The Centers for Medicare & Medicaid Services (CMS) sponsors the CMS Alliance to Modernize Healthcare (CAMH), a federally funded research and development center (FFRDC). CAMH is one of seven FFRDCs operated by The MITRE Corporation, a not-for-profit organization chartered in the public interest. CAMH serves as an objective, independent adviser to CMS, other Department of Health and Human Services agencies, and other federal partners with health missions.

Federal Agencies Look to CAMH as an Objective Partner

As the only broadly healthcare-focused FFRDC, CAMH advises the government through in-depth analysis and systems thinking on business, policy, technology, and operational issues affecting the health sector.

Government agencies engaged in transforming our health sector have an unprecedented need for thoughtful, actionable advice, along with the analytical, systems engineering, and integration expertise necessary to realize that advice. CAMH is convening and managing public-private partnerships, applying big data analytics to shared data resources, recommending cybersecurity and privacy solutions, and assisting with organizational change management. We are a trusted, objective, and conflict-of-interest-free source, providing neutral evaluations, and strategic and tactical studies. We provide analyses, proofs-of-concept, modeling and simulation of policy alternatives, business architecture and operations models, and IT solution options.

Leveraging Expertise from MITRE's Breadth of Work

In addition to CMS, MITRE operates FFRDCs for the Department of Defense, the Federal Aviation Administration, the Department of Homeland Security, the Administrative Office of U.S. Courts, the National Institute of Standards and Technology, the Department of the Treasury, the Internal Revenue Service, and the Department of Veterans Affairs.

To gain deep and broad institutional knowledge and experience, we foster a culture of knowledge sharing by working across the traditional gulfs that exist among the government, industry, and academia. We apply what we learn from addressing one sponsor’s challenges to comparable issues that other sponsors confront. This means when customers engage with one MITRE FFRDC, they can draw expertise from MITRE’s entire body of work.
The FFRDCs that MITRE operates take on tough technical challenges of national importance and provide leading-edge, practical, and cost-effective solutions. The following are examples of the issues addressed by CAMH.

**Making Care Safer**
Every year an estimated 400,000 Americans die because of avoidable medical errors in hospitals and other health facilities. To address this critical public health issue, MITRE launched a National Patient Safety Partnership among hospitals to share sensitive health information, aggregate data across institutions, and apply advanced analytics to yield new strategies and protocols that reduce harm. We safeguard this rich data repository and provide the tools for clinical leaders to learn from the patterns, trends, and factors that correlate with safety issues and to develop interventions to prevent future incidents.

**Spending Smarter**
CAMH is accelerating the shift from fee-for-service models that reward volume to value-based payment models that reward quality. MITRE analyzes and recommends alternative payment models to better align incentives for patients, clinicians, insurers, and other healthcare stakeholders. We convene medical experts to conceive and validate alternative payment concepts, and follow up with economic analysis and modeling, system architectures, and operational concepts to scale up new payment models. We also provide strategic and technical advice on defining, developing, computing, evaluating, and effectively applying the measures of quality and outcomes that are an essential component of value-based payment models.

**Connecting Caregivers, Patients, and Researchers**
MITRE is working to promote health information exchange on a wide scale. We engage with standards organizations to make data exchange easier and have built tools that enable vendors and certifying authorities to test interoperability. MITRE has also developed tools for removing personal identifying information from medical records, extracting facts from clinical text, combining multiple health data sets for analytical and research purposes, complying with patient privacy preferences, and sharing cyber threats.

**Empowering Consumers**
Working with the RAND Corporation, MITRE designed educational materials that provide newly insured consumers with practical information about connecting to care. MITRE has demonstrated concepts for linking consumers’ personal health applications and devices to the electronic health records systems maintained by clinicians. We have also conceived innovative ways to protect privacy and respect individual preferences for sharing of personal information.