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Experience, Quality, Honesty, Results.

Ellumen is the leading provider of innovative information technology for the healthcare industry. Headquartered in Arlington Virginia, Ellumen was founded in 2003 to meet the growing need for improved integration and sharing of health-related information. We specialize in the integration of electronic health records, clinical and business applications, and digital medical imaging within and across organizational boundaries. Our team has been instrumental in the success of numerous highly visible, large-scale, and ground-breaking projects.

Ellumen's principals are highly experienced and have assembled a strong leadership and technical team who provide innovative solutions for challenging healthcare information problems. A combined total of more than 60 years of federal healthcare industry experience, William J. McCollough, Chief Scientist and CEO, Michael J. Luby, Chief Operating Officer and John R. Leslie, Chief Technology Officer provide unmatched subject matter expertise for the technical management of healthcare integration frameworks and hands-on experience in the diagnostic medical imaging, the PACS industry, Federal Health Information Exchange (FHIE), Bidirectional Health Information Exchange (BHIE), and Government Computer-based Patient Record (GCPR). This experience offers our customers unparalleled cost savings and efficacy when integrating legacy healthcare IT systems to the latest industry requirements.

HEALTH INFORMATION EXCHANGE

Ellumen architected, implemented, and continues to maintain the Bidirectional Health Information Exchange (BHIE) and is a trusted partner of the Department of Veterans Affairs and the Department of Defense enabling the daily exchange of medical records of more than 15 million individual beneficiaries. This infrastructure also manages hundreds of millions of clinical and financial records. Our experience implementing interoperable health information technology infrastructure solutions with BHIE has been recognized by the Department of Health and Human Services Office of the National Coordinator (ONC) as the model and de facto integration architecture for the Federal NHIN Health Information Exchange (NHIE) Gateway.

MEDICAL IMAGING

Ellumen's extensive commercial and Federal experience providing innovative digital imaging technology solutions spans projects ranging in scope from large cross-enterprise integration efforts to smaller implementations within medical centers or clinics. We have implemented successful image sharing and integration between two of the world's largest healthcare systems, the Military Health System and the Veterans Health Administration. We have a core imaging technology capability that includes extensive experience in the DICOM image standards, image processing, image compression, document imaging, image manipulation/conversion, and expertise with medical imaging modalities and PACS.

COMPANY OVERVIEW

Ellumen specializes in the Integration of electronic health records, clinical and business applications, and digital medical imaging within and across organization boundaries.

Bidirectional Health Information Exchange (BHIE)

The Department of Defense (DoD) and the Department of Veterans Affairs (VA) jointly provide healthcare and other benefits to millions of active duty personnel and retired veterans. Together, they created the BHIE to allow care providers ready access to health information on the populations they serve. As the original architects, Ellumen provides engineering, O&M, and infrastructure modernization services to support the ongoing development and testing of the BHIE. Our efforts provide unmatched legacy system integration and ensure the operational effectiveness of the BHIE system which supports the daily care of our nation's military personnel, veterans, and their families.

Interagency Imaging Integration

Ellumen built the next generation application which integrated the digital medical images exchanged between DoD and VA health care systems. Our distributed repository architecture enabled the exchange of digital medical images between the DINPACS system at William Beaumont Army Medical Center (WBAMC) and the VistA Imaging/Remote Image viewing capabilities at the VA El Paso HCS. The resulting system is the first cross-agency enterprise image exchange designed to support expansion to various source modalities and viewing capabilities. The solution leveraged the BHIE, is now operated by the DoD and VA, and has saved the Federal government millions of dollars.

Architecture

Today's best practices emphasize the importance of sound enterprise architectures that encompass technologies that address business information, modeling, process, and organization. Ellumen has extensive experience bridging the gap between business objectives and information technology. We understand the dynamic nature of rapidly changing environments, and we craft architectural approaches that will evolve with your organization. Our approach focuses on: information and data modeling and aggregation; data and application integration; service oriented architecture, Federal Enterprise Architecture, and Federal Health Architecture standards; IT infrastructure and information security and assurance.

Software Design and Development

Ellumen applies modern iterative development techniques such as the Agile development methodology, and is committed to an approach that shows early results and involves end users throughout the process. Due to this, we have a strong history of meeting schedules, staying within budgets, and exceeding our customer's expectations. Our approach comes from our ability to tailor best practices to meet your specific project goals. We employ a total systems engineering support approach across IT architecture, hardware, operating system, network and security components to ensure project success. We fully integrate engineering support functions such as configuration management and testing into our software development process.

Application and Data Integration

Many healthcare providers and administrators struggle with the need to integrate the systems and applications running in their offices. Getting the right information where and when it is needed is a challenge within and between facilities, departments, and organizations. Ellumen understands the critical nature of the healthcare business process and the sensitivity of the data that drives it. We have proven experience in bridging the gaps between systems and applications within healthcare organizations - public and private. Our technology solutions enable seamless interoperability for more complete, integrated information leading to effective clinical care and efficient administration.

IT Infrastructure

Acquiring and managing critical IT infrastructure is a complex and daunting task for both government agencies and commercial entities. Ellumen offers complete infrastructure, engineering and management support from capacity planning, acquisition support, deployment, and operations. Our real-world experience ensures that each job is done, and it's done right. Our capabilities and experience range from the local to enterprise level and span every aspect of the process. Our capabilities include all aspects of infrastructure requirements analysis and capacity planning; budgetary and acquisition support; complete engineering data management; system build, integration, and testing; configuration management; and legacy system migration.

Systems Operation and Maintenance

People rely on their IT systems every day to do their jobs, and our customers want reliable and responsive support. We work to proactively anticipate and head off potential problems. This requires the use of automated monitoring tools and industry best technical practices as well as close engagement with our customers and their users. We look at the bigger picture of related systems, applications, networks, and operational environments which often reach beyond a single location or enterprise. Identifying and resolving operational problems requires defined management processes, teamwork, and communication skills as well as expert technical capabilities.

Cyber Security and Information Assurance

Threats to computer systems, networks, and critical applications are real, and Ellumen offers services and solutions to meet critical security and privacy needs. Our experienced team has identified a number of areas of concern to include internet and network security; confidentiality, availability, and integrity of systems, applications and data; and compliance with federal regulations such as HIPAA. Ellumen's Cyber security team includes industry leaders with extensive Federal Health agency IT security backgrounds, combined with years of hands-on experience including the design, implementation, and operation of technology solutions which meet the highest security standards.