Defense Health Agency

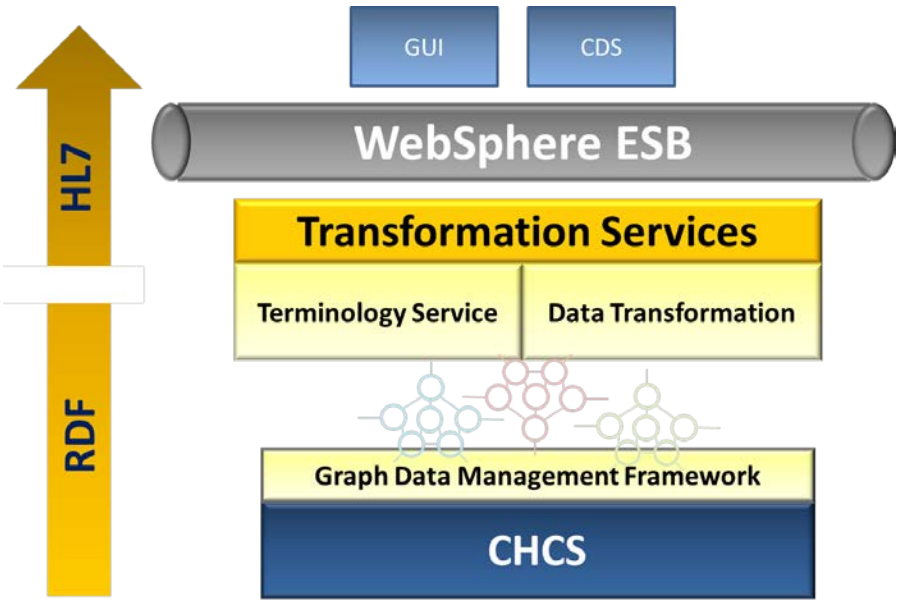
Transition Application Plan Support (TAPS)

...demonstrating a plan for CHCS to leverage a service-oriented architecture

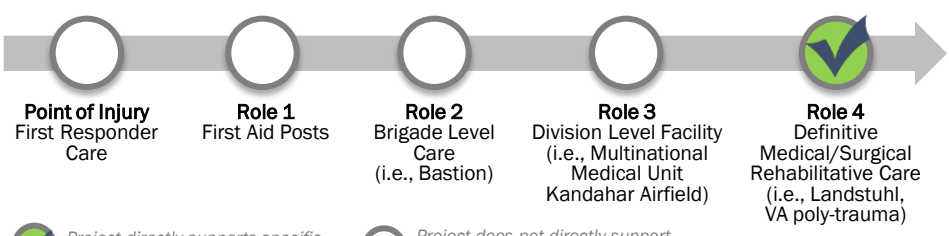
The TAPS project provided research, analysis, and prototype development to demonstrate the utility of using Semantic Web standards to enable the Composite Health Care System (CHCS) to leverage a service-oriented architecture.

TAPS supports the DoD's electronic health record efforts to provide seamless and standardized healthcare data sharing between the DoD and the VA while providing enhanced situational awareness. The TAPS research resulted in the development of a framework to expose and utilize all CHCS data as Semantic Web-based Resource Description Framework.

TAPS Prototype Architecture



Supporting the Continuum of Care



Point of Injury
First Responder Care

Role 1
First Aid Posts

Role 2
Brigade Level Care (i.e., Bastion)

Role 3
Division Level Facility (i.e., Multinational Medical Unit Kandahar Airfield)

Role 4
Definitive Medical/Surgical Rehabilitative Care (i.e., Landstuhl, VA poly-trauma)

Project directly supports specific Continuum of Care Stage

Project does not directly support specific Continuum of Care Stage

Research Areas

Technical Prototypes

Developed prototypes to expose CHCS through a service layer that normalizes data semantics and enables linkage with data from other web services.

Terminology Management

Developed and evaluated prototypes for clinical terminology services based on traditional relational database solutions and a Semantic Web-based framework.

Regionalization Analysis

Analyzed the costs and benefits of alternative regional configurations for the 100+ separate MTF-based CHCS systems based on performance, availability, reliability and maintainability objectives and thresholds.

Virtualization Analysis

Studied the value and trade-offs of using server and storage virtualization technologies in alternative regional configurations along with the costs and benefits of migrating CHCS to different CPU architectures and operating systems.

Interface Catalog

Identified and cataloged CHCS interfaces and analyzed their usage across the 100+ separate CHCS systems.

This project is managed by the **Pacific Joint Information Technology Center**, which focuses on rapidly researching, testing, and developing warfighter medical solutions and products, through pilots or prototypes in support of the DOD.