested for the Long COVID portfolio to provide comparability to the FY 2024 President's Budget that integrates this program into the HSR portfolio.

 $^{2/}$  Mandatory Funds

The FY 2024 President's Budget provides \$447.5 million for the following AHRQ programs:

- <u>Patient Safety (+\$1.0 million; total \$90.6 million)</u>: The objective of the Patient Safety research portfolio is to prevent, reduce, and mitigate patient safety risks and hazards associated with health care and their harmful impact on patients. AHRQ proposes an increase of \$1.0 million over the FY 2023 Enacted level for the Patient Safety portfolio to fund the HHS Patient Safety Plan.
- <u>Health Services Research, Data and Dissemination (HSR) (+\$58.9 million; total \$169.9</u> <u>million</u>): HSR funds foundational health services research through research grant support to

the extramural research community. AHRQ proposes an increase of \$58.9 million over the FY 2023 Enacted level for the Health Services Research, Data, and Dissemination portfolio. A total of \$8.0 million is requested in new primary care research grants, providing \$11.0 million in total support in FY 2024. The FY 2024 President's Budget also provides \$7.0 million in new grants focused on opioid research, providing \$10.0 million in total support in FY 2024. A total of \$9.0 million in new funding is provided to expand AHRQ's research in Long COVID care, providing a total of \$19.0 million in FY 2024. An additional \$5.0 million is provided for new research to study how to scale current models of behavioral healthcare integration. A total of \$3.0 million in new grant funding is provided to develop and test new patient experience measurement tools aligned with the AHRQ CAHPS principles and which are designed to promote equity. An additional \$7.4 million in research contract support is provided to ensure that Federal, State, and local policymakers have timely and accurate data and useful analytic resources about maternal morbidity and mortality with which to make informed policy decisions and for local healthcare systems to take actions to prevent devastating outcomes and deaths. A total of \$7.4 million in research contracts is provided to develop the infrastructure to regularly create and disseminate a National All-Payers Claims Database (APCD) – a nationally representative sample of APCDs that can be used to inform public and private policy making, address equity issues, and to improve healthcare quality.

- <u>Digital Healthcare Research (+\$2.0 million; total \$18.3 million</u>): The Digital Healthcare Research portfolio conducts rigorous research to determine how the various components of the digital healthcare ecosystem can best come together to positively affect healthcare delivery and create value for patients and their families. By identifying and disseminating what works and developing evidence-based resources and tools, the portfolio has played a key role in the Nation's drive to accelerate the use of safe, effective, and patient-centered digital healthcare innovations. The FY 2024 President's Budget provides an additional \$2.0 million to focus on evaluating the effects of telehealthcare on care delivery and health outcomes through the establishment of two Centers of Excellence in Telehealthcare Implementation. New grants will generate evidence on how telehealthcare can improve equity through expanded healthcare access to high-quality care for diverse populations and how remote monitoring can improve quality and equity while reducing unnecessary utilization.
- <u>The U.S. Preventive Services Task Force (+\$6.5 million; \$18.0 million)</u>: The U.S. Preventive Services Task Force (USPSTF) is an independent, volunteer panel of national experts in prevention and evidence-based medicine whose mission is to improve the health of all Americans by making evidence-based recommendations about the effectiveness of clinical preventive services and health promotion. AHRQ provides ongoing scientific, administrative, and dissemination support to assist the USPSTF in meeting their mission. The FY 2024 President's Budget provides \$18.0 million for the Task Force, an increase of \$6.5 million over the FY 2023 Enacted to support the increasingly complex nature of evidence reviews carried out by the Task Force and to support their effort to address health inequities in their recommendation development.

- <u>Medical Expenditure Panel Survey (+0.0 million; \$71.8 million)</u>: The Medical Expenditure Panel Survey (MEPS) is the only national source for comprehensive annual data on how Americans use and pay for medical care. The survey collects detailed information from families on access, use, expenses, insurance coverage, and quality. The FY 2024 President's Budget provides \$71.8 million to support base MEPS activities and fund fourth-year costs related to expanding the sample size of the MEPS that was first funded in the FY 2021 Enacted budget. The sample expansion involved the addition of 1,000 participating households (2,300 persons) to improve the precision of State level estimates for about 36 States and D.C. (i.e., all except the 7 largest and 7 smallest States). This augmentation enhances the ability of MEPS to support analyses of key population subgroups, such as persons with specific conditions, those at particular income levels or age groups, and analyses by insurance status.
- <u>Program Support (+\$5.7 million; total \$78.8 million)</u>: Program Support activities provide administrative, budgetary, logistical, and scientific support in the review, award, and monitoring of research and training awards, and research and development contracts. Recruiting and retaining talented and dedicated staff members is central to AHRQ's ability to meet its objectives. The FY 2024 President's Budget provides an increase of \$5.7 million for Program Support to support 2 additional Full-Time Equivalent (FTE) and an across-the-board 5.2 percent pay raise.
- <u>Patient-Centered Outcomes Research Trust Fund (PCORTF) (+\$5.0 million; total \$116.0 million): PCORTF</u> totals \$116.0 million in mandatory funding in FY 2024, an increase of \$5.0 million from the FY 2023 level. AHRQ will use these resources as required in its authorization to disseminate and implement patient-centered outcomes research (PCOR) evidence based actionable knowledge; obtain stakeholder feedback on the value of the evidence to be disseminated, and to inform future efforts; assist users of health information technology in incorporating PCOR research evidence into clinical practice; and provide training and career development for researchers and institutions in methods to conduct comparative effectiveness research and implement resulting evidence.

### <u>Full-Time Equivalent (FTEs)</u>

Finally, AHRQ seeks to promote economy, efficiency, accountability, and integrity in managing our research dollars to ensure that AHRQ is an effective steward of its limited resources. With our continued investment in successful programs that develop useful knowledge and tools, the end result of our research will be measurable improvements in healthcare in America, gauged in terms of improved quality of life and patient outcomes, lives saved, and value gained for our expenditures. The workforce at AHRQ includes talented scientific, clinical, programmatic, and administrative staff who work to fulfill our mission. The table on the following page summarizes current full-time equivalent (FTE) levels funded with Budget Authority, other reimbursable funding, and the PCORTF. FY 2023 and FY 2024 figures are estimates for the PCORTF.

	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget
FTEs – Budget Authority	264	264	266
FTEs – PCORTF	13	24	24
FTEs – Other Reimbursable	2	2	2

### **Overview of Performance**

AHRQ's mission is operationalized through a broad array of research that reinforces the agency's competencies: 1) health services research, 2) practice improvement, 3) data and analytics, and 4) operational excellence. Priority-setting is implicit in the activities and programs that are chosen to achieve the mission. These priorities are operationalized through the annual selection of research topics as well as in the annual balancing between funding knowledge creation activities versus dissemination, implementation, and data gathering and reporting activities.

Performance measurement begins with the refinement of existing measures or development of new performance measures to calibrate the activities (grants and contracts), outputs (knowledge creation), and near-term, intermediate, and long-term outcomes (dissemination, implementation, and impact). At the end of FY 2023, AHRQ will retire the CUSP for MRSA prevention project and supporting measure. A new measure to begin in FY 2024 was developed to support another HAI project -CUSP for Telemedicine: Diagnostic Accuracy and Antibiotic Stewardship.

Performance information is gathered from existing data sources. When necessary, new data sources must be uncovered or developed. When new measures and new data sources are used, the process must be field tested to be certain the measures can be operationalized. AHRQ assesses its operational performance through the use of literature scans and input from strategic partners to identify research gaps and new evidence and strategies on patient safety and quality and clinical preventive services and methods for reviewing scientific evidence. This information provides AHRQ with an evidence-based method for prioritizing its program planning. AHRQ's most recent performance-based accomplishments include:

**Medical Expenditure Panel Survey (MEPS).** The MEPS Household Component (HC) Tables Compendia has recently been updated moving to a more user-friendly and versatile platform (<u>https://datatools.ahrq.gov/meps-hc</u>). Interactive dashboards are provided for the following: use, expenditures, and population; health insurance, accessibility, and quality of care; medical conditions and prescribed drugs. The new platform greatly expands the number of tables that can be generated based on parameters entered by the user. As indicated in measure 1.3.19, this transition resulted in an exponential increase in the number of tables provided by the MEPS-HC (12,485 tables on the old platform to 50,000+ tables on the new platform). Whereas the old tables were released as consolidated PDFs, the new Data Tools platform allows users greater flexibility to create custom views of the tables, including a new feature that allows data to be viewed across time.

**Patient Safety.** The AHRQ Safety Program for Methicillin-Resistant Staphylococcus Aureus (MRSA) project recruited over 200 units to its intensive care unit (ICU) and non-ICU cohort. While

the recruitment did not reach the performance measure goal, considering the profound stressors on the healthcare system due to the COVID-19 pandemic and the number of facilities that have reported reduced staffing to work on such projects, the number of recruited units is impressive. Elevated rates of MRSA during the pandemic have only increased the importance of this work and the resources that will be developed from it.

In FY 2022, the AHRQ Safety Program for Improving Antibiotic Use completed and posted its 3rd and final educational toolkit, aimed at ambulatory practices, to the AHRQ website, and published results in JAMA Network Open describing significant reductions in antibiotic use in the ambulatory setting cohort of over 350 outpatient practices. The accomplishments of this project in FY 2022 joined previous accomplishments from this project including published results of significant reductions in antibiotic use in over 400 acute care hospitals and over 400 long-term care facilities and educational evidence-based toolkits posted on the AHRQ website for each of those settings.

In addition, AHRQ's Patient Safety efforts continue to provide a large variety of resources and tools to improve patient safety. Some examples include: AHRQ Patient Safety Network (AHRQ PSNet), TeamSTEPPS for Diagnosis Improvement Module, AHRQ Patient Safety Organizations, and the 2021 National Healthcare Quality and Disparities Report.

**U.S. Preventive Services Task Force (USPSTF).** In FY 2022, while continuing to provide ongoing scientific, administrative and dissemination support to the U.S. Preventive Services Task Force (USPSTF), AHRQ completed analysis of 2018 data from a nationally representative sample on the receipt of preventive services by U.S. adults. AHRQ also funded a project to update the list of high-priority clinical preventive services for adults over the age of 35 and identify potential strategies for the patient-centered implementation of preventive services as recommended by the USPSTF. The Agency continues data collection and to analyze prior years data on the receipt of preventive services.

**Digital Healthcare Research.** The portfolio produced <u>a practical guide</u> to assist ambulatory care practices with the collection, integration, and use of patient-generated health data (PGHD) in clinical care. Clinicians and scientists can use these data to generate and apply analytical techniques to improve risk prediction and diagnoses. Effective use of PGHD has become particularly important of late since remote patient monitoring with PGHD is an important complement to telehealthcare, which increased during the pandemic.

**Health Services Research, Data and Dissemination.** AHRQ is continuing work to design, develop, and disseminate clinical decision support (CDS) for chronic pain management and new applications to support safe, patient-centered opioid tapering. Also, AHRQ continues to maintain two large databases capable of monitoring data relevant to the opioid overdose epidemic – the Healthcare Cost and Utilization Project (HCUP) and the Medical Expenditure Panel Survey-Household Component (MEPS-HC).

### AGENCY FOR HEALTHCARE RESEARCH AND QUALITY

#### All Purpose Table

### (dollars in millions)

Activity		FY 2022 Final		FY 2023 Enacted <sup>1/</sup>		FY 2024 President's Budget		FY 2024 +/- FY 2023	
	\$	FTE	\$	FTE	\$	FTE	\$	FTE	
AHRO									
Patient Centered Outcomes Research Trust Fund Transfer <sup>2/</sup>	\$ 105.112	13	\$ 111.000	24	\$ 116.000	24	+5.000	0	
Research on Health Costs, Quality, and Outcomes (HCOO):									
Patient Safety.	79.615		89.615		90.615		+1.000		
Health Services Research, Data and Dissemination	98.003		111.103		169.960		+58.857		
Budget Authority (non-add)	98.003		111.103		124.960		+13.857		
PHS Evaluation Tap (non-add)					45.000		+45.000		
Digital Healthcare Research	16.349		16.349		18.349		+2.000		
U.S. Preventive Services Task Force	11.542		11.542		18.000		+6.458		
Subtotal, HCQO	205.509		228.609		296.924		+68.315		
Budget Authority (non-add)	205.509		228.609		251.924		+23.315		
PHS Evaluation Tap (non-add)					45.000		+45.000		
Medical Expenditure Panel Survey	\$ 71.791		\$ 71.791		\$ 71.791				
Budget Authority (non-add)	\$ 71.791		\$ 71.791		\$ 71.791				
PHS Evaluation Tap (non-add)									
Program Support	\$ 73.100	264	\$ 73.100	264	78.785	266	+5.685	+2	
Budget Authority (non-add)	73.100	264	73.100	264	78.785	266	+5.685	+2	
PHS Evaluation Tap (non-add)									
Total, AHRQ Program Level	\$455.512	277	\$484.500	288	\$563.500	290	+79.000	+2	
Budget Authority (non-add)	350.400	264	373.500	264	402.500	266	+29.000	+2	
PHS Evaluation Tap (non-add)					45.000		+45.000		
Less Patient Centered Outcomes Research Trust Fund Transfer 2'	105.112	13	111.000	24	116.000	24	+5.000		
Total, AHRQ Discretionary Funds	350.400	264	373.500	264	447.500	266	+74.000	+2	
NEF									
Modernization and Optimization of the Healthcare Cost and Utilization Project (HCUP)			1.700						

<sup>1/</sup> The FY 2023 Enacted has been adjusted to include research grants and contracts requested in the Long COVID portfolio to provide comparability to the FY 2024 Request <sup>2</sup> Mandatory funds.

### AGENCY FOR HEALTHCARE RESEARCH AND QUALITY

	]	FY 2022		FY 2023	FY 2024		
		Final	Enacted 1/		President's Budget		
	<u>No</u> .	<u>Dollars</u>	<u>No</u> .	<u>Dollars</u>	<u>No</u> .	<b>Dollars</b>	
RESEARCH GRANTS							
Non-Competing							
Patient Safety	69	29,316,705	86	36,695,473	115	48,686,475	
Health Serv Res, Data & Diss	127	39,156,605	132	40,657,027	185	56,996,685	
Digital Healthcare Research	30	9,528,290	31	9,714,412	40	12,769,602	
U.S. Preventive Services Task Force	0	0	0	0	0	0	
Total Non-Competing	226	78,001,600		87,066,912	340	118,452,762	
New& Competing							
Patient Safety	40	21,530,263	36	19,500,000	21	11,100,000	
Health Serv Res, Data & Diss	85	20,370,000	120	28,870,000	206	49,408,000	
Digital Healthcare Research	17	4,617,954	13	4,217,588	6	3,579,398	
U.S. Preventive Services Task Force	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	
Total New& Competing	142	46,518,217	169	52,587,588	233	64,087,398	
RESEARCH GRANTS							
Patient Safety	109	50,846,968	122	56,195,473	136	59,786,475	
Health Serv Res, Data & Diss	212	59,526,605	252	69,527,027	391	106,404,685	
Digital Healthcare Research	47	14,146,244	44	13,932,000	46	16,349,000	
U.S. Preventive Services Task Force	0	0	0	0	0	0	
TOTAL, RESEARCH GRANTS	368	124,519,817	418	139,654,500	573	182,540,160	
CONTRACTS/IAAs							
Patient Safety		28,768,032		33,419,527		30,828,525	
Health Serv Res, Data & Diss		38,476,395		41,575,973		63,555,315	
Digital Healthcare Research		2,202,756		2,417,000		2,000,000	
U.S. Preventive Services Task Force		11,542,000		11,542,000		18,000,000	
Medical Expenditure Panel Survey		<u>71,791,000</u>		<u>71,791,000</u>		71,791,000	
TOTAL CONTRACTS/IAAs		152,780,183		160,745,500		186,174,840	
PROGRAM SUPPORT		73,100,000		73,100,000		78,785,000	
GRANDTOTAL							
PatientSafety		79,615,000		89,615,000		90,615,000	
Health Serv Res, Data & Diss		98,003,000		111,103,000		169,960,000	
Digital Healthcare Research		16,349,000		16,349,000		18,349,000	
U.S. Preventive Services Task Force		11,542,000		11,542,000		18,000,000	
Medical Expenditure Panel Survey		71,791,000		71,791,000		71,791,000	
Program Support		<u>73,100,000</u>		73,100,000		<u>78,785,000</u>	
GRAND TOTAL		350,400,000		373,500,000		447,500,000	

### Discretionary Mechanism Summary Table by Portfolio

 $^{1/}$  The FY 2023 Enacted has been adjusted to include research grants and contracts requested for the Long COVID portfolio to provide comparability to the FY 2024 President's Budget that integrates this program into the HSR portfolio.

### **BUDGET EXHIBITS**

### AGENCY FOR HEALTCARE RESEARCH AND QUALITY

#### HEALTHCARE RESEARCH AND QUALITY

For carrying out titles III and IX of the PHS Act, part A of title XI of the Social Security Act, and section 1013 of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, [\$376,091,000] *\$402,500,000*: Provided, That section 947(c) of the PHS Act shall not apply in fiscal year [2023] *2024*: *Provided further, That, in addition to amounts provided herein, \$45,000,000 shall be available to this appropriation, for the purposes under this heading, from amounts provided pursuant to section 241 of the PHS Act*: Provided further, That in addition, amounts received from Freedom of Information Act fees, reimbursable and interagency agreements, and the sale of data shall be credited to this appropriation and shall remain available until September 30, [2024] 2025.

### AGENCY FOR HEALTHCARE RESEARCH AND QUALITY

### Amounts Available for Obligation

### (Dollars in Thousands)

General Fund Discretionary Appropriation:	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget
Appropriation (L/HHS, Ag, or, Interior) Across-the-board reductions (L/HHS, Ag, or Interior) Subtotal, Appropriation (L/HHS, Ag, or Interior) Rescission Reappropriation. Proposed Supplemental Appropriation. Proposed Rescission.	\$350,400	\$373,500	\$402,500
Proposed Reappropriation Subtotal, adjusted appropriation			
Real transfer	\$ -	\$-	\$ -
Comparable transfer from AHRQ to NIH	(886)		
Subtotal, adjusted general fund discretionary appropriation	\$ 349,514	\$ 373,500	\$ 402,500
<u>Trust Fund Discretionary Appropriation</u> : Appropriation Lines Transfer Lines for PHS Evaluation Subtotal, adjusted trust fund discr. Appropriation			45,000
Total, Discretionary Appropriation	\$ 349,514	\$ 373,500	\$ 447,500
Mandatory Appropriation: Appropriation Lines Transfer Lines for PCORTF (non-add) Subtotal, adjusted mandatory. appropriation Offsetting collections from:	\$ 105,112 \$ 105,112	\$ 111,000 \$ 111,000	\$116,000 \$116,000
Unobligated balance, start of year Unobligated balance, end of year Unobligated balance, lapsing	\$ 52		
Total obligations	\$ 454,574	\$ 484,500	\$ 563,500

### AGENCY FOR HEALTHCARE RESEACH AND QUALITY

### Summary of Changes

#### (dollars in millions)

FY 2023 Enacted	
Total estimated budget authority	\$373.500
(Obligations)	
FY 2024 President's Budget	
Total estimated discretionary funds	\$447.500
(Obligations)	
Net Change	+\$74.000

	FY 2023 Enacted		FY 2024 President's Budget		FY 2024 +/- FY 2023	
	ВА	FTE	ВА	FTE	BA	FTE
Increases:						
Built-in:						
Annualization of 2022 civilian pay increase	\$54.755	259	\$58.101	261	+\$3.346	+2
Annualization of 2022 commissioned corps pay increase	\$0.940	+5	\$0.989	+5	+\$0.049	
Subtotal, Built-in Increases B. Program:	\$55.695	+264	\$59.090	266	+\$3.395	+2
Health Services Research, Data and Dissemination	\$111.103		\$169.960		+\$58.857	
2. Patient Safety	\$89.615		\$90.615		+\$1.000	
3. Digital Healthcare Research 4. U.S. Preventive Services Task	\$16.349		\$18.349		+\$2.000	
Force	\$11.542		\$18.000		+\$6.458	
5. Program Support (non-pay)	\$17.405		\$19.695		+\$2.290	
Subtotal, Program Increases	\$246.014		\$316.619		+\$70.605	
Total Increases	\$301.709	264	\$375.709	266	+\$74.000	+2
Decreases: A. Built-in:						
A. Built-In:						
1. Pay Costs						
Subtotal, Built-in Decreases B. Program:						
Subtotal, Program Decreases		-				
Total Decreases		-		-		
Net Change					+\$74.000	+2

### AGENCY FOR HEALTHCARE RESEARCH AND QUALITY

### **Discretionary Funds by Activity**

(dollars in millions)

	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget
Research on Health Costs, Quality and Outcomes	\$205.509	\$228.609	\$296.924
Budget Authority	\$205.509	\$228.609	251.924
PHS Evaluation Funds			45.000
Medical Expenditure Panel Survey	71.791	71.791	71.791
Budget Authority	71.791	71.791	71.791
PHS Evaluation Funds			
Program Support	73.100	73.100	78.785
Budget Authority	73.100	73.100	78.785
PHS Evaluation Funds			
Total, Budget Authority AHRQ	\$350.400	\$373.500	\$402.500
Total, PHS Evaluation Fund, AHRQ			\$ 45.000
FTE (BA)	264	264	266

#### AGENCY FOR HEALTHCARE RESEARCH AND QUALITY

#### Authorizing Legislation <sup>1/, 2/</sup>

(dollars in millions)

	FY 2023 Amount Authorized	FY 2023 Amount Appropriated	FY 2024 Amount Authorized	FY 2024 President's Budget
Research on Health Costs, Quality, and Outcomes: Secs. 301 & 926(a) PHSA	SSAN	\$ 228.609	SSAN	\$251.924
Research on Health Costs, Quality, and Outcomes: Part A of Title XI of the Social Security Act (SSA) Section 1142(i) <sup>3/4/</sup> Budget Authority Medicare Trust Funds <sup>4/3/</sup> Subtotal BA & MTF	Expired <sup>6/</sup>		Expired <sup>6/</sup>	
<u>Medical Expenditure Panel Surveys:</u> Sec. 947(c) PHSA	SSAN	\$ 71.791	SSAN	\$ 71.791
Program Support: Sec. 301 PHSA	Indefinite	\$73.100	Indefinite	\$78.785
Evaluation Funds: Sec. 947(c) PHSA		\$0		\$45.000
Total appropriations, AHRQ <sup>2/</sup>		\$ 373.500		\$447.500

Total appropriation against definite authorizations......

SSAN = Such Sums As Necessary

<sup>1/</sup> Section 487(d) (3)PHSA makes one percent of the funds appropriated to NIH for National Research Service Awards available to AHRQ. Because these reimbursable funds are not included in AHRQ's appropriation language, they have been excluded from this table.

<sup>2/</sup> Excludes mandatory financing from the PCORTF.

<sup>3/</sup> Pursuant to Section 1142 of the Social Security Act, FY 1997 funds for the medical treatment effectiveness activity are to be appropriated against the total authorization level in the following manner: 70% of the funds are to be appropriated from Medicare Trust Funds (MTF); 30% of the funds are to be appropriated from general budget authority.

<sup>4/</sup> No specific amounts are authorized for years following FY 1994.

<sup>5/</sup> Funds appropriated against Title XI of the Social Security Act authorization are from the Federal Hospital Insurance Trust Funds (60%) and the Federal Supplementary Medical Insurance Trust Funds (40%).

<sup>6/</sup> Expired September 30, 2005.

### Agency for Healthcare Research and Quality

### Appropriations History Table (2014-2024) <sup>1/</sup>

		Budget Estimate to Congress	House Allowance	Senate Allowance	Appropriation
AHRQ 2014					
Budget Authority		\$ -	\$ -	\$ -	\$ -
PHS Evaluation Funds		\$333,697,000	<u>\$ -</u>	\$364,008,000	\$364,008,000
	Total	\$333,697,000	\$ -	\$364,008,000	\$364,008,000
AHRQ 2015		¢.		<b>* 252 2</b> 25 200	
Budget Authority		\$ - <u>\$334,099,000</u>	\$ - <u>\$ -</u>	\$ 373,295,000 <u>\$-</u>	\$363,698,000 \$
PHS Evaluation Funds	<b>T</b> . 1				<u>\$-</u>
AHRQ 2016	Total	\$334,099,000	\$ -	\$373,295,000	\$363,698,000
Budget Authority		\$275,810,000	\$ -	\$236,001,000	\$334,000,000
PHS Evaluation Funds		<u>\$ 87,888,000</u>	5 - <u>\$ -</u>	\$250,001,000 <u>\$ -</u>	\$354,000,000 <u>\$ -</u>
	Total	\$363,698,000	\$ -	\$236,001,000	\$334,000,000
AHRQ 2017	10.00	\$2,02,02,000	Ŷ	\$200,001,000	\$22.1,000,000
Budget Authority		\$280,240,00	\$280,240,000	\$324,000,000	\$324,000,000
PHS Evaluation Funds		\$83,458,000	<u>\$</u> -	<u>\$ -</u>	<u>\$ -</u>
	Total	\$363,698,000	\$ 280,240,000	\$324,000,000	\$324,000,000
AHRQ 2018					
Budget Authority		\$272,000,000	\$300,000,000	\$324,000,000	\$334,000,000
PHS Evaluation Funds		<u>\$-</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
AHRQ 2019	Total	\$272,000,000	\$300,000,000	\$324,000,000	\$334,000,000
Budget Authority		\$255,960,000	\$334,000,000	\$334,000,000	\$338,000,000
PHS Evaluation Funds		<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
	Total	\$255,960,000	\$334,000,000	\$334,000,000	\$338,000,000
AHRQ 2020					
Budget Authority		\$255,960,000 <u>\$ -</u>	\$339,809,000 <u>\$18,408,000</u>	\$ - <u>\$ -</u>	\$338,000,000 <u>\$ -</u>
PHS Evaluation Funds	Total	<u>\$ -</u> \$255,960,000	<u>\$ 18,408,000</u> \$358,217,000	<u> </u>	\$338,000,000
AHRQ 2021	10141	\$255,700,000	\$558,217,000	φ -	\$558,000,000
Budget Authority		\$256,660,000	\$143,091,000	\$256,600,000	\$338,000,000
PHS Evaluation Funds		<u>\$ -</u>	<u>\$199.909,000</u>	<u>\$0</u>	<u>\$0</u>
	Total	\$256,660,000	\$343,000,000	\$256,600,000	\$338,000,000
	101.01.01.01.01.01.01.01.01.01.01.01.01.	\$250,000,000	\$343,000,000	\$250,000,000	\$338,000,000
AHRQ 2022 Budget Authority		\$353,000,000	\$250,792,000	\$353,000,000	\$350,400,000
PHS Evaluation Funds		<u>\$ 27,000,000</u>	<u>\$129,208,000</u>	<u>\$ 27,000,000</u>	\$550,400,000 <u>\$0</u>
	Total	\$380,000,000	\$380,000,000	\$380,000,000	\$350,400,000
AHRO 2023			. , ,	. , ,	
Budget Authority		\$376,091,000	\$385,000,000	\$373,500,000	\$373,500,000
PHS Evaluation Funds		<u>\$ 39,800,000</u>	\$0 \$0	\$0	<u>\$0</u>
	Total	\$415,891,000	\$385,000,000	\$373,500,000	\$373,500,000
AHRQ 2024		-		- /	
Budget Authority		\$402,500,000			
PHS Evaluation Funds					
FIIS Evaluation Funds		\$45,000,000			
	Total	\$447,500,000			

<sup>1/</sup> Excludes mandatory financing from the PCORTF.

### Agency for Healthcare Research and Quality

### Appropriations Not Authorized by Law

Program	Last Year of Authorization	Authorization Level	Appropriations in Last Year of Authorization	Appropriations in FY 2023
Researchon HealthCosts, Quality, and Outcomes	FY 2005	Such Sums As Necessary	\$260,695,000	\$373,500,000

## NARRATIVE BY ACTIVITY

Research on Health Costs, Quality, and Outcomes (HCQO)				
	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget	FY 2024 +/- FY 2023
BA	\$205,509,000	\$228,609,000	\$251,924,000	+\$23,315,000
PHS Evaluation Funds	\$0	\$0	\$45,000,000	+\$45,000,000

Authorizing Legislation: Title III and IX and Section 947(c) of the Public Health Service Act and Section 1013 of the Medicare Prescription Drug, Improvement, and Modernization Act (MMA) of 2003.

FY 2024 Authorization.....Expired. Allocation Method.....Competitive Grant/Cooperative Agreement, Contracts, and Other.

#### Summary

AHRQ's program level for Research on Health Costs, Quality, and Outcomes (HCQO) at the FY 2024 President's Budget level is \$296.9 million, an increase of \$68.3 million from the FY 2023 Enacted level. This funding is comprised of \$251.9 million in budget authority and \$45.0 million in PHS Evaluation funds. A detailed table by research portfolio is provided below. Program narratives for each portfolio follow.

### AHRQ Budget Detail

(dollars in millions)

Division	FY 2022 Final	FY 2023 Enacted <sup>1</sup> /	FY 2024 President's Budget
Research on Health Costs, Quality, and Outcomes (HCQO):			
Patient Safety	\$ 79.615	\$ 89.615	\$ 90.615
Health Services Research, Data and Dissemination 1/	98.003	111.103	169.960
Digital Healthcare Research	16.349	16.349	18.349
U.S. Preventive Services Task Force	11.542	11.542	18.000
Subtotal, HCQO	205.509	228.609	296.960
Budget Authority	205.509	228.609	251.924
PHS Evaluation Funds	0.000	0.000	45.000

 $^{1/}$  The FY 2023 Enacted has been adjusted to include research grants and contracts requested for the Long COVID portfolio to provide comparability to the FY 2024 President's Budget that integrates this program into the HSR portfolio.

HCQO: Patient Safety				
	FY 2022 Final	FY 2023 Enacted Level	FY 2024 President's Budget	FY 2024 +/- FY 2023
Budget Authority	\$79,615,000	\$89,615,000	\$90,615,000	+\$1,000,000
PHS Evaluation Funds	\$0	\$0	\$0	\$0

Authorizing Legislation:Title III and IX and Section 947(c) of the Public Health Service ActFY 2024 Authorization.Expired.Allocation Method.Competitive Grant/Cooperative Agreement, Contracts, and Other.

**Patient Safety Research Program Description:** The objectives of this program are to prevent, mitigate, and decrease patient safety risks and hazards, and quality gaps associated with health care and their harmful impact on patients. This mission is accomplished by funding health services research in the following activities: Patient Safety Risks and Harms, Healthcare-Associated Infections (HAIs), and Patient Safety Organizations (PSOs). A table showing the allocation by these activities is provided below. Projects within the program seek to inform multiple stakeholders including health care organizations, providers, policymakers, researchers, patients and others; disseminate information and implement initiatives to enhance patient safety and quality; improve teamwork and communication to improve organizational culture in support of patient safety; and maintain vigilance through adverse event reporting and surveillance in order to identify trends and prevent future patient harm.

#### FY 2022 FY 2023 FY 2024 **President's Budget** Final Enacted Patient Safety Risks and Harms \$39.123 \$49.123 \$50.123 Patient Safety Organizations (PSOs) 4.821 4.821 4.821 Healthcare-Associated Infections 35.671 35.671 35.671 (HAIs) **Patient Safety Research Activities** \$79.615 \$89.615 \$90.615

#### Patient Safety Research Activities (dollars in millions)

### FY 2024 Budget Request

**FY 2024 Budget Policy:** The FY 2024 President's Budget level for Patient Safety research is \$90.6 million, an increase of \$1.0 million over the FY 2023 Enacted level. AHRQ allocates these funds to our three patient safety research activities. Details are provided on the following page.

#### Research Related to Risk and Harms

The FY 2024 President's Budget level for Research related to Risk and Harms is \$50.1 million, an increase of \$1.0 million over the FY 2023 Enacted level. In total, Research Related to Risk and Harms will fund \$29.8 million in continuing research grants, \$4.8 million in new grants and \$15.5 million in research contracts to support ongoing patient safety research, resource development, and dissemination and implementation. The increase within this activity will also support a \$1 million dollar contract to develop and implement an HHS-wide national patient safety strategic plan through the HHS Action Alliance. This contract will further establish healthcare system learning communities to advance patient safety.

The FY 2024 President's Budget level also will allow AHRQ to maintain \$20.0 million in research support for diagnostic safety. Of this amount, \$14.5 million will support non-competing grants that focus on diagnostic safety, including funding for the Diagnostic Safety Centers of Excellence. The remaining \$5.5 million will support new diagnostic safety grants, contracts and the continuation of a contract awarded in FY 2023 to support a learning community of AHRQ's current diagnostic safety grantees.

At the FY 2024 President's Budget level, AHRQ will continue to support non-competing grants for Patient Safety Learning Labs that use systems engineering approaches to reduce patient harm due to treatment and diagnostic errors. Through two other grant initiatives, AHRQ will provide continuation funding for grants to improve patient safety in ambulatory and long-term care settings, and grants to improve medication safety. In FY 2024, AHRQ will support a new grant program announcement to improve patient safety by addressing workforce issues such as burnout, staffing shortages, increased patient acuity and pandemic related exhaustion.

In FY 2024, AHRQ will award a new contract to continue operations for the Patient Safety Network (PSNet), AHRQ's online comprehensive patient safety resource that includes links to key patient safety peer-reviewed journal articles and new content such as primers on important patient safety topics, interviews with patient safety experts and web-based morbidity and mortality rounds. AHRQ will continue its work on the Quality and Safety Review System (QSRS). QSRS is being used to help understand the extent of medical errors taking place in U.S. hospitals, and, currently, QSRS is used to produce a national rate of Hospital Acquired Conditions (HACs). QSRS generates adverse event rates and trends in performance. AHRQ developed QSRS to function as an improved patient safety surveillance system and serve as a replacement for the Medicare Patient Safety Monitoring System (MPSMS).

#### Healthcare-Associated Infections

The FY 2024 President's Budget level provides \$35.7 million, the same level of support as the FY 2023 Enacted, to fund research grants and contracts to advance the generation of new knowledge and promote the application of proven methods for preventing Healthcare-Associated Infections (HAIs). Within this amount, \$10.0 million will be invested in support of the national Combating Antibiotic-Resistant Bacteria (CARB) enterprise. Program activities include efforts in antibiotic stewardship, with a focus on ambulatory and long-term care settings, as well as hospitals. In total, at the FY 2024 President's Budget level, HAIs will provide \$18.9 million in noncompeting grants, \$6.3 million for new research grants, and \$10.5 million in research contract support. At the FY 2024 President's

Budget level, AHRQ will assess the history and experience with AHRQ's CUSP projects to date as well as then-current HAI prevention and antibiotic resistance issues, to determine which new CUSP projects to initiate. Two potential FY 2024 projects are: a broad update of CUSP toolkits to reflect growing and evolving evidence; and CUSP for Multidrug Resistant Organisms (MDROs), an increasing threat, especially during the COVID pandemic (see Program Portrait on the following page). The evidence and products of the CUSP projects are shared with other HHS OPDIVs. CDC and CMS staff serve on the Technical Expert Panels of projects and are involved in the development and dissemination of toolkits that are produced by the projects.

#### Patient Safety Organization

The FY 2024 President's Budget level provides \$4.8 million to continue conformance with requirements of the Patient Safety Act, the same level of support as was provided in the FY 2023 Enacted level. The Patient Safety Act provides privilege and confidentiality protection to certain information, including that prepared by health care providers throughout the country working with PSOs for quality and safety improvement activities. The Patient Safety Act promotes increased voluntary patient safety event reporting and analysis, as patient safety work product reported to a PSO generally cannot be used as part of litigation (e.g., medical malpractice claims) and other proceedings at the Federal, state, local, or administrative level. HHS issued regulations to implement the Patient Safety Act, which authorized the certification of PSOs, and AHRQ administers the provisions of the Patient Safety Act dealing with PSO requirements for certifications. AHRQ will continue to maintain the NPSD and expand the data available to the public, as the number of providers and PSOs contributing data to the NPSD grows. To make the data available for meaningful, national learning purposes, the NPSD will continue to develop informational tools, such as dashboards and chartbooks.

#### *Program Portrait:* Comprehensive Unit-based Safety Program (CUSP)

1. Comprehensive Unit-based Safety Program

FY 2023 Enacted:	\$5.0 million
FY 2024 President's Budget Level:	\$5.0 million
Change:	\$0.0 million

The Comprehensive Unit-based Sa fety Program (CUSP), which was developed and shown to be effective with AHRQ funding, involves improvement in sa fety culture, teamwork, and communication, together with a checklist of evidence-based sa fety practices. CUSP was highly effective in reducing central line-associated blood stream infections in more than 1,000 ICUs that participated in AHRQ's nationwide CUSP implementation project for central line-associated blood stream infections. Subsequently, AHRQ expanded the application of CUSP to prevent other HAIs, including ca theter-associated urinary tract infections in hospitals and long-term care facilities, surgical site infections and other surgical complications in inpatient and ambulatory surgery, and ventila tor-associated events.

AHRQ will provide \$5.0 million for CUSP activities at the FY 2024 President's Budget level, similar to the prior year. AHRQ will assess the history and experience with AHRQ's CUSP projects to date, as well as thencurrent HAI and antibiotic resistance issues, to determine which new CUSP project to initiate. Two potential FY 2024 projects that are envisioned are: a broad update of all CUSP toolkits to reflect growing and evolving evidence, and CUSP for Multidrug Resistant Organisms (MDROs), an increasing threat, especially during the COVID pandemic.

In FY 2024, Implementation activities in the CUSP for Methicillin-Resistant Staphylococcus Aureus (MRSA) Prevention project will continue using FY 2020 and FY 2021 funds. The ICU and non-ICU cohort will be completed in Q1 of FY 2024. High-risk surgical services implementation activities will be completed in Q4 and long-term care cohorts will continue throughout FY 2024. Finally, the CUSP for Telemedicine project will begin recruitment and implementation activities in its Antibiotic Stewardship cohort using FY 2023 funds.

#### FY 2022 Patient Safety Accomplishments by Research Activity

Patient Safety Risks and Harms: The issue of diagnostic safety has not received the same level of attention as other patient safety harms. In a study of patients seeking second opinions from the Mayo Clinic, researchers found that only 12 percent were correctly diagnosed by their primary care providers. More than 20 percent had been misdiagnosed, while 66 percent required some changes to their initial diagnoses. Therefore, in FY 2022, AHRO funded new Patient Safety Learning Lab (PSLL) grants in addition to continued support for ongoing labs. The PSLLs funded in FY 2019 and FY 2022 apply systems engineering approaches to address both diagnostic and treatment errors in health care. In FY 2022, AHRQ also funded Diagnostic Safety Centers of Excellence grants. These grants explore how to address different diagnostic safety challenges in addition to creating the infrastructure for continued research in this area. In FY 2022 AHRQ continued work related to the development and promotion of four different resources to address failures in the diagnostic process. The Toolkit for Engaging Patients To Improve Diagnostic Safety, posted to the AHRQ website in FY 2021, engages patients and families in the diagnostic process by helping clinicians provide patients with one uninterrupted minute to share the reason for their office visit. Two other resources were posted to the AHRQ website in FY 2022. *TeamSTEPPS to Improve Diagnosis* helps clinicians improve teamwork and communication related to diagnosis. MeasureDx: A Resource to Identify, Analyze, and Learn From Diagnostic Safety Events helps healthcare organizations start using measurement to enhance diagnostic safety learning. A final resource, to be completed in early FY 2023 focuses on clinician calibration, which focuses on better alignment between a clinician's confidence in their diagnostic performance and their actual performance.

According to the Joint Commission, an estimated 80 percent of serious medical errors involve miscommunication between clinical teams when responsibility for patients is transferred or handedoff. In FY 2021, AHRQ further developed projects that have demonstrated impact in improving patient safety, including successful initiatives that seamlessly integrate evidence-based resources into practice such as TeamSTEPPS® (Team Strategies and Tools to Enhance Performance and Patient Safety) and the Surveys on Patient Safety Culture. These projects address the challenges of healthcare teamwork, communication, and coordination among provider teams. Better teamwork and the establishment of safety cultures in healthcare organizations are critically important to patient safety. Both of these topics are widely recognized as foundational bases on which patient safety can be improved. In FY 2022, AHRQ continued work to modernize the TeamSTEPPS curriculum and anticipates posting the new curriculum to the AHRQ website in FY 2023.

<u>Research</u> has shown that preventable adverse events constitute nearly 60% of harms experienced by residents in nursing homes. In ambulatory care, a <u>systematic review</u> found there are between 2–3 patient safety incidents per 100 consultations/patient records reviewed and about 4% of these incidents were associated with severe harm. To address these patient safety issues, in FY 2022 AHRQ supported grants to a) improve patient safety in ambulatory and long-term care settings and b) to improve medication safety. With respect to medication safety, an AHRQ funded grant to improve appropriate opioid prescribing in primary care offices, called the Six Building Blocks: A Team-Based Approach to Improving Opioid Management in Primary Care led to a significant decrease in opioid prescribing. As a result, AHRQ supported the development of a Self-Service How-To Guide to help primary care practices implement this approach. To address the field's need for this information as soon as possible, AHRQ posted an early version of the Guide to the AHRQ

website before pilot testing. The pilot testing has been completed and AHRQ revised and renamed the resource; the <u>Six Building Blocks: A Team-Based Approach to Improving Opioid Management</u> in Primary Care How-to-Implement Toolkit was posted to the AHRQ website in early FY 2022.

<u>Healthcare-Associated Infections (HAIs)</u>: In FY 2021 and 2022, AHRQ made significant progress in five CUSP projects.

- 1) CUSP for antibiotic stewardship (*official title: AHRQ Safety Program for Improving Antibiotic Use*) completed analyses of the ambulatory care cohort involving over 350 ambulatory care practices (e.g., clinics, medical practices, and urgent care centers) which ended December 2020. Data from this cohort showed a significant reduction in antibiotic starts over the one-year period, was presented at Infectious Disease (ID) Week in September 2021 and was published in JAMA Network Open in July 2022. The educational toolkit focused on ambulatory care was released on the AHRQ website in September 2022. In addition, an educational toolkit was launched on the AHRQ web site in June 2021 focused on long-term care (LTC) and based on the experiences of a previous cohort of over 400 LTC facilities. Final results from this cohort were also published in JAMA Network Open in February 2021.
- 2) In March 2022, CUSP for intensive care units (ICUs) with persistently elevated rates of CLABSI and CAUTI (official title: AHRQ Safety Program for Intensive Care Units (ICUs): Preventing CLABSI and CAUTI) posted an educational toolkit based on the experiences of the over 700 ICUs that actively participated in the project overall.
- 3) CUSP for improving surgical care and recovery (official title: AHRQ Safety Program for Improving Surgical Care and Recovery) has worked with over 350 hospitals in well over 40 States through July 2022. The hospitals range from those with fewer than 50 beds to those with more than 500 beds. The first cohort addressed colorectal surgery, the second cohort added a focus on orthopedic surgery, and the third cohort added a focus on gynecological surgery. A fourth cohort of over 100 hospitals – over 50 new hospitals and over 50 hospitals from previous cohorts – added a focus on emergency general surgery. Work with hospitals in the three other focus areas also continued. The fourth cohort started work in September 2020 and concluded in May of 2022. The ISCR team has continued to provide support to hospitals from all cohorts as they try to maintain momentum developed during the formal project. Toolkit materials informed by the cohorts' experience are now being updated in anticipation of posting the toolkit on the AHRQ website in spring of 2023.
- 4) CUSP for Methicillin-Resistant Staphylococcus Aureus (MRSA) Prevention (official title: AHRQ Safety Program for MRSA Prevention), which aims to reduce MRSA infections in ICUs, non-ICUs, high-risk surgical services, and long-term care facilities in setting-specific cohorts, began implementation in over 200 ICUs and non-ICUs in April 2022. An evidence review has been completed for each setting. Recruitment for high-risk surgical services began in September 2022, and the cohort kicked off in January 2023.
- 5) CUSP for Telemedicine (proposed official title: AHRQ Safety Program for Telemedicine) was awarded in June 2022, and the virtual kickoff meeting was held shortly thereafter in the same month. There are two arms to this contract: Diagnostic Accuracy (DA) and Antibiotic Stewardship (AS), for which Technical Expert Panels consisting of academic and federal partners are planned, starting Fall 2022. This project aims to recruit at least 150-300

telemedicine practices to participate in a DA-focused cohort and at least 300-500 telehealth practices to participate in an AS-focused cohort. The project will result in a toolkit to be posted on the AHRQ website after it is completed in 2026.

Patient Safety Organizations (PSOs): The U.S. Department of Health & Human Services was directed in the Patient Safety and Quality Improvement Act of 2005 (Patient Safety Act) to create and maintain a Network of Patient Safety Databases (NPSD) to provide an interactive, evidencebased, management resource for health care providers, Patient Safety Organizations (PSOs) listed by AHRQ, and others. In June 2019, AHRQ operationalized the NPSD with the release of the NPSD dashboards, the first NPSD data reporting tool available to the public, and in December 2019 issued an accompanying NPSD Chartbook. In August 2020, a new NPSD Chartbook and NPSD Dashboards with data reflecting over 619,000 additional records was released. As of September 2022, more than 2.5 million records are reflected in the NPSD Chartbook and NPSD Dashboards. Additionally, a supplemental 2022 Falls dashboard was added, incorporating a new statistical method (frequent pattern-mining), new topic areas (including patient activity prior to fall and risk factors for falls), richer analysis by dis-aggregating falls information by age groups, and reorganization of data to be more reader-friendly. This supplemental dashboard will be used as a prototype for future enhancements to other existing dashboards, starting with the Medication or Other Substance Dashboard in 2023. In November 2021, AHRQ also issued the first NPSD Data Spotlight, Patient Safety and COVID-19: A Qualitative Analysis of Concerns During the Public Health Emergency. A second spotlight is planned for Spring 2023 that will include deeper analysis of the Falls data. The NPSD is the first publicly available online resource that captures nonidentifiable information on patient safety events collected by AHRQ-listed PSOs and their participating providers across the U.S. PSOs collect data using AHRQ's Common Formats for Event Reporting - Hospitals, a standardized reporting format using common language and definitions of patient safety events.

In May 2022, AHRQ issued new Common Formats for Event Reporting – Diagnostic Safety, which is intended to help healthcare providers collect data for analysis of Diagnostic Safety Events in a standardized manner across healthcare settings and specialties for the purpose of learning about how to improve diagnostic safety and better support clinicians in the diagnostic process. The Patient Safety Act also required AHRQ to prepare a Report to Congress on effective strategies for reducing medical errors and increasing patient safety with deadlines tied to the operationalization of the NPSD. In December 2020, AHRQ made available a draft Report to Congress for National Academy of Medicine review and public comment. In November 2021, AHRQ submitted the final report to Congress, "Strategies to Improve Patient Safety: Final Report to Congress Required by the Patient Safety and Quality Improvement Act of 2005."

### Key Outputs and Outcomes Tables with Performance Narrative: Patient Safety

Measure	Year and Most Recent Result/	FY 2023 Target	FY 2024 Target	FY 2024 Target
	Target for Recent Result/			+/- FY 2023 Target
1.3.38 Increase the number of users of research using AHRQ- supported research tools to improve patient safety culture (Outcome)	(Summary of Result) FY 2022: 2,128 users of research	2,325 users of research	N/A (Retired 2023)	N/A
	Target Not Met			
1.3.41 Increase the cumulative number of evidence-based resources and tools a vailable to improve the quality of health care and reduce the risk of patient harm. (Outcome)	FY 2022: 275 tools	300 tools	325 tools	+25 tools
1.3.64 Increase the number of units participating in the CUSP for MRSA prevention project	FY 2022: 211 units	150 additional sites participating (surgical services and long- term care facilities)	N/A (Retired 2023)	N/A
1.3.65 Increase the cumulative number of SOPS surveys and SOPS supplemental item sets submitted to the AHRQ SOPS databases	FY 2024: Result Expected Sep 30, 2024	N/A	TBD	N/A
1.3.66 Increase the cumulative technical assistance and outreach to SOPS users and stakeholders	FY 2024: Results Expected Sep 30, 2024	N/A	TBD	N/A
1.3.67 Increase the number of telehealth practices participating in the CUSP for Telemedicine project's Antibiotic Stewardship cohort	FY 2024: Results Expected Sep 30, 2024	N/A	100 telemedicine practices	+100 telemedicine practices

# **1.3.38:** Increase the number of users of research implementing AHRQ-supported research tools to improve patient safety culture

As an indicator of the number of research users, the Agency relies in part on the Surveys on Patient Safety Culture<sup>TM</sup> (SOPS®). AHRQ initiated the SOPS program to support a culture of patient safety and quality improvement in the Nation's health care system. The safety culture surveys, and related resources are available for hospitals, nursing homes, medical offices, community pharmacies, and ambulatory surgery centers. Each SOPS survey has an accompanying toolkit that contains: survey forms, survey items and dimensions, survey user's guide, and a data entry and analysis tool. Health care organizations can use SOPS to: raise staff awareness about patient safety culture, examine trends in culture over time, conduct internal and external tracking of findings, and identify strengths and areas for improvement. The SOPS surveys can be used to assess the safety culture of individual units and departments or organizations have downloaded the surveys and related resources from the AHRQ Web site, implemented them, and have chosen to submit resulting data to the SOPS databases. The interest in these resources has remained strong over the past 16 years as evidenced by submissions to the databases, orders placed for various products, participation in SOPS webinars, and requests for technical assistance.

The SOPS databases were established in response to requests from SOPS users and patient safety researchers. AHRQ established the SOPS databases as central repositories for survey data from healthcare organizations that have administered the SOPS and have chosen to submit their data to the databases. Upon meeting minimal eligibility requirements, health care organizations can voluntarily submit their survey data for aggregation and compare their safety culture survey results to others. AHRQ moved, in 2014, to bi-annual data submission to enhance accuracy of the survey results and reduce the burden on organizations.

For the purposes of reporting, AHRQ defines "SOPS users" as those organizations that submit results to the databases. This number is only a portion of the total number of users of the SOPS surveys and products; others access the SOPS surveys and materials – which AHRQ is aware of through technical assistance requests and Web downloads – but do not submit data to the databases.

For FY 2022, the SOPS databases encompass a total of 2,128 users of research, including 235 ambulatory surgery centers (2021 report); 400 hospitals (2022 Hospital 2.0 Survey Database Report); 1,100 medical offices (2022 report on data collected 2021); 62 nursing homes (2022 report); and 331 community pharmacies (no plans to collect data at this time).

Healthcare organizations provide the numbers to AHRQ on a voluntary basis. Based on previous trends in reporting, AHRQ established a target of 3,950 users of research to submit to the SOPS database for FY 2021. However, due to COVID-19, the number of SOPS users in 2020 and 2021 was significantly less than in 2019. The AHRQ program suspended the Nursing Home SOPS data submission in 2020 due to competing priorities of nursing homes and the patient care demands required of nursing homes because of the COVID-19 pandemic. Due also to COVID-19, fewer

numbers of hospitals, medical offices, and ambulatory surgery centers submitted data to the database for FY 2021.

The FY 2022 target was adjusted based on the results from FY 2020 and 2021. However, due to ongoing healthcare challenges (limited resources, staff shortages, etc.) including post-pandemic difficulties in healthcare, new SOPS data numbers from hospitals (July 2022) and nursing home (September 2022) are significantly lower than in previous years. There are no plans to collect data on the Community Pharmacy Survey currently.

The FY 2023 target has been adjusted to 2,325. The lower target number is a result of the ongoing challenges that the COVID-19 pandemic has presented and how these challenges affect participation by healthcare organizations that plan to administer the SOPS survey.

The plan is to retire this (1.3.38) measure at the end of FY 2023 as it no longer accurately captures program outcomes.

Two (2) new patient safety measures are being proposed for FY 2024 to depict program activities and outcomes in terms of how healthcare organizations can use SOPS to raise staff awareness about patient safety culture, examine trends in culture over time and identify strengths and areas for improvement:

# 1. (Over a 12-month period) Increase the cumulative number of SOPS surveys and SOPS supplemental item sets submitted to the AHRQ SOPS Databases:

- Number of SOPS survey submissions from all sites
- Number of SOPS supplemental item set submissions from all sites

# 2. (Over a 12-month period) Increase cumulative technical assistance and outreach to SOPS users and stakeholders:

- Attendance on SOPS webcasts
- Number of SOPS general technical assistance and SOPS Databases technical assistance inquiries
- Number of inquiries for SOPS research datasets
- Number of SOPS GovDelivery listserv messages and other social media messages sent
- Number of inquiries for the SOPS Data Entry and Analysis Tool.

# **1.3.41: Increase the cumulative number of evidence-based resources and tools available to improve the quality of health care and reduce the risk of patient harm.**

A major output of the Patient Safety Portfolio is the availability of evidence-based resources and tools that can be utilized by healthcare organizations to improve the care they deliver and specifically patient safety. An expanding set of evidence-based tools is available due to ongoing investments to generate knowledge through research and synthesize and disseminate this new knowledge in the optimal format to facilitate its application.
The Agency continues to provide a large variety of resources and tools to improve patient safety. Some examples of accomplishments:

- <u>AHRQ Patient Safety Network (AHRQ PSNet)</u> resources including Primers and Web M&M (Morbidity and Mortality Rounds) Collections;
- TeamSTEPPS for Diagnosis Improvement Module;
- <u>AHRQ Patient Safety Organizations</u> (PSOs) collection including Common Formats (standardized specifications for reporting patient safety events);
- Guide to Improving Patient Safety in Primary Care Settings by Engaging Patients and Families;
- Making Healthcare Safer III Report; Primary Care-Based Efforts To Reduce Potentially Preventable Readmissions;
- 2021 National Healthcare Quality and Disparities Report
- <u>Diagnostic Safety and Quality</u> collection including several Issue Briefs, <u>Measure Dx: A</u> <u>Resource To Identify, Analyze, and Learn From Diagnostic Safety Events</u> and <u>Calibrate Dx:</u> <u>A Resource To Improve Diagnostic Decisions</u> toolkits.

The Patient Safety Portfolio is projecting that the number of evidence-based resources and tools will continue to increase with a confirmed cumulative number of 275 in FY 2022 and projected cumulative number, of 300 in FY 2023 and 325 in FY 2024.

## **<u>1.3.64</u>** Increase the number of units participating in the CUSP for MRSA prevention project

A performance measure has been developed in connection with an HAI project, CUSP for Methicillin-Resistant Staphylococcus Aureus (MRSA) Prevention. This project was initiated in response to elevated national MRSA rates and in support of the National Action Plan to Prevent Healthcare-Associated Infections, the National Action Plan for Combating Antibiotic-Resistant Bacteria, and Healthy People 2030 MRSA reduction targets. The project aims to prevent MRSA infection in ICUs, non-ICUs, high-risk surgical services, and long-term care facilities over the planned 5-year period. The first phase of the project focuses on ICUs and non-ICUs, supported by FY 2020 funds.

In FY 2022, recruitment was completed for this first phase of the project. The project encountered significant COVID-related delays and barriers to recruitment, including several Omicron surges. Recruitment deadlines were relaxed, recruitment efforts were increased, and the project team significantly augmented personal communications with candidate units. However, interested units reported significant internal barriers, including reduced staffing, continued COVID-related occupancy strains, and competing quality improvement priorities. Ultimately, the program was able to enroll and begin implementation in 211 units. In FY 2023, this project plans to have recruited an additional 150 participating sites from among surgical services and long-term care facilities. This measure will be retired in FY2024, as recruitment for this project will have ended.

## **<u>1.3.67</u>** Increase the number of telemedicine practices participating in the CUSP or Telemedicine project's Antibiotic Stewardship cohort

This new performance measure has been developed in connection with an HAI program-funded project, CUSP for Telemedicine: Diagnostic Accuracy and Antibiotic Stewardship. AHRQ's HAI program supports work to prevent HAIs and to combat antibiotic resistant bacteria. This project was initiated in support of the National Action Plan for Combating Antibiotic-Resistant Bacteria. Appropriate antibiotic use improves patient outcomes, decreases the development of resistant infections, and reduces adverse events. Given the rapid expansion of telemedicine, the need for antibiotic stewardship support in telehealth is critical. The project aims to improve the implementation of antibiotic stewardship in the telemedicine setting, by developing and implementing a toolkit, which will be available for public use. In FY 2024, this project plans to have recruited 100 telehealth practices to participate in the antibiotic stewardship cohort.

#### **Mechanism Table:**

	FY 2022 Final		FY 2023 Enacted		FY 2024 President's Budget	
RESEARCH GRANTS	No.	Dollars	No.	Dollars	No.	Dollars
Non-Competing	69	29,317	86	36,695	115	48,686
New & Competing	40	21,530	36	19,500	21	11,100
Supplemental	0	0	0	0	0	0
TOTAL, RESEARCH GRANTS	109	50,847	122	56,195	136	59,786
TOTAL CONTRACTS/IAAs		28,768		33,420		30,829
TOTAL		\$ 79,615		\$ 89,615		\$ 90,615

#### Patient Safety (Dollars in Thousands)

#### **5-Year Funding Table:**

FY 2020:	\$72,276,000
FY 2021:	\$71,615,000
FY 2022 Final:	\$79,615,000
FY 2023 Enacted:	\$89,615,000
FY 2024 President's Budget:	\$90,615,000

HCQO: Health Services Research, Data and Dissemination						
	FY 2022 Final	FY 2023 Enacted Level <sup>1</sup> /	FY 2024 President's Budget	FY 2024 +/- FY 2022		
Budget Authority	\$98,003,000	\$111,103,000	\$124,960,000	+\$13,857,000		
PHS Evaluation Funds	\$0	\$0	\$45,000,000	+\$45,000,000		

<sup>1</sup>/ The FY 2023 Enacted has been adjusted to include research grants and contracts requested for Long COVID and Improving Maternal Health portfolios to provide comparability to the FY 2024 President's Budget that integrates these programs into the HSR portfolio.

Authorizing Legislation:	Title III and IX and Section 947(c) of the Public Health Service Act
FY 2024 Authorization	Expired.
Allocation Method	Competitive Grant/Cooperative Agreement, Contracts, and Other.

**Health Services Research, Data, and Dissemination (HSR) Program Description:** The principal goals of HSR are to identify the most effective ways to organize, manage, finance, and deliver healthcare that is high quality, safe, equitable, and high value. The portfolio first conducts research to identify and answer the most pressing questions faced by clinicians, health system leaders, policymakers, and others about providing the best care patients need, together with appropriate solutions. These questions include ones about how hospitals can address life-threatening infections in their intensive care units to how primary care practices can find and use the best evidence to reduce their patient's chances of developing heart disease or having a stroke. It also includes questions about critical public health crises, such as the nation's opioid epidemic. This research is done both through investigator-initiated and directed research grant programs, as well as through research contracts.

The next step in the HSR continuum is to implement the findings of our research. AHRQ supports the implementation of its research findings by creating practical tools and resources that can be used in real-world settings by professionals on the front lines of health care and policy making. For instance, AHRQ has developed a model program for shared decision-making between clinicians and their patients, along with creating modules to train physicians and nurses on using the program and training others to use it, as well. In addition, AHRQ ensures that these kinds of resources are widely available by working with partners inside and outside of HHS through public-private partnerships that maximize AHRQ's expertise by leveraging these organizations' own networks and members.

Finally, AHRQ creates and disseminates data and analyses of key trends in the quality, safety, equity, and cost of health care to help users understand and respond to what is driving the delivery of care today. These data and analyses take the form of statistical briefs, interactive information presentations on a national and state-by-state basis, infographics, and articles and commentaries in leading clinical and policy outlets. AHRQ also develops measures of quality that are used to track changes in quality, safety, equity, and health care costs over time, providing benchmarks and dashboards for judging the effectiveness of care delivery, clinical interventions and policy changes. AHRQ not only provides National data sets and analyses, but where possible, AHRQ provides insights on the State and local levels, too.

## Health Services Research, Data and Dissemination (HSR)

	FY 2022 Final	FY 2023 Enacted <sup>1</sup> /	FY 2024 President's Budget
Health Services Research Grants (Investigator-Initiated)	\$59.527 <i>(</i> \$49.565)	\$69.527 (\$53.061)	\$106.405 (58.970)
Health Services Contract/IAA Research	\$14.574	\$17.764	24.143
Mea surement and Data Collection	\$15.066	\$14.812	30.412
Dissemination and Implementation	\$8.836	\$9.000	9.000
Total, HSR	\$98.003	\$111.103	\$169.960

(dollars in millions)

<sup>1</sup>/ The FY 2023 Enacted has been adjusted to include research grants and contracts requested for Long COVID and Improving Maternal Health portfolios to provide comparability to the FY 2024 President's Budget that integrates these programs into the HSR portfolio.

#### HSR FY 2024 Budget Request by Activity

**Health Services Research Grants FY 2024 Budget Policy:** The FY 2024 President's Budget provides \$106.4 million for research grants, an increase of \$36.9 million from the FY 2023 Enacted level. After providing \$57.0 million in noncompeting grant support, including \$3.0 million for investigator-initiated research grants focused on equity, AHRQ will invest \$46.9 million in new research and training grants. Details about AHRQ's new research grants funding is provided below.

- \$17.9 million is directed to general new investigator-initiated research and training grants. This will support approximately 45 new investigator-initiated research grants and provide total support of \$59.0 million for investigator-initiated research and training grants.
- \$7.5 million to fund new grants to establish three regional Long COVID Primary Care Hubs that will enhance the ability of primary care clinicians, particularly those practicing in underserved and rural communities, to care for people with Long COVID. The Hubs will use enhanced ECHO-like models to provide the primary care community with access to emerging evidence and best practices in Long COVID management, provide access to local and national specialty experts, and create a learning and action community for knowledge sharing and collective problem-solving. Together with \$9.0 million in continuing research grants, and \$2.5 million in contracts, AHRQ's total support for Long COVID care is \$19.0 million in the FY 2024 President's Budget. The results of these groundbreaking efforts in FY 2023 and their expansion in FY 2024 will be very useful to HRSA, the VA, and other large systems as they work to improve Long COVID care.
- \$8.0 million is directed to new research grants related to primary care. With \$1.5 million in non-competing grants and \$1.5 million in contracts, AHRQ will provide \$11.0 million for primary care research at the FY 2024 President's Budget level. Primary care research is critical to AHRQ's mission to make health care safer, higher quality, more accessible, equitable, and affordable. AHRQ is the only Departmental agency that supports clinical,

primary care research which includes translating science into patient care and betterorganizing health care to meet patient and population needs. The COVID-19 pandemic has intensified this priority for AHRQ as delayed primary care has resulted in foregone care among people with common <u>chronic conditions</u> including diabetes, hypertension, and hyperlipidemia, as well over <u>22 million missed cancer screening tests</u>, and over <u>80,000</u> <u>delayed cancer diagnoses</u>, as well as the potential for increased rates of uncontrolled diabetes and other chronic diseases. The FY 2024 President's Budget includes two primary care grant components:

- AHRQ will invest \$5.0 million in new research grants to answer critical questions on how to revitalize and reform primary care to improve individual and population health while increasing access to care, reducing burden on patients and improving equity. Critical questions will focus on topics such as how to:
  - address the increased need to increase access, quality, and equity of behavioral health services, including management of mental health and substance abuse in primary care, and improve the integration of behavioral health and primary care,
  - support the primary care workforce to increase resilience and reduce burnout.
  - increase the use and effectiveness of different forms of virtual care/telehealth for different conditions and populations,
  - create functional relationships between primary care practices and state and local health departments to support ongoing COVID vaccination, dissemination of public health recommendations, and develop partnerships for chronic disease prevention and management,
  - improve equitable receipt of clinical preventive services, and chronic disease management, and
  - develop, implement, evaluate and scale innovative models of integrated whole-person care based in primary care to prevent and manage multiple chronic conditions.
- Building on its investments in the development of primary care practice-based research networks (PBRNs), AHRQ will invest \$3.0 million in new FY 2024 in research grants to PBRNs to find actionable solutions to the challenges confronting primary care that can be scaled and spread across the health system. A priority of this research will focus on improving linkages between primary care, the larger health system, behavioral health and public health. AHRQ will encourage innovative approaches including rapid cycle research, partnership research, and adaptive designs that address the complexity of care delivery to accelerate evidence development to support primary care transformation and post-COVID revitalization.
- \$7.0 million is directed to new opioid and polysubstance abuse research grants that improve health equity and patient experience. In total, the FY 2024 President's Budget provides \$10.0 million in funding to support the Secretary's initiative to combat opioid abuse, misuse, and overdose including \$2.5 million in continuing research grants and \$0.5 million in opioid research contracts. The new research grants will:

- Disseminate and implement evidence-based interventions, including behavioral interventions that treat opioids and multiple substance use in ambulatory care and primary care settings. Emphasis will be placed on improving equity in access to and quality of treatment.
- Develop and test models of primary care and ambulatory care delivery to address substance use disorder that consider the social, environmental, economic and psychological factors that contribute to substance use disorder. Examples include care coordination, integration of substance use services in ambulatory care settings, or integration of population health approaches with primary care.
- Understand and address the effect of substance use disorder on whole person health and the development and/or management of other chronic conditions, especially multiple chronic conditions (MCC).
- Assess the impact of technology (especially telehealth applications) on access, quality, and equity of prevention and management of SUD and develop evidence for best practices.
- \$3.0 million is directed to one or two competitive grants to explore opportunities for lowburden, purpose-driven patient experience measurement tools that are designed to promote equity. This work is especially important post pandemic as health care delivery is transforming and the measurement of patient and family experience of care must evolve with it. AHRQ will rely on our experience with the Consumer Assessment of Healthcare Providers and Systems to guide this work.
- \$5.0 million is directed to provide behavioral health support to primary care practices. As a result of the pandemic, economic uncertainty, and rising inequality, many more Americans are experiencing anxiety, depression and other behavioral health problems including unhealthy use of alcohol and other substances. Primary care providers are often the first point of contact with the health care system for people living with behavioral and mental health conditions but often lack the resources, experience, training, and tools to integrate behavioral health care into their practice without support. To address this need, AHRQ will provide \$5.0 million in new research grants to better understand how to scale and spread existing models to support primary care practices in providing integrated care in underresourced communities or with under-served populations. These activities align with HHS's Roadmap for Behavioral Health Integration.
- \$1.0 million is directed to grant supplements focused on ensuring diversity within the health services research community. This funding will allow current grantees to request funds to enhance the diversity of the research workforce by recruiting and supporting students, postdoctorates, and eligible investigators from underrepresented backgrounds, including those from groups that have been shown to be nationally underrepresented in health services research. This supplement opportunity would also be available to grantees who are or become disabled and need additional support to accommodate their disability in order to continue to work on the research. Supplement projects would focus on addressing equity and agency priorities including maternal and child health, opioids, primary care, and rural health.

<u>Health Services Research Contracts and IAAs FY 2024 Budget Policy</u>: The FY 2024 President's Budget provides \$24.1 million for this activity, an increase of \$6.4 million from the FY 2023 Enacted level. The increased funding at the FY 2024 President's Budget level supports:

- \$1.0 million in new contract support and \$0.5 million in continuing contract support for AHRQ's primary care research initiative. AHRQ will invest these funds in a learning community to support national, state and local organizations that provide direct assistance to primary care practices. AHRQ will disseminate learnings and shared resources from the community via a website, and will capture, track, and disseminate findings from the primary care initiative to the community and larger primary care research field. Together with the request for grants discussed earlier, the FY 2024 President's Budget provides \$11.0 million for primary care.
- \$1.0 million in new contract support to convene Long COVID Summits in approximately five states. The Summits will build on the successful model of the inaugural Long COVID Summit co-sponsored by AHRQ in Virginia in January 2023. The Summits will bring together key stakeholders, including health care systems across the state and people with Long COVID, to discuss how Long COVID care is being provided. The Summits will include updates on the latest developments in the provision of Long COVID care, uncover pressing needs of clinician and patient communities, identify solutions through peer-to-peer learning, support the development of state-wide collaborations, and solicit lived experiences and perspectives of people with Long COVID.
- \$0.5 million new contract support, for a total of \$1.5 million, to expand the second year of a complementary Long COVID contract to serve as a grantee resource center to catalyze cross-grantee learning, create and disseminate resources and tools to improve Long COVID care based on the findings of the Summits and grantees, and evaluate both grant initiatives.
- \$3.8 million in new contracts within the ACTION contract network to advance new models of care in a post-COVID-19 learning health system. Following the intense period of innovation caused by the COVID-19 pandemic, U.S. healthcare delivery systems will enter an intense phase of recovery in which they consolidate new innovations, such as the expanded use of virtual care, and invest in resiliency and preparation to ensure they are prepared for future surges in demand. This period will coincide with a focus on expanding equitable access to healthcare and addressing systemic barriers to equity. AHRQ will invest \$3.8 million to develop experience-based guidance and resources to support healthcare systems in advancing quality, safety, equity, and value in the post-COVID-19 environment. This work may include the development and spread of resources on the use of integrated data systems to drive improvement and learning and the integration of healthcare and human services to address social needs.
- \$1.0 million in new contract funding to support HHS and AHRQ's focus on advancing equity within the workplace. This funding will be used for a multi-year contract to support AHRQ in the development and implementation of a plan to ensure a culture of diversity, equity, and inclusion (DEI) at AHRQ. The plan will include assessment of barriers to equity and

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recommendations building capacities and skills to contribute to a workplace culture that promote DEI, including a commitment to systemic change.

- \$1.4 million increase in inter-agency agreements with our Federal partners to support health services research.
- \$0.7 million in new contracts to focus on telehealth safety. A critical issue that has emerged with the rapid expansion of the use of virtual healthcare visits is maintaining high levels of patient safety and quality. One important solution in creating safe telehealth applications is the involvement of patients. AHRQ has developed a patient experience of care survey for use with telehealth visits. In FY 2024, AHRQ will invest \$0.8 million to user test and validate the tool in real-world clinical settings. This effort will expand the Agency's suite of practical, evidence-based resources for improving the safety, quality, equity, and person-centeredness of telehealth.
- \$3.0 million in decreases from prior year activities. The largest of the decreases, \$2.5 million, is associated with one-time funding of research contract projects directed in the FY 2023 Enacted related to people with disabilities, sepsis, and grief and bereavement care.

**Measurement and Data Collection FY 2024 Budget Policy:** The FY 2024 President's Budget provides \$30.4 million for Measurement and Data Collection activities, an increase of \$15.6 million from the FY 2023 Enacted level. This funding level will support the continuation of measurement and data collection for the Healthcare Cost and Utilization Project (HCUP), Consumer Assessment of Healthcare Providers and Systems (CAHPS), AHRQ Quality Indicators (AHRQ QIs), the National Healthcare Disparities and Quality Reports (QDRs), and data harmonization expenses. AHRQ's Data Harmonization project supports the Foundation for Evidence-Based Policymaking Act of 2018 (Evidence Act). Over the past decades, AHRQ has developed many data sets and tools open to the public. Each of these was developed independently from the other and often with customized software. While each tool has unique and useful features, as a whole, they lack a consistent user interface and are not as a group "branded" as AHRQ. The purpose of this work is to harmonize AHRQ's statistical data tools so that they use a common interface, are clearly branded as AHRQ, are less costly to expand and maintain, and more easily transferred between vendors.

The FY 2024 President's Budget includes an additional \$7.35 million in new contract funding to develop the infrastructure to regularly create and disseminate a national All-Payers Claims Database (APCD) – a nationally representative sample of health insurance claims data that can be used to inform public and private policy, address equity issues, and to improve healthcare quality. AHRQ will conduct an environmental scan to document the value of an annual National APCD; negotiate data use agreements; acquire data from selected states with APCDs and other organizations that maintain statewide or nationwide claims databases; obtain stakeholder input from diverse audiences; standardize, harmonize, and assess data obtained from data partners; establish a variety of sampling strategies for a National APCD; and create a National APCD for public release. AHRQ will enrich the basic National APCD through data linkages, focusing on creating new supplemental databases on medical professionals, organizations delivering health care, other health care entities, or local community characteristics. These new supplemental databases linked to the National APCD will

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create a more robust data resource to address emerging policy issues at the state and national levels. In addition, AHRQ will explore mutual interests on APCDs with other federal agencies such as CMS, CDC, HRSA, and NIH. To date, AHRQ and ASPE have collaboratively completed many tasks (e.g., landscape reports, stakeholder meetings, focus groups) and have initiated on-going work (e.g., AHRQ-ASPE collaboration to create prototype state-level databases, regular conversations with state APCDs) that will provide a foundation to launch the national APCD initiative.

Additionally, a total of \$7.35 million is provided for Improving Maternal Health data activities. In alignment with the White House Blueprint for Addressing the Maternal Health Crisis, AHRQ would leverage its unique data infrastructure to evaluate and unpack the persistent racial and ethnic disparities in pregnancy-related complications and maternal deaths. More specifically, AHRQ would expand HCUP, MEPS, and CAHPS data resources to better understand the basis for systemic inequities in how women experience the healthcare system, thereby ensuring that Federal, State, and local policymakers have timely and accurate data to support policies and programs to ensure ALL women and mothers have equitable, safe and high-quality care needed to thrive.

Finally, an additional \$0.9 million is provided for increased data costs and additional analytical capabilities, including additional costs related to HCUP's central distributor to facilitate dissemination of HCUP databases to users.

**Dissemination and Implementation FY 2024 Budget Policy:** The FY 2024 President's Budget levels provide \$9.0 million for Dissemination and Implementation activities, the same level of support as the FY 2023 Enacted level. These funds will support dissemination and implementation activities for the Agency. These activities include promoting AHRQ's investments in data products and tools, such as the Agency's statistical briefs based on the Medical Expenditure Panel Survey (MEPS) and the Healthcare Cost and Utilization Project (HCUP). In addition, these funds will help expand the promotion of AHRQ resources to reduce healthcare-associated infections and improve diagnostic safety, tools to improve primary care, and in general, foster the adoption and use of evidence in healthcare decision-making.

#### FY 2022 Accomplishments

**Health Services Research Grants:** AHRQ's funding of Health Services Research grants, both targeted and investigator-initiated, focus on research in the areas of quality, effectiveness, equity, and efficiency of health care services. Investigator-initiated research is particularly important. New investigator-initiated research and training grants are essential to health services research – they ensure that both new ideas and new investigators are supported each year. Investigator-initiated research grants allow extramural researchers to pursue the various research avenues that lead to successful yet unexpected discoveries. In this light, the investigator-initiated grant funding is seen as one of the most vital forces driving health services research in this country. In FY 2022, AHRQ funded \$49.6 million in investigator-initiated research grant funding supporting 197 grantees. As expected, the research topics funded in FY 2022 were diverse, but AHRQ did receive a number of grantees proposing topics focused on innovative and evidence-based interventions that advance the nation's goal of achieving equity in the delivery of healthcare services including reducing disparities

in quality of care, patient safety, healthcare utilization and access, and ultimately, health outcomes. This increase in applications was related to a <u>special emphasis notice</u> AHRQ published in FY 2021 announcing interest in this topic. In FY 2022, AHRQ funded 9 grants totaling \$1.4 million related to equity. Additionally, in FY 2022, AHRQ also funded 9 grants totaling \$2.6 million focused on maternal health. The maternal health grants included titles such as "Improving Maternal and Child Health in the Year After Birth: An Early Evaluation of Postpartum Medicaid Eligibility Extensions" and "Effects of Preconception Care on Maternal Outcomes in Medicaid."

Health Services Contract/IAA Research: Similar to funding research grants, AHRQ funds health services contracts and IAAs to support health services research activities to improve the quality, effectiveness, and efficiency of health care. AHRQ continues to invest in systematic evidence reviews, delivery system research activities, and other contracts to extramural recipients. This budget activity also funds a variety of contracts that support administrative activities related to research including support for grant peer review, ethics reviews, data management, data security, evaluation, and inter-agency agreements with Federal partners. The FY 2022 level provided \$14.6 million for Health Services Contracts/IAAs. An example of an HSR contract is support for the Evidence-Based Practice Center (EPC) Program. The EPCs review all relevant scientific literature on a wide spectrum of clinical and health services topics to produce evidence reports that are widely used by public and private healthcare organizations. These reports are used for informing and developing coverage decisions, clinical practice guidelines, quality measures, educational tools, and research agendas. In FY 2022 as part of AHRQ's continued focus on equity, AHRQ funded an EPC evidence review focused on strategies to address racial, ethnic, and related socioeconomic disparities in health and healthcare. That report is in process. In September 2022, AHRQ released the first update of its Living Systematic Review on Cannabis and Other Plant-Based Treatments for Chronic Pain which has been used by the VA to inform its research around Cannabis and advances the research methods around living reviews. AHRQ's contract activities also support opioid research. In December 2022, AHRO presented preliminary findings from the Opioids in Older Adults Learning Collaborative contract on implementing opioid prescribing and management strategies for older adults in primary care. Among the findings was that the difficulty in using electronic health records (EHRs) to pull the necessary measures continues to be a major barrier to quality improvement efforts. AHRO grantees also advanced their understanding of the relationship between opioid use in hospital settings and patient outcomes. Dr. Herzig and colleagues found that older adults filling an opioid prescription in the week after hospital discharge were at higher risk for mortality and other post-discharge adverse outcomes compared to those filling a nonsteroidal anti-inflammatory drug (NSAID) prescription only. Dr. Jena and colleagues reported that for patients with chronic opioid utilization before surgery, subsequent increases in opioid utilization during the first postoperative year were associated with increased health care spending during that timeframe, while subsequent decreases in opioid utilization were associated with decreased health care spending.

**Measurement and Data Collection:** Monitoring the health of the American people is an essential step in making sound health policy and setting research and program priorities. Data collection and measurement activities allow us to document the quality and cost of health care, track changes in quality or cost at the national, state, or community level; identify disparities in health status and use

of health care by race or ethnicity, socioeconomic status, region, and other population characteristics; describe our experiences with the health care system; monitor trends in health status and health care delivery; identify health problems; support health services research; and provide information for making changes in public policies and programs. AHRQ's Measurement and Data Collection Activity coordinates AHRQ data collection, measurement, and analysis activities across the Agency. In FY 2022 AHRQ provided \$15.1 million to support measurement and data collection activities including the following flagship projects: Healthcare Cost and Utilization Project (HCUP), Consumer Assessment of Healthcare Providers and Systems (CAHPS), AHRQ Quality Indicators (AHRQ QIs), the National Healthcare Disparities and Quality Reports (QDRs), and data harmonization expenses. For more information about HCUP and recent research finding please see the program portrait beginning on page 48. Some accomplishments from Measurement and Development in FY 2022 include:

- In July 2022, AHRQ released updated software packages for the Quality Indicators (QIs) Program, which includes the Area Quality Indicators (AQIs) and Hospital Quality Indicators (HQIs). The updated software (2022 version) offered additional features which addressed user requests, including flagging COVID-19 cases. To continue producing products addressing QI user needs, AHRQ held an open invitation listening session that was attended by 300+ users in August 2022; results are guiding the QI program's future plans. The software for AQIs and HQIs may be accessed: <u>https://qualityindicators.ahrq.gov/</u>
- The 2022 National Healthcare Quality and Disparities Report (NHQDR)was released in November 2022. The report provides policymakers, health system leaders and the public with a statistical portrait of how effectively the healthcare delivery system provides safe, high-quality and equitable care. The NHQDR website provides access the <u>full report</u> as well as the <u>NHQDR Data Tools</u>, which is an interactive tool that allows users to access national and State data. They can also search for data or trends based on particular subject areas, topics, or individual measures.
- The Consumer Assessment of Healthcare Providers and Systems (CAHPS®) held a virtual research meeting on September 22, 2022 "Assessing Patient Experience for Insights into Enhancing Equity in Healthcare." This meeting explored how CAHPS® surveys shed light on disparities in patient experience and how improved measurement can advance healthcare equity. This meeting brought together CAHPS survey users, researchers, healthcare organization leaders, patient advocates, policymakers, federal partners and the CAHPS Consortium with the common purpose of understanding current approaches to measuring patient experience and advancing equity in patient experience through improvements in measurement. There were 661 attendees. <a href="https://www.ahrq.gov/cahps/news-and-events/research-meetings/assessing-patient-experience.html">https://www.ahrq.gov/cahps/news-and-events/research-meetings/assessing-patient-experience.html</a>

**Dissemination and Implementation:** AHRQ's dissemination and implementation activities are designed to foster the use of Agency-funded research, products, and tools to achieve measurable improvements in the quality and safety of healthcare services that patients receive. AHRQ's research, products, and tools are used by a wide range of audiences, including individual clinicians;

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hospitals, health system leaders, and other providers; patients and families; payers, purchasers, and health plans; and Federal, state, and local policymakers. AHRQ's dissemination and implementation activities are based on understanding these audiences' needs and how they consume information, including social media, plus sustained work with key stakeholders to develop ongoing dissemination partnerships. In addition, AHRQ sponsors the dissemination of research findings and tools through webinars, round table discussions, and other tailored, hands-on technical assistance. AHRQ provided \$8.8 million in funding in FY 2022 to support Dissemination and Implementation activities. Some accomplishments from FY 2022 include:

- AHRQ convened a Health Equity Summit to identify strategies needed to advance equity within healthcare delivery. AHRQ released a <u>grant supplement Notice of Funding Opportunity</u> to increase the diversity of the health services researchers, including groups that have been shown to be underrepresented in health services research and who are or become disabled.
- On September 22, 2022, released a primer to help healthcare organizations reduce their carbon footprint and protect communities from climate threats. In alignment with HHS goals, <u>Reducing Healthcare Carbon Emissions: A Primer on Measures and Actions to Mitigate Climate Change</u> features a prioritized set of measures and potential interventions to reduce healthcare's greenhouse gas (GHG) emissions.
- AHRQ continued to produce new data, research, and evidence-based tools to respond to the COVID-19 pandemic, including an updated <u>HCUP visualization tool</u> on inpatient trends in COVID-19 and six <u>HCUP statistical briefs</u> on changes in hospitalizations and in-hospital deaths in the initial period of the pandemic.
- On October 8, 2021, AHRQ launched a <u>Spanish version of its QuestionBuilder app</u>, which can help Latino patients prepare for their in-person or telehealthcare appointments. The goal of the app is to improve health care access and equity for Latinos.

#### Program Portrait: Healthcare Cost and Utilization Project (HCUP) and Climate Change

HCUP is the Nation's most comprehensive source of hospital care data, including all-payer information on inpatient stays, ambulatory surgery and services visits, and emergency department encounters. HCUP enables researchers, insurers, policymakers and others to study health care delivery and patient outcomes at the national, regional, State, and community levels, as well as over time. HCUP is the only national data source that is able to report detailed information about patient socio-demographics (race/ethnicity, age, zip code of residence, geographic location, community-level income) and clinical reasons for hospitalizations.

Recently, AHRQ staff have been coordinating with the HHS Office of Assistant Secretary for Health (OASH) Office of Climate Change and Health Equity (OCCHE) to examine the impact of climate events on hospital and emergency department (ED) utilization. HCUP is being used to identify geographic areas in most need of new policies and targeted interventions related to climate. Using the most conservative definition of heat-related illness, <u>HCUP data from 39 States and the District of Columbia</u> show that the rate of heat-related ED visits varies across the country, with the Southwest, mid- and lower Midwest and Southeast being most impacted by extreme heat and associated illnesses. In 2019, across the country there were 80,000 ED visits with a diagnosis directly indicating heat exposure. Moreover, while more heat-related ED visits, respectively), a larger proportion of rural counties experienced a high rate of heat-related ED visits compared with large metropolitan areas (32% versus 8% of counties, respectively). Additional analyses revealed that 49 percent of the most socially vulnerable counties had a high rate of heat-related ED visits, while only 6 percent of the least socially vulnerable counties had a high rate of heat-related ED visits.





Heat-related ED visits per 100,000 population

Data unavailable 0-<20 20-<35 35-<60 60-150+ Source: Agency for Healthcare Research and Quality (AHRQ), Healthcare Cost and Utilization (HCUP), State Emergency Department Databases (SEDD) and State Inpatient Databases (SID), 2016-2019 and Found at: https://hcupus.ahrq.gov/reports/ataglance/HCUPanalysisHeatExposureEDvsts.pdf

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### Program Portrait: Healthcare Cost and Utilization Project (HCUP) and Climate Change Continued



CDC SVI = CDC Social Vulnerability Index

Source: Agency for Healthcare Research and Quality (AHRQ), Healthcare Cost and Utilization (HCUP), State Emergency Department Databases (SEDD) and State Inpatient Databases (SID), 2016-2019.

# Outputs and Outcomes Table with Discussion: Health Services Research, Data and Dissemination

Measure	Year and Most Recent Result/ Target for Recent Result/	FY 2023 Target	FY 2024 Target	FY 2024 Target +/- FY 2023 Target
2.3.8 Increase the a vaila bility of electronic clinical decision support tools related to safe pain management and opioid prescribing (Output)	(Summary of Result) FY 2020: Through two contracts, began designing and developing new patient- facing clinical decision support (CDS) applications for chronic pain management.	Retired	Retired	N/A
	(Pending)			
2.3.9 Increase the cumulative amount of publicly available data on 1) Opioid-Related Hospital Use, 2) Neonatal Abstinence Syndrome (NAS), and 3) outpatient use of opioids.	FY 2023: 1) Opioid-Related Hospital Use – updated interactive maps using 2020 data 2) NAS– update interactive maps using 2020 data (Target Met)	<ol> <li>Opioid-Related Hospital Use – update interactive maps using 2019 data</li> <li>NAS– update interactive maps using 2019 data</li> <li>outpatient use of opioids – update Brief and/or do new analysis a ddressing trends or other measures.</li> </ol>	<ol> <li>Opioid-Related Hospital Use – update interactive maps using 2022 data</li> <li>NAS– update interactive maps using 2022 data</li> <li>outpatient use of opioids – update Brief and/or do new analysis addressing trends or other measures.</li> </ol>	N/A

# **2.3.8:** Increase the availability of electronic clinical decision support tools related to safe pain management and opioid prescribing (Output)

Addressing the nation's opioid epidemic is an ongoing focus of AHRQ's Health Services Research, Data, and Dissemination portfolio. In FY 2017, AHRQ contributed to all five pillars of the Department of Health and Human Services comprehensive opioids strategy. Our work included practical health services research, data explorations, and public dissemination. Our dissemination activates included producing systematic evidence reviews on non-opioid pain management and the use of naloxone by emergency medical service personnel and publishing a collection of over 250 field-tested tools to support the delivery of Medication Assisted Treatment (MAT) in primary care settings. Using AHRQ data platforms, AHRQ produced a series of analysis documenting trends in health care utilization fueled by the opioid epidemic at state and national levels and which uncovered the diverse ways in which the crisis is manifesting itself across the country. In FY 2017, AHRQ also continued to support both investigator-initiated health services research on the prevention and treatment of opioid addiction by health care delivery organizations and targeted health services research expanding access to MAT in rural communities through primary care.

In FY 2017, AHRQ initiated a new initiative to ensure that health care professionals have access to evidence supporting safe pain management and opioid prescribing at the point of care through electronic clinical decision support (CDS). This effort is part of AHRQ's overall CDS initiative, funded by resources from the Patient-Centered Outcomes Research Trust Fund, to advance evidence into practice through CDS and to make CDS more shareable, standards-based, and publicly available. The infrastructure for developing and sharing these CDS tools is called CDS Connect (https://cds.ahrq.gov).

In FY 2018, AHRQ developed a dashboard that aggregates pain-related information from the EHR into one consolidated view for clinicians. The information includes data such as pain medications, pain assessments, relevant diagnoses, and lab test results. The dashboard was tested in partnership with OCHIN, a network of community health centers, and uses the HL7 FHIR standard, which allows for interoperability and implementation in different EHRs.

In FY 2019, AHRQ disseminated safe pain management and opioid related CDS through CDS Connect. This includes the pain management dashboard developed in FY 2018. AHRQ continues to present its work in CDS at national meetings of key organizations, such as the American Medical Informatics Association and the Healthcare Information and Management Systems Society. In addition, AHRQ will continue to work with its federal partners to disseminate safe pain management and opioid CDS tools. For example, the CDC uses AHRQ's CDS Connect web platform as a dissemination mechanism for two opioid CDS tools that were developed by CDC and ONC. At the end of FY 2019, AHRQ awarded two new contracts to develop additional CDS for chronic pain management.

In FY 2020, the two new contracts began designing and developing the CDS for chronic pain management, including meeting with end-users (e.g., patients, clinicians) and planning for integration with their pilot sites' electronic health records. One contract built on the pain management dashboard developed by the AHRQ CDS Connect project in 2018, and the other contract built brand new applications to help with opioid tapering. Each contract has been developing both clinician- and patient-facing CDS applications. Information about the contracts has been disseminated through project profiles at <a href="https://digital.ahrq.gov">https://digital.ahrq.gov</a>, and abstracts have been submitted for presentation at research conferences. One project's evaluation approach has received OMB approval for compliance with the Paperwork Reduction Act.

In FY 2021, both contracts completed the design of the CDS applications, followed by testing and deployment at their pilot sites. Each of the contracts undertook a self-evaluation of their CDS and developed resources for dissemination through AHRQ's CDS Connect platform. This includes

implementation guides and other materials for re-use by other healthcare systems. Each project's self-evaluation is in addition to a separate evaluation of AHRQ's overall CDS initiative, which began in FY2020. Both projects continued to present their work at research conferences such as AMIA. Some FY 2021 activities such as recruitment and analyses were delayed due to COVID and will not be completed until FY 2022.

In FY 2022, the two contracts to develop and disseminate CDS resources for pain management completed their data collection and prepared their final reports and implementation guides. AHRQ is in the process of finalizing those resources (e.g., final copy editing and ensuring 508 compliance) and expects to release those resources by end of FY 2023.

The project that is providing safe pain management and opioid prescribing data has ended, and this measure will be retired.

## **<u>2.3.9</u>** Increase the cumulative amount of publicly available data on 1) Opioid-Related Hospital Use, 2) Neonatal Abstinence Syndrome (NAS), and 3) outpatient use of opioids.

This measure supports AHRQ's ongoing work to create accurate data for monitoring and responding to the opioid crisis. AHRQ maintains two large databases capable of monitoring data relevant to the opioid overdose epidemic – the Healthcare Cost and Utilization Project (HCUP) and the Medical Expenditure Panel Survey-Household Component (MEPS-HC).

HCUP includes the largest collection of longitudinal hospital care data in the United States and HCUP <u>Fast Stats</u> displays that information in an interactive format that provides easy access to the latest HCUP-based statistics for healthcare information topics. More information on HCUP can be found on the HCUP website at <u>https://hcup-us.ahrq.gov/</u>. HCUP is able to produce national estimates on Opioid-Related Hospital Use based on data from the HCUP National Inpatient Sample (NIS) and the HCUP Nationwide Emergency Department Sample (NEDS). HCUP can produce State-level estimates on Opioid-Related Hospital Use based on data from the HCUP State Inpatient Databases (SID) and HCUP State Emergency Department Databases (SEDD). HCUP is also able to produce data on the rate of births diagnosed with NAS (newborns exhibiting withdrawal symptoms due to prenatal exposure to opioids) by State. State-level statistics on newborn NAS hospitalizations are from the HCUP National (Nationwide) Inpatient Sample (NIS).

The MEPS-HC collects nationally representative data on health care use, expenditures, sources of payment, and insurance coverage for the U.S. civilian noninstitutionalized population. The MEPS-HC is cosponsored by the Agency for Healthcare Research and Quality (AHRQ) and the National Center for Health Statistics (NCHS). More information about the MEPS-HC can be found on the MEPS Web site at <u>http://www.meps.ahrq.gov/</u>. MEPS-HC data can be used to produce Statistical Briefs that examine a wide range of measures of opioid use and expenditures including the percentages of adults with any use and frequent use of outpatient opioids during the year.

Updated the AHRQ website interactive maps that provide trends in opioid-related inpatient stays and emergency department visits at the national and State levels and a Neonatal Abstinence Syndrome

(NAS) Among Newborn Hospitalizations interactive heat map that visualizes the rate of births diagnosed with NAS by State with 2018 data.

For the outpatient use of opioid measure, in FY 2022 MEPS has produced two Briefs on outpatient opioid use, one for <u>non-elderly</u> and one for <u>elderly</u> adults overall, looking at socioeconomic characteristics including sex, race-ethnicity, income, insurance status, perceived health status, Census region and Metropolitan Statistical Area (MSA) status. In FY 2023 and FY 2024, that Brief will be updated and, if relevant, new analyses of trends or using additional data sources may be added.

#### **Mechanism Table:**

#### Health Services Research, Data and Dissemination

	FY 2 Fin	2022 nal		2023 acted		2024 t's Budget
RESEARCH GRANTS	No.	Dollars	No.	Dollars	No.	Dollars
Non-Competing	127	39,157	132	40,657	185	59,997
New & Competing	82	20,168	115	28,370	196	48,408
Supplemental	<u>3</u>	202	<u>5</u>	5 <u>00</u>	<u>10</u>	1,000
TOTAL, RESEARCH GRANTS	212	59,527	255	69,527	391	106,405
TOTAL CONTRACTS/IAAs		38,476		41,576		63,555
ТОТАL		\$98,003		\$111,103		\$ 169,960

#### (Dollars in Thousands)

<sup>1</sup>/ The FY 2023 Enacted has been adjusted to include research grants and contracts requested for Long COVID and Improving Maternal Health portfolios to provide comparability to the FY 2024 President's Budget that integrates these programs into the HSR portfolio.

#### **5-Year Funding Table:**

FY 2020:	\$96,284,000
FY 2021:	\$95,403,000
FY 2022 Final:	\$98,003,000
FY 2023 Enacted Level:	\$111,103,000
FY 2024 President's Budget	\$169,960,000

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HCQO: Digital Healthcare Research						
FY 2022         FY 2023         FY 2024         FY 2024 +/-           Final         Enacted         President's Budget         FY 2023						
Budget Authority	\$16,349,000	\$16,349,000	\$18,349,000	+\$2,000,000		
PHS Evaluation Fund	\$0	\$0	\$0	\$0		

Authorizing Legislation:Title III and IX and Section 947(c) of the Public Health Service ActFY 2024 Authorization.Expired.Allocation Method.Contracts, and Other.

**Digital Healthcare Research Program Description**: The Digital Healthcare Research portfolio conducts rigorous research to determine how the various components of the digital healthcare ecosystem can best come together to positively affect healthcare delivery and create value for patients and their families. By identifying and disseminating what works and developing evidence-based resources and tools, the portfolio has played a key role in the Nation's drive to accelerate the use of safe, effective, equitable, and patient-centered digital healthcare innovations.

The portfolio operates in coordination with other Federal health IT programs, particularly the Office of the National Coordinator for Health IT (ONC). AHRQ's legislatively authorized role is to fund research on whether and how digital healthcare innovations improve healthcare quality. For the past decade, AHRQ-funded research has consistently informed and shaped the programs and policy of ONC, CMS, the Veteran's Administration, and other Federal entities. AHRQ's Digital Healthcare Research portfolio will continue to produce field-leading research and summarized evidence synthesis to inform future decisions about digital healthcare by healthcare stakeholders and policymakers.

## FY 2024 Budget Request

**FY 2024 Budget Policy:** The FY 2024 President's Budget level provides \$18.3 million for Digital Healthcare Research, an increase of \$2.0 million over the FY 2023 Enacted level. The FY 2024 President's Budget level provides \$16.3 million in research grant funding – \$12.7 million in continuation grant funding and \$3.6 million in new grant funding. A total of \$1.6 million in general new grants will focus on determining the quality and safety of digital healthcare innovations. An additional \$2.0 million in new grants will support two Centers of Excellence in Telehealthcare Implementation dedicated to advancing a telehealth research agenda to evaluate the impact of various telehealthcare models and approaches that will improve care equity, access to care, care quality, patient-clinician communication, and health outcomes with a focus on primary care services. In addition, a total of \$2.0 million in contract funding will support synthesizing and disseminating evidence generated by the portfolio.

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#### FY 2022 Program Accomplishments

Since 2004, the Digital Healthcare Research portfolio has invested in a series of groundbreaking research grants to increase understanding of the ways digital healthcare can improve health care quality. Early efforts evaluated the facilitators and barriers to health IT adoption in rural America and the value of health IT implementation. In 2014 and 2015, Congress directed AHRQ to fund new research to fill the gaps in our knowledge of health IT safety. The portfolio continues to generate evidence in this important area and, early in FY 2022, released a special emphasis notice indicating support for research aimed at improving the safety of digital healthcare systems. For example, Dr. Raj Ratwani and his team of researchers at MedStar Health National Center for Human Factors in Healthcare recently completed a project that showed, for the first time, the direct connection between electronic health record usability and patient safety issues—essentially that patients can be harmed because of the way some of these systems are designed and being used. Based on these results, this Medstar team developed an EHR usability and safety evaluation tool that was successfully tested at two healthcare facilities. This tool can be used by any healthcare facility to identify specific issues related to safety in their EHR and to identify potential solutions to those issues through usability improvements. The tool includes a guide for how to perform the assessment so that it can be selfadministered and disseminated broadly.

Additionally, the Digital Healthcare Research portfolio produced <u>a practical guide</u> to assist ambulatory care practices with the collection, integration, and use of patient-generated health data (PGHD) in clinical care. The potential for PGHD to impact healthcare delivery is significant. Ambulatory care clinicians base their decisions on information received from the patient, traditionally from data collected in the clinical setting. PGHD offers insights into the day-to-day health of an individual, providing patients and clinicians the ability to employ better strategies to prevent and manage acute and chronic conditions, through monitoring for remission and relapse. Moreover, clinicians and scientists can use these data to generate and apply analytical techniques to improve risk prediction and diagnoses. Effective use of PGHD became particularly important of late since remote patient monitoring with PGHD is an important complement to telehealth, which increased during the pandemic. Over 1000 downloads of the guide have occurred since its posting in the second quarter of FY 2022.

In FY 2022 the portfolio also launched a new project to support digital healthcare equity. All too often, digital healthcare purported solutions do not include consideration of the unique needs and capabilities of all applicable patient groups, resulting in healthcare inequities when implemented. Considerations ranging from patient digital literacy to patient broadband access are important and can impact the viability of digital healthcare solutions and tools whose designers do not explicitly assess patient needs and capabilities. Digital tools such as algorithms that support clinical decision making and risk prediction can also result in healthcare inequities if not designed to avoid bias. Digital healthcare designers require a set of guidelines or best practices, organized within a consensus-based framework, to avoid digitally-caused inequities. Hence, AHRQ awarded a contract to a team of researchers from Johns Hopkins University, led by Drs. Elham Hatef and Matthew Austin, to develop a digital healthcare equity framework and an accompanying guide for its use. The research team will combine results from an environmental scan on the current state of existing, related frameworks, and input from an expert panel on equitable digital healthcare to

determine the critical elements for the framework. Within this context, the panel will then be asked to recommend best practices and resources to include within the guide. The framework and guide will apply to patient- and clinician-facing solutions and be disseminated to health systems, public entities, and digital healthcare vendors.

As interest and investments in digital healthcare have grown, so has the need for evidence and evidence-based tools. In addition to the research highlighted above, AHRQ has provided comprehensive and ready access to all portfolio-funded research results, profiles of experts in the field, and recordings of digital healthcare national webinars at <u>digital.ahrq.gov</u>.

Digital Healthcare Research (Dollars in Thousands)							
	FY 2 Fin	-		2023 nacted		2024 t's Budget	
RESEARCH GRANTS	No.	Dollars	No.	Dollars	No.	Dollars	
Non-Competing	30	9,528	31	9,714	40	12,770	
New & Competing	17	4,618	13	4,218	6	3,579	
Supplemental	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	
TOTAL, RESEARCH GRANTS	47	14,146	44	13,932	46	16,349	
TOTAL CONTRACTS/IAAs		2,203		2,417		2,000	
ТОТАL		16,349		16,349		18,349	

#### Mechanism Table:

#### **5-Year Funding Table:**

FY 2020:	\$16,500,000
FY 2021:	\$16,349,000
FY 2022 Final:	\$16,349,000
FY 2023 Enacted:	\$16.349,000
FY 2024 President's Budget:	\$18,349,000

HCQO: U.S. Preventive Services Task Force							
FY 2022         FY 2023         FY 2024         FY 2024 +/-           Final         Enacted         President's Budget         FY 2023							
Budget Authority	\$11,542,000	\$11,542,000	\$18,000,000	+\$6,458,000			
PHS Evaluation Funds	\$0	\$0	\$0	\$0			

Authorizing Legislation:Title III and IX and Section 947(c) of the Public Health Service Act FY2024 Authorization.Expired.Allocation Method.Contracts, and Other.

**U.S. Preventive Services Task Force (USPSTF) Program Description:** The U.S. Preventive Services Task Force (USPSTF) is an independent, volunteer panel of nationally recognized experts in prevention and evidence-based medicine. The Task Force makes evidence-based recommendations about clinical preventive services to improve the health of all Americans (e.g., by improving quality of life and prolonging life). Since 1998, AHRQ has been authorized by Congress to provide ongoing scientific, administrative, and dissemination support to assist the USPSTF in meeting its mission. AHRQ is the sole funding source of the USPSTF. AHRQ supports the USPSTF by ensuring that it has: the evidence it needs to make its recommendations; the ability to operate in an open, transparent, and efficient manner; and the ability to share its recommendations clearly and effectively with the healthcare community and general public.

### FY 2024 Budget Request

FY 2024 Budget Policy: The FY 2024 President's Budget level for the USPSTF is \$18.0 million, an increase of \$6.5 million over the FY 2023 Enacted. These funds will be used to support the increasingly complex nature of evidence reviews carried out by the Task Force, thereby increasing the number of final recommendations in future years, and supporting Task Force efforts to address health inequities in their recommendation development. Over the last several years, the increasingly voluminous evidence and complex analysis required for USPSTF recommendations, and the increased other support required given the increased scrutiny and stakeholder engagement, has prevented AHRQ from providing the USPSTF with the planned 10-12 systematic reviews. Of the total increase of \$6.5 million, \$2.5 million would support additional systematic reviews and support the additional complexity and size of reviews and analyses. This will bring the total yearly reviews back to 10-12 and allow the analysis of the evidence on racism and health inequities related to preventive services in the reviews. Additional annual funds of \$1.2 million will provide for developing revised methods of evidence surveillance, early updates, and 1-2 rapid reviews or living reviews a year to support early updates of the Task Force's recommendations. Although the Task Force has rigorous methods and extensive stakeholder engagement, they lack direct patient involvement in the recommendation development processes. The Task Force would like to formally and directly engage with patients to improve the patient-centeredness of their recommendations. Additional annual funds in the amount of \$2.0 million would be used to support this effort in patient engagement. Funds would be used to train and support patients in the recommendation-development methods and processes, develop patient-friendly materials, and compensate patients for their time. Finally, \$0.8 million would be used to support the development and implementation of processes to increase the transparency of USPSTF recommendations. Given the increasing costs to conduct a

systematic evidence review, the FY 2024 President's Budget allows the USPSTF may make 2 additional recommendations over the FY 2023 Enacted level.

## FY 2022 Program Accomplishments

## Major FY 2022 accomplishments for the USPSTF include:

- Maintained recommendation statements for 87 preventive service topics with 139 specific recommendation grades. Many recommendation statements include multiple recommendation grades for different populations.
- Received 33 nominations for new topics and 11 nominations to reconsider or update existing topics.
- Posted 10 draft research plans for public comments.
- Posted 14 draft recommendation statements for public comments.
- Posted 15 draft evidence reports for public comments.
- Published 12 final recommendation statements with 19 recommendation grades in a peer-reviewed journal.
- Published its 11th Annual Report to Congress on High-Priority Evidence Gaps for Clinical Preventive Services highlighting research gaps related to health equity in cardiovascular disease and cancer prevention.
- Expanded its dissemination and implementation partners to include: Association of American Indian Physicians, Health Professionals Advancing LGBTQ Equality, National Council of Asian Pacific Islander Physicians, National Hispanic Medical Association, and National Medical Association.

To do its work, the Task Force uses a four-step process:

- 1. Step 1: Topic Nomination. Anyone can nominate a new topic or an update to an existing topic at any time, via the Task Force Web site.
- 2. Step 2: Draft and Final Research Plans. The Task Force develops a draft research plan for the topic, which is posted on the Task Force Web site for a 4-week public comment period. The Task Force reviews and considers all comments as it finalizes the research plan.
- 3. Step 3: Draft Evidence Review and Draft Recommendation Statement. The Task Force reviews all available evidence on the topic from studies published in peer-reviewed scientific journals. The evidence is summarized in the draft evidence review and used to develop the draft recommendation statement. These draft materials are posted on the Task Force Web site for a 4-week public comment period.
- 4. **Step 4: Final Evidence Review and Final Recommendation Statement.** The Task Force considers all comments on the draft evidence review and recommendation statement as it finalizes the recommendation statement.

## Program Portrait: Prevention of Dental Caries in Young Children

Dental caries is the most common chronic disease in children in the US. According to the 2011-2016 National Health and Nutrition Examination Survey, approximately 23% of children aged 2 to 5 years had dental caries in their primary teeth. Prevalence is higher in Mexican American children (33%) and non-Hispanic Black children (28%). Dental caries in early childhood is associated with pain, loss of teeth, impaired growth, decreased weight gain, and has negative effects on quality of life and poor school performance, and leads to future dental caries.

Given the importance, prevalence, negative health effects, and health inequities related to dental caries, the USPSTF commissioned a systematic review of the evidence to update its recommendation on interventions to prevent dental caries in young children. Based on the evidence in its review on the effectiveness of fluoride interventions to prevent dental caries, the USPSTF recommends that clinicians prescribe oral fluoride supplementation for young children whose water supply is deficient in fluoride and to apply fluoride varnish to the primary teeth of all infants and children starting at the age of primary tooth eruption. The USPSTF also called for more research to understand the role of routine screening by primary care clinicians in children younger than 5 years.

The USPSTF is committed to transparency when developing its recommendations and sought input on its draft recommendation from the public, topic experts and clinical specialists, including dental professionals, parents, and other stakeholders. The USPSTF also worked closely with other Federal agencies, as well as professional organizations that deliver primary care. The USPSTF reviewed and considered all of this input when finalizing its recommendations.

The final recommendation was published in the *Journal of the American Medical Association* in December 2021. The final recommendation was reported by *Reuters, multiple health media outlets, and dental publications*.

#### Outputs and Outcomes Table with Discussion: U.S. Preventive Services Task Force

Measure	Year and Most Recent Result/	FY 2023 Target	FY 2024	FY 2024 Target
	Target for Recent Result/		Target	
	(Summary of Result)			+/- FY 2023 Target
2.3.7 Increase the percentage of older a dults who receive a ppropriate clinical preventive services (Output)	FY2022: 6% Baseline	Maintain 6% Baseline	5%	-1%

**2.3.7:** Increase the percentage of adults who receive appropriate clinical preventive services In FY 2021, AHRQ continued to provide ongoing scientific, administrative and dissemination support to the U.S. Preventive Services Task Force (USPSTF). The Task Force makes evidencebased recommendations about clinical preventive services to improve the health of all Americans (e.g., by improving quality of life and prolonging life). By supporting the work of the USPSTF, AHRQ helps to identify appropriate clinical preventive services for adults, disseminate clinical preventive services recommendations, and develop methods for understanding prevention in adults.

For several years, AHRQ has invested in creating a national measure of the receipt of appropriate clinical preventive services by adults (measure 2.3.7). A necessary first step in creating quality improvement within health care is measurement and reporting. Without the ability to know where we are and the direction we are heading, it is difficult to improve quality. This measure will allow AHRQ to assess where improvements are needed most in the uptake of clinical preventive services. It will help AHRQ support the USPSTF by targeting its recommendations and dissemination efforts to the populations and preventive services of greatest need. Thus, making sure that all Americans receive the appropriate clinical preventive services, at the right interval. The data from this measure can also identify gaps in the receipt of preventive services and therefore inform the Department's and the public health sector's prevention strategies.

AHRQ now has a validated final survey to collect data on the receipt of appropriate clinical preventive services among adults (the Preventive Services items that are included in the Self-Administered Questionnaire (PSAQ) in the AHRQ Medical Expenditure Panel Survey (MEPS)). The survey was fielded in a pilot test in 2015. The prevention items were incorporated in the self-administered questionnaire (SAQ) that will be included as part of the standard MEPS starting in 2018. Additional years of data will allow for AHRQ to track and compare receipt of high priority, appropriate clinical preventive services over time.

The panel design of the survey, which will include the PSAQ in even years, makes it possible to determine how changes in respondents' health status, income, employment, eligibility for public and private insurance coverage, use of services, and payment for care are related. Once data are collected, they are reviewed for accuracy and prepared to release to the public.

In FY 2021, AHRQ continued to analyze the CY 2018 (FY2018/2019) data. It also continued collecting the CY2020 (FY2020/2021) data.

In FY 2022, AHRQ completed analysis of the CY2018 (FY 2018/2019) data. It also anticipates the CY2020 (FY 2020/2021) preventive items data will become available, and data collection for the CY2022 (FY2022/2023) will begin. In addition, AHRQ began a project to update the list of high priority clinical preventive services based on the latest available evidence.

In FY 2023, AHRQ anticipates it will begin analysis of the CY2020 (FY2020/2021) data and continue data collection for the CY 2022 (FY 2022/2023) data. The target of 6% (baseline from FY2022) will be maintained. AHRQ will convene an expert panel to update the list of high priority clinical preventive services and a series of technical expert panels to identify strategies to improve uptake of these services.

In FY 2024, AHRQ will report estimates of the percentage of older adults who received highpriority, appropriate preventive services based on CY2020 (FY2020/2021) data. It is expected that rates will be reduced to 5% due to the impact of the COVID-19 pandemic on use of health care, in particular the postponement of preventive care. AHRQ expects to have completed the update of the list of high priority clinical preventive services in FY 2023. AHRQ and HHS efforts in FY2023 and FY 2024 are expected to result in increased use of preventive services in coming years which may be reflected in the CY 2024 nationally representative survey.

#### Mechanism Table:

#### U.S. Preventive Services Task Force

		2022 nal		2023 acted		2024 t's Budget
RESEARCH GRANTS	No.	Dollars	No.	Dollars	No.	Dollars
Non-Competing	0	0	0	0	0	0
New & Competing	0	0	0	0	0	0
Supplemental	0	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL, RESEARCH GRANTS	0	0	0	0	0	0
TOTAL CONTRACTS/IAAs		11,542		11,542		18,000
ТОТАL		11,542		11,542		18,000

#### (Dollars in Thousands)

## 5-Year Funding Table:

FY 2020:	\$11,649,000
FY 2021:	\$11,542,000
FY 2022 Final:	\$ 11,542,000
FY 2023 Enacted Level:	\$11,542,000
FY 2024 President's Budget:	\$18,000,000

Medical Expenditure Panel Survey						
FY 2022FY 2023FY 2024FY 2024FinalEnactedPresident's BudgetFY 2024						
Budget Authority	\$71,791,000	\$71,791,000	\$71,791,000	\$0		
PHS Evaluation Funds	\$0	\$0	\$0	\$0		

Authorizing Legislation:Title III and IX and Section 947(c) of the Public Health Service ActFY 2024 Authorization.Expired.Allocation Method.Contracts and Other.

Medical Expenditure Panel Survey (MEPS) Program Description: MEPS, first funded in 1995, is the only national source for comprehensive annual data on how Americans use and pay for medical care. The MEPS is designed to provide annual estimates at the national level of the health care utilization, expenditures, and sources of payment and health insurance coverage of the U.S. civilian non-institutionalized population. The funding requested primarily supports data collection and analytical file production for the MEPS family of interrelated surveys, which include a Household Component (HC), a Medical Provider Component (MPC), and an Insurance Component (IC). In addition to collecting data that support annual estimates for a variety of measures related to health insurance coverage, healthcare use and expenditures, MEPS provides estimates of measures related to health status, demographic characteristics, employment, access to health care and health care quality. The survey also supports estimates for individuals, families, and population subgroups of interest. The data collected in this ongoing longitudinal study also permit studies of the determinants of insurance take-up, use of services and expenditures as well as changes in the provision of health care in relation to social and demographic factors such as employment and income; the health status and satisfaction with care of individuals and families; and the health needs of specific population groups such as racial and ethnic minorities, the elderly and children.

MEPS data continue to be essential for the evaluation of health policies and analysis of the effects of tax code changes on health expenditures and tax revenue. Key data uses include:

- MEPS IC data are used by the Bureau of Economic Analysis in computing the nation's GDP
- MEPS HC and MPC data are used by the Congressional Budget Office, Congressional Research Service, the Treasury, and others to inform high level inquiries related to healthcare expenditures, insurance coverage and sources of payment
- MEPS is used extensively to inform policymakers with respect to the Children's Health Insurance Program and its reauthorization
- MEPS is used extensively by the GAO in its studies of the U.S. healthcare system and subsequent reports as requested by the Senate Committee on Health, Education, Labor and Pensions
- MEPS is used by CMS to inform the National Health Expenditure Accounts
- MEPS is used extensively by the health services research community as the primary source of high-quality national data for studies related to healthcare expenditures and out-of-pocket costs and examinations of expenditures related to specific types of health conditions.

• MEPS data have been used recently to analyze social factors associated with the disproportionate impact of COVID-19 on minority populations.

## FY 2024 Budget Request

**FY 2024 Budget Policy**: The FY 2024 President's Budget level for the MEPS is \$71.8 million, the same level as the prior year. The FY 2024 President's Budget level will allow AHRQ to continue to provide ongoing support to the MEPS, allowing the survey to maintain the precision levels of survey estimates, maximize survey response rates, and continue to achieve the timeliness, quality and utility of data products specified for the survey in prior years. The MEPS program supports three survey components: Household, Medical Provider, and Insurance.

**MEPS Household Component (HC)**: The MEPS Household component collects data from a sample of families and individuals in communities across the United States, drawn from a nationally representative subsample of households that participated in the prior year's National Health Interview Survey (conducted by the National Center for Health Statistics). During the household interviews, MEPS collects detailed information for each person in the household on the following: demographic characteristics, health conditions, health status, use of medical services, expenses and source of payments, access to care, satisfaction with care, health insurance coverage, income, and employment. In FY 2021 and 2022, the Household Component of the MEPS maintained the precision levels of survey estimates and, despite disruptions in operations associated with the COVID-19 pandemic, maintained the timeliness of data collection and data releases.

Each year the MEPS selects a new household sample, and those individuals are followed for two years. Therefore, the full annual MEPS household sample typically consists of two overlapping panels. However, in 2020, to supplement the reduced number of completed interviews due to COVID-19, an outgoing panel from the previous year (Panel 23) was extended for another year, resulting in three overlapping panels in 2020. In 2021, the same panel was later extended for a fourth year and another outgoing panel from 2020 (Panel 24) was also extended for two more years. Panel-specific files from the MEPS are used for longitudinal analyses. Since Panel 23 and Panel 24 contain four years of longitudinal data covering the period before and after the emergence of the pandemic, these files can be used for longitudinal analyses to assess the effects of the pandemic on healthcare access, use, and expenditures. The extended panels were retired at the end of 2022. Beginning in 2023 the MEPS sample will return to the pre-pandemic design of including only households whose participation covers a two-year reference period.

At the FY 2024 President's Budget level, AHRQ will provide funding to support the MEPS household component at the sample size necessary to meet traditional precision levels in survey estimates. This funding will permit the survey to maintain its capacity to detect changes in health care use, medical expenditures, and insurance coverage for many important population subgroups.

**MEPS Medical Provider Component (MPC)**: The MEPS Medical Provider component is a survey of medical providers, including office-based doctors, hospitals and pharmacies that collects detailed data on the expenditures and sources of payment for the medical services provided to individuals sampled for the MEPS. This component of MEPS is necessary because households are often unable

to accurately report payments made on their behalf for their medical care. In FY 2021 and 2022, the Medical Provider Component of the MEPS maintained its sample specifications. The FY 2024 President's Budget levels will permit the MEPS Medical Provider Component to maintain existing survey capacity at its current level.

**MEPS Insurance Component (IC)**: The MEPS Insurance component is a survey of private business establishments and governments designed to obtain information on health insurance availability and coverage derived from employers in the U.S. The sample for this survey is selected from the Census Bureau's Business Register for private employers and Census of Governments for public employers. The IC is an annual survey designed to provide both nationally and state representative data on the types of health insurance plans offered by employers, enrollment in plans by employees, the amounts paid by both employers and employees for those plans, and the characteristics of the employers. In FY 2021 and 2022, the MEPS Insurance Component maintained the precision levels of survey estimates for all 50 states and the District of Columbia, maintained survey response rates, and adhered to data release schedules. The FY 2024 President's Budget level will permit the MEPS Insurance Component to maintain existing survey capacity at its current level.

## FY 2022 Program Accomplishments

The MEPS Household Component (HC) collects nationally representative information from household respondents on demographic characteristics, socioeconomic status, health insurance status, access to care, health status, chronic conditions and use of health care services that can be used to examine a broad range of important health issues. The MEPS Insurance Component (IC) collects nationally representative information from private employers and state and local governments that can be used to examine a broad range of issues related to the provision of employer-sponsored health insurance coverage. Following are key findings from recent research that used the MEPS HC and the MEPS IC to provide information that can inform efforts to understand and address disparities in the use of mental health services, the concentration of healthcare expenditures, and the affordability of insurance.

#### Key Findings:

Racial-Ethnic Disparities in Outpatient Mental Health Care in the United States (using data from the MEPS HC):

- The annual rate per 100 persons of any outpatient mental health service use was more than twice as high for White (25.3) individuals as for Black (12.2) or Hispanic (11.4) individuals.
- Among those receiving outpatient mental health care:
  - Black (69.9%) and Hispanic (68.4%) patients were significantly *less* likely than White (83.4%) patients to receive psychotropic medications,
  - Black (47.7%) and Hispanic (42.6%) patients were significantly *more* likely than White (33.3%) patients to receive psychotherapy.
- Among those treated for depression, anxiety, attention-deficit hyperactivity disorder, or disruptive behavior disorders, no significant differences were found in the proportions of White, Black, or Hispanic patients who received minimally adequate treatment.

• These results can inform efforts to achieve racial-ethnic equity in the delivery of outpatient mental health care.

Concentration of Healthcare Expenditures and Selected Characteristics of Persons with High Expenses, U.S. Civilian Noninstitutionalized Population, 2020 (using data from the MEPS HC):

- In 2020, the top 1% of persons ranked by their healthcare expenditures accounted for about 24% of total healthcare expenditures, while the bottom 50% accounted for less than 3%.
- Persons with the top 1% of expenses had an average of \$151,839 in healthcare expenditures in 2020, an increase of more than \$20,000 from previous years.
- Inpatient hospital stays and ambulatory events each accounted for about one third of expenditures for persons with the top 5% of expenses.
- More than three quarters of aggregate expenses for persons with the top 5% of expenses were paid for by private insurance or Medicare.
- These results can inform efforts to finance health care more efficiently and equitably for the US population.

Trends in Employer-Sponsored Insurance (using MEPS IC data on private sector workers):

- Employment-sponsored health insurance at private-sector employers was characterized by increases in premiums and cost sharing for covered workers in 2021.
- In 2021, average health insurance premiums were \$7,380 for single coverage, \$14,634 for employee-plus-one coverage, and \$21,381 for family coverage, representing increases of 3.2, 3.1 and 3.0 percent, respectively, from their 2020 levels.
- In 2021, the average employee contribution was \$1,643 for single coverage, a 7.2 percent increase from the 2020 level. Single premium contributions increased at small (12.3 percent), medium (14.1 percent), and large firms (5.6 percent).
- From 2020 to 2021, average deductible levels for single coverage increased by 3.0 percent to \$2,004, and family coverage deductibles increased 3.9 percent to \$3,868.
- These results can inform efforts to improve the availability and affordability of employmentbased insurance.

Outputs and Outcomes Table with Discussion: MEPS

Measure	Year and Most Recent Result/	FY 2023 Target	FY 2024	FY 2024 Target
	Target for Recent Result/		Target	
	(Summary of Result)			+/- FY 2023 Target
1.3.16 Maintain the number of months to produce the Insurance Component tables following data collection (MEPS-IC) (Output)	FY 2022: 6 months	6 months	6 months	0 months
1.3.19 Increase the number of tables per year added to the MEPS table series to further the utility of the data in conducting research and informing policy (Output)	FY 2022: 50,000 total tables in MEPS-HC table series	2,300 tables in MEPS- HC table series	2,300 tables in MEPS tables series	+2,3000 tables in MEPS table series

The Medical Expenditure Panel Survey (MEPS) data have become the linchpin for economic models of health care use and expenditures. The data are key to estimating the impact of changes in financing, coverage and reimbursement policy on the U.S. healthcare system. No other surveys provide the foundation for estimating the impact of changes in national policy on various segments of the US population. These data continue to be key for the evaluation of health reform policies and analyzing the effect of tax code changes on health expenditures and tax revenue.

# **<u>1.3.16</u>**: Maintain the number of months to produce the Insurance Component tables following data collection (MEPS-IC)

The MEPS-IC measures the extent, cost, and coverage of employer-sponsored health insurance on an annual basis. These statistics are produced at the National, State, and sub-State (metropolitan area) level for private industry. Statistics are also produced for State and Local governments. Special request data runs, for estimates not available in the published tables, are made for Federal and State agencies as requested.

The MEPS-IC provides annual National and State estimates of aggregate spending on employersponsored health insurance for the National Health Expenditure Accounts (NHEA) that are maintained by CMS and for the Gross Domestic Product (GDP) produced by Bureau of Economic Analysis (BEA). MEPS-IC State-level premium estimates are the basis for determining the average premium limits for the federal tax credit available to small businesses that provide health insurance to their employees. MEPS-IC estimates are used extensively for analyses by federal agencies including:

- Congressional Budget Office (CBO);
- Congressional Research Service (CRS);

- Department of Treasury;
- The U.S. Congress Joint Committee on Taxation (JCT);
- The Council of Economic Advisors, White House;
- Department of Health and Human Services (HHS), including
- Assistant Secretary for Planning and Evaluation (ASPE)
- Centers for Medicare & Medicaid Services (CMS)

Schedules for data release were maintained for FY 2022 and will be maintained through FY 2023 and FY 2024. Further reducing the target time is not feasible because the proration and post-stratification processes are dependent upon the timing and availability of key IRS data that are appended to the survey frame. Data trends from 1996 through 2021 are mapped using the MEPS-IC Data Tools. In addition, special runs are often made for federal and state agencies that track data trends of interest across years.

## **<u>1.3.19</u>**: Increase the number of tables per year added to the MEPS table series to further the utility of the data in conducting research and informing policy

The MEPS HC Tables Compendia has recently been updated moving to a more user friendly and versatile format (https://datatools.ahrq.gov/meps-hc). Interactive dashboards are provided for the following: use, expenditures, and population; health insurance, accessibility, and quality of care; medical conditions and prescribed drugs. The new format greatly expands the number of tables generated dependent on the parameters entered by the user.

The 2020 MEPS-HC dashboards include 2,300 tables. The 2021 MEPS-IC dashboards include 5,008 national-level tables and 337 State and local government tables. Although the number of tables can change each year, the total number of tables included in the MEPS-HC dashboards (1996-2020) exceeds 50,000, and there are over 120,000 tables in the MEPS-IC dashboards (1996-2021).

The MEPS Interactive Data Tools are a source of important data that is easily accessed by users. Expanding the content and coverage of these tools furthers the utility of the data for conducting research and informing policy. Currently data are available from 1996 through 2021 for MEPS-IC and from 1996-2020 for MEPS-HC. This represents over twenty-five years of data for both the Household and Insurance Components, enabling the user to follow trends on a variety of topics.

### Mechanism Table:

## Medical Expenditure Panel Survey

		2022 nal		2023 acted		2024 t's Budget
RESEARCH GRANTS	No.	Dollars	No.	Dollars	No.	Dollars
Non-Competing	0	0	0	0	0	0
New & Competing	0	0	0	0	0	0
Supplemental	0	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL, RESEARCH GRANTS	0	0	0	0	0	0
TOTAL CONTRACTS/IAAs		71,791		71,791		71,791
ТОТАL		71,791		71,791		71,791

(Dollars in Thousands)

## **5-Year Funding Table:**

FY 2020 Final:	\$69,991,000
FY 2021 Final:	\$71,791,000
FY 2022 Final:	\$71,791,000
FY 2023 Enacted Level:	\$71,791,000
FY 2024 President's Budget:	\$71,791,000

Program Support							
	FY 2022         FY 2023         FY 2024         FY 2024 +/-           Final         Enacted         President's Budget         FY 2023						
Budget Authority	\$73,100,000	\$73,100,000	\$78,785,000	+\$5,685,000			
PHS Evaluation Funds	\$0	\$0	\$0	\$0			
FTEs (BA)	264	264	266	+2			

Authorizing Legislation:Title III and IX and Section 947(c) of the Public Health Service ActFY 2024 Authorization.Expired.Allocation Method.Other.

**Program Support Description:** Program Support activities provide administrative, budgetary, logistical, and scientific support in the review, award, and monitoring of research grants, training awards, and research and development contracts. Program Support functions also encompass strategic planning, coordination, and evaluation of the AHRQ's programs, regulatory compliance, international coordination, and liaison with other Federal agencies, Congress, and the public.

**FY 2024 Budget Policy**: The FY 2024 President's Budget includes \$78.8 million, an increase of \$5.7 million, for Program Support. The increase of \$5.7 million provides a 5.2% across the board salary increase, adjustments to benefits, and provides a slight increase to AHRQ's service providers, including the Service and Supply Fund. The FY 2024 President's Budget supports 2 additional Full-Time Equivalent (FTE) needed to coordinate and monitor the \$68.3 million in programmatic discretionary increases provided at FY 2024 President's Budget level.

As shown in the table below, AHRQ does have additional FTEs supported with other funding sources, including an estimated 2 FTE from other reimbursable funding and an estimated 24 FTEs supported by the Patient-Centered Outcomes Research Trust Fund. PCORTF FTEs are estimates.

	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget
FTEs – Budget Authority	264	264	266
FTEs – PCORTF	13	24	24
FTEs – Other Reimbursable	2	2	2
## **Program Support**

#### (Dollars in Thousands)

	FY	RQ 2022 nal	FY	IRQ 2023 acted	AHRQ FY 2024 President's Budget			
RESEARCH GRANTS	No.	Dollars	No.	Dollars	No.	Dollars		
Non-Competing	0	0	0	0	0	0		
New & Competing	0	0	0	0	0	0		
Supplemental	0	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>		
TOTAL, RESEARCH GRANTS	0	0	0	0	0	0		
TOTAL CONTRACTS/IAAs		73,100		73,100	78,785			
ТОТАL		73,100		73,100	78,78			

## **5-Year Funding Table:**

FY 2020:	\$71,300,000
FY 2021:	\$71,300,000
FY 2022 Final:	\$73,100,000
FY 2023 Enacted Level:	\$73,100,000
FY 2024 President's Budget:	\$78,785,000

# **Nonrecurring Expenses Fund**

#### **Budget Summary**

(Dollars in Thousands)

	FY 2022 <sup>2</sup>	FY 2023 <sup>3</sup>	FY 2024 <sup>4</sup>
<b>Notification</b> <sup>1</sup>	\$2,000	\$1,700	\$18,500

#### Authorizing Legislation:

Authorization	Section 223 of Division G of the Consolidated Appropriations Act, 2008
Allocation Method	Direct Federal, Competitive Contract

#### **Program Description and Accomplishments**

The Nonrecurring Expenses Fund (NEF) permits HHS to transfer unobligated balances of expired discretionary funds from FY 2008 and subsequent years into the NEF account. Congress authorized use of the funds for capital acquisitions necessary for the operation of the Department, specifically information technology (IT) and facilities infrastructure acquisitions.

The Healthcare Cost and Utilization Project (HCUP), a Federal-State-Industry partnership, is one of AHRQ's flagship data projects. In FY 2023 AHRQ received \$1.7 million in one-time funding to modernize the HCUP-US website. This work is in the contract acquisition phase and will be obligated in FY 2023. The FY 2022 NEF allocation allows AHRQ to evolve Quality and Safety Review System (QSRS) from a mostly manual abstraction system to a mostly automated abstraction system. Increasing automation of data collection and analysis in the OSRS system by leveraging emerging technologies, such as natural language processing, machine learning, and artificial intelligence will improve speed and efficiency in this critical project. This work is in contract acquisition process with the goal automating a minimum of 75 percent of the QSRS modules by 2028. The National Healthcare Quality and Disparities Reports (NHQDR) program continues to conduct incremental improvements for the NHQDR website that is now part of the AHRQ data platform. The remaining NEF funds will be used to advance the performance of the current AHRQ data platform that houses the NHQDR web tools. The development work for the information technology platform for the NHQDR has been conducted in coordination with the agency's development work for all the AHRQ data platforms the past 2 years and will continue under the current contract.

#### **Budget Allocation 2024**

The FY 2024 allocation includes four NEF projects. The first of which is the Modernization and Optimization of the Healthcare Costs and Utilization Project (HCUP) Data Infrastructure and Computing Environment, the goal of which is to create a modernized, integrated data environment optimized to receive, standardize, create research resources, and contain all HCUP data inputs to further enhance this valuable healthcare data resource. Secondly, NEF will fund the AHRQ Evidence Digital Knowledge Platform to Improve Health Care Delivery to make AHRQ evidence, tools, and data more easily accessible to clinicians, clinical practices, and health systems, and

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presented in integrated formats that align with user needs and the important decisions they make in their routine work. Next, NEF will fund AHRQ's Data Website Redesign Project to modernize the way that the public accesses important data produced by the Medical Expenditure Panel Survey and other AHRQ data. Lastly, NEF will fund the Promoting Interoperability of Patient Safety Data, which will enable providers and Patient Safety Organizations to contribute patient safety data more readily to AHRQ's Network of Patient Safety Databases by aligning the Common Formats with the United States Core Data for Interoperability and Fast Healthcare Interoperability Resources standards

#### **Budget Allocation FY 2023**

AHRQ received \$1.7 million in NEF funding for the HCUP, to modernize the HCUP-US website to become a data platform capable of leveraging technological advances that will improve its functionality, accessibility, and usability to signal the on-going relevance of this valuable healthcare data resource. HCUP provides the largest collection of longitudinal hospital care data in the United States, with all-payer, encounter-level information beginning in 1988. At present, 48 States and the District of Columbia participate in HCUP, and the data are used by Agencies across DHHS and by policymakers at the federal and state levels, as well as by the clinical and policy research communities and the American public. HCUP databases are used to support health services research and policy analyses on issues such as costs, utilization and access to care, quality of care, medical practice patterns, and medical treatment effectiveness.

#### **Budget Allocation FY 2022**

AHRQ received NEF funding of \$2.0 million for the Agency's QSRS. This funding was provided to evolve QSRS from a mostly manual abstraction system to a mostly automated abstraction system.

#### Budget Allocation FY 2021 and prior

AHRQ received NEF funding for the Agency's QSRS. QSRS replaced the Medicare Patient Safety Monitoring System as a national source of hospital safety data. Using NEF funds, AHRQ developed and enhanced QSRS and modernized its platform by moving it to the AHRQ's AWS cloud in 2019. Additional NEF funding was provided to upgrade the NHQDR IT platform and that work is in process.

- <sup>3</sup>Notification submitted to the Committees on Appropriations in the House of Representatives and the Senate on September 23, 2022.
- <sup>4</sup> HHS has not yet identified for FY 2024.

<sup>&</sup>lt;sup>1</sup> Pursuant to Section 223 of Division G of the Consolidated Appropriation Act, 2008, notification is required of planned use.

<sup>&</sup>lt;sup>2</sup> Notification submitted to the Committees on Appropriations in the House of Representatives and the Senate on October 22, 2020.

# SUPPLEMENTARY TABLES

# Total Discretionary Funds by Object $^{1/}$

Personnel compensation:	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget	FY 2024 +/- FY 2023
Full-time permanent (11.1)	34,113,501	35,358,644	37,562,293	2,203,649
Other than full-time permanent (11.3)	3,615,520	3,747,486	3,942,355	194,869
Other personnel compensation (11.5)	1,459,252	1,512,515	1,591,165	78,651
Military personnel (11.7) Special personnel services payments (11.8)	769,791	797,889	839,379	41,490
Subtotal personnel compensation Civilian benefits (12.1)	<b>39,958,064</b> 13,264,422	<b>41,416,533</b> 14,121,714	<b>43,935,192</b> 14,991,043	<b>2,518,659</b> 869,329
Military benefits (12.2)	137,578	142,600	150,015	7,415
Benefits to former personnel (13.0)	13,653	13,953	13,953	
Total Pay Costs	53,733,717	55,694,799	59,090,203	3,395,404
Travel and transportation of persons (21.0)	137,383	140,406	143,214	2,808
Transportation of things (22.0)	1,000	1,000	1,020	20
Rental payments to GSA (23.1) Rental payments to Others (23.2)	3,108,000	3,004,153	3,058,228	54,075
Communication, utilities, and misc. charges (23.3)	164,892	168,520	171,890	3,370
Printing and reproduction (24.0)	958	958	977	19
Other Contractual Services:				
Advisory and assistance services (25.1)				
Other services (25.2)	9,774,625	9,774,625	10,000,000	225,375
Purchase of goods and services from government accounts (25.3)	23,484,179	23,484,179	24,381,457	897,278
Operation and maintenance of facilities (25.4)				
Research and Development Contracts (25.5) Medical care (25.6)	133,838,428	140,877,211	167,399,209	26,521,998
Operation and maintenance of equipment (25.7) Subsistence and support of persons (25.8)	283,654	283,654	289,327	5,673
Subtotal Other Contractual Services	167,380,886	174,419,669	202,069,993	27,650,324
Supplies and materials (26.0)	62,815	64,197	65,480	1,283
Equipment (31.0)	351,799	351,799	358,835	7,036
Investments and Loans (33.0)				
Grants, subsidies, and contributions (41.0)	124,519,817	139,654,500	182,540,160	42,885,660
Insurance Claims and Indemnities (42.0)				
Refunds (44.0)				
Total Non-Pay Costs	295,727,550	<u>317,805,201</u>	388,409,797	<u>70,604,596</u>
Total Budget Authority by Object Class	349,461,267	373,500,000	447,500,000	74,000,000

<sup>1/</sup> Does not include mandatory financing from the PCORTF.

<sup>2/</sup> Includes PHS Evaluation Funding.

# Agency for Healthcare Research and Quality Salaries and Expenses <sup>1/</sup>

Personnel compensation:	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget	FY 2024 +/- FY 2023
Full-time permanent (11.1)	34,113,501	35,358,644	37,562,293	2,203,649
Other than full-time permanent (11.3)	3,615,520	3,747,486	3,942,355	194,869
Other personnel compensation (11.5)	1,459,252	1,512,515	1,591,165	78,651
Military personnel (11.7)	769,791	797,889	839,379	41,490
Subtotal personnel compensation	39,958,064	41,416,533	12 025 102	2 510 (50
Civilian benefits (12.1)	13,264,422	<b>41,410,555</b> 14,121,714	<b>43,935,192</b> 14,991,043	<b>2,518,659</b> 869,329
Military benefits (12.2)	137,578	142,600	150,015	7,415
Benefits to former personnel (13.0)	13,653	13,953	13,953	
Total Pay Costs				2 205 404
Travel and transportation of persons (21.0)	<b>53,733,717</b> 137,383	<b>55,694,799</b> 140,406	<b>59,090,203</b> 143,214	<b>3,395,404</b> 2,808
Transportation of things (22.0)	1,000	1,000	1,020	20
Communication, utilities, and misc. charges (23.3)	164,892	168,520	171,890	3,370
Printing and reproduction (24.0)	958	958	977	19
Other Contractual Services: Other services (25.2)	9,066,968	9,066,968	9,500,000	433,032
Purchase of goods and services from govt accounts (25.3)	4,168,812	4,168,812	5,066,090	897,278
Research and Development Contracts (25.5)	2,014,486	154,735	1,039,736	895,001
Operation and maintenance of equipment (25.7)	283,654	283,654	289,327	5,673
Subtotal Other Contractual Services	15,533,920	13,674,169	15,895,153	2,220,984
Supplies and materials (26.0)	62,815	64,197	65,480	1,283
Total Non-Pay Costs	15,900,968	14,049,249	16,277,735	2,228,486
Total Salary and Expense	69,634,685	69,744,048	75,367,938	5,623,890
Direct FTE	264	264	266	+2

<sup>1/</sup> Does not include mandatory financing from the PCORTF. Does not include reimbursable FTEs.

#### **Program Support Detail by Office and Center**

# Detail of Full Time Equivalents (FTE) 1/

	2022 tual Civilian	2022 Actual Military	2022 Actual Total	2023 Est. Civilian	2023 Est. Military	2023 Est. Total	2024 Est. Civilian	2024 Est. Military	2024 Est. Total
Office of the Director (OD)									
Direct:	13	0	13	13	0	13	13	0	13
Reimbursable:	1	0	1	1	0	1	1	0	1
Total:	14	0	14	14	0	14	14	0	14
Office of Management Services (OMS)									
Direct:	55	0	55	55	0	55	55	0	55
Reimbursable:	0	0	0	0	0	0	0	0	0
Total:	55	0	55	55	0	55	55	0	55
Office of Extramural Research, Education, and Priority									
Populations (OEREP)									
Direct:	30	2	32	30	2	32	30	2	32
Reimbursable:	1	0	1	1	0	1	1	0	1
Total:	31	2	33	31	2	33	31	2	33
Center for Evidence and Practice Improvement (CEPI)									
Direct:	51	2	53	51	2	53	51	2	53
Reimbursable:	0	0	0	0	0	0	0	0	0
Total:	51	2	53	51	2	53	51	2	53
Center for Financing, Access, and Cost Trends (CFACT)									
Direct:	51	0	51	51	0	51	51	0	51
Reimbursable:	0	0	0	0	0	0	0	0	0
Total:	51	0	51	51	0	51	51	0	51
Center for Quality Improvement and Patient Safety (CQuIPS)									
Direct:	36	1	37	36	1	37	37	1	38
Reimbursable:	0	0	0	0	0	0	0	0	0
Total:	36	1	37	36	1	37	37	1	38
Office of Communications (OC)									
Direct:	23	0	23	23	0	23	23	0	23
Reimbursable:	0	0	0	0	0	0	0	0	0
Total:	23	0	23	23	0	23	23	0	23
AHRQ FTE Total	261	5	266	261	5	266	263	5	268

#### Average GS Grade

FY 2018	14.6
FY 2019	14.6
FY 2020	14.6
FY 2021	14.6
FY 2022	14.6

<sup>1/</sup> Excludes mandatory PCORTF FTEs. Includes reimbursable FTEs.

# Detail of Positions 1/

	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget
Executive level I	7	6	6
Executive level II	4	4	4
Executive level III			
Executive level IV	1	1	1
Executive level V			
Subtotal Executive Level Positions	12	11	11
Total - Exec. Level Salaries	\$2,315,569	\$2,271,329	\$2,389,438
Total SES, AHRQ	4	4	4
Total - ES Salary, AHRQ	\$765,138	\$840,347	\$884,045
GS-15	59	56	58
GS-14	73	74	74
GS-13	68	66	66
GS-12	11	13	13
GS-11	10	11	11
GS-10			
GS-9	8	9	9
GS-8	1	1	1
GS-7	4	4	4
GS-6	1	2	2
GS-5	2	1	1
GS-4			
GS-3			
GS-2			
GS-1			
Subtotal	237	237	239
Total – GS Salary	\$35,165,960	\$36,256,105	\$38,491,422
Average GS grade, AHRQ	14.6	14.6	14.6
Average GS salary, AHRQ	\$148,380	\$152,979	\$161,052

<sup>1/</sup> Excludes Special Experts, Services Fellows and Commissioned Officer positions. Also excludes positions financed using mandatory financing from the PCORTF.

### AHRQ-79

#### Agency for Healthcare Research and Quality FTEs Funded by the Patient Protection and Affordable Care Act, P.L. 111-148 (Dollars in Thousands)

		FY 2013		FY 2013			FY 2014 FY 2015			5	FY 2016			FY 2017			FY 2018		
Program	Section	Total	FTEs	CEs	Total	FTEs	CEs	Total	FTEs	CEs	Total	FTEs	CEs	Total	FTEs	CEs	Total	FTEs	CEs
Patient-Centered Outcomes Research Trust Fund AHRQ Mandatory	6301	\$ 633	6	0	\$1,505	13	0	\$1,644	10	0	\$1,430	10	0	\$1,387	8	0	\$1,129	8	0

		FY 2019			FY 2020			FY 2021			FY 2022			FY 2023		
Program	Section	Total	FTEs	CEs												
Patient-Centered Outcomes Research Trust Fund AHRQ Mandatory	6301	\$1,096	7	0	\$947	5	0	\$1,026	6	0	\$2,297	13	0	\$5,135	24	0

		FY 2024							
Program	Section	Total	FTEs	CEs					
Patient-Centered Outcomes Research Trust Fund AHRQ Mandatory	6301	\$5,385	24	0					

#### Physicians' Comparability Allowance (PCA) Worksheet

1) Department and component:

Agency for Healthcare Research and Quality (AHRQ)

2) Explain the recruitment and retention problem(s) justifying the need for the PCA pay authority.

Most, if not all, of the research positions at AHRQ are in occupations that are in great demand, commanding competitive salaries in an extremely competitive hiring environment. This includes the 602 (Physician) series which is critical to advancing AHRQ's mission to produce evidence to make health care safer, higher quality, more accessible, equitable, and affordable. Since the Agency has not utilized other mechanisms for the 602 series (for example, Title 38), it is imperative that the Agency offers PCAs to recruit and retain physicians at AHRQ. In the absence of PCA, the Agency would be unable to compete with other Federal entities within HHS and other sectors of the Federal government which offer supplemental compensation (in addition to base pay) to individuals in the 602 series.

3-4) Please complete the table below with details of the PCA agreement for the following years:

	PY 2022 (Actual)	CY 2023 (Estimates)	BY* 2024 (Estimates)
3a) Number of Physicians Receiving PCAs	21	23	25
3b) Number of Physicians with One-Year PCA Agreements	0	0	0
3c) Number of Physicians with Multi-Year PCA Agreements\$	21	23	25
4a) Average Annual PCA Physician Pay (without PCA payment)	\$168,012	\$169,692	171,389
4b) Average Annual PCA Payment	\$22,238	\$22,238	22,238

 $\ast$  FY 2023 data will be approved during the FY 2024 Budget cycle

5) Explain the degree to which recruitment and retention problems were alleviated in your agency through the use of PCAs in the prior fiscal year.

(Please include any staffing data to support your explanation, such as number and duration of unfilled positions and number of accessions and separations per fiscal year.)

PCA contracts are used as a tool to alleviate recruitment problems and attract top private sector physicians into public sector positions. These recruitments give AHRQ a well-rounded and highly knowledgeable staff.

6) Provide any additional information that may be useful in planning PCA staffing levels and amounts in your agency.

#### **Resources for Cyber Activities**

#### (dollars in millions)

Cyber Category	FY 2022 Final	FY 2023 Enacted	FY 2024 President' s Budget	FY 2024 +/- FY 2023
Cyber Human				
Capital				
Sector Risk Management Agency				
(SRMA)				
Securing Infrastructure				
Investments				
Other NIST CSF Capabilities:				
Detect				
	0.165	0.165	0.165	
Identity				
	1.397	1.397	1.397	
Protect				
	1.106	2.106	2.306	+0.200
Recover				
	0.064	0.064	0.064	
Respond				
1	0.064	0.064	0.064	
Total Cyber				
Request	2.795	3.795	3.995	0.200
- 				
Technology Ecosystems (non-				
add)				
Zero Trust Implementation (non-				
add)	0.200	0.600	0.700	0.100

### Modernization of the Public-Facing Digital Services – 21st Century Integrated Digital Experience Act

The 21st Century Integrated Digital Experience Act (IDEA) was signed into law on Dec. 20, 2018. It requires data-driven, user-centric website and digital services modernization, website consolidation, and website design consistency in all Executive Agencies. Departments across the federal landscape are working to implement innovative digital communications approaches to increase efficiency and create more effective relationships with their intended audiences. The American public expects instant and impactful communications – desired, trusted content available when they want it, where they want it, and in the format they want it. If the consumer is not satisfied they move on and our opportunity for impact is lost.

#### **Modernization Efforts**

In FY 2019 HHS engaged Department leadership and developed a Digital Communications Strategy that aligns with the requirements of IDEA. In FY 20, HHS Digital Communications Leaders began implementation of the Strategy in alignment with IDEA, beginning to align budgets to modernization requirements.

As the result of a comprehensive review of costs associated with website development, maintenance, and their measures of effectiveness, HHS will prioritize:

- modernization needs of websites, including providing unique digital communications services, and
- continue developing estimated costs and impact measures for achieving IDEA.

Over the next four years HHS will continue to implement IDEA by focusing extensively on a usercentric, Digital First approach to both external and internal communications and developing performance standards. HHS will focus on training, hiring, and tools that drive the communication culture change necessary to successfully implement IDEA.

Over the next year, HHS Agencies and Offices will work together to continue to implement IDEA and the HHS Digital Communications Strategy across all communications products and platforms.

# Legislative Proposal

<u>Proposal</u>: Beginning in fiscal year 2024, AHRQ seeks to change the national reports on quality and disparities from an annual basis to biennial.

<u>Current Law</u>: Section 903(a)(6) of the PHS Act, 42 U.S.C. 299a-1(a)(6), requires AHRQ to "annually submit to the Congress a report regarding prevailing disparities in health care delivery as it relates to racial factors and socioeconomic factors in priority populations."

Section 913(b)(2), 42 U.S.C. 299b-2(b)(2), requires AHRQ to submit to Congress "an annual report on national trends in the quality of health care provided to the American people."

Based on recommendations from the National Academies of Science, AHRQ consolidated quality trends and prevailing disparities in health care into one report, known as the National Healthcare Quality Disparities Report (NHQDR). This report is submitted annually to Congress.

<u>Rationale</u>: Currently, there needs to be more time to assess the framework and priorities for measuring healthcare quality for all topics and priorities, and also compile data at the same time. Most data cycles are not synced; therefore, data are submitted at different times throughout the production cycle. The data submission period is between 3-8 months long which leaves very little time for drafting and review of the report before publication.

Changing the NHQDR to a biennial report would allow for resources to help support development of new measures which requires staff time, resources and collaboration with other HHS agencies to meet long-term goals and priorities. Additionally, it would allow more time to identify more robust trend results. Many HHS surveys had made significant changes to survey design and questions in recent years and experienced significant disruption in data collection due to the COVID-19 pandemic. This has significantly reduced the ability to report on trends. On an annual basis, trends may only change slightly or not at all. Allowing more time to collect trend data will allow reporting for longer trends and identify significant changes over time. A biennial time frame also allows more time to make changes to the framework, conceptual model for assessing healthcare quality to ensure that the content is relevant to current evidence and policy discussions. Finally, such a change would allow time to publish shorter and more focused topic highlights in between the biennial reports