



# *Delivering Dynamic Health Information Technology for the Federal Government*



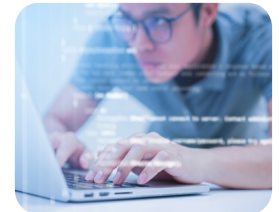
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# Overview

*Since its inception in 2007, Visual Connections has continually worked to deliver dynamic solutions that exceed our customers' expectations.*



## Core Competencies

- Health Data Analytics
- Health Program Integrity and Identifying Fraud Waste and Abuse
- Artificial Intelligence and Robotic Process Automation
- Program and Portfolio Management
- System Integration
- IT Services
- Section 508 Remediation and Training

## Certifications

- Service Disabled Veteran Owned Small Business (SDVOSB)—CVE Certified
- Veteran Owned Small Business (VOSB)—CVE Certified
- Historically Underutilized Business Zone (HUBZone)—SBA Certified
- Minority Business Enterprises (MBE)
- ISO Certified (9001:2008, 15288:2008, 20000:2011, 26514:2008, 27001:2013)
- CMMI DEV/3
- SBA 8a JV (Visual Axis, LLC)

## Agency Past Performance

- HHS-Centers for Medicare & Medicaid Services
- HHS-Agency for Healthcare Research and Quality (AHRQ)
- HHS-Health Resources and Services Administration (HRSA)
- HHS-National Institute of Health (NIH)
- HHS-Centers for Disease Control (CDC)
- US Dept. Of Treasury - Internal Revenue Service (IRS)
- DoD-Defense Logistics Agency (DLA)
- DoD-Defense Contract Management Agency (DCMA)
- Veterans Health Administration (VA)
- U.S. Air Force
- DOJ—Bureau of Prisons (BOP)
- Maryland State Department of Education (MSDE)
- United States Patent and Trademark Office (USPTO)
- Blue Cross Blue Shield
- U.S. Army

## Contract Vehicles

- GSA IT-70 Contract Number—GS-35F-0404X
- GSA Professional Services Schedule (PSS)—GS-00F-043GA
- GSA VETS 2 GWAC (VETS2 Synergy-JV)
- HHS-CMS Strategic Partners Acquisition Readiness Contract (SPARC) (HHSM-500-2016-000771)
- HHS-CMS Project Management BPA
- HHS-PSC Intelligent Automation/Artificial Intelligence IDIQ (IAAI)
- HHS-CMS Measure and Instrument Development and Support (MIDS) (Subcontractor)
- HHS-CMS - Research, Measurement, Assessment, Design, and Analysis (RMADA 2) (Subcontractor)
- HHS-HRSA Evaluation Studies IDIQ (Subcontractor)
- DISA—ENCORE III (ENCORE III Partners LLC—JV)
- Army—ITES 3 (Subcontractor)
- IRS - RASS, Data Analytics and Innovation Support BPA (Subcontractor)
- VA T4NG (Sub-contracts—Large and Small Teams)

## NAICS Codes

### IT and Related Services

- **511210** Software Publishers
- **518210** Data Processing, Hosting, and Related Services
- **519130** Internet Publishing and Broadcasting and Web Search Portals
- **524298** All Other Insurance Related Activities
- **541330** Engineering Services
- **541430** Graphic Design Services
- **541511** Custom Computer Programming Services
- **541512** Computer Systems Design Services
- **541519** Other Computer Related Services
- **541613** Marketing Consulting Services
- **541990** All Other Professional, Scientific, and Technical Services
- **561110** Office and Administrative Services

## Core Competencies

### HEALTH DATA ANALYTICS



Visual Connections offers diverse services in Health Data Analytics, including the development of statistical models, performance management frameworks, and predictive solutions to help government agencies build business intelligence solutions to analyze performance and prepare for future activities. We are experienced in providing analytics utilizing SAS Analytics tools across large Medicare and Medicaid data stores to support program compliance and program integrity initiatives. Our team includes individuals with graduate level training in statistics and health services research, including extensive work developing complex statistical models, working with survey data, and performing analyses of health care cost and utilization.

### HEALTH PROGRAM INTEGRITY AND IDENTIFYING FRAUD WASTE AND ABUSE



Visual Connections, through the Risk Adjustment Data Validation (RADV) program, brings experience measuring the extent to which inaccurate diagnosis codes impact Hierarchical Condition Category (HCC) assignments and the associated payment for Medicare Advantage (MA) beneficiaries. Our data scientists, statisticians, and policy analysts also have experience developing research for issues related to Medicare Part D improper payment, modeling error in the Medicare Part C program, and recreating analytic findings for the Center of Program Integrity using diverse datasets. VC has developed analyses of fraud, waste, and abuse in the Medicare Part D program that involve full recreation of the Medicare Part D payment rules.

### ARTIFICIAL INTELLIGENCE



Visual Connections is skilled in the utilization of Artificial Intelligence (AI) techniques across multiple efforts at CMS. VC works with AI and ML tools to enhance accuracy and efficiency of data collected. These techniques produce more consistent results across reviewers, detect anomalies, and improve overall operations and efficiencies. Approaches include Natural Language Processing (NLP), both unstructured and structured data processing, pattern recognition, machine learning, deep learning, and convolutional neural networks (CNNs), and predictive analytics, among other tools and approaches. We are also developing Robotic Process Automation (RPA) or “bots” applications to improve accuracy, efficiency and reduce operational costs for our clients.

### PROGRAM AND PORTFOLIO MANAGEMENT



Visual Connections is seasoned at program and portfolio management, having provided these services across a variety of federal agencies including the Defense Logistics Agency (DLA). Our experience as it pertains to program management includes developing, managing, and monitoring Integrated Master Schedules, and administering technology activities across the Systems Development Lifecycle. Where portfolio management is concerned, Visual Connections has past performance assessing, analyzing, and documenting systems’ capabilities within portfolios and ensuring their alignment with department, agency and portfolio objectives.

### SYSTEM INTEGRATION



Bringing together discrete subsystems into one functional system requires keen knowledge of various system integration techniques. Visual Connections’ systems engineers are experts in enterprise application integration and business process management—so that the end result is a seamless linking of functionality. We have extensive experience working to integrate the various system components that are required for business process management applications such as the Pega application, having done this on a variety of contracts at the Centers for Medicare and Medicaid Services.

### IT SERVICES



Visual Connections provides a variety of IT development services. These include, but are not limited to: Software/Application Development (Java, .Net); Firmware Development (Ruby on Rails, C#, C++, VB, VBA, F#); IBM WebSphere Portal Development and Administration; Usability Testing; Quality and Information Assurance Testing; Enterprise Application Maintenance; and data warehousing and analytics support services. We have provided these services across numerous federal agencies, including the Department of Health and Human Services, CMS, the Veterans Health Administration, and DLA.

### SECTION 508 REMEDIATION AND TRAINING



Applying the principles of user-centered design and usability, Visual Connections has extensive experience developing websites and web-based applications that are accessible to people with disabilities and compliant with Section 508 of the Rehabilitation Act of 1973, amended by Congress in 1998 to require Federal agencies to make their electronic and information technology (EIT) accessible to people with disabilities.

We use a combination of techniques to ensure compliance in the design, implementation, content authoring, quality assurance and maintenance phases. Our firm also provides Section 508 training as requested to government contractors and government personnel.



# Government Health Agency Performance

# Centers for Medicare and Medicaid Services (CMS)

## Core Competencies

- Health Data Analytics
- Health Program Integrity and Identifying Fraud Waste and Abuse
- Artificial Intelligence and Robotic Process Automation
- Program and Portfolio Management
- System Integration
- IT Services
- Section 508 Remediation and Training

## Prime Contract Vehicles

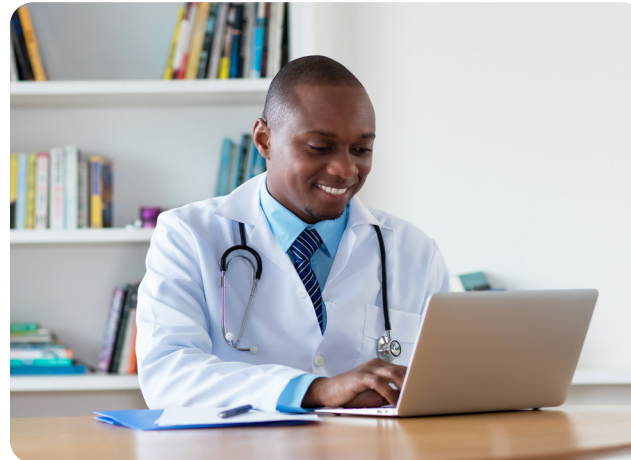
- GSA IT-70 Contract Number—GS-35F-0404X
- GSA PSS (MOBIS)—GS00F043GA
- GSA VETS 2 GWAC (VETS2 Synergy—JV)
- HHS-CMS Strategic Partners Acquisition Readiness Contract (SPARC) (HHSM-500-2016-000771)
- HHS-CMS Project Management BPA
- HHS-PSC Intelligent Automation/Artificial Intelligence IDIQ (IAAI)
- DISA—ENCORE III (ENCORE III Partners LLC—JV)

## Subcontract Vehicles

- HHS-CMS Measure and Instrument Development and Support (MIDS)
- HHS-CMS - Research, Measurement, Assessment, Design, and Analysis (RMADA 2)
- HRSA Evaluation Studies IDIQ
- Army—ITES 3S
- IRS - RASS Data Analytics and Innovation Support BPA
- AHRQ ACTION IV IDIQ

## CMS Past Performance

- Program Assurance and Data Optimization Support (PADOS)
- Risk Adjustment Data Validation (RADV) Medical Record Review Contractor (MRRRC-B)
- Performance Compliance Management (PCM) and Statistical Modeling/Analytical Support Services
- Marketplace Program Integrity Contractor (MPIC)
- CCIO - Marketplace Operations Support
- Home Health and Hospice Quality Reporting Program Quality Measures and Assessments-MIDS
- Affordable Care Act (ACA) Risk Adjustment Data Validation (RADV)
- Retrospective ACA Eligibility and Enrollment Pilot (Retro ACA)
- Medicaid and CHIP Program (MACPro)
- Risk Adjustment Data Validation (RADV) Lead Analytical Contractor (LAC)
- Retiree Drug Subsidy (RDS)
- Eligibility Appeals Operation Support (EAOS)
- Medicare Secondary Payer Systems Contractor (MSPSC)
- Medicare Secondary Payer Integration Contractor (MSPIC)
- Healthcare Integrated General Ledger Accounting System Hosting and O&M (HIGLAS HOM)
- Federally Facilitated Marketplace (FFM)
- Quality Management and Review System (QMARS)
- Early Retiree Reinsurance Program (ERRP)
- Coordination of Benefits (COB)
- Beneficiary Eligibility Suite of Systems Transactions (BESST)



## HHS & Other Federal Agency Subcontracts

- ARHQ - Healthcare Data Analysis and Statistical Product (HDASP)



# CMS Past Performance

## PROGRAM ASSURANCE AND DATA OPTIMIZATION SUPPORT (PADOS)

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- VC provides technical, statistical, analytical and administrative support to the Center for Program Integrity (CPI) and the Office of Information Technology / Program Management and National Standards Group (OIT/PMNSG) within the Centers for Medicare & Medicaid Services (CMS) for the design, development, administration, daily maintenance, and implementation of enhancements for technology solutions, predictive data models, statistical models, pilot modeling, program optimization, project management, and assurance activities. Focus areas include Information Technology (IT) development, project coordination and support, audit, data optimization and compliance reviews, Part C Risk Adjustment Data Validation (RADV), Private Plan program integrity, and other assurance activities. VC was responsible for the first contract for Medicare Advantage (MA) RADV that allows for Artificial Intelligence pilots with a focus on program integrity case studies and solutions. Through this work and our efforts, we have conducted three pilots which have turned into contracts in production.

## RISK ADJUSTMENT DATA VALIDATION (RADV) MEDICAL RECORD REVIEW CONTRACTOR (MRRC) B

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- VC conducts medical record review for various projects and ad hoc studies including RADV projects as part of the Joint Venture team, Visual Axis. The validation process involves the evaluation and analysis of the risk adjustment data via medical record review. VA conducts medical record intake, focused reviews, and abstraction of hospital inpatient, hospital outpatient and physician medical records, and evaluation of MA Organization's appeals submissions, and performs operational analysis, and business intelligence analysis.

## PERFORMANCE, COMPLIANCE MANAGEMENT (PCM) AND STATISTICAL MODELING/ANALYTICAL SUPPORT SERVICES

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- On the Performance, Compliance Management (PCM) & Statistical Modeling/Analytical Support Services project on which VC is prime and Axis Consulting is a subcontractor, we perform Operational Analysis for Center for Program Integrity (CPI) in two areas, including Central Data Abstraction Tool (CDAT) User Access and Trend Analysis (Data Analytics) and CDAT System Interaction Modeling. CDAT is used to manage the distribution of medical records, medical record abstraction RADV project data, and other project information including some payment error calculation. Additionally, VC provides technical support for CPI using descriptive and predictive analysis methods to assist in the development of models to examine and/or predict events based on current or past data within the CDAT system. VC applies our analytics experience to the supporting data to understand and resolve any underlying data quality issues, and we work with CPI to tailor an analytics, modeling, or reporting solution to the business owner needs.

We also perform business intelligence analysis for clients in the Medicare Contractor Management Group (MCMG) and CPI on the PCM project. Business intelligence analyses for CPI involves using prior year RADV National sample and Contract sample data to predict likelihood of errors in diagnosis code submissions and assists CMS with ad-hoc analysis related to questions around RADV Contract-level sampling.

## MARKETPLACE PROGRAM INTEGRITY CONTRACTOR (MPIC)

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- VC is using the Marketplace and tools to perform comprehensive research, proactive data analysis, and trend analysis to identify program vulnerabilities, generate leads for possible investigations, and monitor agent/broker, web-broker, navigator/certified application counselor and issuer compliance with Marketplace rules. We also ensure compliance with all federal security regulations with a focus on data access and system security. In addition, we are responsible for Marketplace High-Risk Region Investigations (HRRIs) to include conducting HRRIs by developing and refining analytics techniques and metrics/indicators of potential fraud and non-compliance. We are also responsible for License Verifications to determine if insurance agents/brokers (including web-brokers) are registered with the FFM and licensed in every state in which they are enrolling consumers.

## HOME HEALTH AND HOSPICE QUALITY REPORTING PROGRAM QUALITY MEASURES AND ASSESSMENT

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- Visual Connections is providing expertise, experience and skills to support Section 508 and 504 remediation. Our desktop publishing experts support the development and delivery of a variety of accessible materials to assure compliance with Section 508/504 and other federal accessibility requirements. A range in length and complexity of materials that may include Microsoft Word, PowerPoint and Excel files, as well as PDFs are shared and formatted properly to 508 compliance standards. Accessibility checks are conducted to ensure requirements are met and satisfied.

## AFFORDABLE CARE ACT (ACA) RISK ADJUSTMENT DATA VALIDATION (RADV)

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- VC is developing business requirements that define CMS's medical records intake business needs and workflow processes for Part C RADV operations. We also defined and conducted a proof of concept (POC) for automating the intake process using Robotic Process Automation (RPA) tools to configure and test implementation of "bots". Additionally, VC is working to integrate the CDAT RPA tools with the current medical record intake workflow solution as a pilot, and conducting CDAT technical assessments for User Access and Trend Analysis (Data Analytics).

## RETROSPECTIVE ACA ELIGIBILITY AND ENROLLMENT PILOT (RETRO ACA)

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- VC is providing a platform that offers Business Intelligence (BI) analytical results for the monitoring of program compliance with state business objectives, validation of program rates, and other statistical analysis as directed. The platform is built using a CMS three-zone architecture and operates within a Red Hat Linux operating environment. The platform is using Red Hat Enterprise License (RHEL) IDM application for centralized user and user role management. The statistical functions provided by the platform are performed through the SAS suite of analytic and statistical tools.

## MEDICAID AND CHIP PROGRAM (MACPro)

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- At VC, we are providing Appian Developers and Support for the Appian implementation. This includes participating in the analysis, design, and new development/application of Appian's Business Process Management tool. We participate in analysis, design, and new development of BPM based applications. VC translates business process software requirement specifications into Appian process model prototypes and solutions. In addition, we design and develop medium and large-scale software applications, create user interfaces and process models. While we support data migration, loading and conversion between data stores, VC also prepares and maintains system, application and program level documentation. All the while, VC assists in the review and analysis of detailed program specifications and designs to meet changes required in the work processes.

## RISK ADJUSTMENT DATA VALIDATION (RADV) LEAD ANALYTICAL CONTRACTOR (LAC)

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- On this contract, Visual Connections provided multiple resources to assist with data and knowledge transfer. Responsibilities included obtaining data from CMS's mainframe and supplying the data to the Analytic Lead; participating in analytical meetings and technical reviews; managing technical solutions and providing analytical and program support; and conducting research and providing relevant reports. VC was also responsible for ensuring the accuracy of program documentation and participated in program assessments.



## RETIREE DRUG SUBSIDY PROGRAM (RDS)

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- Visual Connections provides web portal design and development, case management system development and 508 compliance and remediation for the CMS RDS program. The RDS portal serves as a comprehensive resource center for all informational and operational needs for the Retiree Drug Subsidy Program. VC was instrumental in introducing the Resource Library concept to the RDS web page on the CMS site. The Resource Library now contains tools and resources to provide everything from general information about the RDS program to specific instructions and assistance during and after the application period. We developed and designed innovative web-based training as part of this library. Additionally, VC was specifically requested by CMS to be brought on as a subcontractor to lead the Section 508 compliance and remediation efforts. Because VC received accolades on our web design efforts for the Early Retiree Reinsurance Program, we were also requested to lead the re-design of the RDS web site. This re-design included developing and implementing a sophisticated case management solution for RDS appeals processing using Pega as the platform.

## ELIGIBILITY APPEALS OPERATIONS SUPPORT (EAOS)

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- VC is the Lead on the design and development of the Eligibility Appeals Case Management System (EACMS) which will be used to receive, route, and address appeals and is built on the Pegasystems BPM application. Work by our senior Pega developers has included building out the development and production environments, installing Pega appeal rules, modifying Pega appeal workflow to incorporate appeal sources and reasons, adding appeal status reporting, and modifying Pega to be compliant with Section 508. We are additionally responsible for performance testing/tuning, creating training materials, and creating custom reports. The EACMS project was driven by a short timeframe to go live within 60 days. Thanks to VC's leadership and efforts, the system went live in 39 days which helped expedite 20,000 early appeals.

## FEDERALLY FACILITATED MARKETPLACE (FFM)

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- The purpose of the FFM contract was to provide analysis, design, development, testing, implementation, documentation, services, maintenance, and support for the Federally Facilitated Marketplace (FFM). VC was a key part of the Assembly Architecture team that oversaw, built, and deployed all towers of the FFM project. We supplied Application Assembly and Deployment support using the Java Technology platform. VC gathered information to produce designs and create prototypes for development tools. We were involved in tools administration and executing code builds, researching and learning new technologies to develop technical solutions and coordinate activities across teams.

## QUALITY MANAGEMENT AND REVIEW SYSTEM (QMARS)

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- VC was the prime IT developer for the Centers for Medicare and Medicaid Services' (CMS) Quality Management and Review System (QMARS). QMARS is a national standardized system used to capture, track, manage and analyze the activities associated with all case review types associated with the Beneficiary and Family Centered Care (BFCC) Program. On this contract, VC was the Applications Development Organization (ADO) for operations, maintenance, and enhancements made to the pilot QMARS application. VC utilized the CMS eXpedited Life Cycle (XLC) and the HCQIS XLC Agile framework guidelines for this project. VC provided Design, Development, Test and Support services. This contract involved extensive work with the PegaRULES Processing Commander (PRPC) and with Pega BPM, as the case-processing application is Pega-driven. VC had a certified Pega engineering team on this project.

## MEDICARE SECONDARY PAYER SYSTEMS CONTRACTOR (MSPSC) AND MEDICARE SECONDARY PAYER INTEGRATION CONTRACTOR (MSPIC)

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- The Medicare Secondary Payer program protects Medicare program integrity by ensuring CMS can identify the appropriate primary payer and process secondary payments accordingly. On these contracts, VC is responsible for creating an information technology system for systems maintenance and support activities. This involves SQL Server Data Base Administration and JAVA/J2EE programming. Our programmers on this project are leading the design, documentation, development, and implementation/ enhancement of a highly scalable and secure Java Web application. The SQL Server administrators are supporting the Remedy products and the SQL Server database environments. They are key to the design, maintenance, and problem resolution and troubleshooting of these components.

## EARLY RETIREE REINSURANCE PROGRAM (ERRP)

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- ERRP provides reimbursement to participating employment-based plans for a portion of the costs of health benefits for early retirees and early retirees' spouses, surviving spouses, and dependents. On this contract, VC was instrumental in deploying a state-of-the-art, 508-compliant public website and managing the IBM Web Content Management system for multiple integrated software applications. We spearheaded the development of the Pega PRPC Platforms for the ERRP Contact Center. The VC Team of Pega experts built and operationalized the customer support application within a record time of 10 days. Additionally, VC provided usability testing support as well as project management of graphics services, web design and usability testing.

## COORDINATION OF BENEFITS (COB)

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- The Coordination of Benefits (COB) program allows plans that provide health and/or prescription coverage for a person with Medicare to determine their respective payment responsibilities (i.e., determine which insurance plan has the primary payment responsibility and the extent to which the other plans will contribute when an individual is covered by more than one plan). On this contract, VC provided design, development, testing and implementation of software to support the Electronic Correspondence Referral System Prescription Drug Enhancement Project (ECRS Rx) and the Electronic Data Interchange—Coordination of Benefits (EDI—COB) application website. This included, an analysis of system requirements, development of system design documents, support for scheduled software releases and ongoing production support activities.

## BENEFICIARY ELIGIBILITY SUITE OF SYSTEMS TRANSACTIONS (BESST)

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- The BESST systems maintain Medicare beneficiary eligibility information and support critical components of CMS's core healthcare mission. VC led Section 508 compliance work on this contract, as well as technical editing and formatting of artifacts. One of our senior Section 508 remediation specialists was specifically requested by the prime to work on this project to remediate and make it compliant. Our work included 508 consulting and training for the Development/Analyst/Testing team on accessibility and 508 testing tools, implementation of the 508 testing process for new web pages and systems during release, provision of training materials on accessibility tools, 508 HTML checklists, and assistive technology training, and development of the Voluntary Product Accessibility Template (VPAT).

## MEDICARE ADMINISTRATIVE CONTRACTOR-J15 (RIVERBEND GOVERNMENT BENEFITS ADMINISTRATOR- RGBA)

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- BlueCross BlueShield of Tennessee (d.b.a. Riverbend Government Benefits Administrator) is the state's oldest and largest not-for-profit health plan, serving nearly 3 million Tennesseans. RGBA's Customer Contact Center is responsible for receiving and responding to customer queries through multiple sources. To facilitate this task, integration with multiple external systems as well as with different external and internal departments and units was required. VC's team of Pega experts designed and built a customer service support application that was robust and flexible, allowing for ongoing changes in requirements. Over 8,000 custom rules were implemented, along with 180 automated processes—improving the efficiency of the program by 60 percent over the previous process.





# Service Offerings



# Health Data Analytics

## WE DELIVER DIVERSE SERVICES

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Visual Connections delivers diverse services in advanced Data Analytics, including the development of statistical models and reporting solutions, program performance assessments and performance management frameworks. Our data scientists, statisticians, and policy analysts also conduct econometric and regulatory research, and develop predictive solutions leveraging intelligent automation tools and solutions to aid our Government clients in building business intelligence solutions to analyze performance and prepare for future activities.

## ANALYTIC SOLUTIONS

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Visual Connections specializes in delivering to Federal Health agencies analytic solutions utilizing State-of-the-Art SAS Enterprise Analytics tools, including Medicare, Medicaid, and ACA Marketplace. This work supports program compliance and program integrity initiatives, risk adjustment audits and validations, and helps identify fraud, waste and abuse.

## PLATFORM AS A SERVICE (PAAS)

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Visual Connections also offers a Platform as a Service (PaaS) option to support our clients' data analytics needs. This advanced analytic environment is powered with the SAS suite of analysis tools including SAS statistical and data visualization software, data management, and predictive tools. Our PaaS is provided as a cloud resident service available in a 24/7 environment hosted by a FedRAMP certified cloud service provider. The platform and environment is guarded by multiple layers of security to provide confidentiality, availability, and integrity of the data. This highly-advanced SAS analytics environment is used to generate analytics, models, dashboards, and other reports available via a web-based interface, electronic reports, or hard copies, as required by our clients.



We understand how to deliver meaningful data analytics and compelling data analysis that will ultimately drive better constituent service and care.



# Health Program Integrity and Identifying Fraud Waste and Abuse



## PROGRAM INTEGRITY EXPERIENCE

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Visual Connections has extensive experience with program integrity objectives and in identifying fraud, waste and abuse for our government clients. Our analytics experts and subject matter experts are very familiar with developing complex statistical models, as well as navigating structured/non-structured data, claims data, audit data, demographic data, and informatics data to determine possible fraud, waste and abuse. Our staff has an in-depth understanding of the Improper Payments Elimination and Recovery Improvement Act of 2012 (IPERIA), which requires federal agencies to review their programs and activities to identify programs that may be susceptible to significant improper payments, to test high risk programs, and to develop and implement corrective action plans for high risk programs.

## MEDICARE AND MEDICAID DATA

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We have experience with Medicare and Medicaid data, providing detailed analyses using a wide array of statistical techniques in order to identify potential targets deemed to be committing fraud, waste, and/or abuse. They are extracting insights from various CMS programs and projects and from healthcare data, and are measuring performance for Medicare, Medicaid, private plans, Medicare Advantage, the Medicare Prescription Drug program, Fee-For-Service (FFS) Operations, and for state-based programs.



## TECHNICAL SUPPORT

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Our technical support in this service area also includes reviewing and analyzing relevant statutes, regulations, and sub-regulatory guidance as well as researching, drafting papers and developing briefing materials, guidance, documents, and reports related to reviews and evaluations. Additionally, we develop, validate and manage data optimization and program integrity pilots that employ learning algorithms to make data-driven predictions and decisions.

## OUR QUALIFICATIONS

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Our analytics experts possess a total of over 100 years' cumulative analytics experience, and our team includes individuals with graduate level training in statistics, economics and research, as well as seasoned data scientists, architects and related-subject matter experts, some of whom previously worked as government employees.

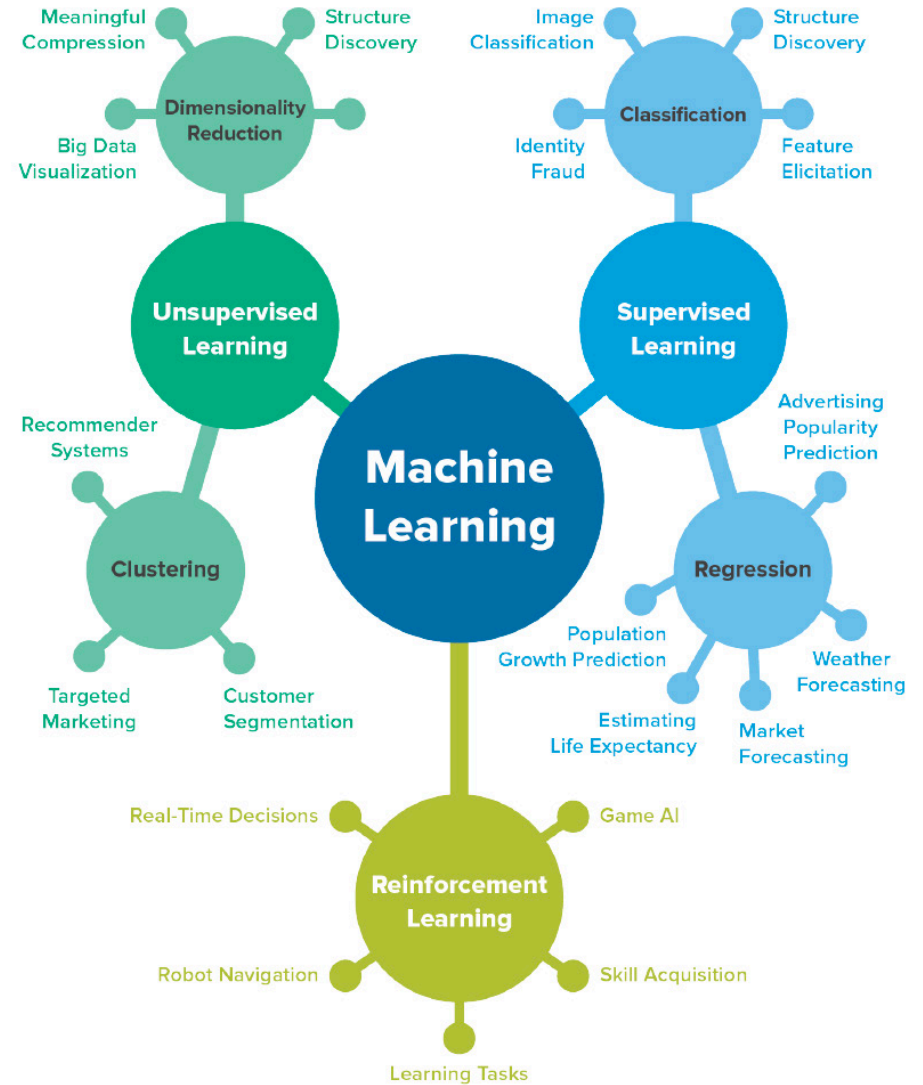


# Artificial Intelligence



Visual Connections is skilled in the utilization of Artificial Intelligence (AI) and Machine Learning (ML) tools across multiple efforts at CMS. VC utilizes AI tools to enhance accuracy and efficiency of data collected. These techniques produce more consistent results across reviewers, detect anomalies, and improve overall operations and efficiencies. Approaches include Natural Language Processing (NLP), both unstructured and structured data processing, pattern recognition, machine learning, deep learning, and convolutional neural networks (CNNs), and predictive analytics, among other tools and approaches. We are also developing Robotic Process Automation (RPA) or “bots” applications to improve accuracy, efficiency and reduce operational costs for our clients.

AI technology is poised to become vital to the federal government, as new mission requirements come more quickly and become more complex. AI technology is evolving faster than expected and is already surpassing human decision-making in certain instances. And sometimes, in ways we can't explain. Utilizing AI and RPA helps our clients re-envision the power of their data and help improve their day to day processes. Visual Connections utilizes AI specifically in the CMS' Part C Risk Adjustment Data Validation (RADV), Private Plan program integrity, and other assurance activities for employ learning algorithms to make data-driven predictions and decisions.



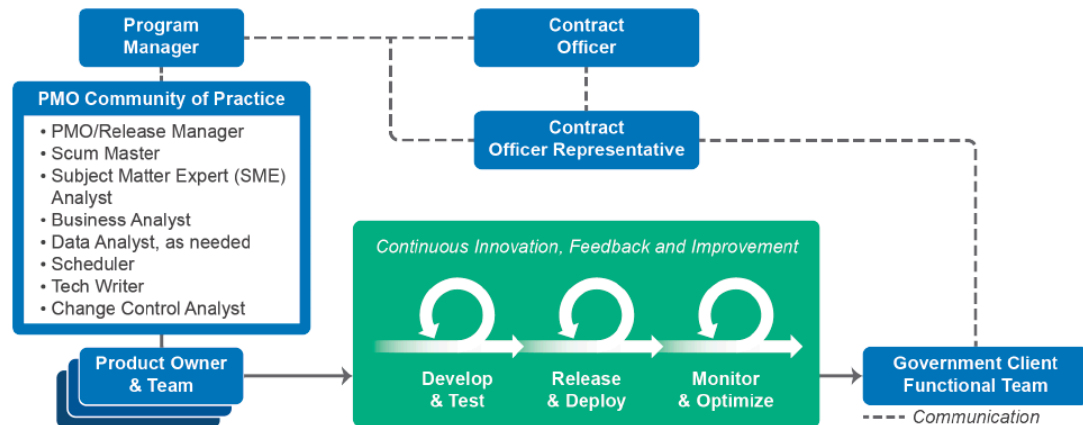
# Program and Portfolio Management

Visual Connections' Program and Portfolio Management support enables our clients to optimize and improve the management of their IT investments as demonstrated by our work with multiple federal government clients. Our program and portfolio managers bring their creative expertise to the table, increasing efficiencies and overall communication and collaboration to benefit our clients and their respective programs/portfolios. The PMO can vary from one person acting as "program support," to a large team of individuals and can have more than one location if the program is scattered nationally or globally. It can be set up to support a specific program or be a permanent structure supporting all the organization's programs—in which case, it is integrated with the organization's permanent project management office. The PMO has a program office manager responsible for its functions.

### Responsibilities of the PMO

- Setting up tools and standards for managing the program
- Planning, tracking, and reporting on outputs and outcomes
- Tracking risks and Issues
- Managing cross-project interdependencies
- Planning and executing communication plans to stakeholders

### Community of Practice At-a-Glance



We deliver our Portfolio and Program Management Service using a hybrid Program Management Office (PMO), which we call the Community of Practice (CoP). This CoP approach leverages best practices such as Agile, Kanban, and DevOps to support the Program Manager in establishing methodologies, processes, and standard operating procedures that align with their integrated Program management, practice area, and toolset framework to effectively manage programs. These practice areas and toolsets ensure that the appropriate and required levels of communication, reporting, documentation, and deliverables are provided for our clients and focus our ability to manage people, process, and technology assets in attaining business performance objectives for our clients.

Visual Connections leverages the full power and enterprise capability of Microsoft SharePoint Server and Microsoft Project Server, which together, provides a rich set of capabilities to facilitate line-of-sight visibility into increment or task activities, project tracking, scheduling program assessment, portfolio management, and enterprise assessment. These dynamic work management capabilities are designed to address specific enterprise program and work management needs.



# Business Process Management (BPM)

Business Process Management (BPM) is the term used to describe applications designed to orchestrate the various jobs that need to be performed between a network of people and systems.

BPM applications attempt to continuously improve the process of human interaction with technology. They enable businesses to respond to changing consumer, market and regulatory demands faster than competitors, creating competitive advantage. At Visual Connections, our developers are highly experienced in working with BPM solutions. Our past performance includes configuration and integration work with various BPM solutions.

The VC Team deploys business process management solutions to make workflow more effective, more efficient and more capable of adapting to an ever-changing environment. The goal is to reduce human error and miscommunication and focus stakeholders on the requirements of their roles. BPM is not a one-time exercise. It involves a continuous evaluation of the processes and includes taking actions to improve the total flow of processes using such tools as process modeling.



## BUSINESS PROCESS MANAGEMENT/CASE MANAGEMENT

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- Visual Connections has extensive experience implementing Business Process Management (BPM) solutions at the Centers for Medicare & Medicaid Services (CMS) across multiple projects. By leveraging case management and business process management best practices, Visual Connections has been able to provide CMS with a high degree of ROI by automating and streamlining complex processes. With a strong background in business process reengineering and deep industry expertise, Visual Connections is able to rapidly assist organizations with BPM and case management and provide high quality solutions to solve complex business problems. We offer installation, development, testing, upgrading and post-production support services.

# Hosting and Infrastructure Support

## INNOVATIONS LAB

Visual Connections has created an innovations lab to provide hosting and infrastructure support for research and development. The lab uses high performance, low energy secure servers and technology that can be deployed using Modular Cloud Blocks™ that provide Hardware-as-a-Service (HaaS). Blocks are interchangeable between the cloud, data center, mobile, and vehicle, aerial and other applications for maximum flexibility. In partnership with Green-Tec-USA, the GMX Modular, Re-configurable systems are built from Blocks in a modular, flexible, scalable, low-energy and easy to maintain form factor. Blocks may be any combination of Processor Blocks™, Storage Blocks™, WORMdisk™ Blocks, Video Blocks™ and FPGA Blocks™. Mix and match up to 10 Blocks of any type within the same GMX-10 chassis, allowing you to grow or shrink your system as your needs change. When you need more processing capability, add Processor Blocks™, when you need more storage, just add Storage Blocks™ when you need WORMdisks™, add WORMdisk™ Blocks. Modular Block design allows you to only pay for what you use. Easy to use Modular Cloud Blocks™ provide Hardware-as-a-Service (HaaS) with lots of processing power, memory, storage and bandwidth for secure, rapidly deployable, scalable, reliable complex configurations without requiring a team of experts.

Improving Solution Development  
with Rapid Research and  
Development Environments

## VALUABLE AND UNIQUE CAPABILITY

Visual Connections offers a valuable and unique capability through the Genesis Innovation Lab (GIL). This FISMA and National Institute of Standards and Technology (NIST) compliant lab will be available to CMS as a no-cost, value-add to develop prototypes and demonstrations of new products and solution. The GIL was developed to replicate DoD Defense Information Systems Agency (DISA) technical environment, pre-configured with demonstration versions of the leading IT and Business Intelligence (BI) products. Deployed and integrated products include a mix of innovative solutions, as well as products currently in the CMS TRA. Examples include:

- Database Management, Intelligence and Integration Tools—MicroStrategy, Teradata, Informatica, Hadoop, Hortonworks, MapReduce, QlikView, MarkLogic, Oracle, SQL, Cognos
- NoSQL technologies—Cassandra, MongoDB, CouchDB
- OpenSource technologies—Spring Integration/Batch, Liferay, Alfresco, Drupal, MySQL, SugarCRM, PostgreSQL, Jasper Report, Talend, ActiveMQ, Mule
- Application Servers—Microsoft Internet Information Server (IIS), JBoss, WebLogic, GlassFish, Tomcat, WebSphere, z/Linux, Red Hat, Solaris 10



# Section 508 Remediation and Compliance

## WHAT IS SECTION 508?

Section 508, an amendment to the United States Workforce Rehabilitation Act of 1973, is a federal law mandating that all electronic and information technology developed, procured, maintained, or used by the federal government be accessible to people with disabilities. Inaccessible technology hinders a person's ability to obtain and use information quickly and easily. Section 508 was enacted to remove such barriers, to make available new opportunities for people with disabilities, and to encourage development of user-centered design and usability principles.

## OUR EXPERIENCE

Visual Connections has extensive experience developing front- and back-end web applications that are accessible to people with disabilities and compliant with Section 508. We use a combination of tools and techniques— a holistic approach—to ensure compliance in the usability, design, implementation, content authoring, and maintenance phases of any application we develop.

An important component of Section 508 compliance is testing. To test web applications for compliance, we use a combination of manual and automated techniques, such as screen readers and software that can scan an application for 508 violations.

### Core Competencies

- Program Management Support
- Accessibility Consulting
- Development
- Remediation Services
- Usability & Accessibility Testing
- Document Accessibility
- Accessibility Training

### Past Performance

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“At Visual Connections, we are committed to developing user-centered solutions that make electronic and information technology accessible to people with disabilities.”

## CUTTING EDGE INNOVATION

Carnegie Mellon, Syracuse University, and the University of Maryland are working together to build intuitive logins that would utilize the user profile and automatically access tools to support users that need accessibility assistance. We can assist you in leveraging and making available services to leverage new tools and methods as they become available.

## OUR 508 CLIENTS

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- Defense Logistic Agency – We provide accessibility consulting services by offering business strategies, identifying gaps and accessibility issues, defining accessibility road maps and by providing support in establishing a mature accessibility program with quantification business benefits.
- Centers for Medicare and Medicaid Services (CMS)
  - Home Health and Hospice Quality Reporting Program Quality Measures and Assessment – Visual Connections is providing expertise, experience and skills to support Section 508 and 504 remediation. Our desktop publishing experts support the development and delivery of a variety of accessible materials to assure compliance with Section 508/504 and other federal accessibility requirements. A range in length and complexity of materials that may include Microsoft Word, PowerPoint and Excel files, as well as PDFs are shared and formatted properly to 508 compliance standards. Accessibility checks are conducted to ensure requirements are met and satisfied.
  - Performance Compliance Management (PCM). VC updated all CMS public facing 508 support documentation for the Revised 508 Standards and we developed a 508 roadmap to integrate 508 standards into an existing 508 CMS program.
  - Marketplace Program Integrity Contractor (MPIC). VC consults and provides 508 compliance remediation support for project deliverables.
  - Healthcare Integrated General Ledger Accounting System (HIGLAS). VC provided 508 testing of changes and updates to the HIGLAS system under Operations and Maintenance efforts.
  - Retiree Drug Subsidy project (RDS) – We are providing Section 508 remediation on a variety of RDS documentation, including project management plans, organizational charts, system security plans, dashboards, financial plans, payment status reports, communication management plans and development approach plans. Our QA testers and developers are working behind the scenes in a secure website environment, ensuring the accessibility of existing pages and testing and participating in the 508 design process. We also designed a Section 508-compliant knowledge base.
  - Medicare Secondary Payer System Contractor (MSPSC) – We are designing, developing, and implementing 508 testing tools and best practices into the Development Lifecycle. We are providing training materials on accessibility tools, 508 HTML checklists, and on assistive technology to team members. We are also creating onboarding training handouts on 508 accessibility to provide to new team members on 508 accessibility. Additionally, Visual Connections is working with Development Team on System Remediation. We have created Voluntary Product Accessibility Template (VPAT) and Government Product Accessibility Template (GPAT) for each MSPSC system.
  - Early Retiree Reinsurance Program (ERRP) – We provided Section 508 compliance remediation for documents including PDF, Microsoft Word, PowerPoint, and HTML websites services. In addition, we provided 508 specialist support to help ERRP understand Section 508 compliance regulations. We also set in place additional processes to help ERRP comply with Section 508 regulations in a timely and efficient manner.
  - Quality Management and Review System (QMARS). VC Implemented 508 testing processes for new systems and provided Section 508 training.



- Maryland State Department of Education (PARCC assessments) – The project involved validating the Section 508 compliancy of the English and Mathematics on-line modules. This included ensuring the files had the correct reading order so they could be read by assistive devices in a logical manner, and confirming the files had the correct tab order so the user could tab through the content in the correct order.
- Veterans Health Administration's My HealtheVet (MHV) – This project included services in 508 testing and remediation support, usability, user experience engineering (including designing testing for cognitively challenged users), and training.



Contact us today to discover how we can help your organization comply with Section 508 requirements.



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