DEPARTMENT of HEALTH and HUMAN SERVICES

Fiscal Year

2023

Agency for Healthcare Research and Quality

Justification of Estimates for Appropriations Committees

DEPARTMENT OF HEALTH AND HUMAN SERVICES

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 2023 Congressional Justification. This budget details the activities and efforts needed to fulfill AHRQ's mission to produce evidence to make healthcare safer, higher quality, more accessible, equitable, and affordable, and to work with the U.S. Department of Health and Human Services (HHS) and other partners to ensure that evidence is understood and used.

In FY 2022, AHRQ is supporting the Biden-Harris Administration and the U.S. Department of Health and Human Services in addressing its critical priorities. Center stage is providing evidence-based research, data, and tools to combat the COVID-19 pandemic as well as meeting other pressing needs including ongoing epidemic of opioid and polysubstance use disorders, the impact of natural disasters and climate change on healthcare, and a healthcare system that too often fails minority and underserved communities, especially in the areas of maternal and child health.

The FY 2023 President's Budget continues these critical efforts and focuses new resources on post-acute sequelae of COVID-19 (PASC), or **Long COVID**, debilitating symptoms that persist after recovery from acute COVID infection**.** Long COVID is impacting a growing number of people who experience consequences across multiple organ systems (e.g., neurologic, cardiac, pulmonary, musculoskeletal), potentially compounded by underlying conditions, with negative impacts on health and quality of life. AHRQ's $19.0 million investment will 1) invest in health systems research on how to organize and deliver patient-centered care for people living with Long COVID, including the use of digital and telehealth, 2) provide needed mentoring and support to smaller communities to establish multidisciplinary clinics to care for people with complex cases of Long COVID, and 3) enhance the ability of primary care practices to use emerging evidence to care for millions of Americans with Long COVID.

In addition, the FY 2023 President's Budget focuses new resources on patient safety, specifically to **prevent errors and delays in diagnosis**, which affects 12 million Americans each year. Of those errors and delays, more than 4 million people experience death or illness as a result, and the financial cost is staggering –well over $100 billion annually. To discover solutions to improve the safety of diagnosis, AHRQ will invest $7.8 million in the Diagnostic Safety Centers of Excellence and in disseminating evidence-based tools to prevent these mistakes.

The FY 2023 President's Budget also supports AHRQ's work on key HHS and national priorities, including:

- $61.5 million in new and continuing investigator-initiated **health services research funding**, including $3.0 million in new investments to advance **health equity** in healthcare delivery.

- $10.0 million in new research funding directed to revitalizing **primary care**.

- $10.0 million for research to prevent, identify, and provide integrated treatment for **opioid and multiple substance use disorders** in ambulatory care settings.

- $7.4 million to support the Administration's initiative to improve **maternal health**. 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.

- $2.0 million to establish **Centers of Excellence in Telehealth Implementation** to generate essential new evidence to understand telehealth's effect on access, equity, and quality that may inform key policy decisions to maximize telehealth's impact.

- $5.0 million to advance HHS efforts to coordinate and align on-going state-level efforts to develop national-level **all-payer claims database** (APCD). AHRQ will partner with states and other data holders to create a framework for a secure national-level APCD that will enhance value to participating states and provide analytics to federal policy makers to inform decision making.

Across these activities and all our work, AHRQ is committed to supporting the President's Executive Order on **advancing racial equity** and support for underserved communities. The agency will identify areas in which AHRQ can achieve these goals 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 the management of our resources ensure those investments will have the greatest impact on the health of all Americans.

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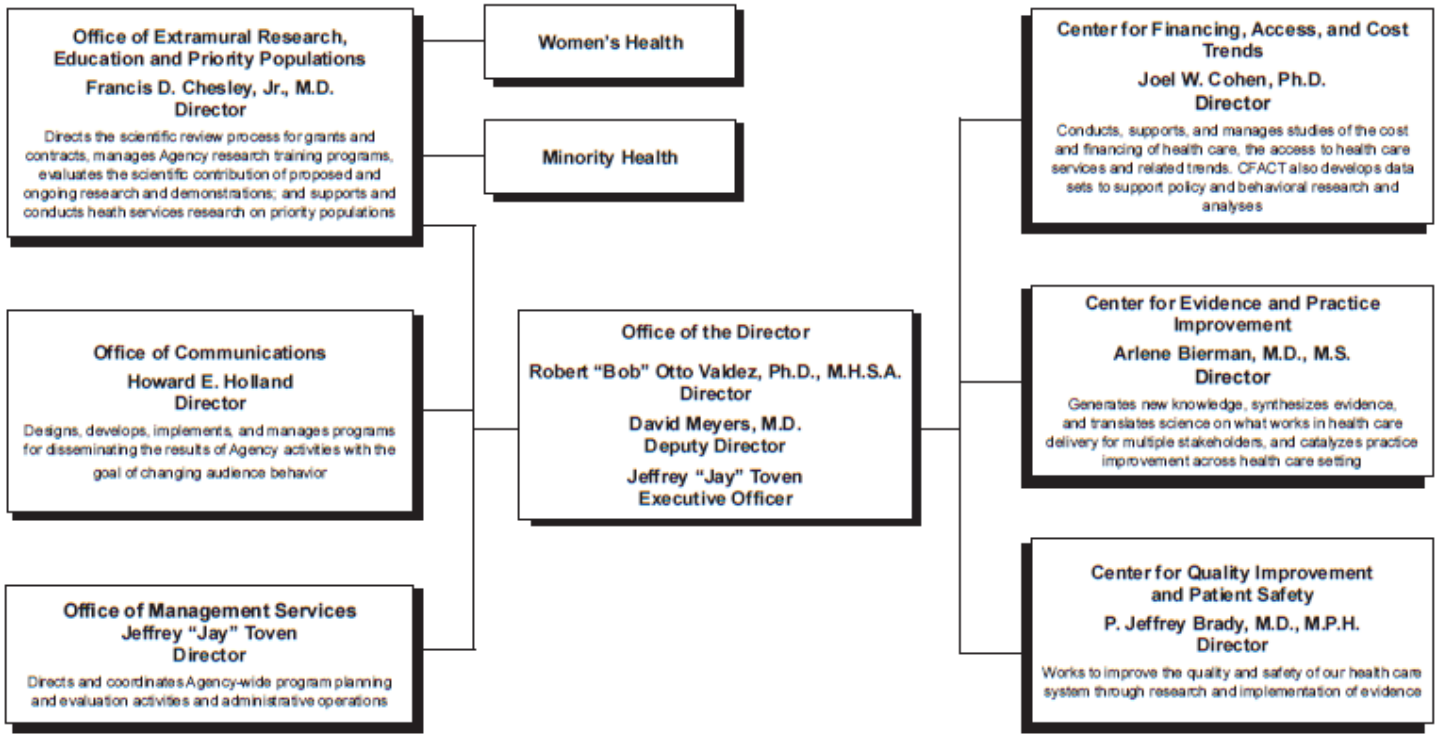
Robert Otto Valdez, Ph.D., M.H.S.A.
Director, Agency for Healthcare Research and Quality

DEPARTMENT OF HEALTH AND HUMAN SERVICES
Agency for Healthcare Research and Quality (AHRQ)

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



AHRQ Pub. No. 22-0023
February 2022

EXECUTIVE SUMMARY

Introduction and Mission

I am pleased to present the FY 2023 President's Budget for the Agency for Healthcare Research and Quality (AHRQ). AHRQ's mission is to produce evidence to make health care safer, higher quality, more accessible, equitable, and affordable, and to work within the U.S. Department of Health and Human Services and with other partners to make sure that the evidence is understood 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 how the US healthcare system is working and where there are opportunities for improvement.

The FY 2023 President's Budget provides $415.9 million in discretionary funding. The FY 2023 President's Budget supports the following priorities:

- Improving Diagnostic Safety: 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 $7.8 million in Diagnostic Safety Centers of Excellence and disseminating evidence-based tools for improving diagnostic safety. The research Centers will bring together multi-disciplinary teams to develop, implement, test, and refine practical solutions for reducing diagnostic errors using human factors principles, system engineering, and digital health applications.

- Long COVID: As the nation and our healthcare system turn our attention towards recovering from the pandemic, Long COVID, or as referred to in the scientific community, Post-Acute Sequelae of SARS COV-2 COVID (PASC), must be a central focus. As part of a national action plan to address people living with Long COVID, AHRQ has an important role to play alongside of the rest of the HHS team. AHRQ will complement the work of other divisions by investing $20.0 million ($19 million in implementation and $1.0 million in staffing support) to ensure that healthcare delivery systems are prepared to provide patient-centered, coordinated care for people experiencing Long COVID.

- New Research to Advance Equity in Healthcare Delivery: The FY 2023 President's Budget provides $3.0 million in investigator-initiated research grants focused on health equity. The investment is vital to advance healthcare equity in care delivery. This funding also increases support for investigator-initiated research grants from $50.5 million in FY 2022 to $61.5

million at the FY 2023 President's Budget level. This investment in evidence is fully aligned with the Administration and Department's Equity priority.

- Investments in Primary Care Research: The FY 2023 President's Budget provides $10.0 million in primary care research. AHRQ will invest in primary care research to help answer critical questions on 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 care, addressing substance use disorders, improving access to mental health care, and advancing health equity.

- Building the Evidence Base for Telehealth: The rapid expansion of telehealth during the COVID-19 pandemic created both historic opportunities and unique challenges. As the pandemic abates, a myriad of telehealth 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 telehealth, it is important to evaluate the effect of the telehealth on healthcare quality, safety, equity, access, utilization, and value. The FY 2023 President's Budget includes $2.0 million to establish Centers of Excellence in Telehealth Implementation to generate essential new evidence to understand telehealth's effect on access, equity, and quality that may inform key policy decisions to maximize telehealth's impact.

- Addressing the Substance Use Disorder Crisis: This proposal includes new research grants totaling $9.5 million to support the Department's efforts to end the opioid crisis and combat the growing polysubstance use crisis. While the COVID-19 pandemic exacerbated substance misuse and led to 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 determinants that shape vulnerability to drug use – will persist beyond the pandemic. AHRQ will provide $9.5 million in new research grants in FY 2023 to increase equity in treatment access and outcomes, accelerate the implementation of effective evidence-based care in primary and ambulatory 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.

- Ensuring Maternal Health: A total of $7.4 million in new funding will support the Administration's initiative to improve maternal health. This coordinated initiative focuses on ensuring safe and healthy pregnancies and childbirth among African 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.

- Powering Decision Making Through Data and Analytics: AHRQ will invest $5.0 million to advance HHS efforts to coordinate and align on-going state-level efforts to develop an All-Payer Claims Database (APCD) with data linkage capacities to join claims and administrative data with other data resources to facilitate research. AHRQ will partner with states and other data holders to create a framework for a secure national-level APCD that will enhance value to individual participating states and provide analytics to federal policy makers to inform decision making. The database will have the capacity to track patients across care settings, over time, and to the extent possible, across geographic locations. These features will enable research on national health priorities including COVID, the opioid epidemic, maternal mortality, cancer, and many more. Additionally, the budget allows AHRQ to continue expansion and innovation of our major data platforms, which currently include the Medical Expenditure Panel Survey (MEPS) and the Healthcare Cost and Utilization Project (HCUP), making the platforms more comprehensive, timely, and relevant.

Overview of Budget

AHRQ's FY 2023 President's Budget will continue to support both AHRQ's mission and our priority areas of research. Our FY 2023 discretionary request totals $415.9 million, an increase of $77.9 million or +23.0 percent from the FY 2022 Continuing Resolution (CR) level. Of this total, $376.1 million is requested in budget authority and $39.8 million is PHS Evaluation Funds. AHRQ's total program level at the FY 2023 President's Budget level is $526.9 million, an increase of $83.9 million from the FY 2022 CR Level. The total program level includes $111.0 million in mandatory funds from the Patient-Centered Outcomes Research Trust Fund (PCORTF), an increase of $6.0 million from FY 2022

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

AGENCY FOR HEALTHCARE RESEARCH AND QUALITY

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

	FY 2021 Final	FY 2022 CR	FY 2023 President's Budget
Research on Health Costs, Quality and Outcomes (HCQO)	**$194,909**	**$194,909**	**$268,709**
HCQO: Patient Safety	71,615	71,615	79,415
HCQO: Health Services Research, Data, and Dissemination (HSR)	95,403	95,403	133,053
HCQO: Improving Maternal Health	0	0	7,350

	FY 2021 Final	FY 2022 CR	FY 2023 President's Budget
HCQO: Digital Healthcare Research	16,349	16,349	18,349
HCQO: U.S. Preventive Services Task Force (USPSTF)	11,542	11,542	11,542
HCQO: Long COVID	0	0	19,000
Medical Expenditure Panel Survey	**71,791**	**71,791**	**71,791**
Program Support	**71,300**	**71,300**	**75,391**
Total, Budget Authority AHRQ	**$338,000**	**$338,000**	**$376,091**
Total, PHS Evaluation Fund, AHRQ			**$39,800**
PCORTF Transfer [1/]	95,750	105,000	111,000
Total, AHRQ Program Level	**$433,750**	**$443,000**	**$526,891**

[1/] Mandatory Funds

The FY 2023 President's Budget provides $415.9 million for the following AHRQ programs:

- Patient Safety (+$7.8 million; total $79.4 million): 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 $7.8 million over the FY 2022 CR Level for the Patient Safety portfolio to advance our efforts to address diagnostic safety. To discover and test solutions to avoid diagnostic error, the initiative would fund five Diagnostic Safety Centers of Excellence. These centers will bring together multi-disciplinary teams to generate new knowledge through diagnostic safety research. At least one Center will focus on each of 'big three' conditions – cancer, heart disease, and infectious disease – which together account for more than 50% of diagnostic errors annually and all of the Centers will consider how to ensure equity within the diagnostic process. Of the $7.8 million, $2.8 million will be invested to immediately advance diagnostic safety by widely disseminating and further evaluating evidence-based tools and resources already developed by AHRQ.

- Health Services Research, Data and Dissemination (HSR) (+$37.7 million; total $133.1 million): HSR funds foundational health services research through research grant support to the extramural community. AHRQ proposes an increase of $37.7 million over the FY 2022 CR Level for the Health Services Research, Data and Dissemination portfolio. The FY 2023 President's Budget will provide $61.5 million in investigator-initiated research funds, including $3.0 million in new investigator-initiated research (IIR) focused on research to advance health equity. An additional $8.5 million is provided for primary care research

grants. The FY 2023 President's Budget also provides $9.5 million in new grants to increase equity in treatment access and outcomes, accelerate the implementation of effective evidence-based care in primary and ambulatory 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. Finally, a total of $5.0 million in research contracts is provided to develop the infrastructure to regularly create and disseminate an All-Payer Claims Database (APCD) that can be used to inform public and private policy, address equity issues, and to improve healthcare quality.

- Improving Maternal Health (+$7.4 million; total $7.4 million): HHS is preparing to address the complex challenge of ensuring safe and healthy pregnancies and childbirth. Today 700 or more American women die each year as a result of pregnancy and childbirth and over 50,000 experience severe complications. These outcomes are not evenly distributed, with underserved women, particularly African American and American Indian and Alaskan Native women, being at substantially higher risk of complication and death. The root causes of this crisis in American health and health care are multifaceted and so the solutions must be as well. The FY 2023 President's Budget funds research to ensure that Federal, State, and local policymakers have timely and accurate data and useful analytic resources about maternal health and the healthcare system with which to make informed policy decisions.

- Digital Healthcare Research (+$2.0 million; total $18.3 million): 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 2023 President's Budget provides an additional $2.0 million to focus on evaluating the effects of telehealth on healthcare delivery and health outcomes. New grants will generate evidence on how telehealth 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.

- The U.S. Preventive Services Task Force (+0.0 million; $11.5 million): 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.

- Long COVID (+19.0 million; $19.0 million): As the nation and our healthcare system turn our attention towards recovering from the pandemic, Long COVID, or as referred to in the scientific community, Post-Acute Sequelae of SARS COV-2 COVID (PASC), must be a central focus. AHRQ will invest $20.0 million ($19 million in research and $1.0 million in staffing support) to ensure that healthcare delivery systems are prepared to provide patient-centered, coordinated care for people experiencing Long COVID.

- Medical Expenditure Panel Survey (+0.0 million; $71.8 million): 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 2023 President's Budget provides $71.8 million to support base MEPS activities and to fund third year costs related to expanding 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 produce improvements in 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, as well as analyses by insurance status.

- Program Support (+$4.1 million; total $75.4 million): 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 2023 President's Budget provides an increase of $4.1 million for Program Support to support 7 additional Full-Time Equivalent (FTE) needed for the expansion of Patient Safety's Diagnostic Safety program, Digital Healthcare Research's telehealth program, and development of the new Long COVID initiative. Funding is also provided for an across-the-board 4.6 percent pay raise.

- Patient-Centered Outcomes Research Trust Fund (PCORTF) totals $111.0 million in mandatory funding in FY 2023, an increase of $6.0 million from the FY 2022 level. AHRQ will use these resources as required in authorization language to disseminate and implement patient-centered outcomes research (PCOR) research findings; obtain stakeholder feedback on the value of the information to be disseminated and to inform future efforts; assist users of health information technology to incorporate PCOR research findings into clinical practice; and provide training and career development for researchers and institutions in methods to conduct comparative effectiveness research.

Full-Time Equivalent (FTEs)

Finally, AHRQ seeks to promote economy, efficiency, accountability, and integrity in the management of our research dollars to ensure that AHRQ is an effective steward of its finite 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 health care in America, gauged in terms of improved quality of life and patient outcomes, lives saved, and value gained for what we spend. The workforce at AHRQ includes talented scientific, 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 2022 and FY 2023 figures are estimates for the PCORTF.

	FY 2021 Final	FY 2022 CR	FY 2023 President's Budget
FTEs – Budget Authority	262	262	269
FTEs – PCORTF	6	6	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 excellences. 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). The Agency retired one MEPS measure at the end of FY 2020, because it represents limited utility and has been underutilized by the health services research community over a period of years. Working with our ASFR partners, another MEPS measure (#1.3.19) was modified to add some context in the measure language. A new measure to begin in FY 2023 was developed to support another HAI project - CUSP for Methicillin-Resistant Staphylococcus Aureus (MRSA) Prevention.

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). AHRQ expanded the MEPS Tables Compendia by 250, bringing the total number of tables available to the user population to 11,181. This represents twenty years of data for both the Household and Insurance Components, enabling the user to follow trends on a variety of topics, including health insurance, accessibility and quality of care, medical conditions, and prescribed drugs.

Patient Safety. Intensive care units (ICUs) participating in the Comprehensive Unit-based Safety Program (CUSP) for Catheter-Associated Urinary Tract Infection (CAUTI) project in FY 2021, substantially decreased infection rates by 29% after intervention. This reduction was higher than AHRQ's target of 5%. Additionally, the AHRQ *Making Healthcare Safer III* compendium identified 47 best practices to improve patient safety for a variety of settings and stakeholders.

U.S. Preventive Services Task Force (USPSTF). In FY 2021, while continuing to provide ongoing scientific, administrative and dissemination support to the U.S. Preventive Services Task Force (USPSTF), AHRQ published baseline data from a nationally representative sample on the receipt of preventive services by U.S. adults. The Agency continues to expand and re-field data collection and to analyze prior year data.

Digital Healthcare Research. AHRQ funded new research to help understand the effects of telehealth expansion during the COVID-19 pandemic. This research seeks to understand how treatment for post-pandemic patient care will ensure the highest quality of care, support changes in payment regulations, reduce the health disparities that are currently present with the delivery of telehealth services, and promote equal access for all.

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 2021 Final	FY 2021 COVID-19 Supplemental /1	FY 2022 CR /2	FY 2022 Supplemental Funding /3	FY 2023 President's Budget	FY 2023 President's Budget +/- FY 2022 CR
AHRQ						
Patient Centered Outcomes Research Trust Fund Transfer [4/]	**95.750**	**--**	**105.000**	**--**	**111.000**	**+6.000**
Research on Health Costs, Quality, and Outcomes (HCQO):						--
Patient Safety	*71.615*	--	*71.615*	--	*79.415*	*+7.800*
Health Services Research, Data and Dissemination	*95.403*	--	95.403	--	*133.053*	*+37.650*
Budget Authority (non-add)	*95.403*		*95.403*		*133.053*	*+37.650*
PHS Evaluation Tap (non-add)	--		--			--
Improving Maternal Health	--	--	--	--	7.350	+7.350
Long COVID	--	--	--	--	19.000	+19.000
Digital Healthcare Research	16.349		16.349		18.349	+2.000
U.S. Preventive Services Task Force	11.542	--	11.542	--	11.542	--
Subtotal, HCQO	**194.909**	**--**	**194.909**	**--**	**268.709**	**+73.800**
Budget Authority (non-add)	*194.909*		*194.909*		*228.909*	*+34.000*
PHS Evaluation Tap (non-add)	--		--		*39.800*	*+39.800*
		--		--		--
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	**71.300**	**--**	**71.300**	**--**	**75.391**	**+4.091**
Budget Authority (non-add)	*71.300*		*71.300*		*75.391*	+4.091
PHS Evaluation Tap (non-add)	--		--		--	--
Total, AHRQ Program Level	**433.750**	**--**	**443.000**	**--**	**526.891**	**+83.891**
Budget Authority (non-add)	*338.000*	--	*338.000*	--	*376.091*	*+38.091*
PHS Evaluation Tap (non-add)	--		--		*39.800*	*+39.800*
Less Patient Centered Outcomes Research Trust Fund Transfer [4/]	***95.750***	**--**	***105.000***	**--**	***111.000***	***+6.000***
Total, AHRQ Discretionary Funds	**338.000**	**--**	**338.000**	**--**	**415.891**	**+77.891**

1/ This column includes both supplemental funding and mandatory funds appropriated in the American Rescue Plan Act of 2021, P.L. 117-2 post-transfer and post-reallocation and the supplemental appropriation in the Consolidated Appropriations Act, 2021 (P.L. 116-260)

2/ Reflects the annualized amounts provided in the continuing resolution ending 3/11/2022

3/ This column includes both supplemental funding and mandatory funds appropriated for FY 2022 in the Infrastructure and Jobs Act and in the Build Back Better Act.

4/ Mandatory Funds

AGENCY FOR HEALTHCARE RESEARCH AND QUALITY

Discretionary Mechanism Summary Table by Portfolio

	FY 2021 Final		FY 2022 CR		FY 2023 President's Budget	
	No.	Dollars	No.	Dollars	No.	Dollars
RESEARCH GRANTS						
Non-Competing						
Patient Safety	82	35,994,585	69	29,367,348	73	30,150,029
Health Serv Res, Data & Diss.	144	43,868,187	128	39,295,851	138	41,886,040
Improving Maternal Health	0	0	0	0	0	0
Digital Healthcare Research	24	7,783,298	30	9,535,871	29	9,974,461
U.S. Preventive Services Task Force	0	0	0	0	0	0
Long COVID	0	0	0	0	0	0
Total Non-Competing	250	87,646,070	227	78,199,070	240	82,010,530
New & Competing						
Patient Safety	20	7,030,601	33	14,800,000	47	20,100,000
Health Serv Res, Data & Diss.	58	15,305,782	65	19,878,118	133	40,857,960
Improving Maternal Health	0	0	0	0	0	0
Digital Healthcare Research	22	6,691,402	14	4,813,129	20	6,374,539
U.S. Preventive Services Task Force	0	0	0	0	0	0
Long COVID	0	0	0	0	14	14,000,000
Total New & Competing	100	29,027,785	113	39,491,247	214	81,332,499
RESEARCH GRANTS						
Patient Safety	102	43,025,186	102	44,167,348	121	50,250,029
Health Serv Res, Data & Diss.	202	59,173,969	193	59,173,969	271	82,744,000
Improving Maternal Health	0	0	0	0	0	0
Digital Healthcare Research	46	14,474,700	44	14,349,000	49	16,349,000
U.S. Preventive Services Task Force	0	0	0	0	0	0
Long COVID	0	0	0	0	14	14,000,000
TOTAL, RESEARCH GRANTS	350	116,673,855	340	117,690,317	455	163,343,029
CONTRACTS/IAAs						
Patient Safety		28,589,814		27,447,652		29,164,971
Health Serv Res, Data & Diss.		36,229,031		36,229,031		50,309,000
Improving Maternal Health		0		0		7,350,000
Digital Healthcare Research		1,874,300		2,000,000		2,000,000
U.S. Preventive Services Task Force		11,542,000		11,542,000		11,542,000
Long COVID		0		0		5,000,000
Medical Expenditure Panel Survey		71,791,000		71,791,000		71,791,000
TOTAL CONTRACTS/IAAs		150,026,145		149,009,683		177,156,971
PROGRAM SUPPORT		71,300,000		71,300,000		75,391,000
GRAND TOTAL						
Patient Safety		71,615,000		71,615,000		79,415,000
Health Serv Res, Data & Diss.		95,403,000		95,403,000		133,053,000
Digital Healthcare Research		16,349,000		16,349,000		18,349,000
Improving Maternal Health		0		0		7,350,000
U.S. Preventive Services Task Force		11,542,000		11,542,000		11,542,000
Long COVID		0		0		19,000,000
Medical Expenditure Panel Survey		71,791,000		71,791,000		71,791,000
Program Support		71,300,000		71,300,000		75,391,000
GRAND TOTAL		338,000,000		338,000,000		415,891,000

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: Provided, That section 947(c) of the PHS Act shall not apply in fiscal year 2023: Provided further, That, in addition to amounts provided herein, $39,800,000 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.

AGENCY FOR HEALTHCARE RESEARCH AND QUALITY

Amounts Available for Obligation

(Dollars in Thousands)

General Fund Discretionary Appropriation:	FY 2021 Final	FY 2022 CR	FY 2023 President's Budget
Appropriation (L/HHS, Ag, or, Interior)	$338,000	$338,000	$376,091
Across-the-board reductions (L/HHS, Ag, or Interior)			
Subtotal, Appropriation (L/HHS, Ag, or Interior)			
Rescission			
Reappropriation			
Proposed Supplemental Appropriation			
Proposed Rescission			
Proposed Reappropriation			
Subtotal, adjusted appropriation			
Real transfer from AHRQ to ACF	$ (1.015)	$-	$ -
Comparable transfer from AHRQ to NIH	(504)		
Subtotal, adjusted general fund discretionary appropriation	$ 336,481	$ 338,000	$ 376,091
Trust Fund Discretionary Appropriation:			
Appropriation Lines			
Transfer Lines for PHS Evaluation			
Subtotal, adjusted trust fund discr. Appropriation			39,800
Total, Discretionary Appropriation	$ 336,481	$ 338,000	$ 415,891
Mandatory Appropriation:			
Appropriation Lines			
Transfer Lines for PCORTF (non-add)	$ 95,750	$ 105,000	$111,000
Subtotal, adjusted mandatory. appropriation	$ 95,750	$ 105,000	$111,000
Offsetting collections from:			
Unobligated balance, start of year			
Unobligated balance, end of year			
Unobligated balance, lapsing	$ 353		
Total obligations	$ 431,878	$ 443,000	$ 526,891

AGENCY FOR HEALTHCARE RESEARCH AND QUALITY

Summary of Changes

(Dollars in Millions)

AHRQ 2022 CR	$ 338,000
Total estimated budget authority	
(Obligations)	
AHRQ 2023 President's Budget	$ 415.891
Total Discretionary Funds	
(Obligations)	
Net Change	+$77.891

	FY 2022 CR FTE	FY 2022 CR	FY 2022 PB FTE	FY 2023 PB BA	FY 2023 +/- FY 2022 FTE	FY 2023 +/- FY 2022 BA
Increases:						
A. Built-in:						
1. Annualization of 2020 civilian pay increase...	257	$51.986	264	$54.786	+7	+$2.782
2. Annualization of 2020 Corps pay increase..	+ 5	1.022	+ 5	1.069		+$0.047
Subtotal, Built-in Increases.....	**262**	**$53.008**	**269**	**$55.837**	**+7**	**+ $2.829**
A. Program:						
1. Health Services Research, Data & Dissem....		$95.403		$133.053		+$37,650
2. Patient Safety.....		$71.615		$ 79.415		+$ 7.800
3. Digital Healthcare Research.....		$16.349		$ 18.349		+$ 2.000
4. Improving Maternal Health.....		--		$ 7.350		+$ 7.350
5. Long COVID.....		--		$ 19.000		+$19.000
6. Program Support (non-pay increase)		$18.292		$19.544		+$1.262
Subtotal, Program Increases.....		**$201.659**		**$276.721**		**+$75.062**
Total Increases.....	**262**	**$254.667**	**269**	**$332.558**	**+7**	**+$77.891**
Decreases:						
A. Built-in:						
1.						
2.						
Subtotal, Built-in Decreases.....	0	$0	0	$0	0	$0
A. Program						
Subtotal, Program Decreases.....	0	$0	0	$0	0	$0
Total Decrease	**0**	**$0**	0	**$0**	0	**$0**
Net Change					**+7**	**+$77.891**

AGENCY FOR HEALTHCARE RESEARCH AND QUALITY

Budget Authority by Activity
(Dollars in Millions)

	FY 2021 Final	FY 2022 CR	FY 2023 President's Budget
Research on Health Costs, Quality and Outcomes	$194.909	$194.909	$268.709
Budget Authority	*$194,909*	*$194.909*	*228.909*
PHS Evaluation Funds	--	--	*39.800*
Medical Expenditure Panel Survey	71.791	71.791	71.791
Budget Authority	*71.791*	*71.791*	*71.791*
PHS Evaluation Funds	--	--	--
Program Support	71.300	71.300	75.391
Budget Authority	*71.300*	*71.300*	*75.391*
PHS Evaluation Funds	--	--	--
Total, Budget Authority AHRQ	$338.000	$338.000	$376.091
Total, PHS Evaluation Fund, AHRQ	--	--	$ 39.800
FTE (BA)	264	264	271

AGENCY FOR HEALTHCARE RESEARCH AND QUALITY

Authorizing Legislation [1/, 2/]

(Dollars in Millions)

	FY 2022 Amount Authorized	FY 2022 Amount Appropriated	FY 2023 Amount Authorized	FY 2023 President's Budget
Research on Health Costs, Quality, and Outcomes: Secs. 301 & 926(a) PHSA	SSAN	$ 194.909	SSAN	$228.909
Research on Health Costs, Quality, and Outcomes: Part A of Title XI of the Social Security Act (SSA) Section 1142(i) [3/ 4/]				
Budget Authority				
Medicare Trust Funds [4/ 5/]				
Subtotal BA & MTF	Expired [6/]		Expired [6/]	
Medical Expenditure Panel Surveys: Sec. 947(c) PHSA	SSAN	$ 71.791	SSAN	$ 71.791
Program Support: Sec. 301 PHSA	Indefinite	$71.300	Indefinite	$75.391
Evaluation Funds: Sec. 947(c) PHSA		$0		$39.800
Total appropriations, AHRQ [2/]		$ 338.000		$415.891
Total appropriation against definite authorizations.....				

SSAN = Such Sums As Necessary

[1/] 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.

[2/] Excludes mandatory financing from the PCORTF.

[3/] 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.

[4/] No specific amounts are authorized for years following FY 1994.

[5/] 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%).

[6/] Expired September 30, 2005.

Agency for Healthcare Research and Quality

Appropriations History Table (2013-2023) [1/]

		Budget Estimate to Congress	House Allowance	Senate Allowance	Appropriation
AHRQ 2013					
Budget Authority……..		$ -	$ -	$ -	$ -
PHS Evaluation Funds……..		$334,357,000	$-	$364,053,000	$365,362,000
	Total……..	$334,357,000	$-	$364,053,000	$365,362,000
AHRQ 2014					
Budget Authority……..		$ -	$ -	$ -	$ -
PHS Evaluation Funds……..		$333,697,000	$ -	$364,008,000	$364,008,000
	Total……..	$333,697,000	$ -	$364,008,000	$364,008,000
AHRQ 2015					
Budget Authority……..		$ -	$ -	$ 373,295,000	$363,698,000
PHS Evaluation Funds……..		$334,099,000	$ -	$-	$-
	Total……..	$334,099,000	$ -	$373,295,000	$363,698,000
AHRQ 2016					
Budget Authority……..		$275,810,000	$ -	$236,001,000	$334,000,000
PHS Evaluation Funds……..		$ 87,888,000	$ -	$ -	$ -
	Total……..	$363,698,000	$ -	$236,001,000	$334,000,000
AHRQ 2017					
Budget Authority……..		$280,240,00	$280,240,000	$324,000,000	$324,000,000
PHS Evaluation Funds……..		$83,458,000	$ -	$ -	$ -
	Total……..	$363,698,000	$ 280,240,000	$224,000,000	$324,000,000
AHRQ 2018					
Budget Authority……..		$272,000,000	$300,000,000	$324,000,000	$334,000,000
PHS Evaluation Funds……..		$-	$ -	$ -	$ -
	Total……..	$272,000,000	$300,000,000	$324,000,000	$334,000,000
AHRQ 2019					
Budget Authority……..		$255,960,000	$334,000,000	$334,000,000	$338,000,000
PHS Evaluation Funds……..		$ -	$ -	$ -	$ -
	Total……..	$255,960,000	$334,000,000	$334,000,000	$338,000,000
AHRQ 2020					
Budget Authority……..		$255,960,000	$339,809,000	$ -	$338,000,000
PHS Evaluation Funds……..		$ -	$ 18,408,000	$ -	$ -
	Total……..	$255,960,000	$358,217,000	$ -	$338,000,000
AHRQ 2021					
Budget Authority……..		$256,660,000	$143,091,000	$256,600,000	$338,000,000
PHS Evaluation Funds……..		$ -	$199.909,000	$0	$0
	Total……..	$256,660,000	$343,000,000	$256,600,000	$338,000,000
AHRQ 2022					
Budget Authority……..		$353,000,000	$250,792,000	$353,000,000	
PHS Evaluation Funds……..		$ 27,000,000	$129,208,000	$ 27,000,000	
	Total……..	$380,000,000	$380,000,000	$380,000,000	
AHRQ 2023					
Budget Authority……..		$376,091,000			
PHS Evaluation Funds……..		$ 39,800,000			
	Total……..	$415,891,000			

[1/] 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 2022
Research on Health Costs, Quality, and Outcomes	FY 2005	Such Sums As Necessary	$260,695,000	$338,000,000

NARRATIVE BY ACTIVITY

Research on Health Costs, Quality, and Outcomes (HCQO)				
	FY 2021 Final	**FY 2022 CR**	**FY 2023 President's Budget**	**FY 2023 +/- FY 2022**
BA	$194,909,000	$194,909,000	$228,909,000	+$34,000,000
PHS Evaluation Funds	$0	$0	$39,800,000	+$39,800,000

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 2023 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 2023 President's Budget level is $268.7 million, an increase of $73.8 million from the FY 2022 CR level. This funding is comprised of $228.9 million in budget authority and $39.8 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 2021 Final	FY 2022 CR	FY 2023 President's Budget
Research on Health Costs, Quality, and Outcomes (HCQO):			
Patient Safety	$ 71.615	$ 71.615	$ 79.415
Health Services Research, Data and Dissemination	95.403	95.403	133.053
Improving Maternal Health	0.000	0.000	7.350
Digital Healthcare Research	16.349	16.349	18.349
U.S. Preventive Services Task Force	11.542	11.542	11.542
Long COVID	--	--	19.000
Subtotal, HCQO	**194.909**	**194.909**	**268.709**
Budget Authority	***194.009***	***194.909***	***228.909***
PHS Evaluation Funds	***0.000***	***0.000***	***39.800***

HCQO: Patient Safety				
	FY 2021 Final	FY 2022 CR Level	FY 2023 President's Budget	FY 2023 +/- FY 2022
Budget Authority	$71,615,000	$71,615,000	$79,415,000	+$7,800,000
PHS Evaluation Funds	$0	$0	$0	$0

Authorizing Legislation: Title III and IX and Section 947(c) of the Public Health Service Act
FY 2023 Authorization……Expired.
Allocation Method……Competitive Grant/Cooperative Agreement, Contracts, and Other.

Patient Safety Research: 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.

Patient Safety Research Activities
(in millions of dollars)

	FY 2021 Final	FY 2022 CR	FY 2023 President's Budget
Patient Safety Risks and Harms	$31.123	$31.123	$38.923
Patient Safety Organizations (PSOs)	4.821	4.821	4.821
Healthcare-Associated Infections (HAIs)	35.671	35.671	35.671
Patient Safety Research Activities	**$71.615**	**$71.615**	**$79.415**

FY 2021 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 2021, AHRQ funded $10.0 million in continuing Patient Safety Learning Lab (PSLL) grants. The PSLLs funded in FY 2018 and FY 2019 apply systems engineering approaches to address both

diagnostic and treatment errors in health care. In FY 2021 AHRQ continued work to develop four different resources to address failures in the diagnostic process. One resource to engage patients and families in the diagnostic process by helping clinicians provide patients with one uninterrupted minute to share the reason for their office visit has been completed and posted on the AHRQ website. Another resource will be completed in the spring of 2022; TeamSTEPPS ® (Team Strategies and Tools to Enhance Performance and Patient Safety) to Improve Diagnosis, will help clinicians improve teamwork and communication related to diagnosis. A third resource in development will help healthcare organizations start using measurement to enhance diagnostic safety. A final resource also under development focuses on clinician calibration, which is having better alignment between their 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 handed-off. 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. Specifically, in 2021 in addition to the new TeamSTEPPS® curriculum mentioned above, AHRQ posted two new Surveys on Patient Safety Culture Supplemental Item sets to its website: 1) Workforce Safety and 2) Diagnostic Safety. 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.

Research has shown that preventable adverse events constitute nearly 60% of harms experienced by residents in nursing homes. In ambulatory care, a systematic review 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 2021 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 practice 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 a revised version of the Guide was posted to the AHRQ website. Based on feedback from the pilot sites, AHRQ changed the resource name to the How-To-Implement Toolkit.

Healthcare-Associated Infections (HAIs): In FY 2020 and 2021, AHRQ made significant progress in the four CUSP projects that are currently under way.

1) CUSP for antibiotic stewardship (*official title: AHRQ Safety Program for Improving Antibiotic Use)* completed an ambulatory care cohort involving over 350 ambulatory care practices (e.g., clinics, medical practices, and urgent care centers) in December 2020.

Preliminary data from this cohort show a significant reduction in antibiotic starts over the one-year period and will be presented at Infectious Disease (ID) Week in September 2021, and an educational toolkit based on the experiences of this cohort is anticipated in mid-2022. Results of a long-term care (LTC) cohort of over 400 LTC facilities completed in December 2019 were published in February 2022, reporting a significant reduction in antibiotic starts in these facilities. An educational toolkit based on the experiences of this cohort was launched on the AHRQ web site in June 2021.

2) In April 2021, 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)* completed its sixth and final one-year cohort comprising 50 ICUs. Over 700 ICUs have actively participated in the project overall. An educational toolkit based on the experiences of the project will be launched in April 2022..
3) CUSP for improving surgical care and recovery *(official title: AHRQ Safety Program for Improving Surgical Care and Recovery)* has worked with over 300 hospitals in 44 States through July 2021. 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 – including over 50 hospitals from previous cohorts and over 50 new hospitals– added a focus on emergency general surgery, as well as continuing to work with hospitals on the three other surgical focus areas. This new cohort started work in September 2020, and the inclusion of project procedures ended in February 2022.
4) In February 2020, AHRQ launched the CUSP for Methicillin-Resistant Staphylococcus Aureus (MRSA) Prevention project, which aims to reduce MRSA infections in more than 400 ICUs, 400 non-ICUs, 300 high-risk surgical services, and 300 long-term care facilities over five years. An evidence review has been completed, and recruitment is in progress for an ICU and non-ICU cohort which will begin April 2022.

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, evidence-based, 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 August 2021, more than 318,000 records are reflected in new NPSD Chartbook and NPSD Dashboards, including new dashboards for Perinatal and Pressure Ulcer events and expanded Falls and Blood and Blood Products dashboards. The NPSD is the first publicly available online resource that captures non-identifiable 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. On June 1, 2021, AHRQ made available for public comment new Common Formats for Event Reporting – Diagnostic Safety version 0.1, which is designed for use in all healthcare settings and specialties. From August through November 2021, AHRQ engaged with an Expert Panel convened by the National Quality Forum to review the public comments and provide

recommendations to AHRQ. AHRQ anticipates Common Formats for Event Reporting – Diagnostic Safety version 1.0 will be made available in 2022. The Patient Safety Act also requires 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. In March 2021, AHRQ submitted an annual report in response to the HHS Office of Inspector General's Report, *Patient Safety Organizations: Hospital Participation, Value, and Challenges,* OEI-01-17-00420.

FY 2023 Budget Policy: The FY 2023 President's Budget for Patient Safety research is $79.4 million, an increase of $7.8 M over the FY 2022 CR level. The entirety of the increase goes to Research Related to Risk and Harms.

Research Related to Risk and Harms

The FY 2023 President's Budget level for Research related to Risk and Harms is $38.9 million, an increase of $7.8 million over the FY 2022 CR level. The increase will be dedicated to diagnostic safety research. An estimated 12 million people per year are affected by diagnostic error with approximately 4 million of these people suffering serious harm. The cost of diagnostic error to the U.S. healthcare system may be well over $100 billion annually. The National Academies of Sciences, Engineering, and Medicine defined diagnostic error as the failure to (a) establish an accurate and timely explanation of the patient's health problem(s) or (b) communicate that explanation to the patient. There are two main types of diagnostic error-incorrect diagnosis, sometimes referred to as a misdiagnosis where a patient is given a wrong diagnosis, and delayed diagnosis which means too much time elapses between a patient seeking care after the onset of symptoms and the correct identification of the problem and initiation of treatment. For example, if a patient who is having a heart attack is sent home from an emergency room with a diagnosis of indigestion and a bottle of antacid, this would be an incorrect diagnosis. An example of a delayed diagnosis is when a screening mammogram is reported as suspicious for cancer, but the patient is not contacted and does not get a follow-up diagnostic test until she returns for care after feeling a lump in her breast. Both types of diagnostic error can lead to significant harm and even death. To assist the field in reducing diagnostic errors, the proposed initiative will invest $7.8 million in the first year of a multifaceted initiative to improve diagnostic safety and quality. AHRQ will invest $5.0 million to fund five Diagnostic Safety Centers of Excellence. These centers will bring together multi-disciplinary teams to generate new knowledge through diagnostic safety research. Each Center would support 3-6 related research projects over an initial grant period of four years. Individual Centers may focus on specific conditions, populations, or settings where diagnostic errors are more likely to occur. It is expected that these projects will address multiple issues including those associated with the 'big three' conditions – cancer, heart disease, and infectious disease – which together account for more than 50% of diagnostic errors annually. Centers will develop, implement, test, and refine practical solutions for reducing diagnostic errors using human factors, system engineering, and/or digital health applications. The relationship between diagnostic safety and health equity will be an overarching, cross-cutting priority that all Centers address. In addition, a total of $2.8 million will be allocated to disseminate existing evidence-based tools and resources to improve diagnostic safety. AHRQ began focusing on diagnostic safety in 2019 and has developed a series of evidence-based resources to support health systems in reducing diagnostic errors. In FY

2023, AHRQ will invest in the spread, use, evaluation, and refinement of these tools. In carrying out this work AHRQ will ensure diversity among implementation sites according to multiple factors that are relevant to health equity. AHRQ also will evaluate the impact of these tools using process and outcome measures.

The FY 2023 President's Budget will also continue our general patient safety research, including funding $11.8 million in continuing grants, $8.8 million in new grants and $10.5 million in research contracts to support ongoing patient safety research, resource development, and dissemination and implementation. The President's Budget includes $5.0 million in noncompeting grants and $5.0 million in new grants for Patient Safety Learning Labs to use system's 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 to improve medication safety. AHRQ will also 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 2023 President's Budget provides $35.7 million, the same level of support as the FY 2022 CR level, 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 2023 President's Budget, HAIs will provide $18.4 million in noncompeting grants, $6.3 million for new research grants, and $11.0 million in research contract support. In FY 2023 AHRQ will complete the work of the CUSP project aimed at improving care and recovery of surgical patients. Implementation activities in the CUSP for Methicillin-Resistant Staphylococcus Aureus (MRSA) Prevention project will continue in ICUs, non-ICUs, high-risk surgical services, and long-term care facilities. In addition, AHRQ will continue funding a project to address diagnostic accuracy and antibiotic stewardship in telehealth. 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 2023 President's Budget 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 2022 CR 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. CUSP for Telemedicine

FY 2022 CR Level:	$5.0 million
FY 2023 President's Budget:	$4.8 million
Change:	-$0.2 million

The Comprehensive Unit-based Safety Program (CUSP), which was developed and shown to be effective with AHRQ funding, involves improvement in safety culture, teamwork, and communication, together with a checklist of evidence-based safety 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 catheter-associated urinary tract infections in hospitals and long-term care facilities, surgical site infections and other surgical complications in inpatient and ambulatory surgery, and ventilator-associated events.

AHRQ will provide $4.8 million for CUSP activities at the FY 2023 President's Budget, a decrease of $0.2 million from the prior year. This small decrease does not reflect a reduced interest in CUSP implementation. Instead, the decrease is related to the slightly lower cost of implementation in the second year of the CUSP for Telemedicine project, as compared to the higher start-up costs in the first year of the project.

In Q1 of FY 2023, the CUSP for Improving Surgical Care and Recovery project will complete its activities, using FY 2019 funds. Implementation activities in the CUSP for Methicillin-Resistant Staphylococcus Aureus (MRSA) Prevention project will continue in ICUs, non-ICUs, high-risk surgical services, and long-term care facilities, using FY 2020 and FY 2021 funds.

Key Outputs and Outcomes Tables with Performance Narrative: Patient Safety

Measure	Year and Most Recent Result / Target for Recent Result / (Summary of Result)	FY 2022 Target	FY 2023 Target	FY 2023 Target +/- FY 2022 Target
1.3.38 Increase the number of users of research using AHRQ-supported research tools to improve patient safety culture (Outcome)	FY 2021: 2349 users of research	2950 users of research	3050 users of research	+100 users of research
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. (Outcome)	FY 2021: 250	275 tools	300 tools	+25 tools
1.3.62 Reduce the rate of CAUTI cases in hospital intensive care units (ICUs) (Outcome)	FY 2021 Target: 5% reduction from FY 2021 Baseline NHSN and Population rates NHSN Rate: Baseline: 1.30 CAUTI/1,000 catheter days. Intervention: 1.02 CAUTI/ 1,000 catheter days. Result: 21.5% reduction ([1.30-1.02]/1.30). Population Rate: Baseline: 6.81 CAUTI/10,000 patient days. Intervention: 5.45 CAUTI/10,000 patient days. Result: 20% reduction ([6.81-5.45]/6.81). Target exceeded	Retire	N/A	N/A
1.3.64 Increase the number of units participating in the CUSP for MRSA prevention project	FY 2022: Result Expected Sep 30, 2023	400 hospital units participating	200 additional sites participating (surgical services and long-term care facilities)	+200 additional sites participating (surgical services and long-term care facilities)

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™ (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 as a whole. Since the 2004 release of the first SOPS survey, thousands of health care 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 health care 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 who submit results to the databases. This number is only a portion of the total number of users of the SOPS surveys and products; there are others who 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.

In FY 2021, the submissions to the databases were provided by the total of 2,349 users of research, including 235 ambulatory surgery centers (2021 report); 492 hospitals (SOPS 2.0 – 172, SOPS 1.0 – 320; 2021 report); 1,100 medical offices (2022 report on data collected 2021); 191 nursing homes (2019 report); and 331 community pharmacies (2019 report).

Healthcare organizations provide the numbers to AHRQ on a voluntary basis. Based on previous trends in reporting, AHRQ established a target of 3950 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 as a consequence of the COVID-19 pandemic. The nursing homes report

is now due December 2023. Due also to COVID-19, fewer numbers of hospitals, medical offices and ambulatory surgery centers submitted data to the database for FY 2021. As a result, the target was not met in FY 2021, and could change for subsequent years. The FY 2022 target was adjusted based on the results from FY 2020 and 2021, and continuous challenges due to the pandemic.

It is anticipated that in FY 2023, with healthcare fully resuming normal (pre COVID-19) operations, the number of SOPS users will steadily increase and reach 3,050.

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 as a result of 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 provide many and a large variety of resources and tools to improve patient safety. Examples include:

- AHRQ Patient Safety Network (AHRQ PSNet) & Web M&M (Morbidity and Mortality Rounds);
- AHRQ Question Builder App;
- AHRQ's Safety Program for Nursing Homes: On-Time Pressure Ulcer Prevention;
- Common Formats (standardized specifications for reporting patient safety events);
- Guide to Improving Patient Safety in Primary Care Settings by Engaging Patients and Families;
- Healthcare Simulation Dictionary, Second Edition;
- Making Healthcare Safer III Report; Primary Care-Based Efforts To Reduce Potentially Preventable Readmissions;
- *Reducing Diagnostic Errors in Primary Care Pediatrics* (Project RedDE!);
- Re-Engineered Discharge (RED) Toolkit;
- Toolkit To Improve Antibiotic Use in Acute Care Hospitals;
- Understanding Omissions of Care in Nursing Homes.

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

1.3.62: Reduce the rate of CAUTI cases in hospital intensive care units (ICUs)

A performance measure has been developed in connection with an HAI project as follow-on to earlier CUSP projects. Data from the CUSP for CAUTI project have shown that hospital units other than intensive care units (ICUs) have achieved greater reductions in CAUTI rates than ICUs. It appears that this difference is related to the clinical culture of the ICU, where staff who are treating critically ill patients favor maintaining indwelling urinary catheters to closely monitor urine output

for relatively longer times than in non-ICUs. In a similar vein, some hospitals in the CUSP for CLABSI project did not achieve the significant reductions in CLABSI rates that were attained by their peers. The current HAI project is adapting CUSP to bring down persistently elevated CAUTI and CLABSI rates in ICUs. The performance measure focuses on CAUTI rates because the baseline rate for CAUTI is likely to be easier to estimate and more stable than for CLABSI.

In FY 2021, AHRQ will complete the implementation portion of the CUSP expansion project for reducing CAUTI and CLABSI rates in ICUs with persistently elevated rates of these infections, using FY 2019 funds. This expansion from four regions of the country to nationwide coverage was initially funded with FY 2017 funds, and expansion activities began at the beginning of FY 2018. The FY 2021 HAI performance measure assesses progress toward reducing the rate of CAUTI in ICUs participating in the CUSP project. The performance measure for this project will be retired at the end of FY 2021 and a new performance measure will be instituted starting FY 2022 – see measure 1.3.64.

In the current project, cohorts of ICUs are being recruited on a rolling basis. Progress in reducing CAUTI in a Fiscal Year is therefore assessed by deriving two contemporaneous baseline rates of CAUTI for the ICUs participating in that Fiscal Year's cohort and determining whether the CAUTI rates for those ICUs have been reduced after intervention. The first baseline rate is the National Healthcare Safety Network (NHSN) rate. This rate is defined as the number of CAUTI cases per 1,000 catheter days. An important approach for reducing CAUTI cases is to reduce the use of catheters and thus the number of catheter days. However, to the extent that this effort succeeds, it lowers the denominator in the NHSN rate and thereby appears to raise the CAUTI rate. A second rate is therefore also being used: the population rate, defined as the number of CAUTI cases per 10,000 patient days. The denominator of this rate is not affected by a reduction in the number of catheter days.

The most recent project results are from FY 2021. In FY 2021, as shown in the table, the baseline NHSN rate for the ICUs then participating in the project was 1.30 CAUTI/1,000 catheter days. The NHSN rate after intervention was 1.02 CAUTI/1,000 catheter days, which is a 21.5% reduction in the NHSN CAUTI rate. The baseline population rate was 6.81 CAUTI/10,000 patient days. The population rate after intervention was 5.45 CAUTI/10,000 patient days, which is a 20% reduction in the population CAUTI rate. These results for reductions in the NHSN and population CAUTI rates substantially exceed the target of a 5% reduction.

1.3.64 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 will focus on ICUs and non-ICUs, supported by FY 2020 funds. In FY 2022, recruitment is anticipated to be complete for this first phase of the

project, barring significant delays related to COVID-19, and data are expected to be available from support contractor records regarding participating hospital units. In FY 2023, this project plans to have recruited an additional 200 participating sites from among surgical services and long-term care facilities.

Mechanism Table:

Patient Safety
(Dollars in Thousands)

	FY 2021 Final		FY 2022 CR		FY 2023 President's Budget	
RESEARCH GRANTS	**No.**	**Dollars**	**No.**	**Dollars**	**No.**	**Dollars**
Non-Competing……	82	35,995	69	29,367	73	30,150
New & Competing……..	18	6,170	33	14,800	47	20,100
Supplemental……	2	861	0	0	0	0
TOTAL, RESEARCH GRANTS…..	**102**	**43,025**	**102**	**44,167**	**121**	**50,250**
TOTAL CONTRACTS/IAAs…..		**28,590**		**27,448**		**29,165**
TOTAL……		**$ 71,715**		**$ 71,615**		**$ 79,415**

5-Year Funding Table:

FY 2019:	$72,276,000
FY 2020:	$72,276,000
FY 2021 Final:	$71,615,000
FY 2022 CR:	$71,615,000
FY 2023 President's Budget:	$79,415,000

HCQO: Health Services Research, Data and Dissemination				
	FY 2021 Final	FY 2022 CR Level	FY 2023 President's Budget	FY 2023 +/- FY 2022
Budget Authority	$95,403,000	$95,403,000	$112,253,000	+$16,850,000
PHS Evaluation Funds	$0	$0	$20,800,000	+$20,800,000

Authorizing Legislation: Title III and IX and Section 947(c) of the Public Health Service Act
FY 2023 Authorization……Expired.
Allocation Method……Competitive Grant/Cooperative Agreement, Contracts, and Other.

Health Services Research, Data, and Dissemination (HSR): 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 the most pressing questions faced by clinicians, health system leaders, policy makers and others about how to best provide the 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 patients' 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 grants 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 presentations of information 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 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)

(in millions of dollars)

	FY 2021 Final	FY 2022 CR	FY 2023 President's Budget
Health Services Research Grants *(Investigator-Initiated)*	$59.174 *($45.605)*	$59.174 *($50.506)*	$82.744 *(61.544)*
Health Services Contract/IAA Research	$12.715	$12.715	21.643
Measurement and Data Collection	$14.678	$14.678	19.666
Dissemination and Implementation	$8.836	$8.836	9.000
Total, HSR	**$95.403**	**$95.403**	**$133.053**

Health Services Research Grants: 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.

FY 2023 Budget Policy: The FY 2023 President's Budget provides $82.7 million for research grants, an increase of $23.6 million from the FY 2022 CR level. After providing $41.9 million in noncompeting grant support, including $2.2 million for Consumer Assessment of Healthcare Providers and Systems (CAHPS), AHRQ will invest $40.9 million in new research and training grants. Details about AHRQ's new research grants funding is provided below.

- $18.9 million is directed to general new investigator-initiated research and training grants. This will support approximately 47 new investigator-initiated research grants.

- $3.0 million included for investigator-initiated research grants focused on equity. The FY 2023 President's Budget invests in a first cycle of grants to test healthcare delivery system approaches to addressing healthcare disparities and advancing equity. The evidence generated through this initiative is fully aligned with the Administration and Department's Equity priority.

- $8.5 million is directed to new research grants related to primary care. In addition to funding for new grants, a total of $1.5 million is provided in research contracts for a learning community to support primary care practices, providing $10 million in total primary care research. 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 PHS agency that supports clinical, primary care research which includes translating science into patient care and better organizing 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 chronic conditions including diabetes, hypertension, and hyperlipidemia, as well over 22 million missed cancer screening tests, and over 80,000 delayed cancer diagnoses, as well as potential for increased rates of uncontrolled diabetes and other chronic diseases. The FY 2023 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 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 use 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
  - 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 $3.5 million in new FY 2023 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.

- $9.5 million is directed to new opioid research grants that improve health equity and patient experience. In total, the FY 2023 President's Budget provides $10.0 million in funding to support the Secretary's initiative to combat opioid, misuse, and overdose including $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.
  - 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).
    - Develop and test optimal opioid tapering approaches, effective technologies to support tapering, strategies to mitigate potential harms of tapering, and methods to identify patients most likely to benefit from tapering. AHRQ is especially interested in research to better understanding tapering in older adults and other interventions to address opioid misuse, mitigate harms, and manage pain in this high-risk population.
    - AHRQ will encourage applications that take advantage of the natural experiment caused by the COVID-19 pandemic to examine how changes in service delivery (such as expanded use of telehealth) affect access to care, quality of care, and health inequities.

- $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.

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 will continue 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 that are related to research including support for grant peer review, ethics reviews, data management, data security, evaluation, inter-agency agreements with Federal partners, and events management support.

One contract mechanism AHRQ uses is ACTION 4. This is the fourth generation of an AHRQ-wide contracting mechanism that supports field-based delivery system research. ACTION projects develop and test interventions designed to improve care delivery and explore methods to disseminate and implement successful care delivery models in diverse care settings. Another 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 health care organizations. These reports are used for informing and developing coverage decisions, quality measures, educational materials and tools, clinical practice guidelines, and research agendas. The FY 2022 CR level provided $12.2 million for Health Services Contracts/IAAs.

FY 2023 Budget Policy: The FY 2023 President's Budget provides $21.6 million for this activity, an increase of $9.4 million from the FY 2022 CR level. The increased funding at the FY 2023 President's Budget level supports:

- $1.5 million in new 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 2023 President's Budget provides $10.0 million for primary care.

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

- $0.8 million increase in inter-agency agreements with our Federal partners to support health services research.

- $0.8 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 2023, 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.

- $0.3 million for a series of stakeholder round tables to learn from previous and ongoing efforts to link Emergency Departments with effective follow-up treatment in primary care in order to identify the next steps for developing and implementing effective models of care for initiating

medication-assisted treatment for opioid use disorder in emergency departments and effectively assure ongoing treatment in primary care or other settings.

- $0.3 million increase to fund additional evidence reviews conducted by AHRQ's Evidence-based Practice Centers.

- $0.9 million in increased contract costs related to data management, data security, and peer review costs for proposed new grants and contracts.

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. The FY 2022 CR Level provides $14.7 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 please see the program portrait on page 45.

FY 2023 Budget Policy: The FY 2023 President's Budget provide $19.7 million for Measurement and Data Collection activities, an increase of $5.0 million from the FY 2022 CR level. This funding level will support 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 a number of 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 2023 President's Budget includes an additional $5.0 million in new contract funding to develop the infrastructure to regularly create and disseminate an All-Payer Claims Database (APCD). This database will be a nationally representative, population-based sample of insurance claims 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 APCD; negotiate data use agreements and acquire data from selected states and other organizations

that maintain statewide or nationwide claims databases; obtain stakeholder input from diverse audiences; assess standardization, harmonization, and quality of data obtained from data partners; and establish a variety of sampling strategies for a nationally representative, population-based sample of insurance claims that meet selected requirements.

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; 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. Support for Dissemination and Implementation activities is $8.8 million at the FY 2022 CR level.

FY 2023 Budget Policy: The FY 2023 President's Budget levels provide $9.0 million for Dissemination and Implementation activities, a slight increase of $0.2 million from the FY 2022 CR 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 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 health care decision making.

Program Portrait: Healthcare Cost and Utilization Project (HCUP)

Hospital Utilization and In-Hospital Deaths in the First 6 Months of the Pandemic, by Patient Race/Ethnicity

Number of hospitalizations, in-hospital deaths, and percentage of each related to COVID-19 among adults by patient race/ethnicity in April–September 2020 compared with the average of all hospitalizations in April–September 2016–2019, 13 States

Among adults 18-64 years

Patient race/ ethnicity	Time period	Number of hospitalizations	Apr–Sep, 2020 percent related to COVID-19	Number of in-hospital deaths	Apr–Sep, 2020 percent related to COVID-19
White NH	Apr–Sep, 2016–2019	1,414,600		15,700	
	Apr–Sep, 2020	1,174,500	2.8%	17,800	13.2%
Black NH	Apr–Sep, 2016–2019	504,900		5,900	
	Apr–Sep, 2020	445,000	8.6%	8,600	31.5%
Hispanic	Apr–Sep, 2016–2019	123,200		900	
	Apr–Sep, 2020	127,900	15.2%	2,400	58.6%
Other NH	Apr–Sep, 2016–2019	88,000		800	
	Apr–Sep, 2020	81,500	9.2%	1,500	42.5%

Among adults 65 years and older

Patient race/ ethnicity	Time period	Number of hospitalizations	Apr–Sep, 2020 percent related to COVID-19	Number of in-hospital deaths	Apr–Sep, 2020 percent related to COVID-19
White NH	Apr–Sep, 2016–2019	1,325,300		43,800	
	Apr–Sep, 2020	1,087,500	5.1%	51,100	23.1%
Black NH	Apr–Sep, 2016–2019	218,800		7,700	
	Apr–Sep, 2020	199,500	13.9%	13,500	43.2%
Hispanic	Apr–Sep, 2016–2019	38,900		1,200	
	Apr–Sep, 2020	35,100	17.3%	2,800	58.6%
Other NH	Apr–Sep, 2016–2019	37,300		1,400	
	Apr–Sep, 2020	33,000	14.4%	2,700	47.8%

Abbreviation: NH, non-Hispanic. Notes: Number of hospitalizations and in-hospital deaths is rounded to the nearest hundred. Counts for 2016–2019 represent the mean number of hospitalizations or in-hospital deaths during April–September across these 4 years.

Source: Agency for Healthcare Research and Quality (AHRQ), Healthcare Cost and Utilization Project (HCUP), 2016–2019 State Inpatient Databases (SID) and 2020 quarterly data from 13 States (CO, GA, IA, KY, MD, MI, MN, MO, MS, NJ, OH, SC, and VT) (available as of March 2021)

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

Measure	Year and Most Recent Result / Target for Recent Result / (Summary of Result)	FY 2022 Target	FY 2023 Target	FY 2023 Target +/- FY 2022 Target
2.3.8 Increase the availability of electronic clinical decision support tools related to safe pain management and opioid prescribing (Output)	FY 2020: Through two contracts, began designing and developing new patient-facing clinical decision support (CDS) applications for chronic pain management. (Pending)	Retire	N/A	N/A
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 2022: Results Expected Sep 30, 2022	1) Opioid-Related Hospital Use – create interactive map with 2018 data 2) NAS - create interactive map with 2018 data 3) outpatient use of opioids – post a Brief on outpatient opioid use for non-elderly and elderly adults.	1) Opioid-Related Hospital Use – update interactive maps using 2019 data 2) NAS– update interactive maps using 2019 data 3) outpatient use of opioids – update Brief and/or do new analysis addressing trends or other measures.	N/A

<u>2.3.8:</u> 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 https://digital.ahrq.gov, 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 has begun a self-evaluation of their CDS and will disseminate resources and lessons learned through AHRQ's CDS Connect platform. This will include 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. However, these activities have been delayed due to COVID and will not be completed until FY 2022.

The project that is providing safe pain management and opioid prescribing data is ending in FY 2022 and this measure will be retired.

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.

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 Fast Stats 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 https://hcup-us.ahrq.gov/. 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 State Inpatient Databases (SID). National statistics on newborn 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 http://www.meps.ahrq.gov/. 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.

Currently, the AHRQ website hosts interactive maps that provide trends in opioid-related inpatient stays and emergency department visits at the national and State levels through 2017 and a Neonatal Abstinence Syndrome (NAS) Among Newborn Hospitalizations interactive heat map that visualizes the rate of births diagnosed with NAS by State, also through 2017. For FY 2022, this data will be updated with 2018 data.

For the outpatient use of opioid measure, in FY 2022, MEPS will produce a Brief on outpatient opioid use for non-elderly and elderly adults overall and by socioeconomic characteristics including sex, race-ethnicity, income, insurance status, perceived health status, Census region and Metropolitan Statistical Area (MSA) status. In FY 2023, 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

(Dollars in Thousands)

	FY 2021 Final		FY 2022 CR		FY 2023 President's Budget	
RESEARCH GRANTS	**No.**	**Dollars**	**No.**	**Dollars**	**No.**	**Dollars**
Non-Competing……	144	43,868	128	39,296	138	41,886
New & Competing……..	52	13,006	65	19,878	133	40,858
Supplemental……	6	2,300	0	0	0	0
TOTAL, RESEARCH GRANTS…..	**202**	**59,174**	**193**	**59,174**	**271**	**82,744**
TOTAL CONTRACTS/IAAs…..		**36,229**		**36,229**		**50,309**
TOTAL……		**$95, 403**		**$95,403**		**$ 133,053**

5-Year Funding Table:

FY 2019:	$96,284,000
FY 2020:	$96,284,000
FY 2021 Final:	$95,403,000
FY 2022 CR Level:	$95,403,000
FY 2023 President's Budget	$133,053,000

HCQO: Digital Healthcare Research				
	FY 2021 Final	FY 2022 CR	FY 2023 President's Budget	FY 2023 +/- FY 2022
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 Act
FY 2023 Authorization……Expired.
Allocation Method……. Contracts, and Other.

Digital Healthcare Research: 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 2021 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 and the portfolio continues to generate evidence in this important area. AHRQ recently published a grantee profile on Dr. Jason Adelman who is the Chief Patient Safety Officer and Vice Chair for Quality and Patient Safety at Columbia University Irving Medical Center/New York-Presbyterian Hospital. The Digital Healthcare Research portfolio funded Dr. Adelman to conduct large-scale studies to develop and validate health IT patient safety measures and to use these measures to evaluate interventions aimed at making electronic health record (EHR) systems safer. Dr. Adelman is leading an AHRQ-funded study that seeks to find out whether wrong-patient errors can be reduced by displaying patient photos in EHRs. Only 20 percent of hospitals have adopted this policy, citing a lack of evidence and difficulty in implementation. Preliminary data from the study indicate that the rate of wrong-patient errors is lower among providers using EHRs with patient photos. Once the study is completed, Dr. Adelman and his team will develop a toolkit that provides guidance on how to implement patient photos in EHRs—thereby advancing the ability to implement this safety measure in other hospitals.

In FY 2021, the portfolio also funded new research to help understand telehealth efficacy during the COVID-19 pandemic. Dr. Daniella Meeker and her University of Southern California research team are studying the impacts of the COVID-19 pandemic on telehealth utilization, outcomes, and disparities in order to improve the healthcare system's readiness for future public health emergencies and to elucidate whether telehealth data may be used as a public health surveillance tool for improving an ambulatory pandemic response. Additionally, Dr. Kit N. Simpson and Dr. Kathryn L. King are investigating the quality and efficacy of the Medical University of South Carolina's telehealth programs launched during the COVID-19 pandemic. They aim to understand how to evolve post-pandemic patient care to ensure the highest quality of care, support changes in payment regulations, reduce the health disparities that are currently present with the delivery of telehealth services, and promote equal access for all.

As interest and investments in digital healthcare have grown, so has the need for evidence and best practices. In addition to the research highlighted above, AHRQ has provided comprehensive and ready access to all the research and experts funded by the portfolio at digital.ahrq.gov.

FY 2023 Budget Policy: The FY 2023 President's Budget provides $18.3 million for Digital Healthcare Research, an increase of $2.0 million over the FY 2022 CR level. The entirety of the increase will support the establishment of two Centers of Excellence in Telehealth Implementation to evaluate the effects of telehealth on healthcare delivery and health outcomes.

The rapid expansion of telehealth during the COVID-19 pandemic has created both historic opportunities and unique challenges. As the pandemic abates, we are faced with a myriad of telehealth solutions that are newly embedded into medical practice (such as video office visits, provider-to-provider consultation, hybrid cardiac rehabilitation, and remote patient monitoring). Many have gained favor with the public by offering convenience and copayment-free service. With this unprecedented rapid expansion of telehealth, it is important to understand telehealth's effect on key health policy priorities and thoroughly evaluate the effect of the telehealth on healthcare quality, safety, equity, access, utilization, and value. AHRQ is well positioned to evaluate the effects of the telehealth on healthcare delivery and outcomes to ensure that the promise of telehealth is delivered through evidence-based practice and policy. AHRQ proposes investing an initial $2.0 million to generate critical new evidence to understand telehealth's effect on access, equity, and quality that can be applied to improve the quality and effectiveness of telehealth in health care delivery through a four-year grant initiative. The funding will establish two Centers of Excellence in Telehealth Implementation. These innovative telehealth research Centers will focus on generating evidence on questions such as how telehealth 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.

In addition, the portfolio will continue base portfolio activities, providing $14.3 million in research grant funding: $10 million in continuation grant funding and $4.3 million in new research grants. The new grants will focus on rigorously testing promising digital healthcare interventions aimed at improving the quality and value of care. Interventions will be investigator-initiated. In addition, a total of $2.0 million in contract funding will support synthesizing and disseminating evidence generated by the portfolio.

Program Portrait: **Engaging Disadvantaged Patients by Using Mobile Technology to Share Patient-Reported Outcomes**

One of the fastest growing areas in healthcare - mobile and digital health - is transforming the way healthcare is delivered. And while there are effective tools to manage and track chronic conditions, there is a common misconception that disadvantaged populations are often tech illiterate, or generally not savvy with mobile applications. Populations with higher health disparities and lower access to care usually have a higher burden of chronic diseases and worse outcomes due to fewer resources. Dr. Susan Moore and her Denver Health-based research team recognized this misjudgment, noting "it is essential that we do not leave certain patients behind as we advance in the mobile and digital health field", and sought to explore the suitability of solutions that currently exist in the marketplace that can be used by all patients. Reducing the disparity gap in mobile and digital applications' use will give minority and other medically underserved groups greater self-advocacy and better quality of care.

Dr. Moore and her research team demonstrated that it is possible to use commercial off the shelf (COTS) technology to collect information about a person's health, which can then be shared with their provider to help inform care delivery, care management, and shared decision making around chronic disease management. The team assessed the needs of disadvantaged patients and showed the feasibility of using COTS technology in a randomized control trial for a patient-centered weight management intervention.

"The value that comes from digital health solutions is and can be for everyone. Implementation is feasible, we can, and we must do this for the whole population."- Dr. Susan Moore

Mechanism Table:

Digital Healthcare Research
(Dollars in Thousands)

	FY 2021 Final		FY 2022 CR		FY 2023 President's Budget	
RESEARCH GRANTS	**No.**	**Dollars**	**No.**	**Dollars**	**No.**	**Dollars**
Non-Competing……	24	7,783	30	9,536	28	9,974
New & Competing……..	20	5,972	14	4,813	17	6,375
Supplemental……	2	713	0	0	0	0
TOTAL, RESEARCH GRANTS…..	**46**	**14,468**	**44**	**14,349**	**45**	**16,349**
TOTAL CONTRACTS/IAAs…..		**1,874**		**2,000**		**2,000**
TOTAL……		**16,349**		**16,349**		**18,349**

5-Year Funding Table:

FY 2019:	$16,500,000
FY 2020:	$16,500,000
FY 2021 Final:	$16,349,000
FY 2022 CR Level:	$ 16,349,000
FY 2023 President's Budget:	$ 18,349,000

HCQO: Improving Maternal Health				
	FY 2021 Final	FY 2022 Enacted	FY 2023 President's Budget	FY 2023 +/- FY 2022
Budget Authority	$0	$0	$7,350,000	+$7,350,000
PHS Evaluation Funds	$0	$0	$0	$0

Authorizing Legislation: Title III and IX and Section 947(c) of the Public Health Service Act
FY 2023 Authorization……Expired.
Allocation Method…… Contracts, and Other.

Improving Maternal Health: HHS is addressing the complex challenge of ensuring safe and healthy pregnancies and childbirth. Today 700 or more American women die each year as a result of pregnancy and childbirth and over 50,000 experience severe complications. These outcomes are not evenly distributed, with underserved women, including African American, being at substantially higher risk of complication and death. The root causes of this crisis in American health and health care are multifaceted and so must the solutions be. HHS is leading the nation in addressing problems in prenatal, intrapartum, and postpartum care. It also is focusing on helping women thrive before pregnancy and manage conditions unveiled during pregnancy.

To make informed, evidence-based decisions to improve maternal health, policymakers, healthcare system leaders, researchers, clinicians, and patients need better data and information about the health care system across multiple healthcare settings. They need a 360° view of U.S. healthcare system. Together, the three components of this AHRQ initiative build the foundation for that view.

FY 2023 Budget Policy: The FY 2023 President's Budget provides $7.4 million for the first year of support for a five-year AHRQ initiative to ensure that Federal, State, and local policymakers have timely and accurate data and useful analytic resources about maternal morbidity and mortality and the healthcare system with which to make informed policy decisions. This initiative has four components:

1. Expanding the Capacity of States to Link Healthcare, Vital Statistics, and Social Service Data to Improve Evidence-based Policy Making: AHRQ has experience partnering with states to improve data collection and analysis capabilities as exemplified by the HCUP project. AHRQ will enhance quarterly data as needed to support additional analytic capability related to maternal health. In addition, aligned with the HHS maternal health framework, AHRQ will partner with two to three states and provide customized technical assistance and financial support to catalyze the development of state-level data infrastructure and analytics capability that links healthcare data, vital statistics, and social service data to provide a 360-degree view of the pregnancy, delivery, and early childhood support system in the state. This project will target states in the lower quartile of maternal morbidity and mortality outcomes.

2. An Analytic Strike Team To Provide Rapid Response Information Using Predictive Analytics to Address Emerging Policy Issues: AHRQ will create a predictive analytic program with internal capacity to address rapid-cycle requests for HHS and other priority audiences. Initially, AHRQ will develop a proof of concept to then develop "stand-ready" capacity to conduct rapid-cycle analyses. Initial use cases will focus on issues surrounding

maternal morbidity and mortality, including prevention. As the program matures, AHRQ will make methods and algorithms publicly available for States and other stakeholders to deploy using their own data to address unique concerns.

3. Expanded Capacity of the MEPS for State Estimates: By augmenting the MEPS sample by an additional 1,000 completed households with women of childbearing age (2,300 persons) each year, MEPS will improve its national estimates and increase AHRQ's capacity for examining issues related to maternal health. MEPS will use information from CDC state-based surveillance surveys related to pregnancy to identify sample households. An additional 1,000 completed interviews in each MEPS panel will produce improvements in precision of estimates for this population. This augmentation will improve the ability of MEPS to support analyses of maternal health as well as for other conditions of interest and for key population subgroups, including analyses by insurance status. The MEPS program cannot accomplish this sample expansion for women of childbearing age within base funding

4. Expanded Capacity to Measure Maternal Health: AHRQ will conduct foundational work for development for patient experience of care survey and/or supplemental item set focusing on maternal care. Specific activities will include: designing a research-based approach for instrument development using the CAHPS Developmental Principles, coordination with the CAHPS Consortium, conducting focus groups with patients and stakeholder interviews, determining characteristics of the instrument(s) to be developed and the appropriate setting(s) of care, conducting cognitive interviews with patients (potentially several rounds), and finalizing the pilot test version(s) of the survey, developing a plan for a pilot test of the survey(s), and preparing the OMB package for pilot test.

Mechanism Table:

Improving Maternal Health

(Dollars in Thousands)

	FY 2021 Final		FY 2022 Enacted		FY 2023 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	0	0	0	0	0
TOTAL, RESEARCH GRANTS…..	**0**	**0**	**0**	**0**	**0**	**0**
TOTAL CONTRACTS/IAAs…..		**0**		**0**		**7,350**
TOTAL……		**0**		**0**		**7,350**

5-Year Funding Table:

FY 2019:	$ 0
FY 2020:	$ 0
FY 2021 Final:	$ 0
FY 2022 CR Level:	$ 0
FY 2023 President's Budget:	$ 7,350,000

HCQO: U.S. Preventive Services Task Force				
	FY 2021 Final	FY 2022 CR	FY 2023 President's Budget	FY 2023 +/- FY 2022
Budget Authority	$11,542,000	$11,542,000	$11,542,000	$0
PHS Evaluation Funds	$0	$0	$0	$0

Authorizing Legislation: Title III and IX and Section 947(c) of the Public Health Service Act FY 2023 Authorization……Expired.
Allocation Method……. Contracts, and Other.

U.S. Preventive Services Task Force (USPSTF): 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 in order to make its recommendations; the ability to operate in an open, transparent, and efficient manner; and the ability to clearly and effectively share its recommendations with the health care community and general public.

Major FY 2021 accomplishments for the USPSTF include:

- Maintained recommendation statements for 86 preventive service topics with 138 specific recommendation grades. Many recommendation statements include multiple recommendation grades for different populations.
- Received 19 nominations for new topics and 7 nominations to reconsider or update existing topics.
- Posted 13 draft research plans for public comments.
- Posted 9 draft recommendation statements for public comments.
- Posted 9 draft evidence reports for public comments.
- Published 15 final recommendation statements with 23 recommendation grades in a peer-reviewed journal.

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.

FY 2023 Budget Policy: The FY 2023 President's Budget for the USPSTF is $11.5 million, the same level of support as the FY 2022 CR level. With these funds AHRQ will continue to provide scientific, administrative, and dissemination support for the Task Force by investing in systematic evidence reviews and decision analysis studies; methods development; stakeholder engagement; transparency; communication; dissemination; and logistics support. These funds will allow the USPSTF to conduct evidence reviews and make recommendations on 8-12 topics depending on the complexity of the topic. The cost for evidence reviews has increased over time; therefore, with the same level of support the USPSTF may complete fewer evidence reviews each year. Additionally, in FY 2023 AHRQ will continue to support the USPSTF in advancing its efforts to increase health equity by working with AHRQ, federal and non-federal partners to support the implementation of evidence-based clinical preventive services.

Program Portrait: Screening for Lung Cancer

Lung cancer is the leading cause of cancer death in the United States. More than 200,000 people are diagnosed with this disease each year. Smoking and older age are the two most important risk factors for lung cancer. Black people have a higher risk of lung cancer compared to people who are White, possibly related to differences in smoking exposure and social factors. When lung cancer is detected early, treatment has the best chance of being beneficial.

Given the importance, prevalence, and negative health effects of lung cancer, the USPSTF commissioned a systematic review of the scientific evidence to update its recommendation on screening for lung cancer. Based on this evidence, the USPSTF recommends annual screening for people who are between the ages of 50 and 80 and who are at high risk of lung cancer because of their smoking history. This new final recommendation, which lowers the criteria with respect to age and amount of smoking, means more people are eligible to get screened. It includes specific changes in who should get screened that will be especially helpful to Black people and women who are now more represented among those eligible for screening.

The USPSTF is committed to transparency when developing its recommendations. Therefore, it also sought input on its draft recommendation from the public, topic experts and clinical specialists, patients, and other stakeholders. The USPSTF also worked closely with other Federal agencies, as well as professional organizations that deliver 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 March 2021. It received coverage from media outlets including *Associated Press, Washington Post, Wall Street Journal, New York Times,* and *CNN.*

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

Measure	Year and Most Recent Result / Target for Recent Result / (Summary of Result)	FY 2022 Target	FY 2023 Target	FY 2023 Target +/- FY 2022 Target
2.3.7 Increase the percentage of older adults who receive appropriate clinical preventive services (Output)	FY2021: Continued data analysis of the PSAQ 2018/2019 data analysis continues Complete administration of another round (2020/2021) of the PSAQ. (In Progress)	Complete analysis of FY 2018/2019 data New data from FY 2020/2021 will be available Begin collecting FY 2022/2023 data	Begin analysis of FY2020/2021 data Continue collecting FY2022/2023 data	N/A

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 evidence-based 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 the right people get the right clinical preventive services, in 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 features several rounds of interviewing covering two full calendar 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 is collected, it is reviewed for accuracy and prepared to release to the public.

In FY 2021, AHRQ continued to analyze the FY2018/2019 data. It also continued collecting the FY2020/2021 data.

In FY 2022, AHRQ anticipates completing analysis of the FY 2018/2019 data. It also anticipates the FY 2020/2021 preventive items data will become available, and data collection for the FY 2022/2023 will begin.

In FY 2023, AHRQ anticipates it will begin analysis of the FY2020/2021 data and continue data collection for the FY 2022/2023 data.

Mechanism Table:

U.S. Preventive Services Task Force

(Dollars in Thousands)

	FY 2021 Final		FY 2022 CR		FY 2023 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	0	0	0	0	0
TOTAL, RESEARCH GRANTS…..	**0**	**0**	**0**	**0**	**0**	**0**
TOTAL CONTRACTS/IAAs…..		**11,542**		**11,542**		**11,542**
TOTAL……		**11,542**		**11,542**		**11,542**

5-Year Funding Table:

FY 2019:	$11,649,000
FY 2020:	$11,649,000
FY 2021 Final:	$11,542,000
FY 2022 CR Level:	$ 11,542,000
FY 2023 President's Budget:	$ 11,542,000

HCQO: Long COVID				
	FY 2021 Final	FY 2022 Enacted	FY 2023 President's Budget	FY 2023 +/- FY 2022
Budget Authority	$0	$0	$0	$0
PHS Evaluation Funds	$0	$0	$19,000,000	+$19,000,000

Authorizing Legislation: Title III and IX and Section 947(c) of the Public Health Service Act
FY 2023 Authorization……Expired.
Allocation Method…… Contracts, and Other.

Long COVID: As the nation and our healthcare system turn our attention towards recovering from the pandemic, Long COVID, or as referred to in the scientific community, Post-Acute Sequelae of SARS COV-2 COVID (PASC), must be a central focus. A growing number of people manifest persistent, debilitating symptoms after recovering from acute COVID infection. Long COVID is impacting a growing number of people who experience consequences across multiple organ systems (e.g. neurologic, cardiac, pulmonary, musculoskeletal), potentially compounded by underlying conditions, with negative impacts on health and quality of life. As part of a national action plan to address people living with Long COVID, AHRQ has an important role to play in ensuring that healthcare delivery systems are prepared to provide patient-centered, coordinated care for people experiencing Long COVID.

FY 2023 Budget Policy: The FY 2023 President's Budget provides $19.0 million for a new initiative that will 1) invest in health systems research on how to organize and deliver patient-centered care for people living with Long COVID, including the use of digital and telehealth, 2) provide needed mentoring and support to smaller communities to establish multidisciplinary clinics to care for people with complex cases of Long COVID, and 3) enhance the ability of primary care practices to use emerging evidence to care for millions of Americans with Long COVID. Of the $19.0 million provided, AHRQ will direct $14.0 million to research grant programs. Grant funding will establish Centers of Excellence to develop, implement and evaluate new models of organizing and delivering care for people living with Long COVID with attention to advancing quality, safety, and equity. Grant funding will also establish Primary Care Hubs that will create learning and action networks to provide primary care professionals with access to emerging best practices, local and national specialty experts, and to a learning community that allows collective problem solving based using enhanced ECHO-like models. An additional $5.0 million will be provided in research contracts to establish a National Resource Center for Long COVID Care that will collect and curate emerging evidence, best practices, and tools and provide training, mentoring, and support for multispecialty clinics in smaller, non-academic hospitals. The Resource Center also will develop, test, and disseminate clinical tools and digital resources for use by primary care practices in coordination with the Primary Care Hubs. Contract funding will also be invested to coordinate and evaluate the AHRQ Long COVID initiative.

Please note that an additional $1.0 million is provided in Program Support to fund 4 FTEs to direct and manage AHRQ's new Long COVID program within AHRQ's Center for Evidence and Practice Improvement. In total, $20.0 million will be directed to Long COVID, $19.0 M will be in implementation and $1.0 million in administrative support.

Mechanism Table:

Long COVID

(Dollars in Thousands)

	FY 2021 Final		FY 2022 CR		FY 2023 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	14	14,000
Supplemental……	0	0	0	0	0	0
TOTAL, RESEARCH GRANTS…..	**0**	**0**	**0**	**0**	**14**	**14,000**
TOTAL CONTRACTS/IAAs…..		**0**		**0**		**5,000**
TOTAL……		**0**		**0**		**19,000**

5-Year Funding Table:

FY 2019:	$ 0
FY 2020:	$ 0
FY 2021 Final:	$ 0
FY 2022 CR Level:	$ 0
FY 2023 President's Budget:	$ 19,000,000

Medical Expenditure Panel Survey				
	FY 2021 Final	FY 2022 CR	FY 2023 President's Budget	FY 2023 +/- FY 2022
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 Act
FY 2023 Authorization……Expired.
Allocation Method…… Contracts and Other.

Medical Expenditure Panel Survey (MEPS): 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.

Please see the Program Portrait on page 65 for key findings from FY 2021.

FY 2023 Budget Policy: The FY 2023 President's Budget for the MEPS is $71.8 million, the same level as the prior year. The FY 2023 President's Budget 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 the timeliness, quality and utility of data products specified for the survey in prior years. The survey also recently expanded its state sample sizes to enhance its ability to support estimates for states and smaller population subgroups.

The FY 2023 President's Budget includes funding for the third-year costs associated with expanding the capacity of the MEPS to address HHS priorities. By both augmenting the sample by 1,000 completed households (2,300 persons) and by redistributing sample across states, MEPS improved its national estimates and increased its capacity for making estimates of individual states and groups of states, particularly rural states, and those with relatively small populations. The additional 1,000 completed household interviews can be used to produce improvements in 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 also enhanced the ability of MEPS to support analyses of key population subgroups, such as persons with specific conditions and those at particular income levels or age groups, as well as analyses by insurance status. The enhanced data will be disseminated through the program's existing extensive network of users, which includes numerous universities, research organizations, and national, state, and local agencies and organizations. This sample expansion is separate from the sample expansion of childbearing women requested in the Improving Maternal Health program request.

This initiative provides increased capacity to examine medical care access, use, spending and health outcomes both across states and for population subgroups, which will enhance researchers' and policymakers' ability to bring comprehensive data to bear on policy questions related HHS priority issues. This enhancement to the MEPS will make it an even more powerful tool for state and federal policy and decision makers. For example, it will improve the utility of the MEPS for examinations of medical care utilization and expenditures across states, allowing more precise comparisons across more states and regions, and provide a more solid basis for predicting the impact of state level policy changes on programs such as Medicaid and CHIP. Improvements to these programs will have a positive impact on system efficiency and outcomes, which can improve the value of care provided and increase the quality of care for patients.

Program Portrait: Medical Expenditure Panel Survey (MEPS)

FY 2022 CR Level:	$71.791 million
FY 2023 President's Budget Level:	$71.791 million
Change:	$ 0 million

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 address topics relevant to Secretarial priorities regarding COVID-19, opioids, and health insurance reform.

Key Findings:

Influenza Vaccination Prevalence Among Adults with Increased Risk of Severe COVID-19 (using data from the MEPS HC):

- In 2016, adults with increased risk of severe COVID-19 had influenza vaccination prevalence of 52.5 percent compared to influenza vaccination prevalence of 34.9 percent among adults with lower risk of severe COVID-19.
- Disparities in influenza vaccination prevalence within the increased-risk group mirrored those observed among the broader adult population across poverty level, education level, race and ethnicity, and geographic location.
- Among adults with increased risk, influenza vaccination prevalence was 63.5 percent for non-Hispanic Asian adults, 55.4 percent for non-Hispanic White adults, 44.4 percent for non-Hispanic Black adults and 44.0 percent for Hispanic adults.
- These results on pre-pandemic influenza vaccination prevalence can offer useful insights on which groups may require additional public effort to increase rates of COVID-19 vaccination.

Patient Factors that Affect Opioid Use Among Adults With and Without Chronic Pain (using data from the MEPS HC):

- In this study, self-reliant health attitude is defined as agreement with the following statements: "I do not need health insurance," and "I can overcome illness without help from a medically trained person."
- From 2014-2017, adults with self-reliant health attitudes were less likely to start and more likely to discontinue opioid use.
- Health-related attitudes affect adults with and without chronic pain treatment similarly.
- Exercise was associated with higher probability of choosing no analgesic treatments over using opioids.
- Among adults who were using opioids for pain treatment, exercise was associated with higher probability of discontinuing opioid use in the year following opioid initiation.
- These results provide information on patient characteristics associated with opioid use and can inform efforts to make more appropriate use of these medications.

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

- Employment-sponsored health insurance at private-sector employers was characterized by stability in premiums and cost-sharing for covered workers in 2020.
- In 2020, single premiums increased by 2.5 percent (from $6,972 to $7,149), while premiums for employee-plus-one and family coverage were not significantly different from 2019 levels.
- From 2019 to 2020, there was no statistically significant change in the average employee out-of-pocket premium for single coverage, while increases for employee-plus-one (4.0 percent) and family coverage (4.4 percent) were in line with the long-term average annual rate of change from 2008 to 2020.
- Average deductible levels for individual ($1,945) and family coverage ($3,722) in 2020 were not statistically different from 2019.

Outputs and Outcomes Table with Discussion: MEPS

Measure	Year and Most Recent Result / Target for Recent Result / (Summary of Result)	FY 2022 Target	FY 2023 Target	FY 2023 Target +/- FY 2022 Target
1.3.16 Maintain the number of months to produce the Insurance Component tables following data collection (MEPS-IC) (Output)	FY 2021: 6 months	6 months	6 months	6 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 2021: 11,181 total tables in MEPS table series	11,431 tables in MEPS table series	250 tables in MEPS table series	+250 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.

The MEPS has historically had a limited capacity for state estimation. In 2020 the MEPS sample was augmented by 1,000 households in each panel of its two panels. The augmentation resulted in the addition of 2,300 sampled individuals and 1,500 responding individuals per panel. This augmentation will improve state estimate capacity with estimates now possible for all but the eight smallest states, additionally, for medium size states there is a 20% gain in precision. The augmentation also improves national estimates for key population subgroups: persons with specific conditions; specific age groups; and for various income levels.

1.3.16: 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 employer-sponsored 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 will be maintained for FY 2022 through FY 2023. 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 2020 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.

1.3.19: Increase the number of tables included in the MEPS Tables Compendia 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://meps.ahrq.gov/mepstrends/home/index.html). Interactive tables 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 MEPS Tables Compendia is scheduled to be expanded a minimum of 250 tables per year. For the Insurance Component there are a total of 3,410 national level tables and 6,475 state and metro area tables. Additionally, there are 1,296 tables available for the MEPS Household Component. The total number of tables available to the user population is currently 11,181.

The MEPS Tables Compendia is a source of important data that is easily accessed by users. Expanding the content and coverage of these tables furthers the utility of the data for conducting research and informing policy. Currently data are available in tabular format for the years 1996 – 2019. This represents over twenty 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

(Dollars in Thousands)

	FY 2021 Final		FY 2022 CR		FY 2023 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	0	0	0	0	0
TOTAL, RESEARCH GRANTS…..	**0**	**0**	**0**	**0**	**0**	**0**
TOTAL CONTRACTS/IAAs…..		**71,791**		**71,791**		**71,791**
TOTAL……		**71,791**		**71,791**		**71,791**

5-Year Funding Table:

FY 2019:	$69,755,000
FY 2020 Final:	$69,991,000
FY 2021 Enacted:	$71,791,000
FY 2022 CR Level:	$71,791,000
FY 2023 President's Budget:	$71,791,000

Program Support				
	FY 2021 Final	FY 2022 CR	FY 2023 President's Budget	FY 2023 +/- FY 2022
Budget Authority	$71,300,000	$71,300,000	$75,391,000	+$4,091,000
PHS Evaluation Funds	$0	$0	$0	$0
FTEs (BA)	262	262	269	+7

Authorizing Legislation: Title III and IX and Section 947(c) of the Public Health Service Act
FY 2023 Authorization……Expired.
Allocation Method…… Other.

Program Support: 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 2023 Budget Policy: The FY 2023 President's Budget includes $75.4 million, an increase of $4.1 million, for Program Support. The FY 2023 President's Budget supports 7 additional Full-Time Equivalent (FTE) needed for the expansion of Patient Safety's Diagnostic Safety program (2), Digital Healthcare Research's telehealth program (1) and a 4 FTE to staff a new division and initiative within AHRQ's Center for Evidence and Practice Improvement dedicated to 'Quality Healthcare for People Living with Post-Acute Sequalae of SARS COV 2 Infection (PASC)' or Long COVID. Finally, funding is provided to support an across-the-board salary increase of 4.6 percent.

As shown in the table on the following page, 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 2021 Final	FY 2022 CR	FY 2023 President's Budget
FTEs – Budget Authority	262	262	269
FTEs – PCORTF	6	6	24
FTEs – Other Reimbursable	2	2	2

Mechanism Table:

Program Support

(Dollars in Thousands)

	AHRQ FY 2021 Final		AHRQ FY 2022 CR		AHRQ FY 2023 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	0	0	0	0	0
TOTAL, RESEARCH GRANTS…..	**0**	**0**	**0**	**0**	**0**	**0**
TOTAL CONTRACTS/IAAs…..		**71,300**		**71,300**		**75,391**
TOTAL……		**71,300**		**71,300**		**75,391**

5-Year Funding Table:

FY 2019:	$71,300,000
FY 2020 Final:	$71,300,000
FY 2021 Enacted:	$71,300,000
FY 2022 CR Level:	$71,300,000
FY 2023 President's Budget:	$75,391,000

Nonrecurring Expenses Fund

Budget Summary

(Dollars in Thousands)

	FY 2021[2]	FY 2022[3]	FY 2023[4]
Notification[1]	$000,000	$2,000	

Authorizing Legislation:
Authorization……. Section 223 of Division G of the Consolidated Appropriations Act, 2008
Allocation Method…….……..……..……. Direct Federal, Competitive Contract

Overview of NEF

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. AHRQ received $1.7 million in one-time funding 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. Evaluations of the existing HCUP-US website have already been undertaken and clear recommendations have been established. The modernization of the HCUP-US website supports the Department of Health and Human Services (DHHS) Strategic Objectives and is also aligned with the Foundations for Evidence-Based Policymaking Act of 2018, which requires the federal government to modernize its data management practices, evidence-building functions, and statistical efficiency to inform policy decisions.

Program Accomplishments

HCUP supports AHRQ's mission by providing the largest collection of longitudinal hospital care data in the United States, with all-payer, encounter-level information beginning in 1988. As of June 2021, 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.

The HCUP User Support (HCUP-US) website serves a critical function as the gateway for policymakers, researchers, and the public to access a broad range of HCUP information, which address topics including COVID-19, opioids, mental health, and healthcare disparities and trends. The site is also the virtual repository for all HCUP information, documentation, and products

capturing the 25+ years of project resources. The current HCUP-US website was built in 2000. The existing site structure is insufficient to provide for the current scope of HCUP, meet current usability standards, or support timely response to emerging and high priority requests. Without modernization, HCUP cannot fully realize its potential to meet AHRQ's mission and goals, or those of the 21st Century Cures Act and the 21st Century Integrated Digital Experience Act.

Budget Allocation
The funding for this modernization effort includes all planning, development, deployment activities and alignment across the HCUP online platforms. These cost estimates are based on the recent evaluations of the current HCUP-US website and previous costs over time for the website activities. It is anticipated that work on the website would begin within 90 days of the HCUP estimated date of award, approximately Q2 FY 2023.

Replacing the HCUP-US website with a modern data platform with an integrated content management system will have tremendous benefits, include routine updates, closing security vulnerabilities, ongoing customizations, improved performance, and constant optimization. In addition, because the current HCUP-US site was originally built as a customized solution, it almost requires the original developers to manage it. Implementing a content management system and reducing specific contractor reliance also extends the life of the data platform across potential contract cycles and contractors in the future. Finally, once the HCUP-US website is in a content management system, migrations to any other content management system or solution, if needed in the future, is much easier.

[1] Pursuant to Section 223 of Division G of the Consolidated Appropriation Act, 2008, notification is required of planned use.
[2] Notification submitted to the Committees on Appropriations in the House of Representatives and the Senate on October 22, 2020.
[3] Notification submitted to the Committees on Appropriations in the House of Representatives and the Senate on June 17, 2021.
[4] The NEF CJ indicates the amounts HHS intends to notify for in 2023; these amounts are planned estimates and subject to final approval.

SUPPLEMENTARY TABLES

Agency for Healthcare Research and Quality

Total Discretionary Funds by Object [1/]

Personnel compensation:	FY 2021 Final	FY 2022 CR	FY 2023 President's Budget	FY 2023 +/- FY 2022
Full-time permanent (11.1)	32,728,597	33,612,269	35,549,434	1,937,164
Other than full-time permanent (11.3)	3,641,050	3,739,358	3,911,369	172,010
Other personnel compensation (11.5)	1,418,562	1,456,863	1,523,878	67,016
Military personnel (11.7)	850,428	873,389	913,565	40,176
Special personnel services payments (11.8)				
Subtotal personnel compensation	**38,638,636**	**39,681,879**	**41,898,246**	**2,216,366**
Civilian benefits (12.1)	12,817,717	13,163,795	13,769,329	605,535
Military benefits (12.2)	144,693	148,600	155,436	6,836
Benefits to former personnel (13.0)	13,412	13,774	14,407	634
Total Pay Costs	**51,614,458**	**53,008,048**	**55,837,418**	**2,829,370**
Travel and transportation of persons (21.0)	1,981	1,981	1,981	
Transportation of things (22.0)	21,000	21,000	21,000	
Rental payments to GSA (23.1)	3,070,032	3,070,032	3,125,293	55,261
Rental payments to Others (23.2)				
Communication, utilities, and misc. charges (23.3)	210,117	210,117	210,117	
Printing and reproduction (24.0)	128	128	128	
Other Contractual Services:				
Advisory and assistance services (25.1)				
Other services (25.2)	8,752,955	8,752,955	8,752,955	
Purchase of goods and services from government accounts (25.3)	23,099,326	23,099,326	23,099,326	
Operation and maintenance of facilities (25.4)				
Research and Development Contracts (25.5)	132,061,634	131,523,263	160,876,920	29,353,657
Medical care (25.6)				
Operation and maintenance of equipment (25.7)	242,107	242,107	242,107	
Subsistence and support of persons (25.8)				
Subtotal Other Contractual Services	**164,156,023**	**163,617,652**	**192,971,309**	**29,353,657**
Supplies and materials (26.0)	44,487	44,487	44,487	
Equipment (31.0)	336,239	336,239	336,239	
Investments and Loans (33.0)				
Grants, subsidies, and contributions (41.0)	116,673,855	117,690,317	163,343,029	45,652,712
Insurance Claims and Indemnities (42.0)				
Refunds (44.0)				
Total Non-Pay Costs	**284,513,862**	**284,991,952**	**360,053,582**	**75,061,630**
Total Budget Authority by Object Class	**336,128,319**	**338,000,000**	**415,891,000**	**77,891,000**

[1/] Does not include mandatory financing from the PCORTF.

[2/] Includes PHS Evaluation Funding.

Agency for Healthcare Research and Quality

Salaries and Expenses [1/]

Personnel compensation:	FY 2021 Final	FY 2022 CR	FY 2023 President's Budget	FY 2023 +/- FY 2022
Full-time permanent (11.1)	32,728,597	33,612,269	35,549,434	1,937,164
Other than full-time permanent (11.3)	3,641,050	3,739,358	3,911,369	172,010
Other personnel compensation (11.5)	1,418,562	1,456,863	,523,878	67,016
Military personnel (11.7)	850,428	873,389	913,565	40,176
Subtotal personnel compensation	**38,638,636**	**39,681,879**	**41,898,246**	**2,216,366**
Civilian benefits (12.1)	12,817,717	13,163,795	13,769,329	605,535
Military benefits (12.2)	144,693	148,600	155,436	6,836
Benefits to former personnel (13.0)	13,412	13,774	14,407	634
Total Pay Costs	**51,614,458**	**53,008,048**	**55,837,418**	**2,829,370**
Travel and transportation of persons (21.0)	1,981	1,981	1,981	
Transportation of things (22.0)	21,000	21,000	21,000	
Communication, utilities, and misc. charges (23.3)	210,117	210,117	210,117	
Printing and reproduction (24.0)	128	128	128	
Other Contractual Services: Other services (25.2)	8,752,955	752,955	8,752,955	
Purchase of goods and services from govt accounts (25.3)	4,250,996	4,250,996	4,250,996	
Research and Development Contracts (25.5)	2,753,200	1,361,910	2,568,279	1,206,369
Operation and maintenance of equipment (25.7)	242,107	242,107	242,107	
Subtotal Other Contractual Services	**15,999,259**	**14,607,969**	**15,814,338**	**1,206,369**
Supplies and materials (26.0)	44,487	44,487	44,487	
Total Non-Pay Costs	**16,276,972**	**14,885,682**	**16,092,051**	**1,206,369**
Total Salary and Expense	**67,891,429**	**67,893,730**	**71,929,469**	**4,035,739**
Direct FTE	**264**	**264**	**271**	**+7**

[1/] Does not include mandatory financing from the PCORTF. Includes reimbursable FTEs.

Agency for Healthcare Research and Quality

Detail of Full Time Equivalents (FTE) [1/]

	2021 Actual Civilian	2021 Actual Military	2021 Actual Total	2022 Est. Civilian	2022 Est. Military	2022 Est. Total	2023 Est. Civilian	2023 Est. Military	2023 Est. Total
Office of the Director (OD)									
Direct:	9	0	9	9	0	9	9	0	9
Reimbursable:	0	0	0	0	0	0	0	0	0
Total:	9	0	9	9	0	9	9	0	9
Office of Management Services (OMS)									
Direct:	57	0	57	57	0	57	57	0	57
Reimbursable:	0	0	0	0	0	0	0	0	0
Total:	57	0	57	57	0	57	57	0	57
Office of Extramural Research, Education, and Priority Populations (OEREP)									
Direct:	30	2	32	30	2	32	32	2	34
Reimbursable:	1	0	1	1	0	1	1	0	1
Total:	31	2	33	31	2	33	33	2	35
Center for Evidence and Practice Improvement (CEPI)									
Direct:	49	2	51	49	2	51	51	2	53
Reimbursable:	0	0	0	0	0	0	0	0	0
Total:	49	2	51	49	2	51	51	2	53
Center for Financing, Access, and Cost Trends (CFACT)									
Direct:	53	0	53	53	0	53	55	0	55
Reimbursable:	0	0	0	0	0	0	0	0	0
Total:	53	0	53	53	0	53	55	0	55
Center for Quality Improvement and Patient Safety (CQuIPS)									
Direct:	35	1	36	35	1	36	36	1	37
Reimbursable:	0	0	0	0	0	0	0	0	0
Total:	35	1	36	35	1	36	36	1	37
Office of Communications (OC)									
Direct:	25	0	25	25	0	25	25	0	25
Reimbursable:	0	0	0	0	0	0	0	0	0
Total:	25	0	25	25	0	25	25	0	25
AHRQ FTE Total	259	5	264	259	5	264	266	5	271

Average GS Grade	
FY 2017	14.8
FY 2018	14.8
FY 2019	14.8
FY 2020	14.8
FY 2021	14.8

[1/] Excludes mandatory PCORTF FTEs. Includes reimbursable FTEs.

Agency for Healthcare Research and Quality

Detail of Positions [1/]

	FY 2021 Final	FY 2022 CR	FY 2023 President's Budget
Executive level I	2	2	2
Executive level II	5	4	4
Executive level III			
Executive level IV			
Executive level V			
Subtotal Executive Level Positions	7	6	6
Total - Exec. Level Salaries	$1,434,741	$1,249,086	$1,306,544
Total SES, AHRQ	4	5	5
Total - ES Salary, AHRQ	$864,329	$1.092,005	$1,142,237
GS-15	60	60	61
GS-14	71	70	80
GS-13	66	67	65
GS-12	15	14	14
GS-11	11	12	17
GS-10			
GS-9	5	5	4
GS-8	1	0	0
GS-7	5	5	1
GS-6	1	1	2
GS-5	2	3	0
GS-4			
GS-3			
GS-2			
GS-1			
Subtotal	237	237	244
Total – GS Salary	$35,272,147	$36,224,495	$37,890,822
Average GS grade, AHRQ	14.6	14.6	14.6
Average GS salary, AHRQ	$148,828	$152,846	$155,290

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

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

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

Program	Section	FY 2019			FY 2020			FY 2021			FY 2022			FY 2023		
		Total	FTEs	CEs	Total	FTEs	CEs	Total	FTEs	CEs	Total	FTEs	CEs	Total	FTEs	CEs
Patient-Centered Outcomes Research Trust Fund	6301															
AHRQ Mandatory		$1,096	7	0	$947	5	0	$1,026	6	0	$5,000	6	0	$5,134	24	0
AHRQ Mandatory																

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 2021 (Actual)	**CY 2022 (Estimates)**	**BY* 2023 (Estimates)**
3a) Number of Physicians Receiving PCAs	24	26	26
3b) Number of Physicians with One-Year PCA Agreements	0	0	0
3c) Number of Physicians with Multi-Year PCA Agreements$	24	26	26
4a) Average Annual PCA Physician Pay (without PCA payment)	$164,577	$166,222	167,885
4b) Average Annual PCA Payment	$21,583	$21,583	21,583

* FY 2022 data will be approved during the FY 2023 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.

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 user centric, 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.

SIGNIFICANT ITEMS

SIGNIFICANT ITEMS FOR AHRQ IN THE HOUSE, SENATE, AND CONFERENCE REPORTS

FY 2022 SENATE Explanatory Statement

Center for Primary Care Research

1. SENATE (Explanatory Statement, p. 183)

The Committee supports primary care clinical research and dissemination as a core function of AHRQ, which includes translating science into patient care, better organizing healthcare to meet patient and population needs, evaluating innovations to provide the best healthcare to patients, and engaging patients, communities, and practices to improve health. The Committee supports the Center for Primary Care Research and encourages AHRQ to prioritize the work of the Center.

Action Taken or to be Taken:
AHRQ greatly appreciates the Committee's continued support for primary care research and dissemination, which remains a priority for the Agency. AHRQ's National Center for Excellence in Primary Care Research (NCEPCR) is the intellectual home for primary care research at AHRQ. The NCEPCR is focused on the Nation's primary care system, providing evidence, practical tools, and other resources for researchers and evaluators, clinicians and clinical teams, quality improvement experts, and healthcare decision makers to improve the quality and safety of care. The NCEPCR is committed to engaging with and learning from all members of the primary care community, including patients and families. AHRQ is currently updating its primary care research agenda based on input from the primary care community.
In addition, AHRQ is supporting multiple primary care relevant evidence-based reviews including:

- *Integrated and Comprehensive Pain Management Programs*
- *Strategies for Patient, Family, and Caregiver Engagement*
- *Models of Care That Include Primary Care for Adult Survivors of Childhood Cancer*
- *Transitions of Care for Children with Special Healthcare Needs* (in-progress).

Antimicrobial Research

2. SENATE (Explanatory Statement, p. 183)

The Committee supports AHRQ's continued work in diagnostics outcomes studies for infectious diseases, including those assessing patient outcomes, lengths of stay, changes in antibiotic use, rates of antibiotic use for certain patient populations, and costs of care. The Committee directs the Office of the Assistant Secretary for Health, NIH, ASPR/BARDA, CDC and AHRQ to jointly brief the Committees on Appropriations of the House of Representatives and Senate no later than 30 days after the enactment of this act detailing how HHS and its agencies are coordinating their AMR-related efforts. The briefing should include a comparison of actual performance against the national targets for 2020 established in the March 2015 National Action

Plan for Combatting Antibiotic-Resistant Bacteria and whether those goals were sustained in 2021. Agencies/ are directed to outline the focus of their plans for fiscal years 2022–2023 and how these are connected to longer-term objectives included in the follow-on National Action Plan released in October 2020.

Action Taken or to be Taken:
HHS and its agencies are coordinating their efforts in several ways. The Combatting Antibiotic-Resistant Bacteria (CARB) Task Force has representatives from all the HHS agencies involved in combating AMR, including AHRQ, CDC, CMS, FDA, and NIH, as well as representatives of USDA and DOD. The Task Force helps to bring about coordination of efforts by sharing of information and reporting of results. In addition, the renewed National Action Plan, 2020-2025, was developed in a collaborative effort by the several agencies. The Plan contains objectives and targets for action that will be contributed to by multiple named agencies and reaching these targets will entail coordinated efforts.

With respect to the targets in the 2020 National Action Plan, AHRQ has achieved all of its assigned targets. In the period 2015-2020, the Agency significantly increased its funding of AMR/CARB-related research; conducted a program that promoted antibiotic stewardship that reduced antibiotic use in multiple healthcare settings and developed educational toolkits to disseminate the successful methods of the project to the field; and developed a practical guide to antimicrobial stewardship in nursing homes.

AHRQ's objectives for 2022-2023 are aligned with the current National Action Plan released in October 2020. AHRQ is planning to fund additional research to improve antibiotic use and to prevent healthcare-associated infections and is anticipating that investigators will respond to the invitation in our renewed NOFOs to conduct research on CARB-related diagnostics and their appropriate use in clinical care.

Heart Disease Research

3. **SENATE (Explanatory Statement, p. 183)**
Heart disease is the leading cause of death for Americans. Understanding how to reduce the rate of cardiac events and to control the metabolic processes that lead to such events is needed. The Committee supports AHRQ studying and assessing the current evidence for lipid control and cardiovascular event reduction, quality measures for the improvement of clinical outcomes, and to develop and disseminate education resources and materials about improving cardiovascular clinical outcomes for coronary heart disease death, myocardial infarction, ischemic stroke, and urgent coronary revascularization procedure

Action Taken or to be Taken:
Understanding how best to reduce cardiovascular disease is critical area of focus for AHRQ. AHRQ works closely with HHS' Million Hearts initiative to improve the delivery of high-quality heart health care. AHRQ initiated a project known as *EvidenceNOW: Advancing Heart Health,* which led efforts to increase the uptake of evidence into practice to improve heart health. In 2021, AHRQ launched the next generation of its EvidenceNOW initiative targeting states with

the highest prevalence of cardiovascular disease, including Michigan, Ohio, Tennessee, and Alabama.

AHRQ's TAKEheart initiative is working to increase the use of cardiovascular rehabilitation by eligible patients across the Nation. In 2022, AHRQ will work with a group of cardiac rehabilitation centers to implement and evaluate "hybrid" cardiac rehabilitation services, which will combine center-based and home-based supervised exercise programs that will make use of patient-generated health data.

AHRQ recently commissioned an update of its 2016 systematic review on *Statin Use for the Primary Prevention of Cardiovascular Disease in Adults*. The new report with comprehensively review the current evidence for lipid control with statins and primary cardiovascular event prevention. The updated review will be completed in early 2022.
In addition, AHRQ has recently supported evidence-based reviews in the area of heart health including:

- *Peripartum and Postpartum Management of Women with Hypertensive Disorders of Pregnancy* (in-progress)
- *Automated-Entry Patient-Generated Health Data for Chronic Conditions*, which included coronary artery disease, congestive heart failure, and stroke. (completed)

Improving Maternal Health

4. **SENATE (Explanatory Statement, p. 184)**

The Committee includes $7,350,000, the same as in the fiscal year 2022 budget request, to fund research to understand the complex challenges of ensuring safe and healthy pregnancies and childbirth, particularly for underserved women who are at substantially higher risk of complication and death.

Action Taken or to be Taken:
AHRQ appreciates the Committee's support and investment in ways to improve maternal health. With this funding, AHRQ will continue to develop a body of work to support informed, evidence-based decision making by policymakers, healthcare system leaders, researchers, clinicians, and patients to drive improvements in maternal morbidity and mortality, nationwide. Better data and information about across healthcare settings relating to maternal health and healthcare delivery is needed. The goal of the initiative is to ensure that Federal, State, and local policymakers have timely and accurate data and useful analytic resources about maternal morbidity and mortality and the healthcare system with which to make informed policy decisions. The initiative has four components which include 1) expanding the capacity of States to link healthcare, vital statistics, and social service data; 2) advancing predictive analytics for maternal health to support data-driven maternal health policy; 3) expanded capacity of AHRQ's Medical Expenditure Panel Survey for State estimates of maternal health; and 4) the development of a new tool for measuring patient experience of maternity care.
Additionally, AHRQ has commissioned the following evidence reviews to contribute to the evidence-base in the area of maternal health:

- *Maternal, Fetal, and Child Outcomes of Mental Health Treatments in Women: A Systematic Review of Perinatal Pharmacologic Interventions* (completed)
- *Management of Primary Headaches in Pregnancy* (completed)
- *Maternal and Childhood Outcomes Associated With the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)* (in-progress, final report January 2022)
- *Schedule of Visits and Use of Telemedicine for Routine Antenatal Care* (in-progress, draft report available for public comment early 2022)
- *Peripartum and Postpartum Management of Women with Hypertensive Disorders of Pregnancy* (in-progress, draft report expected Fall 2022)
- *Postpartum Care for Women up to One Year After Birth* (in-progress, draft report expected Fall 2022)

Opioid Research

5. **SENATE (Explanatory Statement, p. 184)**

The Committee supports the research AHRQ has undertaken to better equip practitioners to use evidence-based interventions to treat opioid and multi-substance misuse. The Committee recommends $7,000,000, an increase of $4,000,000, to expand AHRQ's opioid-related research to include equitable access to treatment, management of substance use disorders with other cooccurring chronic conditions, and how changes in service delivery could improve outcomes

Action Taken or to be Taken:

AHRQ appreciates the Committee's continued support and investment in research to help stem opioid and multi-substance misuse. This investment will enable AHRQ to build on the evidence-base for best practices in the treatment and management of substance use disorders.

AHRQ is developing a funding announcement that will support research to test strategies and models to improve the capacity of primary care and ambulatory care settings to provide evidence-based, patient-centered care for people who misuse opioids and other substances. Although there is increasing evidence about which treatments and interventions work, moving that evidence into practice has been slow and unevenly distributed. The funding announcement would seek proposals that build on recent research on effective treatments, lead to lasting changes in how care is delivered, and develop sustainable partnerships between primary care and other care settings. The number of grants that could be supported would depend on the level of funding. AHRQ has also posted a special emphasis notice to encourage submission of innovative research ideas from the field through its investigator-initiated research portfolio and has received an enthusiastic response to that notice.

Patient Safety

6. **SENATE (Explanatory Statement, p. 184)**

The Committee continues to support improving diagnosis in medicine. Diagnostic errors occur far too frequently, threatening patient safety and driving up costs in our healthcare system. The Committee provides an increase of $8,000,000 to support AHRQ's research to address failures in

the diagnostic process, which may include the establishment of Research Centers of Diagnostic Excellence to develop systems, measures, and new technology solutions to improve diagnostic safety and quality.

Action Taken or to be Taken:
AHRQ strongly agrees that diagnostic errors are a serious and complex issue and greatly appreciates the Committees' continued support and investment in addressing this issue. To help improve diagnostic safety and quality, AHRQ has prioritized supporting research to better understand why diagnostic errors occur as well as strategies to prevent them from taking place. While AHRQ has been building a foundation of research to address diagnostic safety and quality, additional funding will enable the Agency to move the field forward more urgently at a level commensurate with the extent of harm caused by diagnostic errors.

To build on our important diagnostic safety work, AHRQ will, subject to the availability of funding, support research to address diagnostic failures which may include a new Notice of Funding Opportunity to establish Research Centers of Diagnostic Excellence. Such Centers would have the expertise to address this challenging issue by developing systems, measures, and new technology to improve diagnostic safety.

Rural and Underserved Populations

7. **SENATE (Explanatory Statement, p. 184)**
The Committee supports the work of AHRQ to better serve the health needs of rural and underserved minorities through such programs as the ''Evidence Now'' network. The Committee encourages the agency to expand its efforts to include additional health extension program sites connected to public academic health centers in States with high populations of underserved minorities, rural communities, and tribal populations.

Action Taken or to be Taken:
AHRQ appreciates the Committees' support for AHRQ's EvidenceNow initiative. The initiative was built upon years of research on how to develop and expand primary care health extension programs. In 2021, AHRQ has two initiatives to expand its efforts to sustain and develop State health extension program sites. The first, an unhealthy alcohol use initiative, is working in six States to help primary care practices to increase the use of screening, brief intervention and treatment for unhealthy alcohol use.

This year, AHRQ launched its newest initiative to expand the EvidenceNOW model by awarding grants to four states with the highest burden of cardiovascular disease. This new initiative is designed to designed to increase the capacity of these States to advance equity in heart health by working with primary care practices to address the needs of rural and underserved populations. AHRQ is committed in all its research to improving the quality, safety, and equity of care in underserved communities. For example, AHRQ's recent funding opportunities on COVID-19 research prioritized research focused on ensuring equity and care innovations to serve traditionally underserved communities.

SIGNIFICANT ITEMS IN THE HOUSE, SENATE, AND CONFERENCE REPORTS

FY 2021 HOUSE REPORT 117-96

Antimicrobial Resistance

1. **HOUSE (Rept. 117-96, p.188)**
   The Committee continues to provide no less than $10,000,000 for combating antibiotic-resistant bacteria.

   Action Taken or to be Taken
   AHRQ appreciates the Committee's continued support for and investment in activities related to combating antibiotic-resistant bacteria (CARB). AHRQ will invest at least $10,000,000 in CARB-related activities, including investigator-initiated research studies. AHRQ has met this level of CARB-related funding in previous years.

Accessibility of Online Telehealth Platforms

2. **HOUSE (Rept. 117-96, p. 188)**
   The Committee recognizes that the COVID–19 pandemic led to the increased use of online portals and web services for patients seeking information, scheduling, and accessing remote services. However, the Committee is concerned that many online platforms are not user-friendly, especially for less digitally literate communities, including seniors. The Committee urges AHRQ to coordinate with ONC, CMS, and OCR on any Federal efforts that could be made to evaluate the accessibility of digital health platforms for Federally supported providers, including any assessments of how seniors and persons with disabilities are included in the design and testing of the platforms. Further, the Committee urges AHRQ to work with ONC, CMS and OCR to establish best practices for health care providers to improve their online telehealth platforms for seniors.

   Action Taken or to be Taken
   Telehealth, virtual care, telementoring and other technological approaches to delivering care have been integral to AHRQ's work for nearly 20 years. AHRQ has worked with HRSA, CDC, CMS, ONC, ASPR and other agencies to coordinate the federal COVID-19 response with regard to telemedicine. In addition to having regular communications with these agencies, AHRQ is a regular participant in the bi-weekly government-wide Cross Federal Workgroup on Telehealth (FedTel), which promotes cross-agency coordination.

   Over the past 18 months, AHRQ has examined its expertise and capacities in research, practice improvement, and data and analytics as it relates to telehealth to identify ways AHRQ can contribute to answering important questions this real-world experiment is generating.

   AHRQ is currently funding the following grants that address the use and accessibility of online digital health platforms for remote healthcare services:
   - *Using Smart Devices to Implement an Evidence-based eHealth System for Older Adults*.

- *Integrating Patient-Reported Outcomes into Routine Primary Care: Monitoring Asthma Between Visits*.

AHRQ also funded two evidence reports to advance the evidence-based for the safe, effective, and accessible use of telehealth:

- *Telehealth in Women*: This report looks at the evidence supporting the use of telehealth for reproductive health and intimate partner violence services for women.
- *Telehealth during COVID*-19: This report will look at variation in outcomes by patient characteristic including age, gender, race/ethnicity, type of clinical condition or health concern, and geographic location. (*The draft report will be available in early 2022*.)

AHRQ added new questions to the nationally representative Medical Expenditure Panel Survey on the use of telehealth which allow for the tracking of disparities in how telehealth is accessed and used.

Cardiovascular Clinical Outcomes

3. **HOUSE (Rept. 117-96, p. 188)**

The Committee looks forward to receiving the study requested in the Consolidated Appropriations Act, 2021 that assesses the current evidence for lipid control and cardiovascular event reduction and quality measures for the improvement of clinical outcomes (e.g. coronary heart disease death, myocardial infarction, ischemic stroke, or urgent coronary revascularization procedure). The Committee also encourages AHRQ to develop and disseminate education resources and materials about improving cardiovascular clinical outcomes.

Action Taken or to be Taken

AHRQ has commissioned a new systematic review to update its 2016 systematic review on Statin Use for the Primary Prevention of Cardiovascular Disease in Adults. This report will provide an update on the current evidence for lipid control with statins and primary cardiovascular event prevention. The update review is in process and will be completed in early 2022.

AHRQ works closely with HHS' Million Hearts initiative to improve the delivery of high-quality heart health care. AHRQ's EvidenceNOW: Advancing Heart Health has led efforts to increase the uptake of evidence into practice to improve heart health. It also produced Tools for Change a suite of evidenced based tools to help practices improve quality of care and reduce cardiovascular risk among the communities they serve. In 2021, AHRQ launched the next generation of its EvidenceNOW initiative targeting states with the highest prevalence of cardiovascular disease, including Michigan, Ohio, Tennessee, and Alabama.

Cardiovascular Clinical Outcomes

5. **HOUSE (Rept. 117-96, p. 188-189)**
Heart disease is the leading cause of death for Americans. Understanding how to reduce the rate of cardiac events and to control the metabolic processes that lead to such events is needed. The Committee encourages AHRQ to conduct a study that assesses the current evidence for lipid control and cardiovascular event reduction and quality measures for the improvement of clinical outcomes (e.g., coronary heart disease death, myocardial infarction, ischemic stroke, or urgent coronary revascularization procedure) and to report findings back to the Committee no later than 180 days after the enactment of this Act. AHRQ is also encouraged to develop and disseminate education resources and materials about improving cardiovascular clinical outcomes.

Action Taken or to be Taken
On October 1, 2021 AHRQ submitted a report to the Committee, ***AHRQ's Ongoing Efforts to Study and Assess Evidence and Quality Measures for Cardiovascular Disease (CVD) Event Reduction and to Develop and Disseminate Education Resources on Improving CVD Clinical Outcomes.*** Additionally, as per the Committee's request, AHRQ continues to develop and disseminate educational resources about best practices for improving cardiovascular clinical outcomes.

AHRQ works closely with HHS' Million Hearts initiative to improve the delivery of high-quality heart health care. AHRQ's EvidenceNOW: Advancing Heart Health has led efforts to increase the uptake of evidence into practice to improve heart health. In 2021, AHRQ launched the next generation of its EvidenceNOW initiative targeting states with the highest prevalence of cardiovascular disease, including Michigan, Ohio, Tennessee, and Alabama.

AHRQ's TAKEheart initiative is working to increase the use of cardiovascular rehabilitation by eligible patients across the Nation. In 2022, AHRQ will work with a group of cardiac rehabilitation centers to implement and evaluate "hybrid" cardiac rehabilitation services, which will combine center-based and home-based supervised exercise programs that will make use of patient-generated health data.

AHRQ has commissioned a new systematic review to update its 2016 systematic review on Statin Use for the Primary Prevention of Cardiovascular Disease in Adults. This report will provide an update on the current evidence for lipid control with statins and primary cardiovascular event prevention. The update review is in process and will be completed in early 2022.

Center for Primary Care

6. **HOUSE (Rept. 117-96, p.188-189)**
The Committee includes $5,000,000 to establish the Center for Primary Care Research authorized at 42 USC 299b–4(b). AHRQ is uniquely positioned to support primary care clinical and practice research and to help disseminate the research nationwide. The 2021 NASEM report on High Quality Primary Care supported the importance of targeted funding for Primary Care

Research (PCR) and recommended prioritization of funding for AHRQ's Center for Excellence in Primary Care Research. In 2020, the RAND Corporation published a report requested by Congress that emphasized the significant role AHRQ plays in PCR and recommended providing targeted funds to create a proper hub for Federal PCR. The areas of focus could include strategies to improve primary care delivery, including through the use of clinical pharmacists and inter-professional; team-based care; advancing the development of primary care researchers; expanding research on persons with multiple co-morbid conditions; and improving primary care in rural and underserved areas, especially in remote and non-contiguous States.

Action Taken or to be Taken

AHRQ is greatly appreciative of the Committee's continued support for, and investment in primary care research at the Agency. The proposed investment would further clarify AHRQ's role in primary care research and better position the Agency to be the nation's principal research arm for primary care research.

AHRQ's National Center for Excellence in Primary Care Research (NCEPCR) is working across AHRQ and with other agencies and stakeholders to support primary care research and disseminate findings, tools, and resources to the primary care community. If funds are available , AHRQ intends to develop a notice of funding opportunity to advance understanding of the role and capacity of primary care to increase value, quality, and outcomes by delivering whole person, patient-centered care. This funding opportunity would support primary care research projects that apply data and evidence in innovative ways to facilitate the redesign of primary care and enhance its critical role in the healthcare system. The purpose of these new research grants will be to answer critical questions on how to revitalize primary care to improve individual and population health while increasing access to care, reducing burden on patients, decreasing clinician burnout, and improving equity. Findings from this research will be disseminated through the NCEPCR to primary care stakeholders and the larger health care community.

Research on Health Equity

7. **HOUSE (Rept. 117-96, p.189)**

The Committee includes an increase of $3,000,000 for AHRQ to support investigator-initiated research grants related to health equity and an additional $1,000,000 to support research supplements related to health equity, the same as the fiscal year 2022 budget request.

Action Taken or to be Taken

AHRQ appreciates the Committee's support for, and investment in research related to health equity, which is one of AHRQ's priority areas.

AHRQ will be publishing a notice of funding announcement (NOFO) that will directly support research projects that focus on the advancement of health equity. This NOFO will utilize FY 2022 funds to fund new research grant awards, or to allow for supplemental revisions to existing awards related to reducing health disparities and advancing health equity in health care settings.

Health System Innovations Responding to COVID-19

8. **HOUSE (Rept. 117-96, p. 189)**

The Committee includes an additional $5,000,000, the same as the fiscal year 2022 budget request, to support new investigator-initiated research grants related to COVID–19, including grants focused on improving the quality of care and patient outcomes; improving patient safety; understanding the pandemic's impact on socially vulnerable populations and people with multiple chronic conditions; and understanding how digital health innovations such as telehealth contributed to the health system response to COVID–19.

Action Taken or to be Taken

AHRQ appreciates the Committee's continued support for, and investments in research related to developing innovations to support the health systems' response COVID-19. AHRQ will, pending funding in FY 2022, publish a notice of funding announcement (NOFO) focused on the issues highlighted by Congress relevant to COVID-19. Funding in FY 2023 will provide continuing funding for awards related to COVID's impact and the response by the healthcare system.

Improving Maternal Morbidity and Mortality

9. **HOUSE (Rept. 117-96, p. 189)**

The Committee includes $7,350,000, the same as the fiscal year 2022 budget request, to improve the provision of timely and accurate data about maternal health and the health care system to policymakers, health care providers, and the public.

Action Taken or to be Taken

AHRQ appreciates the Committee's support and investment in ways to improve maternal health. With this funding, AHRQ will continue to develop a body of work to support informed, evidence-based decision making by policymakers, healthcare system leaders, researchers, clinicians, and patients to drive improvements in maternal morbidity and mortality, nationwide. Better data and information about across healthcare settings relating to maternal health and healthcare delivery is needed. The goal of the initiative is to ensure that Federal, State, and local policymakers have timely and accurate data and useful analytic resources about maternal morbidity and mortality and the healthcare system with which to make informed policy decisions. The initiative has four components which include 1) expanding the capacity of States to link healthcare, vital statistics, and social service data; 2) advancing predictive analytics for maternal health to support data-driven maternal health policy; 3) expanded capacity of AHRQ's Medical Expenditure Panel Survey for State estimates of maternal health; and 4) the development of a new tool for measuring patient experience of maternity care.

Additionally, AHRQ has commissioned the following evidence reviews to contribute to the evidence-base in the area of maternal health:

- *Maternal, Fetal, and Child Outcomes of Mental Health Treatments in Women: A Systematic Review of Perinatal Pharmacologic Interventions* (completed)
- *Management of Primary Headaches in Pregnancy* (completed)

- *Maternal and Childhood Outcomes Associated With the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)* (in-progress, final report January 2022)
- *Schedule of Visits and Use of Telemedicine for Routine Antenatal Care* (in-progress, draft report available for public comment early 2022)
- *Peripartum and Postpartum Management of Women with Hypertensive Disorders of Pregnancy* (in-progress, draft report expected Fall 2022)
- *Postpartum Care for Women up to One Year After Birth* (in-progress, draft report expected Fall 2022)

Kratom

10. HOUSE (Rept. 176-96, p.189)

The Committee directs the Secretary to maintain current Agency policy to not recommend that the substances mitragynine and 7-hydroxymitragynine, known as kratom, be permanently controlled in Schedule I of the Controlled Substances Act, either temporarily or permanently, until scientific research can sufficiently support such an action. The Committee encourages AHRQ to continue to fund research on natural products that are used by many to treat pain in place of opioids, including kratom. Given the wide availability and increased use of these substances, it is imperative to know more about potential risks or benefits, and whether they can have a role in finding new and effective non-opioid methods to treat pain. The Committee recommends an additional $3,000,000 for this research and directs AHRQ to make center-based grants to address research which will lead to clinical trials in geographic regions which are among the hardest hit by the opioid crisis.

Action Taken or to be Taken

AHRQ is conducting a five-year living systematic review on the effectiveness and harms of plant-based treatments (including kratom and cannabidiol) for chronic pain. This project will produce quarterly reports of available trials and annual assessments of the state of the evidence. The first re/port was posted in January 2021 and the most recent update was posted October 2021. While AHRQ does not fund clinical trials of drug treatments, we are coordinating with the National Center on Complementary and Integrative Medicine (NCCIH) to accelerate the development of the evidence base by highlighting evidence gaps and key patient centered outcomes based on our evidence review.

Lyme and Other Tick-Borne Diseases (TBD)

11. HOUSE (Rept. 176-96, pp.189-190)

The Committee is concerned about the experiences of low-income, minority, and migrant populations with Lyme and other TBD and believes that better data should be developed on the incidence of TBD in these populations and the experiences of those populations in accessing care for suspected TBD, including provider awareness of TBD, on diagnostic tools, treatment protocols, and health outcomes. The Committee directs AHRQ to coordinate with HRSA and its Bureau of Primary Health Care and the Office of Rural Health Policy, other HRSA Bureaus and Offices as appropriate, and the Indian Health Service to develop a plan for exploratory research to assess the extent of the problem of TBD in the low income, minority, and migrant populations

and in the national network of clinics and health centers which provide health care, and which in turn receive a large portion of payments from CMS.

Action Taken or to be Taken

AHRQ will reach out to HRSA and the IHS, as well as other agencies as appropriate about developing a plan for exploratory research that assesses the extent of the problem of TBD in the subpopulations as noted by the Committee if funding were provided.

Opioids Research

12. HOUSE (Rept. 176-96, p.190)

The Committee includes $5,000,000, an increase of $2,000,000 above the fiscal year 2021 enacted level and $5,000,000 below the fiscal year 2022 budget request, to support expanded research related to opioid use and misuse, including research focused on increasing equity in treatment access and outcomes, accelerating implementation of effective evidence-based care in primary and ambulatory care, and developing whole person models of care that address the social factors which shape treatment and adherence and long-term recovery.

Action Taken or to be Taken

AHRQ appreciates the Committee's continued support for, and additional investment in research related to opioid use and misuse. This investment will enable AHRQ to build on the evidence-base for best practices in the treatment and management of substance use disorders.
AHRQ is developing a funding announcement that will support research to test strategies and models to improve the capacity of primary care and ambulatory care settings to provide evidence-based, patient-centered care for people who misuse opioids and other substances. Although there is increasing evidence about which treatments and interventions work, moving that evidence into practice has been slow and unevenly distributed. The funding announcement will seek proposals that build on recent research on effective treatments, lead to lasting changes in how care is delivered, and develop sustainable partnerships between primary care and other care settings. The number of grants that could be supported would depend on the level of funding. AHRQ has also posted a special emphasis notice to encourage submission of innovative research ideas from the field through its investigator-initiated research portfolio and has received an enthusiastic response to that notice.

Patient Safety Risks and Harms

13. HOUSE (Rept. 176-96, p.190)

The Committee recognizes the seriousness of diagnostic errors in the health care system. Diagnostic error has been under-recognized and leads to a quarter-million inpatients experiencing serious hardship each year, including approximately 100,000 deaths. The Committee provides an increase of $8,000,000 for researching diagnostic error and associated risk to patient safety.

Action Taken or to be Taken

AHRQ strongly agrees that diagnostic errors are a serious and complex issue and greatly appreciates the Committees' continued support and investment in addressing this issue. To help improve diagnostic safety and quality, AHRQ has prioritized supporting research to better understand why diagnostic errors occur as well as strategies to prevent them from taking place. While AHRQ has been building a foundation of research to address diagnostic safety and quality, additional funding will enable the Agency to move the field forward more urgently at a level commensurate with the extent of harm caused by diagnostic errors.

To build on our important diagnostic safety work, AHRQ will, subject to the availability of funding, support research to address diagnostic failures which may include a new Notice of Funding Opportunity to establish Research Centers of Diagnostic Excellence. Such Centers would have the expertise to address this challenging issue by developing systems, measures, and new technology to improve diagnostic safety.

Prenatal Care for Pregnant Individuals

14. HOUSE (Rept. 176-96, p.190)

The Committee recognizes the Department's ongoing efforts to address the pressing public health issue of rising maternal mortality. Research shows prenatal care is a critical component of preventative care for pregnant individuals. The Committee includes no less than $500,000, the same as the fiscal year 2021 enacted level, for research that examines the potential cost savings to the public health system of providing a special enrollment period for pregnant individuals, as well as the impact of a special enrollment period on the private insurance market

Action Taken or to be Taken

AHRQ has a long history of conducting and supporting research on the impacts of insurance coverage on access to and the utilization and cost of care. The Agency's substantive expertise in both public and private health insurance, technical expertise in economics and microsimulation modeling, and unique data resources, including both the Medical Expenditure Panel Survey (MEPS) and the Healthcare Cost and Utilization Project (HCUP), have been instrumental in examining the impacts of insurance reform (e.g. the Affordable Care Act) on the use and costs of care and the distribution of care among population subgroups, as well as research on rates and reasons for hospital readmissions related to Severe Maternal Morbidity.

Statewide Surgical Quality Initiatives

15. HOUSE (Rept. 176-96, p.190)

The Committee is aware that several States have moved aggressively to combine the knowledge, skills, and resources of diverse hospitals across the State with the expertise of foundations, hospitals associations, and other outside stakeholders to identify and disseminate best practices in surgical care. The goals of the collaborative are to improve surgical outcomes, improve the value of surgical care, and decrease disparities in care. The Committee urges ARHQ to prioritize grants to States that have developed such collaborations and intend to expand by adding more hospitals and incorporate telehealth and mobile solutions into higher-value care.

Action Taken or to be Taken

AHRQ appreciates the Committee's interest in identifying and disseminating best practices in surgical care to help ensure care that is safe, high-quality, and equitable. The Agency has conducted and is currently supporting a variety of research and improvement projects that are associated with this area of interest. Also, a focus for AHRQ is disseminating evidence on best practices to help ensure that the delivery of care is safe, high-quality, and equitable, and based on the most current evidence. One such project that addresses some aspects of surgical safety is AHRQ's Safety Program for Improving Surgical Care and Recovery, which is ongoing. Subject to the availability of funds, the Agency could examine State collaboratives focused on improving surgical care.

Trafficking Awareness Training for Health Care

16. HOUSE (Rept. 176-96, pp.190-191)

The Committee provides total funding of $2,000,000 for the purposes authorized under the Trafficking Awareness Training for Health Care Act to establish a pilot program for the creation, distribution, and evaluation of best practices for medical professionals to identify and respond to victims of human trafficking. Medical professionals are in a unique position to identify abuse and help victims of trafficking. Funding this program will ensure they are adequately trained to do so.

Action Taken or to be Taken

AHRQ greatly empathizes with the victims of human trafficking, unfortunately no funding is provided for this work.

USPSTF Clinical Data

17. HOUSE (Rept. 176-96, p.191)

The Committee is concerned about significant deficiencies in the process and structure of the United States Preventive Services Task Force (USPSTF), as illustrated by its recommendations concerning screening mammography and cervical cancer screening. Comprehensive USPSTF reform is necessary to ensure that its recommendations further public health for all Americans and address health inequities. USPSTF's process needs to be revised to provide timely recommendations, be fully transparent, afford ample opportunity for public comment at each stage, make such comments publicly available, and provide meaningful responses to such comments. The comment process for USPSTF must provide a more robust and transparent opportunity for and public disclosure of expert and patient input, as well as an external advisory board of clinical experts that serves as a check, throughout the process. Moreover, USPSTF's methodologies should be firmly grounded in evidence that most accurately represents the Nation's racial and ethnic subpopulations; this evidence must include high quality real-world data sets and longitudinal or observational studies and not just randomized controlled trials. Specifically, the Committee calls for action on the established lack of data specific to health equity and racial diversity to more clearly inform the USPSTF decision-making. Furthermore,

USPSTF should review a recommendation upon a showing of new evidence. In addition, USPSTF's composition should reflect an appropriate breadth of practicing physician expertise, including specialist expertise, as well as public input reflecting diverse patient populations. The Committee encourages the USPSTF to adopt these reforms to its process for developing recommendations.

Action Taken or to be Taken

AHRQ thanks Congress for their continued support of the USPSTF in developing evidence-based recommendations on clinical prevention to improve the health of all people nationwide. Consistent with its mandate, AHRQ continues to support the USPSTF in its commitment to adhering to the highest standards of trustworthy recommendation development that includes a timely, transparent, and rigorous process, providing multiple opportunities for public comment, diverse stakeholder input, and the inclusion of experts across the clinical specialties. Since its inception, the USPSTF has been committed to improving the health of people nationwide and reducing health inequities. In 2021, the USPSTF published several papers that outlined a roadmap and actions it will take to further advance its approach, methods, and processes to addressing how systemic racism affects preventive care. AHRQ looks forward to continuing its support of the USPSTF in the transparent development of recommendations that are useful to the diverse people across the nation.