

# Allscripts, McKesson & MEDITECH Legacy Application Support & Data Migration

## The Client

A leading health system in the Midwest, comprised of a network of more than 900 doctors and specialists, 17 hospitals, and 280+ physician clinics serving 9 regions and 88 communities.

## The Obstacle

The health system had taken initial steps for a group-wide transition from McKesson, MEDITECH, and Allscripts to EPIC as their primary EHR software vendor. Consequently, the health system had committed much of its internal EHR staff to ensuring a successful and efficient transition to the EPIC system. As part of the transition strategy, the organization asked Galen Healthcare Solutions to provide expert-level support services for current Allscripts users while the health system's internal EHR analysts focused on fulfilling personal and business requirements for the impending move to the EPIC system.

## Services Provided

- McKesson, Allscripts, and MEDITECH data extraction; data analysis, mapping and translation for migration to EPIC
- Tier 2 Support including functional assistance, EHR dictionary maintenance & administration, interface maintenance and technical support
- Coordination with legacy EHR vendor on application development issues and upgrades

## Outsourcing Support

### Measurement Driven: Keep Services/Progress in Check

Hospitals must demonstrate quality through reports and dashboards for external benchmarking and internal quality improvement. Effective partnership governance will include reporting, dashboards and service metric reporting. The hospital's incident management system is typically used for tracking and reporting application management activities and performance to ensure seamless integration into ongoing operations. Help desk services is an area where costs can

fluctuate based on call volume, application changes, staff turnover and service-level agreements (SLAs) maintenance. One of the most significant areas of cost and SLA issues is staff turnover and training, which can also be time consuming and fluctuate greatly. Outsourcing can eliminate this cost variation while keeping SLAs consistent.

## Optimizing Legacy Application Support

STATISTICS	
Number of Cases	3,000
Average Critical Issue Resolution	<1 hour
Average Non-Critical Issue Resolution	<8 hours
Number of Legacy Support Sites	>100

For a period of 12 months Galen assisted organization administrators by providing strategic advice in several key areas and conventional support for specific initiatives including design/build projects, EHR dictionary maintenance, task cleanup, and interface analysis. Overall, the health system continued to handle basic issues and questions from end users while Galen provided assistance for in-depth support needs.

## Dictionary Maintenance

Because Allscripts TouchWorks EHR™ is propelled by many different dictionaries which interact in complex ways, the project's success hinged on keeping dictionaries up to date. This effort ranged from client-specific activities including new user account creation, charge code additions, and industry standard pharmacy dictionary maintenance.

## Task Cleanup

At the health system, communication architecture within the EHR system was based on Allscripts tasking functionality. This involved using diverse task 'views' to drive end-user behaviors. Many interactions using these diverse task views were between individual users, however, system-generated tasks are critical to end-user workflows and patient safety. For example, an incoming result is tasked to a provider for acknowledgement and for patient notification. Because of the importance of the communications structure and task view monitoring and maintenance, testing and troubleshooting were of highest priority. A failed task or a reported ticket from an end user was reported and handled as quickly as possible because it indicated a potential system-wide issue.

## Interface Analysis

Galen technical resources provided interface management by monitoring Reg/Sched and Charge interfaces. This involved resolving filing issues from the error queues and clean-up of duplicate patients via merge and other pertinent database maneuvers.

At times where issues could not be resolved independently, Galen was able to follow successful vendor protocols by creating detailed incident tickets with the information required for a quick resolution. Additionally, Galen also monitored submitted tickets and followed up as needed to ensure timely fixes of client issues.

## Seamless Transitions

1. No business disruption
2. Effective risk management
3. Communication and reporting
4. Effective tools implementation
5. Measuring transition effectiveness
6. Effective documentation

## Legacy Application Support Outsourcing Critical Success Factors:

Critical Success Factor	Commitments/Solution
<b>Collaborative Governance Model</b>	Executive Sponsorship by Senior Management Dedicated Project Management Defined objectives, renewed by organizational manager on periodic basis
<b>Knowledge Transfer</b>	Availability of organization's SME and IT staff Close interaction with staff to cover all components for system in scope Equivalent skill level between resources
<b>Pre-Requisites met on Time</b>	System access, required licenses in place Follow timeline for deliverables
<b>Change Management</b>	Prioritize and approve changes Develop a structure for dealing with change
<b>Service Agreement</b>	Establish protocols for the various tools and system being managed, with associated response times for their mission critical applications

## Data Migration

The Galen technical team accessed the source database systems to evaluate data sets and capabilities for migration, as well as gain an appreciation for dictionary counts, data element counts, and any nuances that may require attention or discussion. XML-based patient CCDs and corresponding metadata were extracted from the source systems, collecting details including medications, allergies, and problems. Extraction of discrete data was performed as available for histories, immunizations, vitals, and results. Data was translated and mapped to corresponding target formats for input into EPIC via HL7 or CCD.

### Allscripts → EPIC Data Migration

**ALLSCRIPTS ENTERPRISE v11.2.3** | **3 YEARS OF DATA** | **510 PROVIDERS**

**MULTI SPECIALTY** | **5MM PATIENT CHARTS** | **ON-PREMISE DATABASE**

### McKesson → EPIC Data Migration

**McKESSON HORIZON AMBULATORY CARE v10.3.5** | **3 YEARS OF DATA** | **132 PROVIDERS**

**47 CLINICS** | **29 SPECIALTIES** | **650K PATIENT CHARTS**

### MEDITECH → EPIC Data Migration

**EXTRACT FROM DR (SQL db)** | **3 YEARS OF DATA** | **35 PROVIDERS**

**MULTI SPECIALTY** | **ON-PREMISE** | **170K PATIENT CHARTS**

## ETL from McKesson SQL source database and translation to HL7 messages (compliant with Epic specifications) for the following clinical items

- Microbiology results
- Radiology reports
- Pathology results
- Progress Notes

### HL7 Data Elements

- Visit Notes: 3 years of progress notes
- Vital Signs: All vitals for patients less than 20 years of age and only 3 years of vitals for adults older than 20 years of age
- Results: 2 years of general lab, microbiology, radiology & pathology
- Histories: For patient with a visit in last 3 years
- Immunization: All patient immunization history

### CCD Data Elements (for patients with a visit in the last 3 years)

- Allergies: Medication and non-medication allergies
- Medications: Current medications
- Problems: Includes active problems

## Project Outcomes

Galen successfully augmented the client team's expertise to provide the requisite domain-specialty knowledge in harvesting data from the source MEDITECH and Allscripts & McKesson systems to migrate into EPIC. In addition, Galen provided legacy application support, ensuring full continuity and seamless translation as the legacy environments were sunset and the client went live on the EPIC system.