

***West Virginia  
United Health  
System  
(WVU Medicine)***

**EMRAM** 

Case Study

# West Virginia United Health System (WVU Medicine)

## Profile

General demographics including organization name, location, size.

West Virginia United Health System (WVU Medicine) is an integrated delivery system comprised of eleven member hospitals, five managed hospitals, and two affiliate hospitals, along with ambulatory centers/clinics throughout the state of West Virginia and in four neighboring states (Ohio, Virginia, Maryland, Pennsylvania).

The flagship hospital and academic medical center, Ruby Memorial Hospital, and the associated medical group practice, University Health Associates, are located in Morgantown, WV. Ruby Memorial is a 675 bed tertiary care, Level 1 Trauma Center that includes a children's hospital and a behavioral medicine hospital. University Health Associates is comprised of over 400 clinics and will complete 1.4 million visits by the end of 2019.

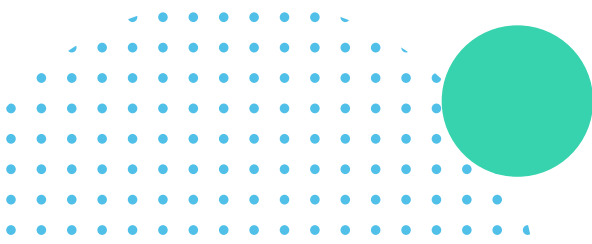
Ruby Memorial Hospital and University Health Associates were first validated as HIMSS EMRAM & O-EMRAM Stage 7 in 2013, and we recently re-validated for a second time for both HIMSS EMRAM & O-EMRAM on October 17, 2019.

**Date Stage 7 was achieved: October 17, 2019**

## The Challenge

Specific challenges your organization wanted to address; include specific goals and objectives (i.e. tactical, operational, strategic).

Over the past two years, WVU Medicine experienced unprecedented growth, and expect this growth to continue for the foreseeable future. To improve the health of West Virginians and all we serve with consistent, high quality, integrated patient care, Albert Wright, President & CEO, knew that a standard technology platform was tantamount to fulfilling the mission of WVU Medicine.



With a typical 12-14 month timeline to implement all of our enterprise systems, we would not be able to keep pace with the rapid growth of the health system, thereby delaying the benefits of being on a standard platform for new hospitals joining our system. We were challenged by our CIO, James Venturella, with creating a rapid install methodology that would significantly reduce the standard timeline to implement our technical infrastructure and our enterprise applications portfolio.

## Implementation Overview

Implementation milestones, approach (i.e., phased approach vs. big bang), scope (i.e. multi-hospital, etc.) and overview of systems installed (PHR, EHR, PACS).

Working with one of our seasoned Sr. Project Managers, our team leads, and our operational partners, we assessed each enterprise application to determine how quickly each application could be implemented. We then looked at our project phases/activities across our standard 12-14 month timeline to determine how we could shrink our implementation timeline. Currently, the WVU Medicine Rapid Install process to implement our enterprise applications at a new hospital averages 4 1/2 - 5 months from project kickoff to go live.



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***We are honored to have the dual distinction for inpatient and outpatient EMR adoption. Our deployment of an integrated platform across the health system empowers us to improve care for the patients we serve.”***

– Dr. David Rich, CMIO

The WVU Medicine enterprise application portfolio includes the following systems:

<p><b>Inpatient Clinical Systems-Acute &amp; Long Term Care</b></p>	<p>Orders, Results, Clinical Documentation, ED, Clinical Decision Support, Biomedical Device Integration; e-Prescribing; Point of Care Bar Coding; all lab specimens &amp; blood products, medications, breast milk; Enterprise Reporting</p>
<p><b>Ambulatory &amp; Post-Acute Clinical Systems</b></p>	<p>Orders, Results; Clinical Documentation; Clinical Decision Support, Biomedical Device Integration; Home Health, e-Prescribing; Enterprise Reporting</p>
<p><b>Ancillary Systems</b></p>	<p>Cardiology; Radiology &amp; Radiology dictation and reporting; PACS; Pharmacy; Perioperative; Lab: Clinical, AP, Blood Bank, &amp; Reference Lab; Enterprise Reporting</p>
<p><b>Revenue Cycle Systems (Inpatient &amp; Ambulatory)</b></p>	<p>ADT/Registration; Environmental Services; Scheduling, Hospital Billing, Professional Billing, Address Verification, HIM: Encoder, Computer Assisted Coding, CDI, E&amp;M Coding, Deficiency Tracking, Release of Information, Dictation/Transcription, &amp; Voice Recognition; Forms Management; Document Management/Optical Imaging; Patient Reminders; Claims Clearinghouse; Enterprise Reporting</p>
<p><b>ERP Systems</b></p>	<p>Finance &amp; Supply Chain; HR &amp; Payroll; Accounts Payable; Time Keeping &amp; Advanced Scheduling</p>

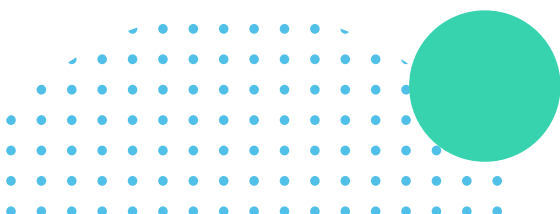
## Resulting Value / ROI

Tangible and intangible results achieved. Tangible results include savings (cost, time, resources), reduced medical errors, outcomes (i.e. patient quality and safety, financial or operational), and creative use of physical space formerly occupied by hard on-site files. Intangible results include such things as clinician and patient satisfaction, etc.

For our new member hospitals, the Rapid Install process has positioned WVU Medicine to begin to align clinical practice, standardize financial processes, and deliver consistency in the patient experience, with the rest of the health system, within a very short time after joining the system.

The WVU Medicine implementation teams have a consistent, repeatable install process that has resulted in extremely successful go-lives at our member hospitals with limited issues and an abbreviated timeframe for maintaining a command center of call takers for support. To date, our timeframe for maintaining a command center with dedicated call takers has dropped from 14 days to 6 days.

We can currently implement our enterprise systems in two new hospitals per year (along with all of their associated clinics). We have also been able to implement two hospitals concurrently in a five-month period which allows us to bring more than two hospitals on to our standard platform in a given year. Our ability to rapidly implement our enterprise systems helps a new member hospital to feel a more immediate ‘connection’ with the other member hospitals in the system.



## Lessons Learned

Top 3-5 things your organization learned over the course of the implementation process (from vendor selection through post implementation).

- Meet with senior leadership at the new site before the project kickoff to introduce IT leadership, provide an overview of the Rapid Install process, and set expectations on operational engagement, standard workflows, etc.
- Gather data needed for the content build before kickoff. Our Rapid Install process includes approximately one month of preplanning. Gap analysis questionnaires are sent out to department leaders at the new site to complete with a four-week turnaround. Teams can then review the questionnaires in preparation for initial meetings with operations SMEs after the kickoff and begin building immediately.
- Identify operational SMEs and trainers during the pre-planning phase so that they can participate in the kickoff – the implementation moves very quickly, so there is no time to catch up if not involved from day one.
- Implement standard workflows/system configuration: The five-month rapid install process would not be possible if the expectation were to start from scratch with system design for each new facility.



***Our standardized technology platforms are the foundation of our ability to act as a true system.”***

– James Venturella, CIO

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