HHS Strategic Plan

FY 2018–2022

U.S. Department of Health and Human Services

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Message from the Secretary

Each day of the year, the men and women of the Department of Health and Human Services come to work to enhance and protect the health and well-being of the American people. In pursuit of this mission, HHS's workforce applies unique skills, uncommon dedication, and a special passion for their work.

Every four years, it is appropriate to carefully reflect and set forth specific goals and strategies for fulfilling our mission, which we do through our department strategic plan.

In the 2018–2022 Strategic Plan, we have identified five goals for the department:

- Reforming, Strengthening, and Modernizing the Nation's Healthcare System
- Protecting the Health of Americans Where They Live, Work, Learn, and Play
- Strengthening the Economic and Social Well-Being of Americans Across the Life-Span
- Fostering Sound, Sustained Advances in the Sciences
- Promoting Effective Management and Stewardship

These goals inform our work and set standards for our performance. They also lay out a framework for approaching specific health and human services challenges, such as the high cost of health care that burdens so many Americans and the epidemic of opioid addiction and overdose that has reached every corner of our country.

To consider how the department can better organize and manage itself to achieve the Plan's five goals, HHS has embarked on a process called *ReImagine HHS*, which has engaged staff from around the department. *ReImagine HHS* identified six strategic shifts as opportunities for the department to advance its work: Leveraging the Power of Data, Restoring Market Forces, Putting People at the Center of HHS Programs, Generating Efficiencies through Streamlined Processes, Making HHS a More Innovative and Responsive Organization, and Moving to a 21st Century Workforce.

These shifts will enhance and refocus HHS's work. The opportunity for transformation they represent and the sense of purpose identified in the five goals of this Strategic Plan should serve as an inspiration to the work HHS's 79,000 employees carry out every day.

That work is vital, and our goals are urgent. As public servants, we at HHS will dedicate ourselves to these goals and to all the work we do on behalf of the American people.

Alex M. Azar II Secretary, Health and Human Services

INTRODUCTION: ABOUT HHS

Mission Statement

The mission of the U.S. Department of Health and Human Services (HHS) is to enhance the health and well-being of all Americans, by providing for effective health and human services and by fostering sound, sustained advances in the sciences underlying medicine, public health, and social services.

Organizational Structure

HHS is the U.S. Government's principal agency for protecting the health of all Americans and providing essential human services, especially for those who are least able to help themselves. HHS accomplishes its mission through programs and initiatives that cover a wide spectrum of activities, serving and protecting Americans at every stage of life, from conception. HHS is responsible for almost a quarter of all Federal outlays and administers more grant dollars than all other Federal agencies combined.

Eleven operating divisions, including eight agencies in the U.S. Public Health Service and three human services agencies, administer HHS's programs. While HHS is a domestic agency working to protect and promote the health and well-being of the American people, the interconnectedness of our world requires that HHS engage globally to fulfill its mission. In addition, staff divisions provide leadership, direction, and policy guidance to the Department.

The <u>organizational chart</u> for HHS and <u>a description of the Agencies and Offices</u> can be found on the Department's website at <u>http://www.hhs.gov/</u>.

Cross-Agency Collaborations

Improving health and human services outcomes cannot be achieved by the Department on its own; collaborations are critical to achieve our goals and objectives.

HHS collaborates closely with other Federal departments and agencies on cross-cutting topics. For example, through the <u>President's Management Council</u>, the Department engages with other Federal departments to identify and adopt best practices on performance and management initiatives. Another example, focused on mission-critical efforts, is the <u>Federal Interagency</u> <u>Workgroup</u> that led the Healthy People 2020 development effort, bringing together Federal staff from the Department with partners in the U.S. Departments of Agriculture and Education.

<u>Federal Advisory Committees</u> enable the Department to collaborate with other Federal departments and agencies, as well as members of the public, on high-priority issues. For example, the <u>Interdepartmental Serious Mental Illness Coordinating Committee</u>, established by the 21st Century Cures Act of 2016 (Pub. L. 114–255), convenes senior leaders from 10 Federal

agencies including HHS; the Departments of Justice, Labor, Veterans Affairs, Defense, Housing and Urban Development, and Education; and the Social Security Administration, along with 14 non-Federal public members, to improve Federal coordination of efforts to address the needs of adults with serious mental illness and youth with serious emotional disturbance.

Importantly, the Federal Government has a unique legal and political government-to-government relationship with Tribal governments and a special obligation to provide services for American Indians and Alaska Natives based on these individuals' relationship to Tribal governments. <u>Executive Order 13175</u>, *Consultation and Coordination with Indian Tribal Governments*, requires consultation with Indian Tribal governments when considering policies that affect Tribal communities. The Department's <u>Tribal Consultation Policy - PDF</u>, first developed with Tribal participation in 2004, was updated in 2010. HHS works with Tribal governments, Indian organizations, and other Tribal organizations to facilitate greater consultation and coordination between States and Tribes on health and human services issues.

HHS works closely with State, local, and U.S. territorial governments, providing funding for program operations and technical assistance. HHS also fosters critical global relationships, coordinates international engagement across HHS and the U.S. Government, and provides leadership and expertise in global health diplomacy and policy to contribute to a safer, healthier world.

In addition, HHS has strong partnerships with the private sector, academia, research institutions, and nongovernmental organizations, including religious and faith-based organizations. The Department partners with the private sector, such as regulated industries, academic institutions, trade organizations, and advocacy groups. The Department leverages resources from these organizations to enable HHS to accomplish its mission through strategies that minimize the burden on, and increase the benefits to, the American public. This effort occurs through Tribes and faith-based and community initiatives as well as grantees in the private sector, such as academic and research institutions, and community-based nonprofit organizations, which provide many services at the local level.

The narrative and strategies listed under the Strategic Goals and Objectives in this document provide additional descriptions of how the Department collaborates with governmental and nongovernmental groups.

OVERVIEW: HHS STRATEGIC PLAN, FY 2018–2022

Strategic Plan Development

Every four years, HHS updates its strategic plan, which describes its work to address complex, multifaceted, and evolving health and human services issues. An agency strategic plan is one of three main elements required by the <u>Government Performance and Results Act (GPRA) of</u> 1993 (Pub. L. 103–62) and the <u>GPRA Modernization Act of 2010 - PDF</u> (Pub. L. 111–352). An agency's strategic plan defines its mission, its goals, and the means by which it will measure its progress in addressing specific national problems over a four-year period. <u>OMB Circular A-11</u>, *Preparation, Submission, and Execution of the Budget*, Part 6, *Strategic Plans, Annual Performance Plans, Performance Reviews, and Annual Program Performance Reports*, and <u>OMB Memorandum M-17-22 - PDF</u>, *Comprehensive Plan for Reforming the Federal Government and Reducing the Federal Civilian Workforce*, provided guidance on how to prepare this Strategic Plan.

All operating divisions and staff divisions within HHS contributed to the development of the HHS Strategic Plan FY 2018–2022 (Strategic Plan), as reflected in its Strategic Goals, Strategic Objectives, and strategies. The Strategic Plan's content aligns with the priorities of the Administration and HHS.

Under the GPRA Modernization Act, Federal agencies are required to consult with Congress and to solicit and consider the views of external parties. To comply with this mandate, HHS engaged the public through the <u>HHS website</u>, a Notice of Availability in the Federal Register, conference calls and consultation sessions with Tribal leaders, email notices to external stakeholders and HHS.gov subscribers, and social media postings. The public could review the draft Strategic Plan on the HHS website or could request an electronic or paper copy. The public was able to submit comments via mail, fax, email, and the HHS website. HHS also sought input from Congress and the Office of Management and Budget.

More than 13,000 comments from the public were received during the 31-day public comment period, which ended on October 27, 2017. Members of Congress also sent feedback on the draft. Input ranged from editorial suggestions to more substantive comments. In response, HHS coordinated with subject matter experts, policy and program analysts, and research and evaluation staff within the operating divisions and staff divisions to incorporate responsive changes into the final Strategic Plan.

Any updates to the Strategic Plan will be made on an annual basis, and updates will be outlined in an appendix.

Strategic Goals, Objectives, and Strategies

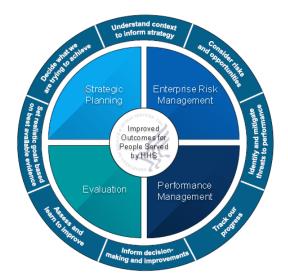
This Strategic Plan describes HHS's efforts within the context of five broad Strategic Goals:

- Strategic Goal 1: Reform, Strengthen, and Modernize the Nation's Healthcare System
- Strategic Goal 2: Protect the Health of Americans Where They Live, Learn, Work, and Play
- Strategic Goal 3: Strengthen the Economic and Social Well-Being of Americans Across the Lifespan
- Strategic Goal 4: Foster Sound, Sustained Advances in the Sciences
- Strategic Goal 5: Promote Effective and Efficient Management and Stewardship



The Strategic Goals and associated Objectives focus on the major functions of HHS and outcomes the Department aims to achieve. Primary strategies for accomplishing HHS's goals are presented with each Objective. Although the Strategic Goals and Objectives are presented in the Strategic Plan in separate sections, they are interrelated, and successful achievement of one Strategic Goal or Objective can influence the success of others. Multiple divisions within HHS often contribute to successful achievement of a Strategic Goal or Objective; divisions that make these contributions to Strategic Goals and Objectives are listed within the appropriate sections of the Strategic Plan.

HHS is working to integrate strategic planning, performance measurement and management, enterprise risk management, and evaluation into its management approach. Although the sections that follow—*Performance Tracking*, *Major Management Priorities and Challenges*, and *Evaluation and Evidence*—were developed by different divisions within the Department, these efforts are aligned in the context of the Strategic Plan.



Performance Tracking

Performance Goals. The GPRA Modernization Act and related guidance from the Office of Management and Budget requires the inclusion of performance goals for each Strategic Objective in the Strategic Plan. In developing and selecting performance goals, HHS included measures of the broad impact of health and human services as well as intermediate processes and outputs that contribute to the achievement of long-term outcomes. HHS personnel regularly monitor more than a thousand performance measures to examine effectiveness and improve program processes. This Strategic Plan includes a subset of important performance goals that track progress for those objectives. Progress on these performance goals will be tracked annually through the <u>Annual Performance Report</u>.

Agency Priority Goals. Among the performance measures monitored by the Department are several measures that support the Department's Priority Goals. These goals are a set of ambitious but realistic performance objectives that the Department will work to achieve within a 24-month period. Agency Priority Goals support and align with the Strategic Goals and Objectives of the HHS Strategic Plan. The GPRA Modernization Act requires the inclusion of these Priority Goals in the Department's Strategic Plan and Annual Performance Plan. Agency Priority Goals for FY 2018–2019 will be reported in Annual Performance Plans and Reports beginning in 2019. Current information on Agency Priority Goals can be found at https://www.Performance.gov.

Cross-Agency Priority Goals. The GPRA Modernization Act requires that the Department address Cross-Agency Priority (CAP) Goals in its quadrennial Strategic Plan, the Annual Performance Plan, and the Annual Performance Report. The Department's contributions to and progress on CAP Goals will be available at <u>https://www.Performance.gov</u>.

Major Management Priorities and Challenges

According to OMB Circular A-11, an agency's strategic plan must include a section on major management challenges, to describe management and programmatic issues and risks or areas that have greater vulnerability to waste, fraud, abuse, and mismanagement or where a failure to perform could seriously affect the agency's mission delivery and ability to achieve its goals. The Office of Inspector General (OIG) annually identifies top management and performance challenges facing the Department as it strives to fulfill its mission. OIG notes that challenges can arise in the Department's responsibilities and functions, such as delivering quality services and benefits, exercising sound fiscal management, safeguarding public health and safety, and enhancing cybersecurity. Efforts to strengthen these functions are described in *Strategic Goal 5: Promote Effective and Efficient Management and Stewardship*. OIG also identified challenges that exist in programs, including Medicare, Medicaid, the Public Health Service, and the Indian Health Service. The Government Accountability Office (GAO) has listed four HHS programs, including Medicare, Medicaid product oversight, on its High Risk List, which lists programs with greater vulnerabilities to fraud, waste, abuse, and mismanagement.

Several other items on the GAO High Risk List also implicate HHS: Improving Federal Management of Programs that Serve Tribes and Their Members; Improving and Modernizing Federal Disability Programs; and Ensuring the Security of Federal Information Systems and Cyber Critical Infrastructure and Protecting the Privacy of Personally Identifiable Information. Efforts to strengthen these programs are described across <u>Strategic Goal 1: Reform, Strengthen,</u> <u>and Modernize the Nation's Healthcare System</u> and <u>Strategic Goal 2: Protect the Health of</u> <u>Americans Where They Live, Learn, Work, and Play</u>. In addition to responding to risks identified by OIG and GAO, the Department is implementing an enterprise risk management (ERM) approach to its work. References to ERM are included throughout the document, especially in <u>Strategic Goal 5: Promote Effective and Efficient Management and Stewardship</u>.

Evaluation and Evidence for the HHS Strategic Plan

Evaluation and analysis provide essential evidence for HHS to understand how, for whom, and under what circumstances its programs work. HHS builds evidence through evaluation and analysis to inform decisions in budget, legislative, regulatory, strategic planning, program, and policy arenas. Given the breadth of work supported by HHS, many evaluations and analyses are conducted each year. These efforts range in scope, scale, design, and methodology, but all aim to understand the effect of programs and policies and how they can be improved.

Evaluation at HHS: Across HHS, evaluation comes in many forms, including (1) formal program evaluations using the most rigorous designs that are appropriate; (2) capacity-building initiatives to improve administrative data collection, accessibility, and use for management; (3) exploratory and preliminary quantitative and qualitative analysis to build evidence; (4) pilots and demonstrations; and (5) statistical analysis of factors related to health and human services programs and policies. Findings from a variety of evaluations and analyses are disseminated to the public on HHS agency websites, such as those of the Administration for Children and Families Office of Planning, Research, and Evaluation and the Innovation Center at the Centers for Medicare & Medicaid Services. HHS coordinates the evaluation community by regularly convening the HHS Evaluation & Evidence Policy Council, which builds capacity by sharing best practices and promising new approaches across HHS.

Data Collection, Analysis, and Policy: Across HHS, decisions about programs, regulations, and policies are informed by a broad range of evidence generated through analysis of data collected from multiple sources. The robust HHS data portfolio serves as the foundation for evidence building. The data collection systems supported by HHS provide most of the national statistical capacity to monitor the health of the population and the functioning of the healthcare and human services systems. They support the tracking of national health objectives and the identification of trends, and they inform program and policy decision making associated with the missions of all HHS agencies. Evidence is developed by analyzing data to answer policy research questions. Data policy shapes the information available for evidence-building to support decision making. HHS also convenes the HHS Data Council, the principal internal advisory body to the Secretary of HHS on data and statistical policy, which facilitates collaboration and coordination among

various divisions involved in evidence building. An important activity of the HHS Data Council includes leveraging HHS statistical and administrative data collection to support evidence building.

Disseminating Evidence: In addition to building evidence through a broad range of rigorous empirical studies, analyses, and evaluations, HHS supports multiple clearinghouses that catalog, review, and disseminate evidence related to programs, such as the Administration for Children and Families <u>Research and Evaluation Clearinghouses</u> on <u>Self-Sufficiency</u>, <u>Employment</u> <u>Strategies</u>, <u>Strengthening Families</u>, <u>Home Visiting</u>, and <u>Child Care and Early Education</u>; the Agency for Healthcare Quality and Research <u>United States Preventive Services Task Force</u>; and the Centers for Disease Control and Prevention <u>Community Guide</u>.

Throughout this Strategic Plan, narrative sections under the Strategic Goals and Objectives describe how evaluations contributed to the strategic directions that the Department has chosen in its efforts to improve health and human services for the populations it serves. This Strategic Plan also includes strategies related to conducting research and evaluations and applying that knowledge to improve programs and other efforts.

Contributing Programs for Strategic Objectives

The GPRA Modernization Act requires that the Department prepare a central inventory of all Federal programs. This program inventory is intended to facilitate coordination across programs, make it easier to find programs that contribute to a shared goal, and improve public understanding about what Federal programs do and how the programs link to budget, performance, and other information.

The <u>HHS Program Inventory</u> describes the programs that HHS administers across its 11 operating divisions, as well as how programs support the Department's broader Strategic Goals and Objectives. In developing the HHS Program Inventory, HHS worked to closely align the list to the Department's budget structure and Treasury accounts. This approach is consistent with how the Department operates and serves the American people and generally reflects the way Congress appropriates funding to HHS.

STRATEGIC GOAL 1: REFORM, STRENGTHEN, AND MODERNIZE THE NATION'S HEALTHCARE SYSTEM

For a nation to thrive, its population must be healthy. Poor health reduces one's ability to attend school, care for one's family, or work. Without healthcare services—including physical, behavioral, and oral healthcare—to help improve health, Americans are at greater risk of poor health and human services outcomes.

To improve the health of our Nation, the Department is working with its public and private partners to make healthcare affordable, high quality, and accessible for the people it serves. The Department also is making investments to strengthen and expand the healthcare workforce. This goal seeks to improve healthcare outcomes for all people across the lifespan, including the unborn, children, youth, adults, and older adults, across healthcare settings.

According to the <u>U.S. Census Bureau - PDF</u>, 91.2 percent of people carried health insurance coverage or received medical assistance for all or part of 2016. Although most people with health insurance coverage get that coverage through private plans (67.5 percent), such as employer-sponsored insurance or direct-purchase insurance, government-sponsored plans and medical assistance such as Medicare, Medicaid, Children's Health Insurance Program (CHIP), and military healthcare pay for health services for 37.3 percent of Americans.

Yet <u>national health spending</u> is expected to rise between 2017 and 2026, at an average rate of 5.5 percent per year, driven by growth in medical prices. Healthcare spending by Federal, State, Tribal, local, and territorial governments will be greater than that of private businesses, households, and other private payers due to growth in Medicare enrollment and continued government funding dedicated to subsidizing premiums for lower-income enrollees of health insurance exchanges under <u>current law</u>.

Per-person personal <u>healthcare spending</u> in 2012 was \$18,988 for adults older than age 65, more than five times higher than the spending per child (\$3,552). Compared with other Organisation for Economic Co-operation and Development (OECD) member countries, the United States ranks the <u>highest in healthcare spending per capita</u>, measured as a share of Gross Domestic Product (GDP). However, health outcomes do not always reflect this.

The effort to improve healthcare quality and patient safety in many ways has been an American success story. <u>Average life expectancy at birth - PDF</u> has increased by nearly 30 years from the turn of the last century (47.3 years in 1900) to the beginning of this century (76.8 years in 2000). A child born in 2015 will live on average 78.8 years. However, <u>preventable medical</u> <u>errors</u> potentially take 200,000 or more American lives each year and cost the United States about \$19.5 billion in additional medical costs and lost productivity from missed work.

Improving access to healthcare is not just a matter of making it more affordable; services including specialized services—are often not available within a person's geographic area, or do not offer culturally responsive care, or are available only after delays. Inadequate access to healthcare can exacerbate health problems, increasing costs and preventing better health outcomes. For example, in 2014–2015, 17.3 percent of adults aged 18 to 64 had no <u>usual source</u> <u>of healthcare</u>. In 2016, only 84.7 percent of children age 2 to 17, and fewer than 65 percent of adults aged 18 and over, <u>had a dental visit in the past year</u>. And although 14 percent of Americans live in rural areas, only 9 percent of the Nation's physicians practice there, despite the fact that rural residents are more likely than their urban counterparts to have higher rates of cigarette smoking, high blood pressure, and obesity.

To improve health in the United States, the Department is working to strengthen and expand the healthcare workforce. In 2010, the <u>U.S. primary care workforce - PDF</u> comprised nearly 295,000 primary care professionals, including more than 208,000 physicians, more than 55,000 nurse practitioners, and more than 30,000 physician assistants. Yet the <u>United States lags</u> behind more than 25 other countries in the number of doctors per capita, with only 2.6 physicians per 1,000 people. While the number of <u>physician assistants</u> is projected to grow by almost 72 percent by 2025, the growth rate may not provide a sufficient number of providers to address the projected primary care <u>physician shortage</u>.

Within HHS, the following divisions are working to reform, strengthen and modernize the Nation's healthcare system: Administration for Community Living (ACL), Agency for Healthcare Research and Quality (AHRQ), Centers for Disease Control and Prevention (CDC), Centers for Medicare & Medicaid Services (CMS), Food and Drug Administration (FDA), Health Resources and Services Administration (HRSA), Indian Health Service (IHS), Office for Civil Rights (OCR), Office of the National Coordinator for Health Information Technology (ONC), and Substance Abuse and Mental Health Services Administration (SAMHSA).

Strategic Objective 1.1: Promote affordable healthcare, while balancing spending on premiums, deductibles, and out-of-pocket costs

Affordability is a key component of accessible healthcare. For individuals and families, high costs of care create economic strain. Americans often have to choose between spending a higher proportion of wages on healthcare and paying for other household essentials. Without timely access to healthcare services, Americans risk worsening healthcare outcomes and higher costs. Yet for many, costs make healthcare out of reach.

In 2016, the Federal Government accounted for 28 percent of <u>healthcare spending - PDF</u>; households, 28 percent; private businesses, 20 percent; and State and local governments, 17 percent. <u>National Health Expenditure data</u> show that growth in spending is due to expanded coverage and increased utilization of healthcare.

HHS is committed to lowering healthcare costs for Americans to affordable levels and minimizing the burden of government healthcare spending. By increasing consumer information, offering lower-cost options and innovation in payment and service delivery models, and promoting preventive care and market competition, HHS is working with its partners to reduce the burden of higher healthcare costs.

HHS is providing guidance, resources, and flexibility for States to enable them to construct competitive, affordable insurance options that best meet the needs of their citizens.

Through the Quality Payment Program authorized by the Medicare Access and CHIP Reauthorization Act of 2015 (Pub. L. 114–10), the Department has new ways to provide incentives to pay physicians and other practitioners for providing cost-effective, high-quality care to Medicare beneficiaries, and to provide incentives for physicians to participate in <u>alternative payment models</u>, which reward value over volume. HHS tests and evaluates alternative payment models that bring together private payers, healthcare providers, State partners, consumer groups, beneficiaries, and others. These models aim to reduce costs and improve the quality of care for beneficiaries, including those in at-risk populations. In 2016, data on 245.4 million people, representing 84 percent of the publicly and commercially insured population in the United States, revealed that 57 percent of healthcare spending occurred within some payment structure tied to quality, including care coordination, pay-for-performance, or shared savings. Data and evidence from these innovative models are used to inform State and Federal policymakers of the methodologies that work to reduce healthcare costs and improve quality.

Contributing Operating Divisions and Staff Divisions

AHRQ, CMS, and FDA

Strategies

In 2016, the <u>average household</u> experienced increases in healthcare spending of 6.2 percent, primarily due to increased health insurance expenditures. <u>Out-of-pocket spending - PDF</u> grew 2.6 percent, physician and clinical services expenditures grew 6.3 percent, and prescription drug spending increased 9.0 percent. The Department is promoting higher-value and lower-cost healthcare options through the following strategies:

- Promote the use of high-quality, lower-cost healthcare providers, such as community health workers and <u>community organizations</u>, where appropriate
- Promote better coordination and efficiency in post-acute care by discharging patients to appropriate settings, including <u>home and community-based services</u> and skilled nursing facilities, using site-neutral payment rates

Prescription drug spending growth is <u>projected to grow - PDF</u> an average of 6.3 percent per year through 2025. <u>Spending growth - PDF</u> is attributed to increased spending on new medicine, price growth for existing brand-name drugs, and fewer expensive drugs going off patent. The Department is working to promote greater affordability of prescription drugs through the following strategies:

- Expand access to high-quality, safe, affordable generic medicines by streamlining the generic drug application review process, enhancing the development and review of complex generic drug products, and otherwise facilitating entry of lower-cost alternatives, to increase competition in the market for prescription drugs
- Promote the use and benefits of generics through beneficiary and partner educational campaigns aimed at helping those paying for the medications to better recognize the value they present
- Continue to offer outpatient drugs to eligible healthcare organizations at reduced prices through the <u>340B Drug Pricing Program</u>

From 2000 to 2015, national health expenditures increased from 13.3 percent to 17.8 percent of the U.S. Gross Domestic Product. Per capita expenditures rose from \$4,857 to \$9,990 per person. More than 16 percent of people under age 65 reported that their family spent more than 10 percent of total family income on health <u>insurance premiums and out-of-pocket costs</u> in 2014. The Department will continue to collect, analyze, and apply data to improve access to affordable healthcare through the following strategies:

- Provide information on the prevalence, causes, and consequences of high healthcare financial costs, including social factors that exacerbate costs
- Partner with States, community organizations, and the private and nonprofit sectors to educate Americans about their health insurance coverage options and how they can identify

the best plan for themselves, and to provide information on how Americans can access and use their benefits

- Track trends in premiums, out-of-pocket payments, deductibles, and out-of-pocket maximums in health insurance plans
- Enhance digital strategies to empower consumers
- Examine regulatory requirements that may differentially burden providers

Chronic diseases, such as heart disease, cancer, and diabetes, are responsible for 7 of every 10 deaths among Americans each year and account for 75 percent of the <u>Nation's health spending</u>. The Department is working to promote preventive care to reduce future medical costs through several strategies:

- Reduce the need for avoidable medical costs and improve health outcomes of pregnant women and newborns by increasing use of timely <u>prenatal</u>, <u>maternal</u>, <u>and postpartum care</u>
- Promote and implement lifestyle change interventions and intensive case management to <u>reduce risk of diabetes</u> and cardiovascular disease in high-risk individuals
- Provide <u>chronic care management PDF</u> services to patients with multiple chronic conditions, including comprehensive care management, a care plan, and care transitions

Note: Additional strategies on preventive care are in Strategic Objectives 2.1, 2.2, and 2.3.

In 2015, approximately 20.1 million people in the United States <u>delayed medical care</u> during the preceding year because of worry about the cost, and 14.2 million did not receive needed medical care because they could not afford it. The Department is working to strengthen informed consumer decision making and transparency about the cost and value of healthcare through the following strategies:

- Enhance comparison and decision-making tools, such as <u>Hospital Compare</u> and <u>Nursing</u> <u>Home Compare</u>, to help Americans make informed decisions about healthcare, including coverage options, providers, and treatments
- Build out and broaden models, such as <u>Medicaid's Self Directed Services</u>, that allow beneficiaries the option of managing more of their healthcare dollars, services, and supports
- Support health literacy tools, such as <u>Coverage to Care</u> or the <u>Person and Family</u> <u>Engagement Strategy - PDF</u>, which focus on increasing health literacy and consumer connections to healthcare, as well as partnership efforts to promote understanding of health coverage, costs, and terminology, so that consumers can choose the most appropriate, affordable health plan to receive the healthcare services they need
- Stabilize the market, implement policies that increase the mix of younger and healthier consumers purchasing plans through the individual market, and reduce premium increases

• Streamline eligibility and enrollment processes for community supports so that all populations have access to the services they need

Value-based programs reward healthcare providers with incentive payments for the quality of care they provide. These programs seek to achieve better care for individuals, better health for populations, and lower costs overall. The Department is working to incentivize healthcare quality and value-based care through the following strategies:

- Promote the application of proven clinical preventive services for high-impact risk factors and early-stage disease detection, through Federal guidelines, quality measurement, and partnerships with accrediting and other organizations
- Improve return on investment of Federal and State spending by encouraging development of payment models that reward value over volume
- Incentivize better planning, coordination, and management of services across the continuum of care to improve outcomes for people with chronic conditions
- Build out and broaden models that improve quality and reduce costs

Note: Additional healthcare quality strategies are in Strategic Objective 1.2.

Performance Goals

- Reduce the average out-of-pocket share of prescription drug costs while in the Medicare Part D Prescription Drug Benefit coverage gap for non-Low-Income Subsidy Medicare beneficiaries who reach the gap and have no supplemental coverage in the gap
- Increase the percentage of Medicare health care dollars tied to Alternate Payment Models incorporating downside risk

Strategic Objective 1.2: Expand safe, high-quality healthcare options, and encourage innovation and competition

Strengthening the Nation's healthcare system cannot be achieved without improving healthcare quality and safety for all Americans. The immediate consequences of poor quality and safety include healthcare-associated infections, adverse drug events, and antibiotic resistance.

Healthcare safety is a national priority. When the <u>Office of Inspector General examined -</u> <u>PDF</u> the health records of hospital inpatients in 2008, it determined that hospital care contributed to the deaths of 15,000 Medicare beneficiaries each month. <u>Healthcare-associated infections</u> are infections people get while they are receiving medical treatment or undergoing surgery. At any given time, about 1 in 25 patients have an infection related to hospital care. Infections lead to the loss of tens of thousands of lives and cost the U.S. healthcare system billions of dollars each year. <u>Adverse drug events</u>—injuries resulting from medical intervention related to a drug—result in more than 3.5 million physician office visits, 1 million emergency department visits, and 125,000 hospital admissions each year.

Antibiotic overuse has contributed to *Clostridium difficile* infections, the most common microbial cause of healthcare-associated infections, responsible for more than half a million infections and nearly 15,000 deaths in a single year. And each year in the United States, 2 million people become infected with antibiotic-resistant bacteria, directly resulting in the deaths of 23,000 people each year, as well as \$20 billion in increased healthcare costs and \$35 billion in lost productivity.

Yet these consequences are preventable. Recognizing the unique challenges of different healthcare settings—including acute care hospitals, ambulatory surgical centers, dialysis centers, and long-term care facilities—HHS has developed specific strategies to reduce the incidence and impact of healthcare-associated infections in these settings. Through surveillance, antibiotic stewardship, diagnostic innovations, and research strategies, HHS is working to <u>combat</u> antibiotic-resistant bacteria. HHS also focuses on three key drug classes—anticoagulants, diabetes, and opioids—to prevent adverse drug events.

HHS investments in prevention have yielded both human and economic benefits. From 2010 to 2014, efforts to reduce <u>hospital-acquired conditions and infections</u> have resulted in a decrease of 17 percent nationally, translating to 87,000 lives saved, \$19.8 billion in unnecessary health costs averted, and 2.1 million instances of harm avoided.

Contributing Operating Divisions and Staff Divisions

ACL, AHRQ, CDC, CMS, HRSA, OCR, ONC, and SAMHSA

Strategies

Through the Quality Payment Program authorized by the <u>Medicare Access and CHIP</u> <u>Reauthorization Act of 2015</u> (Pub. L. 114–10), the Department has new ways to provide incentives to pay physicians and other practitioners for providing cost-effective, high-quality care to Medicare beneficiaries, and to provide incentives to physicians to participate in alternative payment models, which reward value over volume. Through these and other efforts, the Department is working to incentivize safe, high-quality care through the following strategies:

- Develop new <u>payment and service delivery model concepts</u> that aim to reduce healthcare costs by speeding the adoption of best practices, encouraging care coordination, and promoting evidence-based care, and expand opportunities for Medicare and Medicaid alternative payment models to incentivize value-based care options
- Improve provision of, and access to, appropriate preventive services for Medicare beneficiaries, through improved understanding of uptake of preventive benefits, particularly for those individuals who are high risk
- Strengthen the development, implementation, and reporting of measures for reducing health disparities
- Promote research on how to recognize variation in quality of healthcare provision due to circumstances outside the control of the provider

The <u>Healthcare-Associated Infections Progress Report</u> found that rates of central line-associated bloodstream infections declined 50 percent from 2008 to 2014, and rates of surgical site infections declined 17 percent, although the rate of catheter-associated urinary tract infections did not change. The <u>2016 National Healthcare Quality and Disparities Report - PDF</u>, which tracks a broad range of patient safety indicators, found that about two-thirds of patient safety measures were improving. The Department continues to work to improve patient safety and prevent adverse events such as healthcare-associated infections and medication harms across the healthcare system through the following strategies:

- Support research and innovation to strengthen evidence-based recommendations
- Address quality gaps and safety risks for healthcare-associated conditions
- Develop improved methods and strategies to prevent healthcare-associated infections and combat antibiotic resistance
- Translate knowledge and evidence into practical tools, training, and other resources to accelerate progress to improve quality and patient safety

The 21st Century Cures Act of 2016 (Pub. L. 114–255) provides the Department with authority to advance the interoperability and usability of health information technology. In 2015, 77.9 percent of office-based physicians had a certified electronic health record system. However, in

2015, only about one-third of physicians had <u>electronically sent</u>, <u>received</u>, <u>integrated</u>, <u>or</u> <u>searched - PDF</u> for patient health information with other providers, and only 8.7 percent had performed all four of these activities. In 2015, the Shared Nationwide Interoperability Roadmap was published to enhance the Nation's health information technology infrastructure to support information sharing. The Department will work to leverage technology solutions to support safe, high-quality care through the following strategies:

- Advance interoperable clinical information flows so that patients, providers, payers, and others can efficiently send, receive, and analyze data across primary care, acute care, specialty care including behavioral healthcare, and post-acute care settings
- Promote implementation of understandable, functional health information technology tools to support provider and patient decision making, and to support workflows for healthcare providers

Team-based care is the provision of health services to individuals, families, and communities by at least two health providers who work collaboratively with patients and their caregivers to accomplish shared goals and achieve coordinated, high-quality care. The Department is working to implement team-based approaches to care through the following strategies:

- Collaborate with healthcare systems and community partners to facilitate the spread of evidence-based clinical practices and the appropriate incorporation of innovations that advance patient care
- Promote and implement <u>models</u> that connect primary care, acute care, behavioral healthcare, and <u>long-term services and supports</u>, and that use health information technology effectively, to facilitate transitions between care settings, especially for dually eligible <u>Medicare-Medicaid enrollees</u>
- Implement a <u>collaborative model for behavioral health integration</u> with primary care that is team driven, population focused, measurement guided, and evidence based

Person-centered care is an approach to service delivery that ensures that services are respectful of, and responsive to, the preferences, needs, and values of people and those who care for them. The Department is working to empower patients, consumers, families, and other caregivers to facilitate the delivery and increase the use of person-centered care through the following strategies:

- Expand the engagement of patients, families, and other caregivers in developing and implementing programs that improve the quality of care and increase access to services available to them
- Promote the development, implementation, and use of experience and outcome measures, including patient-reported data and price transparency data, as appropriate, for use in quality reporting

• Support patient, consumer, and caregiver involvement in care planning, as appropriate, to ensure that care is person centered, responding to the needs and wishes of those being served, including their religious or conscience needs and wishes

While patient safety measures have been improving overall, disparities persist. The Department is working to reduce disparities in quality and safety through the following strategies:

- Enhance the use of health information technology among safety-net providers and community-based organizations to inform decision making, better engage people in their care, improve public health outcomes, and increase public health reporting
- Encourage and support a healthcare workforce that delivers culturally appropriate care, across all settings
- Increase capacity to provide person-centered care by promoting geriatriccompetent, <u>disability-competent</u>, and <u>culturally competent</u> care through training programs that teach these concepts and require practicing them
- Promote technical training and assistance to disseminate promising practices around geriatric-competent, disability-competent, and culturally competent care
- <u>Provide health information</u> in culturally appropriate and health-literacy-appropriate levels, and in alternative formats, such as in languages other than English, to improve access to health information
- Conduct, fund, and apply research on the role of other risk factors and their impact on health, as appropriate, to improve health outcomes, including access, quality, and safety

Note: Additional strategies to strengthen the healthcare workforce are in Strategic Objective 1.4.

The two primary systems for tracking progress toward safe, high-quality healthcare are the <u>National Healthcare Quality and Disparities Report</u>, which directly tracks measures of healthcare quality, and <u>Healthy People</u>, which tracks measures of health. Both reports noted significant variation in the proportion of healthcare quality measures that were improving in relation to sex, race/ethnicity, socioeconomic status, disability status, and geographic location. The Department will continue to work to collect, analyze, and apply data to improve access to safe, high-quality healthcare through the following strategies:

- Improve quality in healthcare delivery by helping healthcare organizations apply evidence for continuous policy, process, and outcomes improvement, such as through <u>Medicare's</u> <u>Quality Payment Program</u>
- Expand measurement and reporting of stratified performance data to identify health disparities, show gaps in access to safe, high-quality healthcare options, and enable quality improvement

- Collect additional data that will allow HHS to identify barriers to access, facilitate consumer engagement, and promote evidence-based practices, to improve access to physical and behavioral health services
- <u>Measure and report on healthcare quality and disparities</u> at the national, State, Tribal, local, territorial, and individual provider level to facilitate a more complete understanding of the factors that may influence healthcare quality and lead to improvements in the healthcare system
- Support communication and coordination between public health practitioners and clinicians to improve use of data and increase use of evidence-based prevention strategies to address risk factors, and their underlying causes, for disease and health conditions, and implement rapid responses to address outbreaks of infectious disease

Performance Goals

- Reduce the all-cause hospital readmission rate for Medicare-Medicaid enrollees
- Meet the following patient safety goals:
 - Improve hospital patient safety by reducing preventable patient harms
 - Reduce the standardized infection ratio for central line-associated bloodstream infections in acute care hospitals
 - Reduce standardized infection ratio for hospital-onset Clostridioides difficile infections

Strategic Objective 1.3: Improve Americans' access to healthcare and expand choices of care and service options

The Department defines <u>access to health services</u> as "the timely use of personal health services to achieve the best health outcomes." It involves gaining entry into the healthcare system, usually through payment; gaining access to diverse options for receiving treatment, services, and products, including physical locations and online options; and having a trusted relationship with a healthcare provider. Efforts to improve access to care are not limited to physical healthcare. Improving access to behavioral and oral healthcare, including through innovative solutions that use health information technology, also is critical, especially for populations experiencing <u>disparities in access</u>.

Lack of access to care presents a myriad of problems with both human and economic costs including clinically significant delays in care, increased complications, higher treatment costs, and increased hospitalizations. The Department pursues multiple approaches to address barriers to care. Some populations, including American Indians and Alaska Natives, experience unique challenges when attempting to access care, due to factors such as inadequate supply of healthcare providers and geographic barriers. For Tribal populations, the Department <u>plans and</u> <u>constructs</u> healthcare facilities, youth regional treatment centers for substance abuse, small ambulatory care facilities, and other healthcare resources to eliminate geographic barriers that can prevent people from accessing care. In addition, the Department continues to be committed to implementing <u>Executive Order 13166</u>, <u>Title VI of the Civil Rights Act of 1964</u>, <u>Sections 504</u> and 508 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, the Age <u>Discrimination Act</u> of 1975, <u>Section 1557 of the Patient Protection and Affordable Care Act</u> to support access to care and prevent discriminatory practices, and authorities that protect religious freedom and the exercise of conscience rights.

In 2014, 86.7 percent of people younger than age 65 had <u>health insurance, including government</u> and private coverage, and 76.4 percent of people had a <u>usual primary care provider</u>. However, more than 10 percent of all people were <u>unable to obtain or delayed obtaining</u> necessary medical care, dental care, or prescription medicines. The <u>2016 National Health Interview Survey</u> reports that 4.4 percent of people failed to obtain medical care due to cost, with adult women more likely than adult men to have failed to obtain needed medical care due to cost.

To improve outcomes in this objective, HHS is working to address the high cost of care, lack of availability of services, and lack of culturally competent care. Strategies related to promoting affordability and strengthening the workforce are addressed in Strategic Objectives <u>1.1</u> and <u>1.4</u>. This Strategic Objective focuses on how HHS, rather than instituting government mandates, is giving people more control over how they access care, through increasing the spectrum of consumer options and expanding competition among healthcare providers, including by removing barriers to participation in the healthcare sector for religious, faith-based, and other providers.

Contributing Operating Divisions and Staff Divisions

ACL, CMS, HRSA, IEA, IHS, OCR, OGA, and SAMHSA

Strategies

Executive Order 13765, <u>Minimizing the Economic Burden of the Patient Protection and</u> <u>Affordable Care Act Pending Repeal</u>, and Executive Order 13813, <u>Promoting Healthcare Choice</u> <u>and Competition Across the United States</u>, instituted policies intended to improve consumer choices. In support of these Executive orders, the Department will pursue the following activities:

- To the maximum extent permitted by law, waive, defer, grant exemptions from, or delay implementation of any provision or requirement of the Patient Protection and Affordable Care Act that would impose a fiscal burden on any State or cost, fee, tax, penalty, or regulatory burden on individuals, families, healthcare providers, health insurers, patients, recipients of healthcare services, purchasers of health insurance, or makers of medical devices, products, or medications
- Propose regulations or revise guidance, consistent with law, to expand the availability of short-term, limited-duration insurance, which is exempt from certain Federal insurance mandates and regulations
- Propose regulations or revise guidance, to the extent permitted by law and supported by sound policy, to increase the usability of health reimbursement arrangements, to expand employers' ability to offer this option to their employees

The Department is committed to promoting access to high-quality, affordable healthcare for all Americans, increasing patient choices, and lowering premiums. A key component of current healthcare reform efforts emphasizes price transparency of all healthcare providers, allowing consumers to shop more easily for the best prices for their care. Consumers of healthcare should be able to choose the options that make the most sense for themselves, their families, and their budgets. The Department is working to expand healthcare coverage options through the following strategies:

- Expand plan choice in the <u>Medicare Advantage</u> and <u>Part D Prescription Drug</u> programs by reducing administrative, regulatory, and operational burdens, while protecting the integrity and soundness of these programs
- Promote patient access to new and innovative medical products by conducting timely, patient-centered reviews for coverage
- Make information regarding coverage decisions publicly available where possible
- Improve access of Medicare-Medicaid dual enrollees to fully integrated physical and behavioral care options, such as Medicare-Medicaid Plans, <u>Programs of All-Inclusive Care for the Elderly (PACE)</u>, and dual-eligible <u>Special Needs Plans</u>, designed to address the unique healthcare needs of dual-eligible individuals

- Allow State Medicaid programs to promote employment, to help improve health outcomes among recipients of medical assistance
- Enhance care quality and efficiency by exploring the effectiveness of new models of care and advancing coordinated and integrated health and long-term services and supports for people living with Alzheimer's disease and related dementias

Healthcare reform will focus on improving quality and affordable care for all Americans. The Department is committed to strengthening consumers' informed healthcare decision making through cost-quality comparisons and tools to reduce individual and overall costs in healthcare. The Department is pursuing the following strategies to improve consumer understanding of healthcare options and consumer-directed healthcare decisions:

- Promote information and assistance that is accessible, transparent, and provided in understandable formats to ensure that care and insurance options meet consumers' needs
- Collaborate across Federal agencies and stakeholders to ensure effective and coordinated implementation and enforcement of <u>mental health and addiction parity</u> laws
- Expand the use of innovative payment and service delivery models, including those to encourage patients to use high-value clinical services and optimize medication use based upon their specific healthcare needs
- Provide information through partners and trusted intermediaries, including Tribes and faithbased and other community organizations, on how to access and use benefits and avoid fraud or abuse

Evidence supports policies of increasing consumer engagement and public awareness as solutions to reducing healthcare costs, but much remains to be done. Americans may be willing to price-shop, but their priorities for maintaining a preferred provider and the challenges of coordinating care across many providers must continue to be studied for their impact on healthcare reform. The Department is designing healthcare options that are responsive to consumer demands, while removing barriers to participation for faith-based and other community-based providers, through the following strategies:

- Engage with global partners to learn about effective healthcare models and best practices that could be used domestically for the benefit of the American people
- Seek ideas, strategies, and best practices from the private sector, Tribes, and faith-based and community organizations that can be introduced to Department-administered programs, to meet evolving consumer needs

Despite the Nation's advancements in health and medicine, care is still not equally available and accessible across communities, populations, socioeconomic groups, and ethnicities. Disparities in access to, use of, and quality of care can lead to disparities in health outcomes. For example, American Indians and Alaska Natives born today have a <u>life expectancy</u> that is 4.4 years less

than that of the average U.S. population. The Department is working to reduce disparities in access to healthcare through the following strategies:

- Assess person-centered models of care, including <u>patient-centered medical</u> <u>home</u> recognition and care integration, and support the adoption and evolution of such models that reduce expenditures and improve quality
- Simplify enrollment, eliminate barriers to retention, and address shortages of healthcare providers who accept Medicare or Medicaid and providers who offer specialized care
- Provide consumers more options to shop for coverage in the individual insurance market
- Provide resources and tools to providers and plans to encourage implementation of activities and strategies to help improve healthcare access
- Increase access to preventive services, home and community-based services and social supports, and care management in areas and populations with high chronic disease burdens
- Increase access to preventive services to support women's health, including adaptive mammography equipment in clinics, prenatal/pregnancy care and supports, and lactation accommodations and other breastfeeding supports
- Promote <u>healthy pregnancy</u> by protecting unborn children from harm through <u>proven</u> <u>strategies</u> such as receipt of adequate prenatal care and the identification and treatment of diabetes and hypertension
- Identify individuals and populations at risk for limited healthcare access and assist them to access health services, including prevention, screening, linkages to care, clinical treatment, and relevant support services, including through mobilization of Tribes and faith-based and community organizations
- Remove barriers to inclusion and accessibility for people with disabilities in acute care, post-acute care, and community-based settings

Performance Goals

- Track the number of unique individuals who received direct services through Federal Office of Rural Health Policy Outreach grants, subject to the availability of resources
- Increase telebehavioral health encounters nationally among American Indians and Alaska Natives

Strategic Objective 1.4: Strengthen and expand the healthcare workforce to meet America's diverse needs

Whether people access healthcare in a doctor's office, in a health center, in a pharmacy, at home, or through a mobile device, they depend on a qualified, competent, responsive workforce to deliver high-quality care.

Yet population growth and the aging U.S. population, among other factors, are generating increasing demand for physicians, with <u>demand among the older population - PDF</u> expected to grow substantially. From 2014 to 2025, the U.S. population age 65 and older is expected to grow 41 percent, compared with 8.6 percent for the population as a whole and 5 percent for those younger than age 18. Because the elderly have higher healthcare use per capita, compared with younger populations, the increase in demand for healthcare services for older adults is projected to be much greater than the increase in demand for pediatric healthcare.

The <u>U.S. Health Workforce Chartbook - PDF</u> estimated that more than 14 million individuals— 10 percent of the Nation's workforce—worked for the healthcare sector in 2010. The largest health occupation groups were registered nurses; nursing, psychiatric, and home health aides; personal care aides; physicians; medical assistants and other healthcare support occupations; and licensed practical and licensed vocational nurses. Employment in healthcare occupations is <u>projected to grow</u> 19 percent from 2016 to 2026 much faster than the average for all occupations, because of the aging population and increased access to health insurance and medical assistance.

HHS regularly produces reports projecting growth or deficits in the supply and demand of various occupations in the healthcare workforce. At a national level, by 2025, demand is expected to exceed supply for several critical health professions, including primary care practitioners, geriatricians, dentists, and behavioral health providers, including psychiatrists, mental health and substance abuse social workers, mental health and substance use disorder counselors, and marriage and family therapists. At a State level, the picture is more complex, with some States <u>projected</u> to experience greater deficits in certain healthcare occupations. For example, rural areas experience greater shortages in the oral and behavioral health workforces.

HHS works in <u>close partnership</u> with academic institutions, advisory committees, research centers, and primary care offices. These collaborations help HHS make informed decisions on policy and program planning to strengthen and expand the workforce.

Contributing Operating Divisions and Staff Divisions

CDC, CMS, HRSA, IHS, OCR, and SAMHSA

Strategies

The Department provides <u>detailed information on 35 healthcare occupations and occupational</u> <u>groupings - PDF</u>, describing variations in age, demographics, work settings, and geographic distribution of the healthcare workforce. The Department will collect, analyze, and apply data to understand opportunities to strengthen the healthcare workforce through the following strategies:

- Conduct monitoring, <u>occupational forecasting</u>, data collection and analysis, and general research on the healthcare workforce to identify the characteristics, gaps, needs, and trends, and determine where to target resources to strengthen the workforce
- <u>Collect data PDF</u> on ambulatory care services in hospital emergency and outpatient departments and ambulatory surgery locations, to estimate the number of physicians needed to provide care

Training, fellowships, and other opportunities not only strengthen the healthcare workforce, help them learn new skills, and advance their careers, but also result in better care. The Department is supporting professional development of the workforce through the following strategies:

- Increase awareness and promote use of <u>clinical decision support</u> and patient-provider communication tools, and share evidence-based practices and training opportunities to provide safety and scientific knowledge to the workforce
- Expand and transform the healthcare workforce through the training and engagement of emerging health occupations, such as community health workers and <u>promotores de salud</u>, and community partners to enhance the provision of culturally, linguistically, and disability-appropriate services, and increase workforce diversity
- Transform clinical training environments to develop a healthcare workforce that maximizes patient, family, and caregiver engagement and improves health outcomes for older adults by <u>integrating geriatrics and primary care</u>
- Increase access to quality trainings for <u>public health workers</u> that address <u>cross-</u> <u>cuttingcompetencies</u>

Throughout the United States, some geographic areas, populations, and facilities have too few primary care, dental, and mental health providers and services, and are classified as <u>Health</u> <u>Professional Shortage Areas</u>. The Department is working to reduce provider shortages in underserved and rural communities through the following strategies:

• Support the training, recruitment, placement, and retention of <u>primary care providers</u> and behavioral health providers in underserved and rural communities through <u>scholarships</u>, student <u>loan repayment</u>, local recruitment, <u>externships</u>, and other incentives

- Incentivize healthcare providers to work in <u>underserved and rural areas</u>, including Tribal communities
- Assist primary care practices in <u>integrating services</u> for mental disorders, including substance use disorders, to expand access in underserved and rural communities
- Improve access to behavioral and oral health services in underserved and rural communities by supporting the recruitment, placement, and retention of <u>behavioral health</u>, <u>dental health</u>, and <u>primary care providers</u> to address workforce shortages, reduce disparities, and ensure an equitable workforce distribution
- Use <u>telehealth</u> and <u>technology solutions</u> to increase access to and improve quality of care in rural and underserved areas, <u>including for American Indians and Alaska Natives</u>

Executive Order 13798, <u>Promoting Free Speech and Religious Liberty</u>, instituted a policy that protects the freedom of Americans and their organizations to exercise religion and participate fully in civic life without undue interference by the Federal Government. In addition, there are long-standing laws, applicable to HHS and its programs, which protect the religious liberty and conscience rights of healthcare providers and others. In support of religious freedom, and to ensure removal of barriers to participation in healthcare for healthcare providers with religious beliefs or moral convictions, the Department will pursue the following activities:

- Vigorously enforce laws, regulations, and other authorities protecting religious freedom and conscience in HHS-funded, HHS-regulated, HHS-conducted, and/or HHS-administered programs or activities, and engage in related outreach
- Identify and remove barriers to, or burdens imposed on, the exercise of religious beliefs and/or moral convictions by persons or organizations partnering with or served by HHS, and affirmatively accommodate such beliefs and convictions, to ensure full and active engagement of persons of faith or moral conviction and of faith-based organizations in the work of HHS
- Promote equal and nondiscriminatory participation by persons of faith or moral conviction and by faith-based organizations in HHS-funded, HHS-regulated, HHS-conducted, and/or HHS-administered programs or activities, including through outreach, education, and capacity building

Performance Goals

• Support field strength (participants in service) of the National Health Service Corps

STRATEGIC GOAL 2: PROTECT THE HEALTH OF AMERICANS WHERE THEY LIVE, LEARN, WORK, AND PLAY

Healthy living involves more than avoiding risky behavior and disease; health and wellness improve with healthful eating, regular physical activity, preventive care, and positive relationships. Yet in 2015, 30 percent of adults did not engage in any <u>leisure-time physical</u> activity, and from 2011 to 2014 only 28.9 percent of adults had a <u>healthy weight</u>. The Department invests in health promotion and wellness activities, including health literacy, to help Americans take control over their health. Beyond ensuring Americans have the resources they need to make healthier living choices, health promotion efforts also involve focusing on <u>environmental health</u> and reducing the burden caused by disease and other conditions.

Nine of the 10 leading causes of death in 2015 were caused by communicable and chronic disease—heart disease, cancer, chronic lower respiratory diseases, stroke, Alzheimer's disease, diabetes, influenza and pneumonia, kidney disease, and suicide. Together, these causes of death accounted for an estimated 74 percent of the <u>2.6 million deaths</u> recorded in 2015. In some cases, Americans may have multiple chronic conditions at the same time, creating functional limitations and increasing the risk of mortality. Approximately one in four Americans has <u>multiple chronic conditions</u>.

In addition to chronic conditions, the Department is working to prevent, treat, and control communicable diseases that pose a threat to the health of Americans. Although rates of new infections of <u>HIV</u> have declined for the last decade, nearly 40,000 people were <u>diagnosed with HIV</u> in 2015. New <u>infections</u> of hepatitis A, as well as acute hepatitis B and hepatitis C and chronic hepatitis B, increased in 2015. Most recently, the Nation has witnessed the emergence and outbreak of communicable diseases including severe acute respiratory syndrome (SARS), pandemic influenza A (H1N1), Ebola, and Zika virus.

Millions of adolescents and adults across the Nation are affected by mental and substance use disorders. In 2016, an estimated 44.7 million adults, or 18.3 percent of all adults in the United States aged 18 or older, had a mental illness. Of those 44.7 million adults, an estimated 10.4 million were diagnosed with <u>a serious mental illness</u>. In 2016, approximately 20.1 million people in the United States aged 12 or older had a <u>substance use disorder</u> related to alcohol or illicit drug usage. Of 176.6 million alcohol users, an estimated 17 million have an <u>alcohol use disorder</u>, and excessive alcohol use is responsible for 88,000 deaths each year. The <u>Surgeon General's Report on Alcohol</u>, <u>Drugs</u>, and <u>Health</u> highlights the important health and social problems associated with alcohol and drug misuse in the United States. The most common substance use disorder among illicit drug users involved marijuana and prescription pain relief medication. The issue of co-occurring mental illness and substance use disorders is also a public health concern. In 2016, an estimated <u>7.9 million</u> adults aged 18 or older had co-occurring mental and substance use disorders.

In 2017, large parts of the United States saw public health emergencies caused by natural disasters, including Hurricanes Harvey, Irma, Maria, and Nate, affecting several southeastern States and territories, and wildfires in California. In addition to natural disasters, the Nation also

saw adverse health effects of recent outbreaks of Ebola and Zika virus, calling for raised awareness and actions from both domestic and international partners. Preparing for and addressing the immediate and persisting health impacts that stem from natural disasters, naturally occurring diseases and illnesses, and chemical, biological, radiological, or nuclear agents is critical to securing and maintaining a healthy population.

The Department works every day to improve public health. This work is achieved through strategic partnerships with State, Tribal, local, territorial, and nongovernmental organizations within the United States. Partnerships, including with Tribes and faith-based and community organizations, are critical to promoting healthy living and addressing factors that influence the health of Americans.

In addition, the Department actively provides leadership and expertise in global health diplomacy to contribute to a safer, healthier world. Through relationships with other Federal agencies and departments, multilateral organizations, foreign governments, ministries of health, civil society groups, and the private sector, the Department creates and maintains the pathways to apply expertise globally, learn from overseas counterparts, and advance policies that protect and promote health within our borders and worldwide.

Within HHS, the following divisions are working to achieve this goal: Administration for Children and Families (ACF), Administration for Community Living (ACL), Agency for Healthcare Research and Quality (AHRQ), Agency for Toxic Substances and Disease Registry (ATSDR), Centers for Disease Control and Prevention (CDC), Centers for Medicare & Medicaid Services (CMS), Food and Drug Administration (FDA), Health Resources and Services Administration (HRSA), Indian Health Service (IHS), National Institutes of Health (NIH), Office for Civil Rights (OCR), Office of the Assistant Secretary for Administration (ASA), Office of the Assistant Secretary for Health (OASH), Office of the Assistant Secretary for Preparedness and Response (ASPR), Office of the Assistant Secretary for Public Affairs (ASPA), Office of Global Affairs (OGA), Office of Intergovernmental and External Affairs (IEA), Office of Security and Strategic Information (OSSI), and Substance Abuse and Mental Health Services Administration (SAMHSA).

Strategic Objective 2.1: Empower people to make informed choices for healthier living

Health promotion and wellness activities involve providing information and education to motivate individuals, families, and communities to adopt healthy behaviors, which ultimately can improve overall public health. However, the lack of access to and understanding of health information can lead people to make uninformed decisions and engage in risky behavior.

Inadequate health literacy can lead Americans to make uninformed health choices and engage in behavior that can put their health at risk, such as smoking tobacco. More than 16 million people have at least <u>one disease caused by smoking</u>. The total economic cost of smoking is more than \$300 billion per year, including \$170 billion in direct medical care for adults and more than \$156 billion in lost productivity.

Poor nutrition is another health outcome that affects the lives of Americans due to inadequate health education and lack of exposure to nutrition information. The typical American diet exceeds the recommended levels of or limits on calories from solid fats and added sugars, refined grains, sodium, and saturated fat. Additionally, <u>the typical American</u> intake of vegetables, fruits, whole grains, dairy products, and oils is less than is recommended.

In the United States, an estimated 80 percent of people do not meet <u>national physical activity</u> <u>recommendations</u> for aerobic exercise and muscle strengthening. Estimates show that about 45 percent of adults in the United States do not engage in sufficient physical activity to achieve health benefits. The level of <u>inadequate physical activity</u> - PDF amounts to an estimated \$117 billion in healthcare costs to Americans. Physical inactivity and the resulting health impacts are often due to a lack of health literacy and to health information that is not easy to use or understand.

By supporting healthy choices and expanding access to healthier living supports, HHS is helping to curb threats to public health, promote a healthier population, and avoid the economic and human costs of poor health. HHS is working with partners, including faith-based and community organizations, to help people and communities take steps to identify and address priority health issues. The Department supports a series of programs and initiatives aimed at improving nutrition; increasing physical activity; reducing environmental hazards; increasing access to preventive services; and reducing the use of tobacco, alcohol, and illicit drugs and prescription drug abuse. These outcomes are achieved through culturally competent and linguistically appropriate health education, services, and supports made possible through strategic partnerships.

Contributing Operating Divisions and Staff Divisions

ACF, ATSDR, CDC, FDA, HRSA, IHS, NIH, OASH, OCR, OGA, and SAMHSA

Strategies

<u>Smoking</u> is the leading cause of preventable death, responsible for more than 480,000 deaths per year in the United States. If smoking continues at the current rate among U.S. youth, 5.6 million of today's Americans younger than 18 years of age are expected to die from a smoking-related illness. The Department is working to reduce tobacco-related death and disease through the following strategies:

- Reduce the negative health effects of tobacco use by implementing a comprehensive approach that includes regulating the manufacturing, marketing, and distribution of tobacco products; assisting States to implement proven tobacco-control programs; discouraging people from starting to use tobacco products; and educating parents on the potential harm to their children if the parents smoke
- Reduce the harm caused by tobacco use by educating tobacco users on the availability of <u>smoking cessation programs</u>
- <u>Reduce underage access</u> to tobacco products by ensuring <u>tobacco is not sold</u> to individuals younger than age 18

More than one-third of adults in the United States were <u>obese</u> in 2011–2014. For youth aged 2 to 19 years, <u>the prevalence of obesity is about 17 percent</u>, <u>affecting 12.7 million children and</u> <u>adolescents</u>. In that same period, all States had more than 20 percent of adults with obesity. Around \$117 billion in <u>healthcare costs - PDF</u> are associated with inadequate physical activity. The Department is promoting better nutrition and physical activity through the following strategies:

- Enhance understanding of how consumers notice, understand, and act on food labeling and nutrition information, including nutrition facts labels, nutrition product claims, and dietary recommendations
- Decrease prevalence of obesity by encouraging breastfeeding, promoting healthful food and beverage consumption, and promoting increased physical activity
- Reduce chronic diseases and related health behaviors that impact older adults and people with disabilities by adapting and implementing evidence-based programs and policies, such as implementing nutrition standards and guidelines
- Increase access to <u>health education services</u>, including opportunities to learn about the importance of healthful eating and physical activity
- Form public-private partnerships to promote health in <u>academic</u> and religious institutions, such as wellness workshops, physical activity, health literacy, and nutritional excellence programs

• Increase collaboration with stakeholders, including industry, consumer, and public health groups, to enhance consumer nutrition education directed toward age and demographic groups with specific needs

In 2013–2014, more than 14 percent of children had untreated dental decay in their primary or permanent teeth, and only 43.1 percent of children, adolescents, and adults had used the oral healthcare system in the last year. The Department is working to promote <u>oral health</u> through the following strategies:

- Strengthen oral health literacy, and integrate oral health awareness into <u>clinics</u>, <u>early</u> <u>childhood settings</u>, and social service agencies
- Promote <u>dental screenings</u> and <u>preventive oral care</u> for children and adolescents

Health services should be delivered in ways that are easy to understand and that improve health, longevity, and quality of life. The Department is working to ensure people have the information they need to make healthier living choices through the following strategies:

- Communicate culturally competent and <u>linguistically appropriate</u> messages in <u>plain</u> <u>language</u>, as well as in <u>accessible formats for persons with disabilities</u>, using approaches that leverage new and emerging communications and appropriate messengers, including faith-based and other community organizations
- Support programs and build partnerships with organizations (including faith-based and community organizations) that build the <u>health literacy</u> skills of disadvantaged and at-risk populations, and promote proven methods of checking understanding to ensure individuals understand health and prevention information, recommendations, and risk and benefit tradeoffs
- Encourage providers to communicate effectively with patients, families, and caregivers by offering tools and resources to assist discussions centered around care and healthier living
- Support development of tools that provide information about potential <u>environmental</u> hazards in the natural and built environments
- Develop <u>tools</u> and resources that improve health department and healthcare setting efficiency in providing education, training, and quality assurance for screening, treatment, services, and prevention messages
- Partner with private organizations, including Tribes and faith-based and community organizations, to develop and implement programs to help people make <u>healthy life choices</u>
- Increase awareness of the importance of healthy lifestyle behaviors among patients and caregivers to reduce risk of chronic conditions and other illnesses

Good health starts in homes, neighborhoods, and communities. People's health can be affected in part by access to social and economic opportunities and supports, the quality of schools and safety of workplaces, and the nature of interpersonal relationships. Other risk factors, such as access to health services, literacy levels, and socioeconomic conditions, can play important roles in overall health and wellness. The Department is working to promote healthcare access and reduce health disparities through the following strategies:

- Develop and disseminate the use of culturally and linguistically competent, accessible approaches to improve quality of life and reduce disparities
- Build partnerships across Federal, State, Tribal, local, and territorial governments, as well as nongovernmental entities including faith-based and community organizations, to engage with disadvantaged or at-risk populations in healthcare decision making and healthy lifestyles

Performance Goals

- Reduce the annual adult per capita combustible tobacco consumption in the United States
- Reduce the age-adjusted proportion of adults (age 20 years and older) who are obese

Strategic Objective 2.2: Prevent, treat, and control communicable diseases and chronic conditions

Communicable diseases and chronic conditions affect the lives of millions of Americans every day. The emergence and spread of infectious diseases—such as HIV/AIDS, hepatitis, tuberculosis, measles, and human papillomavirus (HPV)—can quickly threaten the stability of public health for communities and place whole populations at risk. The rise of globalization and ease of travel also has made it easier for domestic and international outbreaks—such as recent outbreaks of measles, pandemic influenza A (H1N1), Ebola, Zika, and chikungunya—to create public health challenges. Moreover, the prevalence of chronic conditions—such as diabetes, heart disease, stroke, and cancer—in the United States continues to contribute to the daily struggles of Americans. The occurrence of multiple chronic conditions also exacerbates the adverse health impacts and healthcare costs associated with chronic conditions and their associated health risks.

In 2014, an estimated 17.8 million visits to physician offices were due to <u>infectious and parasitic</u> <u>diseases</u>. More than <u>1.1 million people - PDF</u> in the United States are infected with HIV; estimated lifetime treatment costs are more than \$400,000 per person living with HIV. Viral hepatitis affects approximately <u>4.4 million people - PDF</u>, and curing hepatitis C costs between \$45,000 and \$94,000 per person. Up to <u>13 million Americans - PDF</u> are infected with the bacteria that cause tuberculosis; multiple drug resistant tuberculosis can cost between \$134,000 and \$430,000 to treat.

Many Americans are negatively affected by the high costs associated with chronic conditions. <u>Ninety percent</u> of the nation's \$3.3 trillion in annual health care expenditures are for people with chronic and mental health conditions. In the 40 years leading up to 2015, <u>heart disease and cancer</u> remained the top two leading causes of death. In 2015, heart disease and cancer alone accounted for an estimated 45 percent of the 2.7 million deaths recorded that year. However, in recent years, <u>data have shown a decrease - PDF</u> in death rates from cardiovascular disease, stroke, and cancer, which can be attributed to increased efforts in prevention, early detection, treatment, and care.

The prevention and management of communicable diseases require strategic coordination, collaboration, and mobilization of resources among governmental and nongovernmental partners within and outside of the United States. Similarly, managing chronic conditions requires support for affected individuals, families, caregivers, health professionals, and service providers. HHS programs and initiatives focus on promoting partnerships, educating the public, improving vaccine development and uptake, advancing early detection and prevention methods, and enhancing surveillance and response capacity.

Contributing Operating Divisions and Staff Divisions

ACL, ASPA, ASPR, CDC, CMS, FDA, HRSA, IHS, NIH, OASH, OGA, and SAMHSA

<u>Antibiotic-resistant infections</u> are a major health and economic burden for the United States. Patients who survive antibiotic-resistant <u>infections</u> usually require significantly longer hospitalizations, more medical visits, and a lengthier recuperation and experience a higher incidence of long-term disability. The Department has made <u>significant progress</u> in combating antibiotic-resistant infections and in conducting research and development to discover new antibiotics, diagnostics, therapeutics, and vaccines. The Department is working to reduce the emergence and spread of antibiotic-resistant infections through the following strategies:

- Increase <u>surveillance</u>, early-detection methods (e.g., the use of point-of-care diagnostics), and response capacity, in order to reduce the domestic and international emergence and spread of <u>antibiotic-resistant infections</u>
- Expand the study of low-cost, readily available treatment regimens that limit the emergence of drug resistance, by identifying new antibiotic classes and agents, screening existing products, and combining new or existing compounds to treat drug-resistant infections
- Advance preclinical and clinical research to accelerate the translation of promising antibiotic products into safe and effective treatment regimens
- <u>Foster improvements in the appropriate use of antibiotics</u> by improving prescribing practices and promoting antibiotic stewardship across all healthcare settings and in all <u>veterinary settings</u>
- Expand the development and clinical testing of potential vaccines to prevent infections by drug-resistant pathogens
- <u>Improve international collaboration and capacities PDF</u> for antibiotic resistance prevention, surveillance, and control and for antibiotic research and development

Infectious diseases are a major health and economic burden for the United States. Each year in the United States, on average, 5 to 20 percent of the U.S. population gets the <u>flu</u>, a vaccine-preventable illness. Tens of thousands are hospitalized, and thousands die from flu-related illness, resulting in an estimated \$10.4 billion a year in direct medical expenses and an additional \$16.3 billion in lost earnings annually. The Department will work to prevent and control infectious diseases such as influenza through the following strategies:

- Increase research on vaccine discovery and implementation science on best approaches for enhancing dissemination and uptake of effective vaccines domestically and internationally
- Mobilize resources to support the development, testing, and preparation of vaccines
- <u>Implement</u> effective and coordinated public health and healthcare interventions to detect, prevent, and control environmental, person-to-person, and zoonotic transmission of infectious diseases in the United States and globally

• Respond to outbreaks of infectious diseases to identify their cause, limit their spread, and identify strategies for preventing future outbreaks

While the American food supply is among the safest in the world, an estimated 48 million cases of <u>foodborne illness</u> occur annually—the equivalent of sickening 1 in 6 Americans each year. Each year, these illnesses result in an estimated 128,000 hospitalizations and 3,000 deaths. The Department will work to support food safety through the following strategies:

- Work with stakeholders, including food facilities, manufacturers, farmers, and distributors, to implement science-based <u>preventive control standards</u> for domestic and imported foods
- Increase consumer-based communications, outreach, and research on measures to improve consumer behaviors and practices related to food safety
- Increase research, data analysis, and systematic evaluation to improve the effectiveness of <u>food safety education</u> in changing <u>unsafe consumer food handling behaviors</u>

The percentage of adults aged 18 years and over with hypertension who have their <u>blood</u> <u>pressure under control</u> increased by 42 percent between 2001–2004 and 2011–2014, from 35.5 percent to 50.3 percent. In 2010, 58.2 percent of adults aged 50 to 75 years received a <u>colorectal</u> <u>cancer screening</u>, 72.6 percent of women aged 50 to 74 years reported recent mammography, and 80.7 percent of women aged 21 to 65 years reported a recent Pap test (age-adjusted). The Department will work to support early detection and treatment of communicable and chronic diseases through the following strategies:

- Support access to preventive services including immunizations and screenings, especially for high-risk, high-need populations
- Support <u>screening</u> for tobacco use, alcohol misuse, substance use disorder, and obesity, and offer counseling and treatment as appropriate
- Improve early detection and treatment of people with multiple chronic conditions, such as heart disease, asthma, diabetes, kidney disease, cancer, chronic pain, and dementia
- Improve HIV viral suppression and prevention by increasing <u>engagement and re-</u> <u>engagement activities</u> for screening, <u>treatment</u>, care, and <u>support services</u>
- Implement HIV programs, including prevention, testing, treatment, and retention interventions, provide technical assistance, and conduct research in support of the President's Emergency Plan for AIDS Relief
- Increase access to hepatitis B and <u>hepatitis C screening, treatment, and care</u> for people with hepatitis B or hepatitis C infection

- Support the development of new, safe, and effective medical products, including drugs, vaccines, and devices, for the treatment of communicable diseases and chronic conditions
- <u>Prevent the spread of infectious diseases</u> among persons who inject opioids or other drugs by supporting implementation of effective, comprehensive community- and school-based interventions that reduce the infectious risks associated with injection of opioids and other drugs, increase screening and treatment for bloodborne pathogens, and provide access to effective treatment of substance use disorders
- Improve triage and screening for the prevention of communicable diseases and the future development of chronic diseases in children through annual health screenings and age-appropriate immunizations for children

Note: Additional strategies on mental health and substance use are in Strategic Objective 2.3.

<u>Chronic disease management interventions - PDF</u>, which involve coordinated healthcare services and communications for populations with conditions in which patient self-care is important, have been clearly shown to improve health outcomes in patients with such diverse conditions as diabetes, heart failure, chronic obstructive pulmonary disease, hypertension, anxiety, and depression. The 2017 <u>National Diabetes Statistics Report - PDF</u> estimated that 9.4 percent of the U.S. population had diabetes, with the highest rates among American Indians and Alaska Natives. The Department will work to support chronic disease management interventions through the following strategies:

- Improve <u>planning</u>, <u>coordination</u>, <u>and management of services</u> to better meet the needs of people with complex healthcare needs and chronic health conditions
- Expand participation by older adults and adults with disabilities in self-management education interventions

Performance Goals

- Increase the percentage of Ryan White HIV/AIDS Program clients receiving HIV medical care and at least one viral load test who are virally suppressed
- Increase the percentage of adults aged 18 years and older who are vaccinated annually against seasonal influenza
- Continue advanced research and development initiatives for more effective influenza vaccines and the development of safe, broad-spectrum therapeutics for use in seriously ill and/or hospitalized patients, including pediatric patients

Strategic Objective 2.3: Reduce the impact of mental and substance use disorders through prevention, early intervention, treatment, and recovery support

Mental illness and substance abuse create health risks and place a heavy burden on affected individuals and their families. Substance use disorders arise from the recurring use of alcohol and/or drugs, which lead to clinically and functionally significant impairments. Mental disorders are health conditions that involve significant changes in thinking, emotion, and/or behavior and lead to distress and/or problems functioning in social, work, or family activities. Mental and substance use disorders are illnesses that impact people's ability to go about their daily lives in family, social, and professional settings and place individuals at risk of additional health problems.

Mental illness and substance abuse have a known impact on public health. In 2016, an estimated 20.1 million people - PDF aged 12 or older in the United States had a substance use disorder related to alcohol consumption or illicit drug use in the previous year. In 2016, approximately 2 million people had an <u>opioid use disorder - PDF</u>. The number of deaths related to overdose involving <u>opioids</u>, including prescription opioids and heroin, has quadrupled since 1999. The recent increase in deaths appears to be largely a result of use of heroin and synthetic opioids. Between 2015 and 2016 alone, the death rate from synthetic opioids other than methadone, including fentanyl, increased by 100 percent, and the death rate from heroin increased by 19.5 percent.

In 2016, one in five American adults <u>experienced a mental illness - PDF</u>, and 13 percent of adolescents <u>met criteria for depression - PDF</u>. The number of <u>emergency department visits</u> that involved mental disorders as the primary diagnosis was approximately 5 million in 2014. In 2014, suicide ranked as the 10th leading cause of death. In the same year, <u>suicide</u> deaths reached 13.4 deaths per 100,000 people. Records show that rates of suicide have steadily increased since the baseline year of 2007 in the United States.

HHS works closely with Federal, State, Tribal, local, territorial, and community partners and stakeholders, including faith-based and community organizations, to help identify and address mental health problems and substance use disorders. The Department invests in programs and interventions focused on prevention, screening, and early detection of serious mental illness and substance abuse, including those related to opioid abuse.

Other HHS activities involve improving the provision of comprehensive, coordinated, and evidence-based community recovery supports for affected individuals and improving access to treatment options. Continuing to advance research and work in these areas raises awareness and facilitates the adoption of best practices across communities to minimize the negative health impacts caused by mental and substance use disorders.

Contributing Operating Divisions and Staff Divisions

ACF, ACL, AHRQ, CDC, CMS, FDA, HRSA, IEA, IHS, OCR, and SAMHSA

The National Survey on Drug Use and Health <u>recently found</u> that, while serious mental illness among age groups 26 and older has remained constant for nearly a decade, the prevalence of serious mental illness, depression, and suicidal thoughts has increased among young adults in recent years. In 2016, approximately 20.1 million people aged 12 or older had a <u>substance use</u> <u>disorder</u>. The Department is expanding prevention, screening, and early identification of serious mental illness and substance abuse through the following strategies:

- Apply a <u>public health approach</u> for preventing opioid misuse, opioid addiction, and opioid overdose deaths including through <u>promoting safer prescribing practices</u>
- Educate and empower individuals and communities, including partnerships with Tribes and faith-based and community organizations, to recognize the signs of serious mental illness and substance abuse to encourage screening and identification of such problems
- Ensure early screening of children and youth to identify those with or at risk for serious emotional disturbance or substance use disorders, and expand access to integrated mental health or substance use disorder services
- Increase screening for depression, suicide risk, substance use, dementia, and other behavioral disorders in schools, emergency departments, and inpatient and outpatient settings
- Encourage healthcare providers' use of screening and brief intervention approaches for alcohol, opioid, and other substance use disorders to reduce consequences of risky behavior, including effects of harmful substance use in pregnancy
- Support adoption of other evidence-based prevention strategies, including environmental strategies and community capacity/mobilization strategies, to prevent substance misuse and substance use disorders
- Prevent <u>suicides</u> and suicide attempts by expanding evidence-based approaches for adults and youth and helping State, Tribal, local, and territorial governments and communities take advantage of the <u>best available evidence to prevent suicide PDF</u>

In 2016, an estimated 21 million people aged 12 or older needed <u>substance use treatment</u>, but only 3.8 million people received treatment. Of the 3.1 million adolescents with <u>a major</u> <u>depressive episode</u> in the same year, only 1.2 million received treatment. Similarly, of the 16.2 million adults with a major depressive episode in the same year, only 10.6 million received treatment. The Department seeks to improve access to high-quality care and treatment for mental and substance use disorders through the following strategies:

• Support the integration of the full continuum of behavioral healthcare and primary care and medical systems, and increase the capacity of the specialty behavioral health systems to ensure that the physical health needs of the people they serve are met

- Provide <u>integrated child and family supports</u> to parents/guardians with addiction to support healthy child development and preservation of families
- Improve adoption and continued refinement of selected evidence-based practices for serious mental illness, medication-assisted treatment for alcohol and opioid addiction, and effective use of psychotherapy and antidepressant medication for depression
- Improve access to medications that reverse opioid <u>overdose</u> and prevent death
- Support efforts to increase engagement in treatment following an opioid overdose
- Strengthen clinician training on <u>evidence-based practices</u> related to pain management and the <u>prevention</u> and treatment of opioid use disorders to inform clinical management decisions for patients, including effects of opioid use in pregnancy

Note: Additional behavioral healthcare quality strategies are in Strategic Objective 1.2.

Recovery support is provided through treatment, services, and community-based programs by behavioral healthcare providers, peer providers, family members, friends and social networks, Tribes, and people with experience in recovery. The Department will employ the following strategies to improve access to <u>recovery support</u> for people with serious mental illness and substance use disorders:

- Work with States to encourage the training, certification, and supervision of <u>peer</u> <u>providers</u> and <u>paraprofessionals</u>
- Encourage broad adoption of evidence-based recovery housing, supported housing, supported employment, and supported education programs
- Engage individuals and communities, including faith-based and community organizations, to provide social and community recovery support
- Improve access to a full evidence-based continuum of care for people with mental illness and addiction, including medication-assisted treatment, follow-up from inpatient and residential care, and recovery supports, with a focus on opioid use disorder and serious mental illness

The Department values its strong partnerships with external groups to respond to stakeholder needs, and supports investments to build the expertise, infrastructure, and other capacity to reduce the impact of mental health and substance use disorders. The Department is working to build capacity and promote collaboration among States, Tribes, territories, and communities through the following strategies:

• Improve community capacity to provide comprehensive, coordinated, and evidence-based supports for people with serious mental illness, addiction, and serious emotional

disturbances with a focus on reducing crises and use of emergency services, hospitalization, and involvement with the criminal justice system

- Improve <u>collaboration</u> with Federal and non-Federal stakeholders to promote the health and independence of older adults with or at risk for behavioral health conditions including mental illness, substance use disorders, and suicide
- Foster and strengthen relationships with national, regional, and local coalitions, including with Tribes and faith-based and community partners, to encourage their full and robust involvement in addressing the opioid crisis by providing accurate, up-to-date information regarding health and human service activities, resources, and subject matter expertise

As described in <u>Strategic Goal 1: Reform, Strengthen, and Modernize the Nation's Healthcare</u> <u>System</u>, accessing high-quality behavioral healthcare providers in rural or underserved communities can be challenging. The Department is working to leverage technology and innovative solutions, such as telehealth, electronic health records, and health information exchange, to improve access to and quality of behavioral healthcare through the following strategies:

- Develop, test, and disseminate <u>clinical decision supports</u> through electronic health records to use evidence-based mental health and substance use disorder guidelines for preventing and treating mental health and substance use disorders and increase access to appropriate behavioral care services
- Increase the use of health information exchange to improve the coordination and integration of care, including by increasing the number of behavioral health providers using interoperable electronic health records and by addressing confidentiality policy barriers to health information exchange
- Address the barriers, real or perceived, under the <u>Health Insurance Portability and</u> <u>Accountability Act</u> of 1996 (Pub. L. 104–191) and <u>42 CFR Part 2</u>, *Confidentiality of Alcohol and Drug Abuse Patient Records*, to the appropriate sharing of mental health and substance use disorder information
- Improve access to mental health and substance abuse care for rural and underserved populations, including American Indians and Alaska Natives, by supporting care through <u>telehealth services</u> through regulation and policy clarification and refinement; collaboration with States; and technical assistance, training, and funding opportunities

Performance Goals

- Meet the following opioid-related goals:
 - Increase the number of substance abuse treatment admissions with Medication-Assisted Treatment planned as part of Opioid Use Disorder Treatment
 - Increase the availability of electronic clinical decision support tools related to safe pain management and opioid prescribing
 - By 2020, evaluate the efficacy of new or refined interventions to treat opioid use disorders
- Meet the following goals related to mental illness:
 - Increase the percentage of youth ages 12 to 17 who experienced major depressive episodes in the past year receiving mental health services
 - Increase the percentage of adults with serious mental illness receiving mental health services

Strategic Objective 2.4: Prepare for and respond to public health emergencies

The health of Americans during public health emergencies and other incidents depends on the effectiveness of preparedness, mitigation, response and recovery efforts. Threats in an increasingly interconnected, complex, and dangerous world include naturally emerging infectious diseases; frequent and severe weather events; state and nonstate actors that have access to chemical, biological, radiological, or nuclear agents; nonstate actors who commit acts of mass violence; and cyber attacks on healthcare systems and infrastructure.

HHS provides strong leadership by setting the strategic direction to improve preparedness, mitigation, response, and recovery capabilities, such as through the <u>National Health Security</u> <u>Strategy</u> and the <u>National Biodefense Strategy</u>. HHS, as the coordinator of Emergency Support Function 8 (ESF 8) and the Health and Social Services Recovery Support Function, works with other departments to establish, evaluate, and conduct preparedness, mitigation, response, and recovery activities to support efforts by States, Tribes, localities, and territories. HHS leads the Federal public health and medical response to emergencies and incidents conducted in accordance with the ESF 8 (Public Health and Medical Services) annex of the National Response Framework and the Health and Social Services annex of the National Disaster Recovery Framework.

HHS is working to ensure that a national disaster healthcare system is integrated within the healthcare delivery infrastructure—hospitals, emergency medical services, emergency management, and public health agencies—to provide safe and effective healthcare during emergencies and other disasters. In addition, <u>National Disaster Medical System teams</u> and the <u>U.S. Public Health Service Commissioned Corps</u> complement non-Federal efforts during incidents. HHS supports local <u>Medical Reserve Corps</u> units, which supplement the capacity of States, Tribes, localities, and territories. Through direct services and partnerships with State, Tribal, local, and territorial governments, with faith-based and community organizations, and with the private sector, HHS works to strengthen the Nation's emergency preparedness, response, and recovery efforts.

HHS is engaged in the research, development, and procurement of <u>medical countermeasures</u>, including vaccines, drugs, therapies, and diagnostic tools. HHS collaborates with others to ensure that the appropriate number of safe and effective medical countermeasures are developed and stockpiled and can be easily distributed and used to save lives during an incident.

HHS invests in building the capacity of other countries to detect, prevent, and respond to incidents—thus providing early warning to or reducing the impact to the United States. The international public health professionals trained by the <u>Global Disease Detection Operations</u> <u>Center</u> monitor 30 to 40 public health events each day, and can deploy within 24 hours of learning about an outbreak.

Contributing Operating Divisions and Staff Divisions

ACF, ACL, ASA, ASPA, ASPR, CDC, CMS, FDA, HRSA, IEA, IHS, NIH, OASH, OCR, OGA, OSSI, SAMHSA

Federal statutes, Presidential directives, and strategies set the Nation's approach to preparing for threats and hazards that pose the greatest risk to the security of the United States. National preparedness is a shared responsibility of the government and nongovernmental sectors, as well as individuals. The Department promotes emergency preparedness and improves response capacity through the following strategies:

- Provide subject expertise and tools to State, Tribal, local, and territorial governments, health systems and facilities, and faith-based and community organizations, to strengthen their capabilities to provide continuous, safe, and effective healthcare, public health, and social services in the aftermath of disasters and through the recovery period, including when such care or services may need to be delivered in alternate settings or by alternate mechanisms
- Develop and implement data-driven approaches that prioritize resources and technical support for underprepared geographical regions and communities to maximize preparedness across the Nation
- Expand the use and availability of public health and healthcare emergency response situational awareness tools, including investments in new systems and technologies that support rapid risk assessment, decision making, resource coordination across many levels, and monitoring of the effectiveness of interventions
- Determine appropriate type and quantities of medical countermeasures, ensure timely access to medical countermeasures during response, and maximize effective utilization of medical countermeasures through clinical guidance and public health communications
- Assess preparedness to plan for the timely access to and capacity to use medical countermeasures during disasters and other public health emergencies, and establish requirements based on estimated response needs, capacity to use, and desired characteristics of medical countermeasures to protect the public

The Secretary, through the National Response Framework, leads and coordinates the Federal public health and medical response and provides supplemental support to States, Tribes, localities, and territories that are responding to incidents. The Department supports timely, coordinated, and effective response and recovery activities through the following strategies:

- Promote effective <u>disaster risk reduction strategies</u> to mitigate the adverse physical and behavioral health impacts of disasters and public health emergencies
- Respond rapidly to limit the impacts of incidents by gathering, analyzing, and disseminating information; coordinating requests for public health and medical services with partners; executing response operations and risk communication plans; and conducting research to inform current and future incident responses

- Ensure that the needs of <u>at-risk populations PDF</u> and those with access and functional needs are met during incidents, through integrated and informed preparedness, response, and recovery activities at the Federal, State, Tribal, local, and territorial levels of government
- Provide tools and guidance to interagency, intergovernmental, Tribal, and faith-based and community organizations to improve the Nation's planning, to ensure timely human services response to incidents

Public health emergencies are not confined by geographic borders; response efforts often must engage various States, Tribal governments, localities, or territories. Response efforts must be undertaken in coordination with critical partners, such as hospitals, schools, houses of worship and faith-based organizations, and individual citizens. The Department is working to improve collaboration, communication, and coordination with partners through the following strategies:

- Provide accurate and timely public health communication and media support to non-Federal stakeholders and leaders, as well as deployed HHS leaders and teams
- Improve decision support at all levels through active collaboration with State, Tribal, local, and territorial partners to share human health, environmental, zoonotic health, and other relevant information to improve situational awareness
- Build resilient healthcare coalitions that integrate efforts of healthcare facilities, emergency medical services, emergency management, and public health agencies
- Jointly develop, exercise, and maintain coordinated risk communication, response, and recovery plans among governments and nongovernmental partners
- Formalize strategic partnerships to better ensure that medical countermeasure products and policies that guide their safe and effective use can be implemented effectively during an incident

The emergency preparedness and response workforce includes, but is not limited to, those engaged through the National Disaster Medical System, the <u>U.S. Public Health Service</u> <u>Commissioned Corps</u>, the <u>Medical Reserve Corps</u>, volunteer health professionals, <u>mental health</u> <u>and human service workers</u>, and nongovernmental organizations (including faith-based and community organizations). The Department is strengthening and protecting the emergency preparedness and response workforce through the following strategies:

- Reduce illness and injury due to <u>hazardous exposures</u> in <u>first responders</u>, emergency managers, and public health, healthcare and human services providers, through health and safety training, education, and <u>medical countermeasures</u>
- Train the HHS workforce, and support the training of other partners, to strengthen the health response to incidents and protect communities from domestic and global threats

- Review the U.S. Public Health Service Commissioned Corps structure and modernize how HHS employs public health professionals and responds to public health emergencies
- Coordinate with human resources to help fill hard-to-fill assignments, bridge critical workforce gaps, and respond to public health and medical emergencies
- Increase capacity of emergency managers; healthcare, public health, and human services providers; and faith-based and community organizations to address needs of at-risk individuals with functional and access needs during incident preparedness, response, mitigation, and recovery
- Develop cultural and linguistic competency to allow public health officials and emergency managers to better meet the needs of diverse populations and improve the quality of services and health outcomes during and after a disaster

HHS is working with other Federal departments, foreign governments, and multilateral organizations to create a world safe and secure from public health threats. The Department is working to advance global health security as a national priority through the following strategies:

- Respond rapidly to limit the impacts of incidents by using and sharing incident information, coordinating communications with international partners, and conducting response operations, risk communication, and research to respond to emerging and re-emerging diseases; chemical, biological, radiological, and nuclear agents; and other threats to health security
- Enhance international preparedness activities at the national, regional, and global levels to identify gaps, build capacity, and track progress to prevent, detect, and respond to health threats, respecting cultural differences and the inherent dignity of persons from conception to natural death
- Promote and support, where appropriate, the development, deployment, and use of medical products to prevent, mitigate, or treat adverse health effects in response to a global public health emergency, as well as the development, understanding, and use of behaviors or actions that people and communities can take to help slow the spread of disease or limit the impact of threat agents in response to a public health emergency
- Collaborate with, and provide leadership to, international programs and initiatives to strengthen global preparedness and response to public health and medical emergencies
- Further develop, exercise, and update plans for responding to global threats that have the potential to impact national health security

Performance Goals

- Maintain the percentage of CDC-funded Public Health Emergency Preparedness state and local public health agencies that can convene, within 60 minutes of notification, a team of trained staff that can make decisions about appropriate response and interaction with partners
- Increase the number of new licensed medical countermeasures across Biomedical Advanced Research and Development Authority (BARDA) programs

STRATEGIC GOAL 3: STRENGTHEN THE ECONOMIC AND SOCIAL WELL-BEING OF AMERICANS ACROSS THE LIFESPAN

Poverty, unemployment, family disruptions, aging, and disability can threaten independence and self-sufficiency and increase Americans' need for safety-net programs. Violence and preventable injuries threaten the security and social stability of the American people. HHS is committed to supporting the social and economic well-being of all Americans, including those individuals and populations who are at high risk of social and economic challenges. A core component of the HHS mission is the dedication to serve all Americans from conception to natural death, including those individuals and families who face or who are at high risk of economic and social well-being challenges.

According to the U.S. Census Bureau, the official poverty rate in 2016 was 12.7 percent, down 0.8 percentage points from 13.5 percent in 2015. Both the percentage of the U.S. population in poverty and the unemployment rate have declined in the last three years. According to the <u>U.S.</u> <u>Department of Labor's Bureau of Labor Statistics</u>, in 2017 the monthly unemployment rate averaged 4.4 percent, down from 4.9 percent in 2016.

However, some Americans still experience challenges. According to the 2016 <u>Annual Homeless</u> <u>Assessment Report - PDF</u>, on a single night in 2016, nearly 550,000 people were experiencing homelessness in the United States. Additionally, in 2011, 4.8 million formerly incarcerated individuals were under community supervision. Many individuals returning to the community after serving time experience challenges due to <u>limitations</u> on their eligibility for access to public housing, employment, and healthcare. Job training and social supports are imperative for ensuring that these individuals are able to reintegrate into their communities.

Both unintentional injuries and those caused by acts of violence are among the top 15 causes of death for Americans. Nearly 200,000 people in the United States die every year from <u>injuries and violence</u> related to preventable events such as drug overdoses, falls, drowning, and self-harm. Even when people do not die from injuries and violence, many experience long-term effects. Survivors often face lifelong mental, physical, and financial problems. In 2014, 26.9 million people were treated in an emergency department for injuries, and 2.5 million people were hospitalized. In 2013, <u>costs</u> associated with fatal injuries totaled \$214 billion, while nonfatal injuries resulted in \$457 billion in costs.

The Department's effort to support all Americans includes empowering families to encourage positive child and youth development. Financial and emotional support can encourage children and youth to continue education and make healthier decisions. In 2010, 71 percent of children younger than 18 were reported to be living with at least one parent who was <u>employed full-time</u>, year round. In 2014, 79.3 percent of adolescents age 12 to 17 surveyed said they had an <u>adult in their lives with whom they can discuss serious problems</u>, up from 78.2 percent in 2013.

Over the past 15 years, there has been significant improvement in the teen birth rate. The teen birth rate declined by 63 percent between 1990 and 2015 and is now at a record low. In 1990, the

teen birth rate was 60 births per 1,000 teenage girls. By 2015, the rate had dropped to 22 <u>births</u> per 1,000 teenage girls.

Some subpopulations are at high risk of poor economic and social outcomes. In 2015, 35 percent of single-parent families had incomes below the poverty line, compared with 8 percent of married couples with children. Over the past decade, the percentage of children in single-parent families has increased from 32 percent to 35 percent, although the percentage has remained stable since 2011. Additionally, the more than 400,000 <u>children who live in foster homes</u> face a complex set of challenges. Older foster youth who age out of foster care are at a higher risk of <u>teen pregnancy</u>, <u>employment instability</u>, and <u>homelessness</u>.

Older Americans and Americans with disabilities also face a number of obstacles. Over the past 10 years, the population 65 and over increased by 30 percent from 36.6 million in 2005 to 47.8 million in 2015, and this age group is projected to more than double to 98 million in 2060. More than 4.2 million older adults lived below the <u>poverty line</u> in 2015. At least 90 percent of older adults receiving help with daily activities receive some form of unpaid care, and about two-thirds receive only unpaid care. Almost 12 percent of working-age adults in the United States have some type of <u>disability</u>. Of these adults, 51 percent had a mobility disability, and 38.3 percent had a cognitive disability. Working-age adults with disabilities are more likely to live in poverty, have less than a high school education, and be unemployed.

Within HHS, the following divisions are working to achieve this goal: Administration for Children and Families (ACF), Administration for Community Living (ACL), Centers for Disease Control and Prevention (CDC), Centers for Medicare & Medicaid Services (CMS), Health Resources and Services Administration (HRSA), Indian Health Service (IHS), Office of the Assistant Secretary for Health (OASH), and Substance Abuse and Mental Health Services Administration (SAMHSA).

Strategic Objective 3.1: Encourage self-sufficiency and personal responsibility, and eliminate barriers to economic opportunity

Strong, economically stable individuals, families, and communities are integral components of a strong America. Many Americans currently experience or are at risk for economic and social instability. The social and health impacts of poverty can include reduced access to nutritious food; fewer educational opportunities and poor educational outcomes; a lack of access to safe and stable housing; increased risk of poor health outcomes including obesity and heart disease; and difficulty obtaining work opportunities.

In 2016, a family of three was considered to be living in <u>poverty</u> if they earn less than \$19,105 per year. According to the Census Bureau, the <u>poverty rate in 2016</u> was 12.7 percent, with 40.6 million people living in poverty; this number was down 0.8 percentage points from 2015. For most demographic groups, the number of people in poverty decreased from 2015, with adults older than 65 the only population group experiencing an increase in the number of people living in poverty. By providing opportunities for work and work supports, the Department is dedicated to improving the education, skills, health, and resources of low-income individuals and families to help them expand their productivity, achieve economic independence, and enhance their economic and health outcomes.

To reach this goal, the Department coordinates safety-net programs across the Federal Government; State, local, Tribal, and territorial governments; and faith-based and community organizations. One of the Department's primary programs for families in need is the <u>Temporary Assistance for Needy Families</u> (TANF) program. TANF provides States with block grants to design and operate programs that help needy families reach self-sufficiency, with a focus on preparing parents for work. The Department coordinates with the U.S. Departments of Labor and Education to implement the <u>Workforce Innovation and Opportunity Act</u>, which is designed to help young job seekers and people with disabilities access employment education, training, and support services and match employers with skilled workers.

Contributing Operating Divisions and Staff Divisions

ACF, ACL, and CMS

In March 2017, nearly 2.5 million people across all 50 States, the District of Columbia, Guam, Puerto Rico, and the U.S. Virgin Islands received cash assistance from <u>TANF programs</u>. The Department invests in education, training, work, and work supports through the following strategies:

- Invest in evidence-informed practices that enable low-income adults, unemployed <u>noncustodial parents - PDF</u>, youth, and individuals with disabilities to prepare for, acquire, and sustain employment, including for <u>fast-growing professions in healthcare</u>
- Strengthen the required work participation rate standards for States receiving <u>TANF</u> funds, and provide guidance and technical assistance to State TANF programs to engage adult cash assistance recipients who have the capacity to work in work activities
- Promote innovation in the TANF program to advance the objective of helping families in need find stability and support through the employment and economic independence of adult participants and the healthy development of children whose families receive assistance
- Integrate refugees entering the country into American society and connect them with <u>wraparound services and resources</u>, using faith-based and community organizations, to provide economic opportunity and success
- Provide assistive technology equipment to people with disabilities, allowing them more self-sufficiency and eliminating barriers to their economic opportunity
- Increase the number of employed people with disabilities by encouraging and assisting integration into the greater community's workforce

Note: Additional strategies on supporting independence for people with disabilities are in Strategic Objective 3.4.

Although the number of people in poverty is shrinking, in 2016, 40.6 million <u>people lived below</u> the poverty line, with 32 percent of these people under the age of 18. The Department is working to reform human services programs to assist low-income populations through the following strategies:

- Foster coordination and innovation across safety-net programs, including faith-based and community organizations, to help individuals and families in need to become self-sufficient and end dependency through employment and growth in habits of personal responsibility
- Increase access to comprehensive services as part of short-term, transitional public welfare services in partnership with other Federal agencies and faith-based and community organizations, including <u>programs</u> to promote social and economic self-sufficiency for <u>American Indians and Alaska Natives</u>

- <u>Support formerly incarcerated individuals</u> in obtaining and maintaining employment, developing habits of personal responsibility, reconnecting with their children and families, paying child support, and avoiding recidivism
- Become a center of excellence in the research and practice of facilitating rapid and sustained economic independence for diverse at-risk populations
- Support youth as they transition to adulthood by assisting them to develop habits of <u>personal responsibility</u>, to <u>obtain an education</u>, to strengthen employability skills, and to establish and maintain <u>positive</u>, <u>healthy relationships</u> (including through evidence-based or evidence-informed healthy marriage and relationship education)

The Department participates in the <u>U.S. Interagency Council on Homelessness</u>, which coordinates the Federal response to homelessness by partnering with 19 Federal agencies, State and local governments, advocates, service providers, and people experiencing homelessness, with a goal of ending all homelessness in America. The Department is working with its partners to reduce the incidence of homelessness through the following strategies:

- Testing and investing in models, including <u>emergency shelter</u> and <u>Housing First</u>, to support homeless domestic violence survivors
- Strengthening programs for runaway and homeless youth that provide outreach, crisis intervention, shelter, counseling, family reunification, and aftercare services

Performance Goals

- Increase the percentage of adult TANF recipients and former recipients who are newly employed
- Increase the percentage of refugees who are self-sufficient (not dependent on any cash assistance) within the first six months of the service period

Strategic Objective 3.2: Safeguard the public against preventable injuries and violence or their results

Injuries and violence affect all Americans regardless of an individual's age, race, or economic status. <u>Preventable injuries and violence</u>—such as falls, homicide stemming from domestic violence, and gang violence—kill more Americans ages 1 to 44 than any other cause, including cancer, HIV, or the flu. Hospitalizations, emergency room visits, and lost productivity caused by injuries and violence cost Americans <u>billions</u> of dollars annually.

Individual trauma results from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or threatening and that has lasting adverse effects on the individual's functioning and mental, physical, social, emotional, or spiritual well-being. The Department supports multiple <u>trauma-informed care initiatives - PDF</u> to integrate a trauma-informed approach into health, behavioral health, and <u>related systems</u>, to reduce the harmful effects of trauma and violence on individuals, families, and communities.

In 2015, the age-adjusted rate of unintentional injuries (43.2 per 100,000) increased 6.7 percent from the rate in 2014. The largest subcomponent of injury mortality is <u>poisoning</u>, with a rate 1.5 times greater than that of <u>motor vehicle traffic deaths</u>. In 2015, the age-adjusted rate of <u>drug</u> <u>overdose</u> deaths was more than 2.5 times the rate in 1999. The pattern of drugs involved in drug overdose deaths also has changed in recent years. In 2010, 29 percent of drug overdose deaths involved natural and semisynthetic opioids, and 12 percent involved methadone. In 2015, the percentage of drug overdose deaths involving these drugs decreased to 24 percent and 6 percent, respectively. In contrast, <u>drug overdose deaths</u> involving heroin increased from 8 percent in 2010 to 25 percent in 2015. Increases also were seen in drug overdose deaths involving synthetic opioids other than methadone, from 8 percent in 2010 to 18 percent in 2015.

In 2014, according to the National Center for Health Statistics <u>National Vital Statistics System</u>, nearly 200,000 people died of injuries, including poisoning, resulting in a mortality rate of 62.6 per 100,000. In that same year, 39.5 million (126.3 per 1,000) medically attended <u>injury and poisoning episodes</u> occurred in the United States. In 2013, 1.4 million <u>emergency department visits</u> were due to assault alone. In 2014, 33,594 people died from <u>all firearm-related injuries</u>. In 2013, these issues cost the United States an estimated \$671 billion in <u>medical care and lost productivity</u>.

Contributing Operating Divisions and Staff Divisions

ACF, ACL, CDC, IHS, OASH, and SAMHSA

HHS funds 23 State health departments through the <u>Core State Violence and Injury Prevention</u> <u>Program (Core SVIPP)</u>, which helps States implement, evaluate, and disseminate strategies that address the most pressing injury and violence issues, including child abuse and neglect, traumatic brain injury, domestic violence, and sexual violence. Core SVIPP aims to decrease injury- and violence-related morbidity and mortality and increase sustainability of injury prevention programs and practices. The Department also is working to identify and disseminate evidence-based practices to reduce injuries and violence through the following strategies:

- Expand knowledge about important <u>abuse intervention models</u> to enhance evidence-based services for older adults and adults with disabilities
- Disseminate evidence-based strategies to keep children and youth safe from violence and injuries—including <u>child maltreatment PDF</u>, unintentional poisoning, drowning, fires and burns, and infant suffocation
- Ensure more children safely avoid foster care placement by encouraging the availability of effective, accessible <u>family support services</u> to address the issues families face, including the opioid crisis

<u>Homicide</u> is the third leading cause of death for young people ages 15 to 24, with more than 4,000 young people dying by homicide each year. One in four women, and one in nine men, were victims of <u>sexual violence</u>, <u>physical violence</u>, or <u>stalking - PDF</u> by an intimate partner, resulting in injury, fear, and a concern for their safety. The Department funds services to support those who have been impacted by injuries and violence, including through the following strategies:

- Fund <u>National Centers of Excellence in Youth Violence Prevention</u> to better understand youth violence, implement and evaluate programs to prevent violence, and promote safe and supportive environments
- Provide support for <u>emergency shelters and related assistance</u> for victims of family violence

An estimated 1 in 10 older adults will be a victim of <u>elder maltreatment</u>. The Department works to prevent abuse, neglect, and exploitation for older Americans through the following strategies:

- Coordinate elder justice activities within HHS and across the Federal Government through the <u>Elder Justice Coordinating Council</u>
- Foster the health, safety, rights, and welfare of individuals who live in long-term care facilities through promoting person-centered quality care, monitoring, and ombudsman programs
- Improve access to resources and education to help local communities identify and responding to elder abuse, neglect, and exploitation

- Enhance knowledge about preventing elder maltreatment, through research
- Strengthen adult protective services' timely and effectively responses to older adults who are maltreated through practice guidelines, data collection and reporting, and technical assistance

Note: Additional strategies to support older adults are in Strategic Objective 3.4.

The Department works across the Federal Government, and with States, territories, Tribes, and faith-based and community organizations, to address injuries and violence—monitoring accidental and violence-related injuries, supporting research on the factors that put people at risk, creating and evaluating preventative programs, helping partners plan and implement programs, and conducting research on the effective adoption and dissemination of these strategies. The Department is working to expand partnerships with Federal, State, Tribal, local, and territorial government entities and other stakeholders to reduce injuries and violence through the following strategies:

- Protect women from harmful exposures before, during, and after pregnancy, such as from domestic violence, tobacco exposure, and alcohol, opioid, and other harmful substance use, and improve outcomes for newborns and pregnant women
- Expand interagency partnerships and systems to train healthcare and human service providers to assess for domestic and dating <u>violence</u> and do brief interventions to link victims to safety and support services, including through faith-based and community organizations
- Expand <u>bullying prevention</u> and <u>youth dating violence prevention</u> partnerships with Federal, State, Tribal, local, territorial, and nongovernmental stakeholders to support safety and well-being
- Expand and strengthen partnerships with Federal, State, local, Tribal, and territorial partners, including faith-based and community organizations, on gang prevention programs as well as investing in youth mentoring and coaching, counseling, and life skills and workforce training
- Assess and increase <u>the capacity</u> of medical and behavioral health practitioners, nonprofits, faith-based and community organizations, licensed social workers, child welfare professionals, housing authorities, and public health agencies to provide comprehensive and survivor-informed <u>services</u> for victims of human trafficking
- Improve <u>services to children and families</u> in the child welfare system as a result of parental or caretaker opioid or other substance use disorder, including through faith-based and community organizations

• Enhance the cultural competence of the workforce in the delivery of social services to children, youth, and families through research, technical assistance, and training

Nearly 192,000 people die from <u>violence and injuries - PDF</u> each year—nearly 1 person every 3 minutes. The Department is working to collect, analyze, and report national data on the incidence and consequences of injuries and violence through the following strategies:

- Assess healthcare use and costs associated with violence and unintentional injury, including patient safety events that occur in healthcare settings, to inform actions to prevent injury and violence and describe the return on investment of public health action
- Develop and enhance timely, coordinated data systems to monitor injuries and violence by using expanded surveillance, innovative methods, and new technology, to inform and evaluate national and State prevention activities
- Address gaps in data on prevalence and risk factors for child maltreatment

Note: Additional surveillance strategies are in Strategic Objective 4.1.

Performance Goals

- Maintain the percentage of domestic violence program clients who have a safety plan
- Decrease the percentage of children with substantiated or indicated reports of maltreatment that have a repeated substantiated or indicated report of maltreatment within 6 months
- Increase intimate partner (domestic) violence screening among American Indian and Alaska Native females

Strategic Objective 3.3: Support strong families and healthy marriage, and prepare children and youth for healthy, productive lives

Families are the cornerstone of America's social fabric. A strong family can lead to many positive outcomes for the health, social, and economic status of both adults and children. People live longer, have less stress, and are more financially stable in a healthy family environment where both parents are present, share the responsibility of the household, and raise the children. Additionally, in these households, children tend to be healthier, both mentally and physically, and are better able to have their fundamental needs met.

The Department supports healthy families and youth development through collaborations across the Federal Government and with States, territories, community partners, Tribal governments, and faith-based organizations. <u>Head Start - PDF</u> served 1.1 million children from birth to age 5 and pregnant women in 2015–2016, and approximately 1.4 million children per month received <u>child care assistance</u> in 2015. Recommendations for <u>best practices</u> for early child development are shared with partners across the country. Transitions from youth to adulthood are supported through the promotion of <u>strength-based approaches</u>, multisector engagement, and youth engagement efforts.

Through programs like <u>the Healthy Marriage and Relationship Education Grant Program</u>, the Department funds organizations (including faith-based and community organizations) across the country to provide comprehensive healthy relationship and marriage education services, as well as job and career advancement activities to promote economic stability and overall improved family well-being.

<u>Children with involved fathers</u> are more likely to perform well in school, have healthy selfesteem, and display empathy and pro-social behavior, compared with children who have uninvolved fathers. The <u>New Pathways for Fathers and Families</u> funds organizations across the United States to provide responsible-fatherhood activities that strengthen positive father-child engagement, improve employment and economic mobility, and improve relationships (including couple and coparenting) and marriage. The Department also supports reentry efforts for incarcerated fathers. Approximately 1.7 million <u>State and Federal inmates are fathers of minor children</u>. The impacts of incarceration affect the lives and well-being of their children and families. The <u>Responsible Fatherhood Opportunities for Reentry and Mobility</u> program funds grants that are specifically tailored to the needs of fathers transitioning from incarceration to their families and communities. Grants help fathers stabilize their lives, establish or reconnect with their children and families, develop habits of personal responsibility, obtain employment, and achieve economic mobility.

Contributing Operating Divisions and Staff Divisions

ACF, ACL, CDC, HRSA, IHS, OASH, and SAMHSA

In 2016, the United States was home to 73.6 million <u>children</u>, a number that is projected to grow to 74.5 million by 2022 and 76 million by 2029. The Department supports the healthy development and well-being of children through the following strategies:

- Promote healthy development in young children to avoid behavioral challenges, <u>support</u> <u>school readiness and learning</u>, and offer parents of young children access to evidencebased, culturally appropriate <u>parenting education and supports</u>
- Improve the quality of care and education settings through effective professional development, coaching, monitoring for health and safety, provision of comprehensive services, and other training and technical assistance in order to promote positive teacher-child interactions and support children's skill development in all domains, including language, early literacy, numeracy, cognitive, and social-emotional development
- To achieve optimal brain development for all children, identify and promote effective approaches for early language development to integrate them into existing programs that reach young children, and leverage partnerships (including with faith-based and community organizations) to encourage broad implementation
- Promote increased <u>physical activity and active play</u>, improved nutrition, reduced screen time, and increased interpersonal contact with and between children in child care and early childhood development programs
- Improve access to high-quality early care and education opportunities for young children by improving the quality of existing early care and education settings, including those offered by Tribes and faith-based and community initiatives, and building the supply of high-quality options for families
- <u>Remove barriers to inclusion and accessibility</u> to early child care and education for children with disabilities
- Reduce barriers to child and family participation in early childhood programs and services
- Provide effective training and technical assistance to help parents and families have greater involvement with teachers, educators, and caregivers to improve the quality of early childhood settings

Through the <u>Interagency Working Group on Youth Programs</u>, the Department collaborates with other Federal departments and agencies to support at-risk youth through adolescence and young adulthood. The Department supports the healthy development and well-being of adolescents and young adults through the following strategies:

• Support successful youth transitions to adulthood by strengthening relationship and <u>employability skills</u> and the development of habits of personal responsibility

- Help youth establish and maintain positive, <u>healthy relationships</u>, including connections with <u>peers</u> and caring adults, through <u>demonstration programs</u> and <u>evidence-based or</u> <u>evidence-informed programs</u> (including programs that provide healthy marriage and relationship education), including programs provided by faith-based and community organizations
- Invest in <u>training</u> to support adults in detecting and responding to mental illness in children and youth, including encouraging adolescents and their families to seek treatment
- Prevent and reduce morbidity, mortality, and key risk behaviors among youth by <u>supporting</u> <u>schools and communities</u> to improve youth skills through sound health education and connection to needed services, and promoting school environments that protect and nurture youth to avoid risk and make positive life choices
- Support efforts to place children in foster care with extended birth family and support these <u>kinship caregivers</u>
- Promote efforts to recruit, train, and support <u>adoptive families</u> for children and youth whose birth parents and relatives cannot or will not safely care for them
- Support efforts to ensure the well-being of children in foster care and those who <u>age out of</u> <u>foster care</u> without a family
- Provide adolescents with <u>information and support to make healthy decisions</u> regarding their health and well-being, including risk avoidance and establishment of positive life choices

While most children live with two parents, the <u>Census Bureau</u> estimates that 23 million children live in households with only one parent or no parent at all. The Department supports parents, guardians, and caregivers through the following strategies:

- Improve opportunities for <u>parent participation</u> in an evidence-based parenting curriculum or mentoring programs to improve parenting skills and lead to better learning and development outcomes for children and marital and family stability
- Support efforts, including through Tribes and faith-based and community organizations, to educate <u>parents and caregivers about healthy child development</u>, effective parenting practices, and specific developmental and health concerns faced by their children
- Support and engage fathers in innovative program models across agencies to better integrate them into their families' life
- Support families with young children by addressing parental mental health or substance abuse

• Develop and implement local and national dissemination strategies to communicate the value of <u>healthy marriages and relationships</u>, and of the success sequence, which recommends completing education, obtaining employment, and getting married before a first or subsequent child, across all socioeconomic demographics

The Department recognizes that other risk factors like poverty, food insecurity, and housing instability can negatively impact health, and is working to integrate human services and health supports to support the well-being of children, youth, and families through the following strategies:

- Ensure more young children become up to date on all age-appropriate preventive and primary healthcare, including <u>sensory</u> and <u>developmental</u> screening, with appropriate referral and intervention
- Promote interagency Federal, State, and local coordination, including through Tribes and faith-based and community organizations, to <u>facilitate families' access to services</u> and help them navigate systems of care across the full spectrum of family needs, including housing, education and training, healthcare, child care, social services, and economic supports
- Integrate age- and developmentally appropriate strategies into programs designed to help all youth avoid risk and make better choices
- Integrate trauma-informed, family-focused behavioral health services with pediatric primary care

Performance Goals

- Reduce the proportion of Head Start preschool grantees receiving a score in the low range on any of the three domains on the basis of the Classroom Assessment Scoring System (CLASS: Pre-K)
- Reduce the proportion of children and adolescents ages 2 through 19 who are obese
- Maintain the proportion of youth living in safe and appropriate settings after exiting ACFfunded Transitional Living Program services
- (For adult-serving programs) Increase the proportion of participants who, at program exit, express positive attitudes towards marriage
- (For adult-serving programs) Increase the proportion of married couples who, at program exit, view their marriage as lifelong
- (For youth-serving programs) Increase the proportion of youth who express attitudes supportive of the success sequence

Strategic Objective 3.4: Maximize the independence, well-being, and health of older adults, people with disabilities, and their families and caregivers

Older adults and people with disabilities face a complex set of difficulties. About one in every seven, or 14.9 percent, of the population is an <u>older American - PDF</u>. Approximately 12 percent of working-age adults in the United States have some <u>type of disability</u>. Of these adults, 51 percent had a mobility disability, and 38.3 percent had a cognitive disability.

Older people and people with disabilities often rely on other people to fulfill fundamental needs and complete daily tasks. In order to facilitate adequate care and maximize independence, older adults and people with disabilities of all ages should be able to live where they choose, with the people they choose, and with the ability to participate fully in their communities.

To support older adults, people with disabilities, and the system of friends, family, and community members that support them, the Department collaborates across the Federal Government, with States, Tribes, and territories, and with faith-based and community organizations. Aging and Disability Resource Centers provide a gateway to a broad range of services and supports for older adults and people with disabilities. Centers for Independent Living are community-based centers that offer services to empower and enable people with disabilities to stay in their communities. Every State and territory has an Assistive Technology Act program that can help people find, try, and obtain assistive technology devices and services. Assistive technology includes resources ranging from "low tech" helping tools—like utensils with big handles—to higher-tech solutions like talking computers.

The Department also supports <u>caregivers</u> of older Americans and Americans living with disabilities. At least 90 percent of older adults receiving help with daily activities receive some form of unpaid care, and about two-thirds receive only unpaid care. In 2011, an estimated 18 million unpaid <u>caregivers</u> provided 1.3 billion hours of care on a monthly basis to Medicare beneficiaries age 65 and over.

Strategies relating to supporting the healthcare needs of older adults and people with disabilities can be found in <u>Strategic Goal 1: Reform, Strengthen, and Modernize the Nation's Healthcare</u> <u>System</u> and <u>Strategic Goal 2: Protect the Health of Americans Where They Live, Learn, Work, and Play.</u> This Strategic Objective focuses on human services—efforts to support the economic and social well-being of these populations.

Contributing Operating Divisions and Staff Divisions

ACF, ACL, CDC, CMS, HRSA, IHS, OASH, and SAMHSA

Stable housing is foundational to good health and well-being. Accessible, affordable housing is essential to community integration and aging-in-place. For some older adults and people with disabilities, additional assistance is required to support community living. The Department works to strengthen supports for community living through the following strategies:

- Support age- and dementia-friendly livable <u>communities</u> to improve quality of life for older adults, families, caregivers, people with disabilities, and the larger community
- <u>Promote independence of older adults and people with disabilities</u> through improved collaboration, including with Tribes and faith-based and community organizations, to ensure opportunities to live and receive services in the community
- Foster culture change through inclusion and accessibility for children and adults with disabilities and older adults by removing physical and other barriers
- Support programs for people with disabilities and older adults that help protect them from all forms of abuse, including physical, mental, emotional, and financial abuse, and help ensure their ability to exercise their rights to make choices, contribute to their communities, and live independently
- Support focused technical assistance to States aimed at forging stronger <u>relationships</u> <u>between State Medicaid agencies</u>, <u>State housing finance agencies</u>, and private partners including faith-based and community organizations with the goal of expanding communityliving capacity in States

In <u>Olmstead v. L.C.</u>, the Supreme Court affirmed that under the Americans with Disabilities Act, people with disabilities cannot be unnecessarily segregated and must receive services in the most integrated setting appropriate for their needs. <u>Federal and State efforts</u> following this landmark decision have increased community participation and independence of people with disabilities and older Americans who are living in communities, including those who have transitioned from nursing homes and other institutions. The Department is working to support choice across the care continuum, as well as improved care transitions and care coordination, through the following strategies:

- Promote <u>collaboration among Federal, State</u>, Tribal, local, territorial, and private-sector partners that serve older adults, people with disabilities, and their families and caregivers to improve access to a full range of healthcare services, and home and community-based services
- Pursue <u>initiatives and programs PDF</u> to provide support to older adults, people with disabilities, and their families and caregivers as individuals move between the settings that best address their unique needs

• Increase the proportion of youth with disabilities who have plans in place for transitioning from pediatric to adult care

Medicaid is the largest source of support for long-term services and supports, with an estimated \$131.4 billion annually expended at the Federal and State levels. The Department is working to improve quality and availability of long-term services and supports, including home and community-based services (HCBS), through the following strategies:

- Support the development of a core set of performance measures for HCBS that can provide data that can be used in quality and outcome measurement and reporting
- Support innovative delivery system models and program flexibilities that include HCBS to improve quality, accessibility, and affordability in Medicare and Medicaid
- Consider new <u>person-centered models of care PDF</u> in Medicare and Medicaid that provide an integrated approach to addressing individuals' medical, behavioral, long-term services and supports, and other needs to maintain health, well-being, and independence
- Identify opportunities to accelerate the development, evaluation, translation, implementation, and scaling up of comprehensive care, services, and supports for persons with dementia, families, and other caregivers
- <u>Assist States</u> in strengthening and developing high-performing long-term services and supports systems that focus on the person, provide streamlined access, and empower individuals to participate in community living
- Educate and improve the awareness of HCBS providers of the need to integrate the access and functional needs of older adults and people with disabilities into <u>disaster and public</u> <u>health emergency preparedness, response, mitigation, and recovery</u>

<u>Alzheimer's disease (AD)</u> is an irreversible, progressive brain disease that affects as many as 5.3 million Americans. The prevalence of people with AD doubles for every 5-year interval beyond age 65. Without a preventive treatment or cure, the significant growth in the population over age 85 that is estimated to occur between 2015 and 2050 (from 6.3 million to 19 million) suggests a substantial increase in the number of people with AD. The Department is working to address Alzheimer's disease and related dementias through the following strategies:

- Expand supports for people with Alzheimer's disease and related dementias and their families through <u>culturally sensitive</u> education, training, and support; <u>assessing housing and other needs</u>; and <u>assisting families in planning for future care needs</u>
- Enhance <u>public awareness</u> and <u>engagement</u> to reduce misperceptions about diagnosis and clinical management
- Improve <u>data</u> to track the burden of Alzheimer's disease and related dementias, identify and monitor trends in associated risk factors, and assist with understanding health disparities

Note: Additional strategies on preventive care are in Strategic Objectives 1.3 and 4.3.

Caregivers provide care to people of all ages who live in residential or institutional settings. Caregiving can be both paid and unpaid; a 2009 survey found that approximately <u>25 percent of</u> <u>adults</u> reported providing care to a person with a long-term illness or disability in the past 30 days. The Department is working to strengthen supports for caregivers through the following strategies:

- Provide support for unpaid family <u>caregivers</u>, to maximize the health and well-being of the caregivers and the people for whom they provide care
- Educate and empower community supports, such as faith-based and community organizations, for providing support of all types for caregivers
- Identify research gaps in caregiving, and optimize sharing of research findings
- Improve access to <u>educational and community-based resources</u> that caregivers can use to maintain and/or increase their <u>health and well-being</u>

For people with complex health needs, such as older adults and people with disabilities, accessing high-quality and affordable care—healthcare, as well as assistance for daily living—can be challenging. Geographic disparities, as well as economic constraints, can limit the number and quality of available options. The Department is working to reduce disparities in services for older adults and people with disabilities through the following strategies:

- Ensure that individual rights are protected and addressed through enforcement of <u>mental</u> <u>health and substance use parity laws</u>, <u>*Olmstead*</u>, <u>Americans with Disabilities Act</u>, and other protections
- Include culturally appropriate, person- and family-centered <u>care planning PDF</u> in Federal social and healthcare services for older adults and persons with disabilities to protect individual choice and address a person's current and future economic resources, including advance care planning needs
- <u>Monitor</u>, using existing data sources, the status of the health, well-being, and independence of older adults and people with disabilities, and improve reporting on these populations

The number of people 65 years old and older is expected to double between 2000 and 2030. Providing high-quality services to this growing population requires a high-quality workforce. The Department seeks to strengthen the workforce through the following strategies:

- Educate the healthcare and service professional workforce on the concerns of a geriatric population to ensure awareness of the unique challenges and issues of older adults
- Improve and increase <u>competency</u> in the healthcare and direct service workforce in personcentered approaches and cultural competency

- Strengthen the training and capacity of healthcare providers to recognize, assess, refer, connect, and engage caregivers
- <u>Strengthen partnerships</u> between academia, health delivery systems, Tribes, and faith-based and community organizations to educate and train the workforce to provide high-quality, culturally competent care

Performance Goals

- Demonstrate improvement in nursing home health care quality by reducing the number of one-star nursing homes
- Decrease the percentage of long-stay nursing home residents receiving an antipsychotic medication
- Improve dementia capability of long-term support systems to create dementia-friendly, livable communities
- Increase the success rate of the Protections and Advocacy Program's individual or systemic advocacy, thereby advancing individuals with developmental disabilities right to receive appropriate community based services, resulting in community integration and independence, and have other rights enforced, retained, restored, and/or expanded

STRATEGIC GOAL 4: FOSTER SOUND, SUSTAINED ADVANCES IN THE SCIENCES

According to a recent study, the United States makes about 44 percent of the total global biomedical <u>research investments</u> worldwide. Together with foundations, charities, private industry, and State, Tribal, local, and territorial governments, the Department's scientific investments seek to unlock mysteries to improve health and well-being; reduce the burden of death, disease, and disability; and extend and improve quality of life. These scientific investments are to be conducted consistent with the understanding that all human life is valuable and that the human subjects protection regulations apply to all human beings from conception to natural death.

Making better decisions in health, public health, and human services often depends on data obtained through surveillance, epidemiology, and laboratory services—at the Federal, State, Tribal, local, and territorial levels. HHS efforts in this area help to track and trace disease outbreaks, connect the data to tell a more complete story of public health issues, and facilitate speedier responses to threats to health and well-being.

Success in this domain starts with our scientific workforce. To date, 153 NIH-supported researchers have received <u>Nobel Prizes</u> for their achievements. HHS strives to expand the capacity of the research workforce, and equip them with the tools to make the discoveries of tomorrow.

The NIH's <u>Human Genome Project</u>—completed under budget and 2 years ahead of schedule has led to the discovery of more than 1,800 disease genes and is sparking the development of more powerful, preventive, personalized medical interventions. Basic science and applied research investments—whether intramural or extramural—seek solutions to the health, public health, and human services challenges articulated throughout this Strategic Plan.

To be truly effective, these discoveries must be shared, adopted, scaled up, and implemented with fidelity. HHS is working to promote evidence-informed practices in the health, public health, and human services domains. As a steward of the public trust, HHS has a responsibility to promote approaches that will improve health and well-being.

Within HHS, the following divisions are working to achieve this goal: Administration for Children and Families (ACF), Administration for Community Living (ACL), Agency for Healthcare Research and Quality (AHRQ), Centers for Disease Control and Prevention (CDC), Centers for Medicare & Medicaid Services (CMS), Food and Drug Administration (FDA), Health Resources and Services Administration (HRSA), National Institutes of Health (NIH), Office for Civil Rights (OCR), Office of Global Affairs (OGA), Office of the Assistant Secretary for Health (OASH), Office of the Assistant Secretary for Preparedness and Response (ASPR), and Substance Abuse and Mental Health Services Administration (SAMHSA).

Strategic Objective 4.1: Improve surveillance, epidemiology, and laboratory services

In an increasingly interconnected world, public health threats can quickly escalate from an isolated incident to a regional or even global emergency. A flu outbreak in one State can quickly spread to multiple States—keeping children out of school and adults away from work, and threatening the lives of the very young and very old. Rapid changes in public health patterns—such as the growth in opioid use and overdose—can strain the resources and capacity of first responders, health systems, and communities.

Identifying and mitigating urgent and persistent threats to public health depends on the quality of surveillance, epidemiology, and laboratory services—at the Federal, State, and local levels as well as with U.S. territories, Tribes, and international partners. Public health surveillance data, applied epidemiology, and laboratory best practices can guide better decision making to target interventions more responsibly, and ultimately improve health.

The Department is dedicated to conducting and funding scientific research that leads to evidence-based, high-quality care and responsive interventions to mitigate health crises. Data and information from surveillance, epidemiology, and laboratory services can aid in the prevention and early intervention of foodborne illnesses, such as listeria and norovirus, and infectious disease outbreaks, such as Zika and Ebola. To achieve this objective, the Department is working to facilitate information exchange to identify risks quickly and efficiently, strengthen the quality and safety of our Nation's laboratories, and strengthen the alignment of surveillance, epidemiology, and laboratory services.

As response rates to surveys fall and primary data collection costs increase, the need to use and leverage new sources of data for public health surveillance becomes critical. Within the Department, efforts are underway to use electronic health records for infectious disease surveillance and to facilitate coding of causes of death on death certificates. At the National Center for Health Statistics, linkages between survey data, mortality data, hospital administrative data, electronic health records, Medicare data, and housing data have been created and should greatly expand public health surveillance opportunities. In addition, <u>HL7 Continuity of Care Document</u> specifications have been published to facilitate the submission of standardized electronic health information to the National Health Care Surveys, enhancing their usability for surveillance.

Contributing Operating Divisions and Staff Divisions

ASPR, CDC, CMS, FDA, NIH, OCR, OGA, and SAMHSA

The value of data, as articulated by the <u>HHS Data Council</u>, is its relevance, timeliness, availability when needed, and distinctive contributions. The Department will apply surveillance data and epidemiological findings to improve outcomes through the following strategies:

- Establish data standards and, as appropriate, ensure that Federally conducted or supported healthcare or public health programs, activities, or surveys collect and report data in five specific demographic categories: race, ethnicity, sex, primary language, and disability status
- Engage with American Indians/Alaska Natives to explore opportunities to <u>improve data</u> <u>collection efforts</u>
- Collect, analyze, and report granular or disaggregated data to support population health

In addition to these more general strategies with applicability across settings, the Department will apply surveillance data and epidemiological findings to improve health, public health, and human services through the following strategies:

- Promote use of <u>youth-focused surveillance and data collection</u> to inform school and community actions that improve the health of adolescents
- Identify and assess adverse events related to the use of <u>regulated human and animal medical</u> <u>products</u>, including the development and more effective use of large nationally representative database systems, electronic health records, common data models, and natural language processing
- Implement advanced laboratory, epidemiologic, and environmental methods across Federal and State agencies to identify, investigate, and stop <u>foodborne outbreaks</u> sooner and prevent future illness by identifying and addressing gaps in the food safety system
- Enhance domestic and global capacity for <u>influenza surveillance</u> to ensure rapid detection and reporting of cases or outbreaks of influenza viruses that have pandemic potential and to monitor trends in seasonal influenza epidemiology
- <u>Strengthen understanding</u> of the <u>opioid crisis through better public health surveillance</u> to inform clinical management decisions for patients, including effects of opioid use in pregnancy and neonatal abstinence syndrome
- Analyze data on behavioral health disparities to increase understanding of factors contributing to disparities, identify disadvantaged and at-risk populations, assess trends, and inform policy and program development
- Support a data-driven approach to emergency preparedness, response, and recovery

- Assess healthcare use and costs associated with violence and unintentional injury, including <u>patient safety events</u> that occur in healthcare settings
- Develop and enhance timely, coordinated data systems to monitor <u>injuries and violence</u> by using expanded surveillance, innovative methods, and new technology to inform and evaluate national and State prevention activities

Improving data's value also involves integrating data from two or more sources such as surveys, administrative and claims data, public health surveillance data, and clinical data. The Department is working to facilitate better information sharing, exchange, and alignment of data through the following strategies:

- Improve data collection methodologies and systems for enhancing real-time and local data collection in order to minimize local burden, and improve timeliness, reliability, and comparability of the data, allowing for local public health and healthcare providers to use data for decision making and response mobilization
- Implement information technology solutions that support timely information exchange among local, State, international, and Federal agencies, healthcare facilities, and laboratories while ensuring that these systems minimize threats to information security
- Modernize domestic and international infectious and chronic disease surveillance systems to improve system interoperability and enable more rapid reporting, data exchange, and use to drive timely public health and medical action and response
- Promote new and innovative methods to rapidly collect, store, standardize, share, and analyze data across all levels of government, and with nongovernmental partners, to improve situational awareness and public health surveillance before, during, and after public health and medical emergencies
- Consistent with any limitations on the use or disclosure of such data, develop and implement a <u>Department-wide data collection strategy</u> to strengthen the capacity of HHS resources; promote synergy across systems; assure efficiencies, quality, utility, and timeliness; and address high-priority data gaps

Across the Department, laboratories house efforts to find the cures to disease; detect infectious organisms, foodborne outbreaks, and biosecurity threats; screen for genetic and health risks; and identify environmental hazards. Ensuring that laboratories follow safe practices and meet high standards of quality is essential to preserve the integrity of these essential resources. The Department works to promote and protect laboratory quality and safety through the following strategies:

• Provide ongoing professional development opportunities to help the laboratory-based workforce remain on the cutting edge of relevant scientific and technological advancements

- Ensure training for laboratory personnel and management, and promote employee safety, security, and occupational health through laboratory evaluations and inspections
- Review <u>standards for laboratory quality</u> and strengthen guidance to increase patient and laboratory safety
- Enhance and sustain national and international laboratory capacity to manage samples, conduct research, and analyze and report test results that leads to the development of interventions associated with disease detection and surveillance
- Support the development, implementation, and evaluation of new laboratory technologies (such as telemedicine, metagenomics, next-generation sequencing), and their use for emerging infectious diseases, antimicrobial resistance, food safety, pharmaceutical safety, chronic disease risk factors, and environmental biomonitoring
- Develop reporting guidelines for microbiology laboratories, based upon Federal, State, and local requirements, to improve surveillance of antimicrobial resistance
- Leverage expertise of clinical and public health laboratory partners on improving regulatory compliance to ensure quality laboratory testing operations during emergency response efforts

Note: Additional strategies to strengthen the scientific workforce and infrastructure are in Strategic Objective 4.2.

Effective surveillance systems not only serve as an early warning system for threats to public health; when aligned with epidemiological and laboratory services, they can investigate and confirm outbreaks to facilitate a speedier response. The Department is strengthening the alignment of surveillance, epidemiology, and laboratory services to improve health outcomes through the following strategies:

- Develop innovative solutions for conducting population health monitoring, risk assessments, and analysis of epidemiological data to improve our understanding of health risk factors and the effectiveness of health interventions
- Foster State, Federal, and international partnerships to improve surveillance and laboratory capacity across the continuum of care to identify and control threats to public health and health security, including <u>infectious disease threats</u>, <u>healthcare-associated</u> <u>infections</u>, <u>antimicrobial-resistant pathogens</u>, and <u>environmental health hazards</u>
- Support the private and secure collection, maintenance, analysis, and sharing of information to improve surveillance and expand the evidence base for high-quality care and rapid interventions, through <u>Health Insurance Portability and Accountability Act of 1996 (Pub. L. 104–191)</u> rules and guidance

- Enhance domestic and international information systems (e.g., data linkage, shared services, data standards) and apply modern data science methods to provide timely, high-quality, and actionable data for early outbreak detection, rapid response to public health threats, programmatic planning, and targeted interventions for populations at risk
- Improve health and behavioral health outcomes for children and their parents by using surveillance data to build epidemiological capacity in States and counties to identify high-need issues and particular areas of risk, and then responding with appropriate evidence-based interventions and policy development

- Increase the percentage of laboratory reports on reportable conditions that are received through electronic means nationally
- Increase the percentage of notifiable disease messages transmitted in HL7 format to improve the quality and streamline the transmission of established surveillance data
- Number of medical product analyses conducted through the FDA's Sentinel Active Risk Identification and Analysis system

Strategic Objective 4.2: Expand the capacity of the scientific workforce and infrastructure to support innovative research

Tomorrow's scientific breakthroughs depend on a highly trained and ethical scientific workforce, working in facilities and with tools that foster innovation. Efforts to expand the capacity of the scientific workforce and infrastructure can better prepare the Nation for global health emergencies, extend the reach and impact of scientific investigations, and contribute to research of national or global significance.

Through various initiatives and programs, HHS recruits and trains students, recent graduates, and other professionals to conduct rigorous and reproducible research. HHS provides research training and career development opportunities to ensure that highly trained investigators will be available across the range of scientific disciplines necessary to address the Nation's biomedical and scientific research needs.

HHS invests in Federal statistical units responsible for national surveys that provide reliable, timely, and policy-relevant information for policymakers and researchers. HHS also invests in strengthening the research infrastructure, ensuring that research facilities are constructed, modernized, and equipped with state-of-the-art tools and resources to support the scientific community.

A critical component of this objective is HHS leadership in protecting the rights, welfare, and well-being of human subjects involved in research, and in investigating unethical behavior and misconduct in research. These human subjects protections apply to all human beings, from conception to natural death. Through the Federal Policy for the Protection of Human Subjects (The Common Rule, 45 CFR Part 46, Subpart A), the Department describes Institutional Review Boards, informed consent processes, and Assurances of Compliance, as well as additional protections for biomedical and behavioral research involving pregnant women, human fetuses, neonates, prisoners, and children (45 CFR Part 46, Subparts B–D).

<u>Scientific integrity</u> is a priority for the Department. Divisions responsible for research have developed policies and procedures to ensure the highest degree of scientific integrity in the research HHS conducts, funds, and supports—to ensure that our research is credible and worthy of the public's confidence.

Contributing Operating Divisions and Staff Divisions

AHRQ, CDC, FDA, NIH, OASH, OGA, and SAMHSA

The Department recognizes that our ability to develop the breakthroughs of tomorrow depends on our ability to recruit the next generation into careers in science, technology, engineering, and math today. The Department is recruiting, training, and retaining a scientific workforce responsive to future demands through the following strategies:

- Support fellowships and other training programs in academic, industry, and government settings to help recruit and train <u>early-career scientists</u>, <u>laboratory scientists</u>, public health scientists, and survey statisticians
- Provide <u>research training</u> and <u>career development opportunities</u> to ensure that a diverse pool of highly trained investigators will be prepared for and available across the range of scientific disciplines necessary to address the Nation's <u>biomedical</u> and <u>scientific</u> <u>research</u> needs
- Implement and evaluate the effectiveness of scientific workforce development programs, including training and formal mentorship of new scientists, including data scientists, to guide and support staff performance and professional development and to improve the sustainability and quality of workforce programs
- Conduct joint fellowship programs and other training programs targeted to researchers and regulatory reviewers to provide multidisciplinary training across the interrelated areas of basic and translational science
- Ensure administrative systems and policies are aligned with anticipated workforce needs to support comprehensive capacity building and consistent quality improvement programs

<u>Guidelines for ethical and responsible research</u> consider the boundaries between biomedical and behavioral research and the accepted and routine practice of medicine, risk-benefit criteria, appropriate guidelines for selection of human subjects for participation, and informed consent. The Department promotes ethical and responsible research through the following strategies:

- Assess peer review practices and provide the workforce with best practices for peer review
- Improve <u>human subjects protection</u>, and enforcement of human subjects protection regulations and other laws governing research, especially with respect to research involving human embryos or embryonic <u>stem cells</u>/tissue, <u>fetal tissue</u>, genetic engineering and manipulation of the germ cell, and the creation of chimeras
- Provide guidance and tools, <u>including required trainings</u>, to ensure that researchers are able to conduct research ethically, safely, securely, and responsibly

• Improve the methodological rigor, transparency, and reproducibility of federally funded research and surveys to strengthen public confidence in federally supported research and survey findings

Approximately <u>84 percent of the NIH budget - PDF</u> is dedicated to supporting more than 300,000 members of the research workforce in the extramural biomedical, behavioral, and social science research communities. The Department collaborates with the broader research community to strengthen innovation through the following strategies:

- Facilitate interactions with domestic and international partners to promote basic science and research/educational collaborations and to engage in innovative joint research projects
- Promote a culture of responsible data sharing, openness, and collaboration to better engage with academia and the private sector, consistent with applicable privacy and security requirements

<u>Core facilities</u> are centralized shared resources that provide access to instruments, technologies, services, expert consultation, and other services to scientific and clinical investigators. The Department is strengthening core facilities and infrastructure capacity through the following strategies:

- Leverage facilities as shared resources, which provide investigators access to advanced technologies through <u>cutting-edge instrumentation</u> operated by appropriately trained staff
- Ensure that the scientific research workforce has <u>access to modern tools</u>, including resources for data science and scientific computing
- Support modernization and improvements of <u>research facilities</u> through alterations, renovations, and new equipment purchases

- By 2021, develop, validate, and/or disseminate three to five new research tools or technologies that enable better understanding of brain function at the cellular and/or circuit level
- Increase the percentage of scientists retained at the FDA after completing fellowship or traineeship programs

Strategic Objective 4.3: Advance basic science knowledge and conduct applied prevention and treatment research to improve health and development

The impact of scientific discoveries cannot be underestimated. Research-related gains in average life expectancy between <u>1970 and 2000 have an economic value of \$3.2 trillion dollars per year</u>. A \$1.00 increase in public basic research <u>stimulates an additional \$8.38</u> of industry research and development investment after 8 years.

Basic science and applied prevention and treatment research are critical not just to the American economy, but to quality of life. <u>Infant mortality - PDF</u> has dropped by more than 75 percent since 1960. For children born in 2009, childhood vaccinations are expected to <u>save \$13.5</u> <u>billion</u> in direct healthcare costs over the course of their lifetimes. The death rate from <u>unintentional injuries - PDF</u> has decreased almost 40 percent since 1969. And a 20-year-old <u>HIV - PDF</u>-positive adult receiving treatment to suppress the virus can expect to live into their early 70s—nearly as long as someone without HIV.

For nearly every Strategic Objective in this Strategic Plan, HHS is conducting, supporting, or funding research to expand our knowledge about how to achieve positive outcomes—to improve health and well-being and extend quality of life. Partnerships with the private sector, academia, and governments at the Federal, State, Tribal, local, and international levels are critical to success in this objective.

HHS conducts, funds, and supports a broad and diverse portfolio of biomedical research in a range of scientific disciplines, including basic and translational research, to augment scientific opportunities and innovation for public health needs. HHS works to strengthen basic and applied science and treatment pipelines to assess potential health threats and bolster the fundamental science knowledge in these risk areas to expedite the development of therapies. As described in *Strategic Objective 4.2, Expand the capacity of the scientific workforce and infrastructure to support innovative research*, research is conducted ethically and responsibly.

Contributing Operating Divisions and Staff Divisions

ACL, AHRQ, CDC, FDA, NIH, and OASH

Heart disease, cancer, chronic lower respiratory diseases, unintentional injuries, stroke, Alzheimer's disease, diabetes, influenza and pneumonia, kidney diseases, and suicide were the 10 <u>leading causes of death</u> in 2016. The Department is working to reduce the incidence of the leading causes of death through the following research strategies:

- Discern risk factors and mechanisms underlying the leading causes of death to accelerate applied and preventive research solutions
- Support research to prevent the leading causes of death in adults by improving the quality and specificity of reporting causes of death, developing systematic studies, and testing interventions to determine and prevent the actual causes of death
- Develop and test methods to increase adoption by primary care providers of recommendations from the <u>U.S. Preventive Services Task Force</u> for clinical preventive services that address the leading and actual causes of death
- Assess the 5-year health outcomes and adverse events of preventive interventions that target the actual and leading causes of death, to assist the <u>U.S. Preventive Services Task Force</u> in providing evidence-informed recommendations

<u>Strategic Objective 1.2, Expand safe, high-quality healthcare options, and encourage innovation</u> <u>and competition</u>, describes the Department's efforts to improve patient safety and healthcare quality, including within healthcare settings. <u>Strategic Objective 1.3, Improve Americans' access</u> <u>to healthcare and expand choices of care and service options</u>, describes how the Department works to connect the people HHS serves to quality options. To build knowledge about effective approaches, the Department is investing in research to promote access, patient safety, and healthcare quality through the following strategies:

- Facilitate patient-focused medical product development to inform regulatory decision making
- Conduct and support data collection, research, and evaluations to support healthcare safety, delivery, quality, efficiency, and effectiveness for all populations, including those <u>experiencing healthcare disparities</u>
- Conduct research that takes into account <u>individual differences in lifestyle</u>, <u>environment</u>, <u>and biology</u>, to determine new pathways for preventing and treating disease
- Foster and capitalize on advances in <u>personalized medicine</u> to accelerate health research and medical breakthroughs, enabling individualized prevention, treatment, and care for all people and addressing unmet medical needs
- <u>Support research</u> to provide evidence on how to ensure access to affordable, physical, oral, vision, behavioral, and mental health insurance coverage for children and adults

- Conduct research to facilitate development and availability of innovative, safe, and efficacious human and animal medical products, including development of regulatory science
- Conduct, fund, and apply research on the role of other risk factors and their impact on health access, quality, and safety
- Facilitate the development and qualification of <u>clinical outcome assessment tools</u> to measure clinical benefit in medical product development
- Support and facilitate the adoption of innovative pharmaceutical technology to modernize product development and manufacturing, ensuring the consistent supply of high-quality medicine for patients
- Produce and promote healthcare delivery methods and interventions that improve care quality, promote healthcare access, reduce disparities, and address other risk factors among populations at risk for poor health outcomes
- <u>Expand our understanding</u> of the causes of, treatments for, and prevention of Alzheimer's disease and related dementias, including accelerating efforts to identify early and presymptomatic stages and translating findings into medical practice and public health programs

Strategic Objective 1.4, Strengthen and expand the healthcare workforce to meet America's diverse needs, describes the Department's efforts to recruit, retain, and train the healthcare workforce. To build our knowledge, the Department is investing in research on strengthening and supporting healthcare providers through the following strategies:

- Evaluate the adoption, implementation, and impact of <u>clinical decision support</u> systems, and evidence-based guidelines on clinical and community preventive services and treatments to improve both behavioral and physical health and well-being
- Fund research on <u>shared decision making</u> to support healthcare providers' efforts to deliver healthcare services that empower patients, families, and caregivers to implement lifestyle behavior modification aimed at better health and healthcare outcomes
- Fund applied research, development, training, and sharing of information and products to improve knowledge and practice of service delivery professionals who are supporting disadvantaged and at-risk populations
- Conduct research and disseminate findings on systems of care and strategies such as teambased care, enhanced communication, and improvements in technology that reduce burden and burnout of healthcare professionals and that create healthy workplaces

<u>Strategic Objective 2.1, Empower people to make informed choices for healthier living</u>, describes the Department's efforts to promote health and wellness in the public. To expand our knowledge

base, the Department is investing in research to promote health and wellness through the following strategies:

- Invest in research and education on behavior change methods, such as effective stress management, proper nutrition, and regular exercise
- Accelerate research and national efforts to implement solutions at the individual, family and community level, including through partnerships with Tribes and faith-based and community organizations, to reduce childhood obesity, including focusing on the pregnancy period to age five in terms of the etiology and interventions

Strategic Objective 2.2, Prevent, treat, and control communicable diseases and chronic conditions, describes the Department's efforts to promote public health on the ground. To develop our understanding about best practices and build the evidence base, the Department is investing in research to prevent, treat, and control chronic conditions and communicable diseases through the following strategies:

- Support basic science and applied prevention and treatment research on approaches to reduce the global burden of infectious diseases such as HIV, viral hepatitis, tuberculosis, malaria, and neglected tropical diseases
- Support basic and applied research to prevent and treat enteric and respiratory diseases
- Conduct basic science and applied research and disseminate findings to maximize the use of age-appropriate vaccines to minimize the burden of preventable diseases across the lifespan
- Develop and assess improved methods for rapidly detecting and investigating disease outbreaks and developing new preventive and therapeutic strategies
- Develop, evaluate, and implement high-impact public health interventions domestically and internationally, and advance policies to increase community and individual engagement in infectious disease prevention efforts
- Invest in research on the use of specific social and behavioral interventions to prevent, treat, and control communicable and chronic conditions
- Identify, develop, and evaluate effective prevention and control practices for <u>Lyme</u> and other vector-borne diseases

<u>Strategic Objective 2.3, Reduce the impact of mental and substance use disorders through</u> <u>prevention, early intervention, treatment, and recovery support</u>, describes the Department's direct supports related to mental health and substance abuse. To expand the knowledge base, the Department is investing in research to improve behavioral health through the following strategies:

- Conduct applied research to identify the most effective health and community-based system interventions that address the modifiable risk factors for <u>prescription opioid misuse</u>, heroin initiation, and opioid use disorder and overdose
- Foster integration of behavioral and social science research into research involving acceptability and understanding of <u>genomics</u> and <u>proteomics</u>, to accelerate time-to-trial as well as improve study designs

Strategic Objective 2.4, Prepare for and respond to public health emergencies, articulates the Department's emergency preparedness and response activities. The Department is developing the knowledge to support evidence-based interventions for public health emergencies through the following strategies:

- Enhance the portfolio of strategies, interventions, and evaluations to prevent and respond to public health emergencies
- <u>Accelerate research</u> on novel therapeutics, vaccines, rapid diagnostics, and behavioral interventions to expand evidence-based biomedical countermeasures and preparedness strategies

The Strategic Objectives in <u>Strategic Goal 3: Strengthen the Economic and Social Well-Being of</u> <u>Americans Across the Lifespan</u> describe the Department's efforts to provide high-quality, evidence-based human services programs. The Department is investing in research and evaluation to strengthen human services programs through the following strategies:

- <u>Develop evidence</u> on policies and practices that support stable, economically secure families, with a focus on TANF, employment, education and training, behavioral science, and safety-net research
- Invest in rigorous research and evaluation to identify effective violence and injury prevention strategies, and support the adoption of evidence-based practices to address these issues
- Invest in rigorous research on and evaluation of domestic violence programs
- <u>Invest in research PDF</u> on individual and community-wide interventions and approaches for children, youth, and adults who have experienced adverse childhood experiences, to learn what trauma-informed programs and services demonstrate positive effects
- Conduct applied research and disseminate findings to maximize use of evidence-based strategies to <u>improve the well-being of children at all stages of development</u>, youth, and families
- <u>Support research</u> and test approaches to effective housing with services for <u>people with</u> <u>disabilities</u> and older adults aimed at maximizing independence, choice, and health

- By 2023, develop, optimize, and evaluate the effectiveness of nano-enabled immunotherapy (nano-immunotherapy) for one cancer type
- By 2022, evaluate the safety and effectiveness of one to three long-acting strategies for the prevention of HIV
- By 2023, identify risk and protective alleles that lead to one novel therapeutic approach, drug target, or pathway to prevention for late-onset Alzheimer's disease

Strategic Objective 4.4: Leverage translational research, dissemination and implementation science, and evaluation investments to support adoption of evidence-informed practices

Translational research, dissemination and implementation science, and evaluation investments help to ensure that critical knowledge from basic and applied research finds its way into practice in clinical, public health, and community settings.

Translational research, dissemination, and implementation science help increase understanding about how best to support knowledge, adoption, and faithful implementation of best practices in the community. Selecting and adopting evidence-based approaches to tackle health, public health, and human services challenges can be a complex undertaking. HHS programs balance requirements to implement high-quality programs with fidelity, while acknowledging the unique needs of specific individuals or target populations, recognizing differences in program and community settings and resources, and respecting linguistic or cultural differences. Understanding threats to successful implementation of a promising practice can help the Department prevent and mitigate those risks early.

Evaluation and evidence can support the Department's efforts to improve program performance by applying existing evidence about what works, generating new knowledge, and using experimentation and innovation to test new approaches to program delivery. HHS is committed to integrating evidence into policy, planning, budget, operational, and management decision making. HHS funds multiple types of evaluation and evidence-generating activities; these activities may examine how well a program is implemented, whether it achieves intended outcomes, the overall impact of a program, or all three. Results of these types of activities may be used to plan programs, assess program performance, understand how to improve a program, and inform policy decisions.

Contributing Operating Divisions and Staff Divisions

ACF, ACL, AHRQ, CDC, FDA, HRSA, NIH, OASH, and SAMHSA

Numerous factors affect whether an intervention will have a positive health, public health, or human services outcome on individuals or targeted populations, including the selected model of the intervention, the population served, and the fidelity of implementation. The Department works to improve programs for populations at risk for poor health and well-being outcomes through the following strategies:

- Assess evidence-based practices and service delivery system improvements to increase access to services and improve outcomes for disproportionately affected populations
- Support research conducted in a variety of settings and populations, to improve the quality and utility of evidence generated from HHS investments and the impact of those investments on a broad range of outcomes
- Evaluate multifaceted strategies to apply evidence-based interventions to reach disproportionately affected populations and reduce health disparities
- Analyze data on behavioral health disparities to increase understanding of factors contributing to disparities, identify disadvantaged and at-risk populations, assess trends, and inform policy and program development

<u>Dissemination</u> is the intentional, strategic distribution of information and intervention materials to a specific public health or clinical practice audience. HHS is working to disseminate knowledge about evidence-based interventions through a number of strategies:

- Increase dissemination and implementation of evidence-based practices and provide training and technical assistance to stakeholders to improve outcomes
- Systematically review current evidence on the effectiveness of programs and policy, and disseminate findings in easily accessible formats to practitioners and decision-makers
- Disseminate <u>patient-centered outcome research</u> findings to health professionals and organizations that deliver healthcare

Evaluation involves the systematic collection of information about the activities, characteristics, and outcomes of programs to make judgments about a program, improve program effectiveness, and/or inform decisions about future program development. HHS invests in programs to determine their efficiency and effectiveness through several strategies, including the following:

- Encourage the use of <u>learning agendas</u> <u>PDF</u> or other tools to prioritize critical questions that generate evidence to guide decision making and continuous learning, including short-and long-term questions that build a portfolio of evidence about what works for whom
- Foster a culture of learning through opportunities for coordination and collaboration within and across HHS and with external partners

- Identify improvements to existing evidence-based programs and policies to share broadly with local communities for public health impact
- Promote the use of common evidence standards, principles and practices for evaluation, and policies that support rigorous, relevant, transparent, independent, and ethical evidence-building activities

<u>Implementation science</u> is the study of methods to promote the integration of research findings and evidence into healthcare policy and practice. HHS is working to support the uptake, adoption, and implementation of evidence-based interventions through a number of strategies:

- Engage healthcare, public health, and human service system research networks to study and support local adaptation or customization of evidence-based practices
- Develop and disseminate tools and provide technical assistance that supports adoption and implementation of evidence-based practices to improve access to high-quality public health, healthcare, and human services
- Support knowledge translation capacity and practice to ensure that knowledge generated by grantees and others working in the field is used or adopted by its intended users

Facilitating the adoption of evidence-based solutions into practice requires active engagement of change agents and innovators across health, public health, and human services domains. The Department works to accelerate change through the following strategies:

- Promote innovative approaches to translating research into interventions that improve health and well-being, by modernizing processes and removing obstacles to bring more effective practices to more people more quickly
- Leverage cutting-edge science to support product development strategies, regulatory evaluation, and implementation science by establishing platforms for interaction with academic institutions, other government agencies and their investments, and industry

- Increase the percentage of Community-Based Child Abuse Prevention total funding that supports evidence-based and evidence-informed child abuse prevention programs and practices
- By 2020, develop and test the effectiveness of two strategies for translating cancer knowledge, clinical interventions, or behavioral interventions to underserved communities in community-based clinical settings

STRATEGIC GOAL 5: PROMOTE EFFECTIVE AND EFFICIENT MANAGEMENT AND STEWARDSHIP

This Strategic Goal describes efforts to act as responsible stewards of the financial resources the American taxpayers and Congress entrust to the Department, to support and cultivate top talent, to develop robust and responsive information management systems, and to create a safe and secure environment for human, digital, and physical assets.

HHS is responsible for almost a quarter of Federal outlays and administers more grant dollars than all other Federal agencies combined. Ensuring the integrity of direct payments, grants, contracts, and other financial transactions requires strong business processes, effective risk management, and a financial management workforce with the expertise to comply with legislative mandates, including the Federal Managers' Financial Integrity Act of 1982 (Pub. L. 97–255), the Federal Funding Accountability and Transparency Act of 2006 - PDF (Pub. L. 109–282), and the Improper Payments Elimination and Recovery Improvement Act of 2012 (Pub. L. 112–248).

More than 91,000 permanent and temporary employees serve the public through the Department, providing direct clinical care, serving as emergency responders, researching cures, working with grantees to improve outcomes, and performing other critical functions. Half of the Department's employees work in Washington, DC, with others serving in States and territories, on Tribal lands, and around the globe. Through a new Federal Human Capital Framework, the Federal Workforce Priorities Report, and annual Human Capital Review sessions with the Office of Personnel Management, required by 5 CFR Part 250, Subpart B, *Strategic Human Capital Management*, HHS will work to identify and implement strategies to strengthen its workforce.

The information technology landscape has changed significantly in this century. How we collect and consume information, how we purchase resources, and even how we interact with each other has been revolutionized by technology—and will continue to evolve and change. The Department's information technology investments focus on accessible, user-friendly design and promote business efficiencies, and also must comply with Office of Management and Budget (OMB) guidance and legislative mandates, such as the <u>Federal Information Security</u> <u>Modernization Act</u> (Pub. L. 113–283).

Finally, to accomplish the HHS mission, its staff, data, and infrastructure must be safe and secure. The Department is working to safeguard assets against threats and hazards, whether internal or external, unintentional or malicious, natural or manmade. Securing staff, software, and systems is guided by specific supports, such as <u>Homeland Security Presidential Directive 12</u>, and standards, measurements, and testing promoted by the <u>National Institute of Standards and Technology</u>.

All operating divisions and staff divisions within HHS are committed to achieving this goal, with the Office of the Assistant Secretary for Financial Resources (ASFR), the Office of the Assistant Secretary for Administration (ASA), the Office of the Chief Technology Officer (CTO), the

Office of the General Counsel (OGC), and the Office of Security and Strategic Information (OSSI) playing key roles.

Strategic Objective 5.1: Ensure responsible financial management

Each year, the Department publishes its <u>Agency Financial Report</u>, which shares its progress in modernizing financial systems to strengthen system security, reliability, and availability. Among the Department's efforts to streamline business processes are the following strategies:

- Use quality improvement principles to review key business processes, and identify opportunities to reduce risk and improve outcomes in areas such as financial management, grant management, and acquisitions
- Reduce inconsistent recording and incomplete financial data and, thus, reduce efforts required to perform data cleanup and data transformation
- Preserve public trust and stewardship of taxpayer funding by ensuring effective internal controls and efficient operating policies and procedures are in place that can result in an unqualified audit opinion with no material weaknesses

OMB Circular A-11 and OMB Circular A-123, *Management's Responsibility for Enterprise Risk Management and Internal Control*, charge Federal agencies with implementing an enterprise risk management approach to address significant risks, improve mission delivery, and prioritize corrective actions. The Department promotes effective and efficient risk management across HHS and its programs through the following strategies:

- Conduct and use risk assessments within an enterprise risk management framework to improve information sharing and leadership decision making, resulting in risk-informed strategy execution and program implementation
- Use public-private partnerships to prevent and detect fraud and other inappropriate payments across the healthcare industry by sharing fraud-related information and data, promoting best practices, and educating partners
- Protect Medicare and Medicaid through prevention and detection of fraud, waste, abuse, and improper payments
- Manage the costs associated with governmental imposition of private expenditures through implementation of Executive Order 13771 of January 30, 2017, <u>Reducing Regulation and Controlling Regulatory Costs</u>, by ensuring that, consistent with the Administrative Procedure Act and as informed by the terms of the Executive Order and associated guidance, as appropriate, for every one new regulation issued, at least two prior regulations are identified for elimination, and the cost of planned regulations are managed through a budgeting process

In a Federal department responsible for the administration of more than a trillion taxpayer dollars, the financial management workforce needs to have the skills and competencies to maximize and leverage the Department's financial resources. The Department is strengthening the financial management, acquisition, and grants workforce through the following strategies:

- Reduce knowledge gaps within the financial management, acquisition, and grants workforce by supporting hiring, training, and development programs to strengthen competencies
- Support knowledge transfer programs and training strategies so that the financial management, acquisition, and grants workforce can respond to challenges and changing demands across the enterprise
- Develop a financial management, acquisition, and grants workforce that uses crossfunctional and knowledge transfer training programs to respond to challenges and changing demands across the HHS enterprise

Note: Additional strategies on strengthening the workforce are in Strategic Objective 5.2.

- Meet the following goals related to improper payments:
 - Reduce the percentage of improper payments made under the Medicare Fee-for-Service Program
 - Reduce the improper payment rate in the Medicaid Program
 - Reduce the improper payment rate in the Children's Health Insurance Program
 - Reduce the percentage of improper payments made under Medicare Part C, the Medicare Advantage Program
 - Reduce the percentage of improper payments made under the Part D Prescription Drug Program

Strategic Objective 5.2: Manage human capital to achieve the HHS mission

As the Department looks to FY 2022 and beyond, it imagines all the achievements that can be reached when workforce performance is heightened, efficiencies achieved, and accountability strengthened. The Department must continue to create a flexible and agile workforce that responds and adapts to change: change in technology, change in society, change in expectations, and change in scientific findings. HHS needs the leaders of tomorrow today. To this end, the Department will build a world-class Federal management team and a workforce ready to collaborate with colleagues within the Department, among other Federal departments, and outside the Federal Government, to seek change that improves and enhances the health and wellbeing of Americans.

The HHS workforce comprises more than 91,000 permanent and temporary employees, serving in every region of the United States, including Tribal communities and the U.S. territories, and 66 countries around the world. To achieve its mission, HHS will need to recruit, hire, and retain a qualified, talented, diverse, and inclusive workforce. As the majority of HHS staff nears retirement eligibility, human resources offices throughout the Department help HHS components to hire the best talent from all segments of society and strengthen succession planning, to ensure the Department can continue to support mission-critical functions.

Management will need to help build and maintain the workforce in a way that retains current knowledge, anticipates advances in medicine and technology, and prepares internal staff for future leadership positions. To fulfill the Department's mission, there is a need to recruit, hire, and retain talent with STEM (science, technology, engineering, and math) skills. Targeted recruitment efforts will become more important as mission-critical positions are vacated. Competition from private industry for new employees will continue to be a challenge in recruitment efforts.

An improved and engaged workforce is enhanced by a world-class management team. HHS will strengthen its management team by providing the tools, training, skill development, and empowerment needed to encourage its workforce to work to its highest potential, accountable for its efficiency and effectiveness toward meeting the HHS mission. To keep abreast of advances and lead change in these fields, HHS will continue to bring together the best expertise and talent—to serve the American people the best way possible.

Contributing Operating Divisions and Staff Divisions

All operating divisions and staff divisions

Among large agencies, HHS was ranked the second "<u>Best Place to Work</u>" in 2017. The Department is working to build a high-quality workforce to respond to current and emerging demands through the following strategies:

- Deploy creative and strategic recruitment strategies to target talent to fill mission-critical occupations
- Recruit and retain the most qualified candidates to best meet the needs of the populations served by the Department
- Increase the efficiency and effectiveness of recruitment efforts by partnering with hiring managers and leveraging data to make informed decisions regarding recruitment and retention strategies
- Use existing flexibilities and pursue new retention incentives to ensure HHS retains the highest caliber workforce
- Improve workforce planning efforts by integrating succession management activities into efforts to retain employees and manage knowledge transfer within government wide and agency-specific <u>mission-critical occupations</u> and other shortfall areas
- Advance employee development by increasing opportunities for cross-training activities, developmental and rotational assignments, mentoring and coaching, and other cross-functional activities
- Create and implement development opportunities to provide staff with the leadership, technical, and behavioral skills to succeed in their current and future positions in Federal service

In 2017, the Department ranked second among large agencies in employee engagement, according to the <u>Federal Employee Viewpoint Survey</u>. The Department is maximizing opportunities for employees to contribute to mission success through the following strategies:

- Deploy diversity and inclusion activities to create an environment where people feel valued and can effectively contribute their talents to the mission
- Deploy legally permissible strategies to achieve workforce composition goals, including efforts to increase the Veteran workforce and to increase the number of employees with targeted disabilities
- Use employee feedback and best practices from across the Federal Government to identify and develop strategies to act on employee input and increase employee engagement, such as brown-bag lunches, midcycle surveys, improved analytics, and action guides

• Increase employee engagement, participation in the Federal Employee Viewpoint Survey, and belief that results will be used to improve the organization, by helping managers devise strategies to increase employee engagement and scores around belief in action

<u>OMB Memorandum M-17-22 - PDF</u>, *Comprehensive Plan for Reforming the Federal Government and Reducing the Federal Civilian Workforce*, charged all Federal agencies with ensuring that supervisors and managers are held accountable for managing employee performance and conduct. The Department is strengthening performance and accountability through the following strategies:

- Conduct supervisory training sessions to ensure supervisors are aware of the tools available to engage employees, recognize performance, and strengthen accountability
- Enhance and promote reward and recognition tools available throughout HHS
- Strengthen the performance management process, including better ensuring critical elements are directly linked to the work being performed

The Department is working to build better, stronger, integrated systems that will save hundreds of hours of labor and bring human resources data, tools, and services into the 21st century. The Department works to leverage technology to support human capital management through the following strategies:

• Deploy new and enhanced information technology tools to strengthen the human capital management program at HHS, to reduce administrative burdens, strengthen the human capital program, and improve reporting capabilities as well as promote uniformity and data transparency, appropriate controls, and enterprise-wide analysis to strengthen decision making

- Increase HHS employee engagement through the Federal Employee Viewpoint Survey
- Decrease the cycle time to hire new employees

Strategic Objective 5.3: Optimize information technology investments to improve process efficiency and enable innovation to advance program mission goals

New technology is changing how Americans, businesses, governments, and other organizations expect the Federal Government to manage and deliver services. These individuals and entities expect the same innovation, speed, and quality when they interact with HHS. The right technology investments can help reduce costs as the Department becomes more agile and responsive in an environment of rapid change.

HHS information technology investments help achieve the Department's mission by acquiring and managing the technology infrastructure and systems for its healthcare and human services programs and mission-support programs. From externally facing websites like <u>HHS.gov</u> to internal applications that manage programs and resources, HHS needs information technology solutions to be modernized, secure, and responsive to customer demands.

The <u>HHS Information Technology Strategic Plan 2017–2020 - PDF</u> and the <u>HHS</u> <u>Implementation Plan for the Federal Information Technology Acquisition Reform Act</u> (<u>FITARA</u>) - PDF guide information technology decision making across the Department. The Department's current modernization investments include cloud computing, data center consolidation and improvements, information technology portfolio reviews, shared services, and a <u>digital strategy</u> that makes it easier to access information using HHS websites and tools. HHS is working to increase partnerships with industry, academia, and <u>other organizations</u> to leverage their technology expertise as well.

Planning and managing information technology investments is a challenge. HHS will upgrade its legacy systems, increase <u>interoperability</u> to allow systems to exchange information and use the information to make better decisions, and improve the management of its information technology investments to ensure quality service delivery. For example, through the <u>HHS Strategic Plan for</u> <u>Data Center Optimization - PDF</u>, the Department is working to reduce costs on infrastructure, curtail excessive energy usage, leverage cloud-based technologies, and minimize or eliminate security risks.

Through its participation on the Chief Information Officers (CIO) Council, the Department engages with other Federal departments and agencies to implement information resource management objectives described in the <u>E-Government Act of 2002 (Pub. L. 107–347)</u>, the <u>Government Paperwork Elimination Act (Pub. L. 105–277)</u>, the <u>Paperwork Reduction Act of 1980 (Pub. L. 96–511)</u>, and the <u>Information Technology Management Reform Act of 1996 (Pub. L. 104–106)</u>. The Department also has established clear lines of authority among the Office of the Chief Information Officer and CIOs in each of its operating divisions, to ensure shared and transparent responsibility for information technology investments, and more effective management of the information technology portfolio.

Contributing Operating Divisions and Staff Divisions

All operating divisions and staff divisions

<u>User-centered design</u> in information technology involves understanding who will be using a resource, what they need, what they value, and their abilities and limitations. The Department's externally facing information technology solutions help States look for early warning data on infectious disease outbreaks, such as flu; share information about health insurance coverage options with older adults and the general population; and provide research data to universities and colleges with which the Department is collaborating to find the cures of the future. The Department is working to provide easily understandable, easily accessible information technology solutions, to improve the customer experience, through the following strategies:

- Promote adoption of user-centered design for information technology services targeted to the American public
- Build multiuse and interconnected systems that are intuitive, usable, and accessible
- Improve internal communications, including through unified communications technology, to integrate email, voice mail, and other systems, so that staff may access these work supports regardless of division or work location

About 40 percent of the systems of record at HHS are "legacy" information technology, meaning they are no longer supported by their manufacturers. The Department is working to modernize information technology systems to reduce the risk associated with unsupported or end-of-life systems by identifying opportunities to modernize, decommission, or replace legacy systems, through the following strategies:

- Capitalize on and leverage best practices from divisions within HHS and the private sector to develop enterprise-wide information technology solutions, while minimizing custom application development, maximizing collaboration, and reducing cost
- Support the capability of high-performance computing services, such as sharing large data sets between research institutions, to deliver parallel processing for running advanced application programs efficiently, reliably, and quickly

Informed by FITARA and the <u>Making Electronic Government Accountable By Yielding</u> <u>Tangible Efficiencies (MEGABYTE) Act of 2016 (Pub. L. 114–210)</u>, as well as by <u>OMB M-16-12</u>, <u>Category Management Policy 16-1</u>, <u>Improving the Acquisition and Management of Common</u> <u>Information Technology: Software Licensing - PDF</u>, the Department is working to improve acquisition of information technology assets and services through the following strategies:

- Implement cost-efficient and effective purchasing of software and services that serve as a bridge between operating systems, databases, and applications
- Align acquisition processes, including those required by the <u>Federal Acquisition</u> <u>Regulation</u> and internal policies, with information technology business models and

practices, to remove barriers for purchasing responsive technology in a timely manner to meet ongoing and urgent business needs

Competing with the private sector is a perennial challenge to recruiting and retaining top talent in the government sphere. The Department is working to strengthen the information technology workforce through the following strategies:

- Support ongoing management and planning to optimize use of technology expertise and resources, properly align staffing and responsibilities, and maximize resources
- Implement skills-based workforce training for technology practitioners who design, manage, operate, and support information technology investments

Note: Additional strategies on strengthening the workforce are in Strategic Objective 5.2.

Through the <u>HHS Data Council</u>, operating divisions and staff divisions from across the Department promote a coordinated strategy on data issues, by supporting strong data collection, analysis, and dissemination systems and by collaborating with other health and human services entities on common data interests. But data collected by the Department also include data related to business and operational functions. The Department is optimizing HHS capacity for data-driven decision making through the following strategies:

- Improve system interoperability to allow efficient data sharing; strengthen detection and surveillance of regulated products; reduce risks in manufacturing, production, and distribution of regulated products; and increase regulatory science capacity to effectively evaluate products
- Improve the capture, use, and management of operational and administrative data, including financial management and human capital management systems, by establishing formal processes, rules, and templates to control data sharing and protect sensitive information

- Increase the percentage of systems with an <u>Authority to Operate</u> (ATO)
- Improve the score to an "A" in each of the FITARA-related Scorecard Metrics, per GAO and the House Oversight and Government Reform Committee

Strategic Objective 5.4: Protect the safety and integrity of our human, physical, and digital assets

Through dedicated personnel, the vigilance of all of our employees, and physical and technological investments, the Department actively works to protect the safety and integrity of its personnel and the people served through HHS programs.

Threats to the people working in and served by the programs, facilities, and systems prevent the Department from focusing on its mission. Breaches of information technology systems can compromise electronic health records and privacy, and cause physical and financial harms to patients and financial harm to people and organizations that do business with HHS. In response to the increased threats to Federal information technology systems and cybersecurity attacks, Federal agencies are responsible for developing an <u>information security program</u> and <u>managing cybersecurity risks</u> for their networks and information technology infrastructure. HHS has implemented plans and processes to address different security incidents, from improper use to web attacks; continue operations during emergencies; and provide training to HHS staff and contractors.

Protecting the privacy of personally identifiable information—such as birthdates and Social Security numbers—and securing Federal information systems and critical infrastructure are challenges for Federal agencies. HHS is working to improve how it protects the <u>security and privacy</u> of electronic health information and to consistently address controls that prevent unauthorized use and unauthorized changes to information system resources, monitor building and access control systems, and ensure that all HHS staff and contractors are vetted properly and understand <u>cybersecurity risks</u>. Keeping personal information safe increases trust and confidence in HHS and its information and reporting systems.

Yet providing security for HHS involves more than preventing breaches or cybersecurity attacks. The Department's operating divisions and staff divisions participate in efforts to preserve physical security; personnel security and suitability; security awareness; information security, including the safeguarding of sensitive and classified material; and security and threat assessments. In addition, the Department has established a network of scientific, public health, and security professionals internally, as well as points of contact in other agencies, in the intelligence community, and in the Information Sharing Environment Council. The Department has specialized staff to provide policy direction to facilitate the identification of potential vulnerabilities or threats to security, conduct analyses of potential or identified risks to security and safety, and work with agencies to develop methods to address them.

Contributing Operating Divisions and Staff Divisions

All operating divisions and staff divisions

Strategic Goal 5: Promote Effective and Efficient Management and Stewardship has described our efforts to promote integrity in our financial management systems, strengthen our human capital, and optimize our information technology investments. Protecting these assets and mitigating threats to these systems require an enterprise-wide approach. The Department is working to identify, assess, remediate, and monitor risks to safety, security, and integrity through the following strategies:

- Advance an enterprise-wide risk management approach that continually provides situational awareness of HHS's risk posture by effectively identifying, assessing, remediating, and monitoring risks
- Establish enterprise-wide safety and security models that incorporate best practices from other Federal agencies

The <u>Federal Information Security Modernization Act</u> (Pub. L. 113–283) and the HHS Information Technology Strategic Plan guide the Department's efforts to protect data and electronic data systems from threats, including those from state actors, hackers, and internal threats. The Department protects information technology systems, data, and sensitive information, and prevents, detects, mitigates, and responds to cybersecurity events, through the following strategies:

- Maximize enterprise-level data access and security for stakeholders while ensuring data integrity and privacy in support of streamlined program flexibilities, accountability, and information exchange
- Ensure stronger authentication of privileged users to support application security
- Improve the sharing of intelligence with Federal and private-sector partners to improve situational awareness and reduce cyberthreats
- Maximize data access and usability to internal and external users while protecting data confidentiality, integrity, and availability, including beneficiary privacy
- Promote integration of electronic data systems to increase efficiency and minimize redundancy while maintaining appropriate standards for identity management and the protection of <u>personally identifiable information (PII)</u> and <u>protected health information (PHI)</u>
- Use a priority-based risk management approach that focuses on the protection of sensitive data, including PII and PHI data sets, <u>High Value Assets PDF</u>, and mission-essential systems

Through <u>Federal Continuity Directives</u> 1 and 2, the Federal Emergency Management Agency mandates that the executive branch prepare a Continuity of Operations Plan to be implemented in the event of service disruptions affecting any facility. The Department will execute essential functions, even in the event of an emergency, while protecting the safety of the HHS workforce, by employing the following strategies:

- Promote and ensure the execution of essential Federal functions, while providing for the safety and well-being of employees during emergency situations, including continuity of operations and emergency evacuations, and ensure that all safety and emergency plans take into consideration the varying needs of the HHS workforce
- Review and update continuity plans and procedures to ensure the safety of our workforce while taking advantage of available technologies, increasing efficiency, and minimizing duplication of efforts
- Integrate information security with emergency preparedness efforts, to prepare for broadscale cyberattacks or security breaches, and proactively engage with stakeholders on best practices in protecting the health of cyberspace

<u>Homeland Security Presidential Directive (HSPD) 12</u> establishes a requirement for all Federal agencies to create and use a government wide secure and reliable form of identification for their Federal employees and contractors (a personal identity verification credential). The Department is working to protect HHS facilities, information, and infrastructure through implementation of HSPD 12, as well as the following strategies:

• Strengthen physical, organizational, and functional infrastructure to maximize HHS's ability to meet increased demands

Implement best practices in identity and access management to enforce appropriate levels of protection of HHS-owned physical and logical assets and to ensure only authorized users are given access to resources and information

- Decrease the percentage of susceptibility among personnel to phishing
- Increase the number of days since last major incident of personally identifiable information breach