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SeaPort-NxG
Small Business

JAIC
DRAID

Partnerships

- **Red Pulley Technology Solutions, Inc.** *strategic 8(a) partner*
<https://redpulley.com> | info@redpulley.com
- **AWS Advanced Partnership:**
AWS awarded Competency Status in:
Government, Healthcare & Cloud Migration
- **Equinix Data Center - Cloud Adjacent Partnership**

Quality Certifications

 **CMMI DEV / 3SM** ISO 9001:2015, ISO 20000:2018, ISO 27001:2013

1 Big Data and Enterprise Repositories

Big Data Engineering Frameworks and Technique –

SpinSys created the DHA's Data Fabric by designing and implementing the 300 terabyte MIP Big Data framework for continuous ingestion in AWS GovCloud. This framework was adopted by our government clients, in accordance with the NIST Big Data Interoperability Framework, 1500-1, Vol. 1, that offers (i) horizontal scalability, (ii) scalable logical data platforms, (iii) high performance computing, (iv) data virtualization, (v) a machine learning and artificial intelligence environment for analysis and visualization, (vi) data orchestration, and (vii) data governance.

COHORT – DHA uses the SpinSys MDACA product, winner of the Red Hat Best Middleware Implementation Award, to support their mission of developing an enterprise data mart from ICDB/CHCS data into a central repository. MDACA consolidates, extracts, and provides over 4.2 billion medical data transactions per day, in near real-time, from 160+ global military healthcare facilities to provide quality of care analysis, health analytics applications, early detection of epidemics, and disease trend analysis.

Essentris Data Consolidations – SpinSys supports the DoD in collection, extraction and consolidation of inpatient health records from all Military Treatment Facilities by

using the MDACA product to provide flexibility in designing enterprise common data models and normalization.

Longitudinal Record of Care (LROC) – SpinSys designed and developed the LROC system, which aggregates patient medical history from across all the Armed Forces Integrated Clinical Database (ICDB) instances available in MTFs across the globe.

2 Electronic Health Record

MHS GENESIS Data Migration – SpinSys performs integration and interoperability efforts by providing subject matter expertise, data architects, systems engineers and project management for integration with the future Electronic Health Record (EHR) and DHA enterprise data repositories.

Personal Health Record (PHR) – SpinSys designed, developed and supports the next generation EHR by providing enterprise level integration and delivery services.

3 Health Information Exchange (HIE)

Agile Core Services Data Access Layer (ACS DAL) – SpinSys performs requirements analysis, technical support, system engineering, cybersecurity, system

integration and development of our SOA-based ACS DAL, an integration platform that provides a single, scalable architecture for the exchange of messages between internal MID systems and external systems. ACS DAL has three primary functions: application integration, data integration and business rules management.

 Under SpinSys' stewardship, ACS DAL was the Winner of the 2020 FedHealth IT Innovation Award.

SMART on FHIR – SpinSys prototyped SMART on the Fast Healthcare Interoperability Resources (FHIR) interface to allow innovators to create apps that seamlessly and securely run across the healthcare system. Using an electronic health record (EHR) system or data warehouse that supports the SMART standard, patients, doctors, and healthcare practitioners can draw on this library of apps to improve clinical care, research, and public health.

DAVINCI – SpinSys provides interoperability subject matter expertise, engineering and project management for the DoD/VA Interagency Consolidated Clinical Data Repository that is accessible to both agencies.

MDACA Big Data Virtualization (BDV) – SpinSys provides data visualization, subject matter expertise, data architecture and data warehousing expertise to develop comprehensive data abstraction, integration, federation, transformation, and delivery capabilities in order to seamlessly combine data from one or multiple sources into reusable and unified logical data models. BDV conceals the technical complexities of database types, data locations, and data transformations regardless of where the data resides.

4 Business Intelligence, Data Visualization & Discovery

MHS Dashboard – SpinSys designed and developed the MHS Dashboard by providing a core set of Military Health System Enterprise measures for monitoring and improving patient access, quality of care, and patient safety for the medical components of the Army, Navy, Air Force, and DHA.

AFMS Dashboards – SpinSys designed and developed AFMS Dashboards by providing a suite of risk-adjusted outcome metrics designed to provide a clear understanding of the quality of medical care being

provided in a given MTF facility.

AFMS Wing Commander's Heads Up Display (HUD) – SpinSys designed and developed specialized, secure, interactive dashboards, which measure metrics designed to provide quality of care analysis for wing commanders throughout the Air Force.

Enterprise Usage Analytics – SpinSys designed, developed and currently supports data collection from multiple enterprise SharePoint farms to provide executive level dashboards, data analysis tools, and reports designed to show detailed usage metrics from the program to application levels.

5 Information Portal and Collaboration Sites

CarePoint Information Portal – SpinSys designed, implemented, and currently sustains the CarePoint Information Portal, one of the largest DHA deployments of a SharePoint farm. We established the foundation for standardization and provide for visualization and analytics of the data, as well as a common management interface for 90,000+ clinical, leadership, and administrative staff. This offers universal access to business intelligence, role-based personalization, cross-application workflow, common content management dashboards, and centralized user management.

Traumatic Brain Injury (TBI) Portal – SpinSys leads development activities for this enterprise application within CarePoint, providing a consolidated view of TBI patient data to inform clinical decision making across MHS.

 Under SpinSys' stewardship, the TBI portal was the Winner of the 2019 FedHealth IT Innovation Award.

Clinical Assessment Management Portal (CAMP) – SpinSys created CAMP, a DHA application within the CarePoint Information Portal, to serve as a decision support and treatment tool for clinical care. We designed and developed the interface to collect data directly from patient records for data analysis within the government's data platform.

Workwell for iOS and Android – SpinSys developed WorkWell, an occupational health employee wellness tracking tool, which collects COVID-19 specific information reviewed daily by MTF clinical administrators and hospital leadership for employee wellness and

availability. WorkWell is a mobile-optimized website available 24/7 for use by any computer or smart device.

6 Registries

Military Health System Population Health Portlets (MHSPHP) – SpinSys is currently supporting the architecture, development and support efforts to develop over **50 health registries** which identify MTF Tricare Prime and Plus enrollees in need of potential clinical preventive services, disease management, or case management. SpinSys provides military healthcare professionals and researchers with first-hand information about people with certain conditions, both individually and as a group, in order to increase the understanding of the treatment of those conditions over time.

Hearing Center of Excellence (HCE) – SpinSys is currently supporting the architecture, development and support efforts for the Joint Hearing Loss and Auditory System Injury Registry (JHASIR) that is used to identify personnel with hearing loss and auditory/vestibular injuries. The application supports readiness through monitoring comprehensive hearing health programs by establishing and leveraging bidirectional data sharing between the DoD and VA.

National Intrepid Center of Excellence (NICoE) – SpinSys designed, developed and currently supports NICoE. This is a national case management program for military service members designed specifically to work towards the advancement of the clinical care, diagnosis, research and education of military service members with traumatic brain injuries (TBI) and psychological health (PH) conditions. Our support delivers on cutting-edge objectives in the areas of Patient Referral Processing and Case Management to include the scheduling of the right providers, patient appointments, and needed resources. This tool tracks patient referrals as they go from diagnosis to ultimately the determination of eligibility for patient program admission to discharge.

DoD Trauma Registry (DoDTR) Rationalization – SpinSys is rationalizing DoDTR data for use in the DHA CarePoint portal. SpinSys is creating a comprehensive view of trauma patient data by providing access to specific data points, accurate data refreshes, and export functionality for further analysis.

7 Referral & Case Management

Referral Management System (RMS) – SpinSys designed and developed a RMS that handles referrals from MTFs to Managed Care Support Contractors for DoD health insurance provider referrals and Right of First Refusal (ROFR) determinations. SpinSys worked closely with different health insurance providers to transition from a fax based system to a pure service oriented/messaging based system leveraging HL7.

Referral Management Performance Management Tool (RMPMT) – SpinSys designed, developed and currently supports the DHA RMPMT tool, a health information application that provides leaders and decision-makers global oversight and data on referral management processes and practices at their facility, intermediary command and service. Leaders are better informed on referral patterns and processes that identify areas/tactics for better integrated care and reduced healthcare costs.

NICoE Referrals – SpinSys designed, developed and currently supports the National Intrepid Center of Excellence (NICoE) referral submission application. Service members are typically referred to the NICoE program by their primary care provider. The NICoE is a DoD organization working to advance the clinical care, diagnosis, research and education of military service members with TBIs and PH conditions.

NICoE Continuity Management Tool (NCMT) – SpinSys designed, developed and currently supports NCMT to deliver cutting-edge objectives in the areas of Patient Referral Processing and Case Management to include the scheduling of providers, patients, and resources. This solution supports patient referrals received from various referring providers at MTFs and military medical institutions throughout the country. This tool tracks patient referrals as they go from determination of eligibility for patient admission to discharge.

8 Cloud Migration

Accelerated Cloud Migration Project (AMP) – SpinSys has a proven record of successfully performing rapid migration of DHA on-prem solutions to AWS GovCloud. SpinSys planned, managed, and

implemented the largest MHS cloud migration to date through the award-winning AMP for NIWC in support of DHA. This cloud transition and migration of the 253-server MIP from a Navy Enterprise Data Center into AWS GovCloud was completed in only 93 days, beating the planned 21-month schedule by 18 months. AMP led to a better security posture and improved scalability for onboarding new applications (100% improvement for ingestion of data) and will save \$32.98M over the next five years.

- 🏆 2021 CEJC/PMI Tech Project Team of the Year
- 🏆 2020 G2Xchange Disruptive Tech Award
- 🏆 NAVWAR Lightning Bolt Award for Team Excellence
- 🏆 NAVWAR Innovation Award for Business Model or Process

Knowledge Exchange (Kx) AWS Migration –

SpinSys supported the migration of the enterprise Kx SharePoint portal to the cloud. SpinSys leveraged their deep understanding of federal compliance frameworks, including RMF and FISMA, to support in the design, architecture and implementation of the proof of concept for enterprise level rollout.

9 Machine Learning (ML) and Artificial Intelligence (AI)

SpinSys supports the DHA's goal of cognitive computing and developing leading-edge predictive and prescriptive analytical modeling capabilities by leading AI and ML efforts. We have led modeling efforts, established an ML Ops environment for DHA, trained ML models, supported full containerization of AI/ML platforms, used natural language processing (NLP) and computational linguistics, and supported data identification, processing, and prototyping within a distributed ML environment.

10 Health Infrastructure Cybersecurity

Managed Services and DevSecOps – SpinSys provides technical operations and sustainment support to include full operations, management, sustainment and administration of all enterprise servers, applications, networks and resources for enterprise Health Information Exchange systems and enterprise data presentation solutions.

Information Assurance (IA) – SpinSys leads multiple IA efforts which leverage RMF security standards in support of security certifications and ATO

accreditations.

11 MDACA MySQL Performance Database

MDACA Performance Database (PDB) –

MDACA PDB combines enterprise database capabilities within a secure, unified, big data suite of applications. PDB is built for data ingestion and supports centralized, near real-time acquisition, storage, and single-view access to enterprise-wide repositories across data fabric architectures. SpinSys designed PDB, based on MySQL, as a cloud-agnostic solution with integrated connectivity to meet high ingestion and transaction needs across the enterprise. PDB also provides enterprise monitoring and backup management tools that facilitate higher uptime and comprehensive database administration. MDACA PDB is proven in cloud environments, handling up to 4.2 billion transactions per day.

PDB and other MDACA products and services available for immediate purchase within the AWS marketplace include:

Synthetic Data Engine, Data Flow, Cloud Storage Explorer, Data Explorer, Big Data Virtualization, Digital Innovation Lab, and Professional Services.



📱 SCAN ME

Contract Details

GSA Multiple Award Schedule (MAS)

Contract #:47QTCA21D00A9

Period of Performance: 5/2021 - 5/2026

SeaPort-Next Generation (NxG)

Contract #:N0017819D8559

Period of Performance: 1/2019 - 1/2029

JAIC Data Readiness Artificial Intelligence Development (DRAID)

Contract #:W52P1J22G0169

Period of Performance: 6/2022 - 3/2027

Spin Systems, Inc.

SAM Unique Entity Identifier (UEI): RP1MS622MZN7

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