

# CMS Case Study

## Development Applications Technical Services

How can IT help prevent billions in improper medical payments while improving the healthcare experience for patients and providers?

### Challenge

GRSi was tasked with architecting an advanced, next-generation solution to modernize the enterprise-level system for the electronic submission of Medical Documentation (esMD) to CMS in order to significantly reduce provider time & cost by eliminating overhead of organizing, tracking, preparing and sending claims to CMS Review Contractors across North America.

### Solution

We designed esMD so that its diverse platform components could be brought together in an agnostic way to facilitate communication among HIHs, CMS and RCs. We built esMD using the most advanced B2B software along with contemporary programming languages/paradigms such as multi-zone distributed client/server architecture with a lift-and-shift to a highly virtualized environment using TIBCO, MicroStrategy, CONNECT, Java, Oracle, .NET and more. esMD supports the most recent eHealth Exchange standards (XDR, C-CDA/CDPS-1, X12, CAHQ) for exchange of electronic health records. Designed to scale horizontally, esMD offers seamless integration with any system within or outside CMS for businesses revolving around clinical media exchange.

### Outcomes & Results

GRSi has provided a platform migration resulting in a highly virtual and available esMD system. We improved the esMD system's ability to process XDR real-time transactions by 400% from legacy esMD limitations and fine-tuned esMD system configurations so that up to 50 GB of data is exchanged between HIHs and RCs every day.



### Technology Stack

Java | .Net | TIBCO | SQL | MySQL | BusinessConnect | EDI Protocol | Tableau | BusinessWorks | DB2 | NVIVO | Foresight Transaction Insight | Foresight Instream | Foresight Translator | BusinessEvents | Hawk | ONC CONNECT | ALM | MKS Code Deployment | MicroStrategy | JIRA | ServiceNow | Remedy | SharePoint | Oracle APEX | Oracle BI | Windows | Red Hat Linux | WebSphere | HP Virtual Data Center | C | C++ | Visual C++ | C# | PHP | Rhino 3D | Final Cut Pro | CSS | HTML | C-CDA / X12 | Hadoop | Cloudera | Splunk | XML | EDI | CentOS | Ubuntu | RHEL | Debian | Fedora | Azure | AWS | Google Cloud | Apache | Drupel | Ipsilon | VNX | Unity | Brocade | CSS | JavaScript | Ruby | Python | Perl | BigFix | GitHub | Bitbucket | OneDrive | SolarWinds | Cisco

### Methods

DevOps | XLC | Agile/Scrum | Hybrid Waterfall | EVMS ANSI-748 | ISO | CMMI | ITIL | MS Team Foundation | MicroStrategy

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## CMS SPARC

Contract Number: HHSM-500-2017-000271

### GRSi: Leading the way in Health IT

GRSi is a WOSB health IT company with more than 17 years' experience managing task orders averaging \$30 million. We follow the HHS Enterprise Performance Lifecycle (EPLC), CMS Expedited Lifecycle (XLC), and other industry best practices (CMMI, ISO, ITSM, ITIL) when delivering cutting-edge IT solutions, Cloud, software development, ERP, IT Service Management, Application Hosting, Technology Insertion, and Unified Communications. We currently support CMS and more than five NIH Institutes and Centers and are joined by a team of SPARC partners who support 10 of the 12 HHS OPDIVS.

### Why GRSi

- WOSB/SB Prime on SPARC
- CMMI Maturity Level 3/Development appraised
- ISO 9001:2015 and ISO 20000 certified
- MD Corporate office, large Woodlawn office, 12 offices coast to coast and operating in 31 states
- FedHealth IT Top 10 WOSBs/Top 25 SBs supporting CMS
- FedHealth IT Top 20 CIO-SP3 SB Health IT awardee
- Inc. 5000 list, Fastest Growing Companies (multiple years)
- 2019, 2018 Top 5 Gov Contractor, Maryland Tech Council
- 2018 Velocity Growth Awards, Baltimore & D.C, CEO Report
- 2019, 2017 Top 5 CEO, Maryland Tech Council
- 2017 Best-Run Company, SmartCEO
- 2016 Gov. Contractor of the Year, SmartCEO Magazine
- 2016 Top 5 Company of the Year Maryland Tech Council
- 2016 SmartCEO Circle of Excellence Award

**GRSi CORE COMPETENCIES** | Software Development | Information Technology Management | Cyber Security | Systems Engineering | Logistics Lifecycle Management | Cloud | High Performance Computing | Data Storage | Bioinformatics and Health Analytics | Enterprise Modernization | Technology Insertion



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