









## I. Opportunity

#### What is VitalCenter™?

VitalCenter is a client-server application that delivers patient charts to the point-of-care to ensure business continuity. This Patent Pending technology enables physicians to access electronic copies of patient charts when the Electronic Health Record (EHR) is not available. From hardware failures to network outages and even scheduled maintenance, VitalCenter helps health care groups handle any downtime event. By offering instant access to records, VitalCenter can significantly increase efficiency during normal business circumstances as well. Perhaps this is the reason health systems and medical groups around the country rely on VitalCenter to keep them up and running with maximum efficiency.

#### **Why VitalCenter is Important**

Downtime costs your organization \$488 per hour, per physician<sup>1</sup>. Organizations need access to their patient charts even when the EHR is down. This need ranges from critical, in the case of a physician and his/her staff, to functional, in the case of a staff member looking to fill a request for records.

There are many issues beyond the control of the provider that can result in the instant loss of data access at the point-of-care. This is why VitalCenter was developed – to address the critical nature of network performance and procedures due to an increasing dependence on the EHR.

Although health care organizations continue to take steps towards Disaster Recovery, none are more effective than VitalCenter at seamlessly mitigating cost and time to recovery.

This powerful technology addresses the most significant concerns by providing an efficient and scalable way to provide medical staff with patient data whenever they need it. What's more, VitalCenter is designed to deliver significant cost savings during normal business operation conditions.



Cost per hour, per physician when the EHR system is down

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<sup>(1) &</sup>quot;The Costs and Implications of EHR System Downtime on Physician Practices" by Mark Anderson. Sys-Con Media, July 11, 2011.



### II. VitalCenter™ Overview

#### **VitalCenter Benefits During Downtime**

In today's environment, loss of access can be the result of network hardware failure, server misconfiguration, and most likely, Wide Area Network (WAN) connection problems (Figure 1, page 4). With the introduction of VitalCenter, medical providers can depend on Galen in the event that access is lost to the Allscripts Enterprise EHR database.

- Simple, Secure Chart Access VitalCenter delivers offline electronic copies of patients' charts to PCs within the provider clinic, where they are viewed or printed when the EHR is not available. The charts available in VitalCenter contain the same information found in the EHR including all discrete data (medications, problems, labs, etc.), notes, reports, and scanned images. And because each record is encrypted, critical patient data remains protected.
- Note Support The visit documentation created by the provider is interfaced into the EHR via VitalCenter VitalNote™ Syncing functionality. These notes, templated in VitalCenter, will be interfaced as simple unstructured text into the EHR. VitalCenter uses the same mechanisms for adding notes to the EHR as any document interface or the Allscripts Transcribe product. VitalCenter can also turn off this functionality, should a client decide not to use VitalNote.
- Protection VitalCenter helps to quiet the concerns many physicians have regarding the liability involved with seeing patients without access to the patients' electronic charts.

## VitalCenter Benefits During Normal Business Conditions

In addition to the downtime benefits, VitalCenter is a valuable asset to various stakeholders under normal business conditions.

- Planned Upgrades Planned upgrades cause anxiety for many groups. Whether it is access to the EHR for physicians on call or supporting urgent care clinics during upgrades, VitalCenter provides access to any scheduled or unscheduled patient.
- Requests for Records Health provider groups get daily requests for patient records. Historically, costs associated with producing these charts have allowed organizations to charge up to \$125 for the service. VitalCenter offers an "On-Demand" feature that allows users to produce charts in less than a minute and then save, print, or fax the document. This new Galen technology represents the most efficient way to produce these outputs 15 seconds, compared to roughly 15 minutes per record with other methods.
- Insurance Audits Audits conducted at the behest of
  the insurance carriers have significant soft dollar costs
  to the organization. Organizations must create users
  on the system, train those users, monitor access and
  then ensure access is revoked upon completion.
  The VitalCenter system enables users to quickly and
  efficiently request thousands of patient charts, without
  impacting the production EHR database.

#### **Usability**

- Intuitive user experience requires little to no training
- Seamless transition from EHR to VitalCenter
- Generate and upload Notes or Visit documentation while the EHR or network is offline

#### **Innovations**

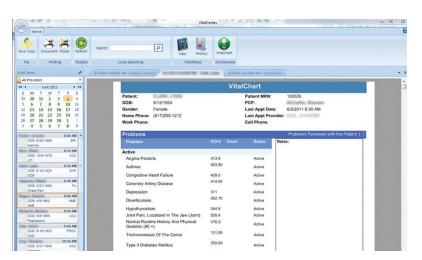
- Patent Pending Peer-to-Peer (P2P) communication reduces VitalCenter's already-low network impact
- Patent Pending Incremental Data Extract captures incremental changes and delivers them at a fraction of the time required by full updates
- Patent Pending Chart Delivery provides offline electronic copies of patients' charts to provider clinic PCs, where they can be viewed or printed when the EHR is not available

#### **Security**

- Encryption and Secure Document Delivery ensures patient data is always secure
- Full support of Allscripts Patient Security mechanisms: Secure Documents, Confidential Patients, Patient Security Groups
- Role-based security allows for varying levels of access to multiple users
- Encrypted charts for request of records and chart portability ensures a continuity of security outside the walls of the primary office
- Full HIPAA compliance, including audits of all user activity and chart access

#### **Monitoring and Reliability**

- Active monitoring and correction of issues on PCs
- Active monitoring server environment



A look inside the VitalCenter user interface.



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# II. VitalCenter™ Overview (cont.)

#### **Common Causes that Prevent Access to Patient Information**

- Network Whenever network issues prevent access to the EHR, VitalCenter gives users a way to access charts for scheduled appointments on the appropriate PC, in each of their clinics.
- Hardware Failures If hardware within the data center fails, VitalCenter makes patients' charts available.
- Severe Slowness When access to patient charts is hobbled by slowness, VitalCenter may be used as a quicker alternative.
- Power Outages VitalCenter can even be run when there is no power. Because encrypted charts are stored locally on the PC, physicians and staff with a UPS or laptop computer will still be able to view patient charts.

Figure 1. Feature Comparison Chart

#### **Business Continuity Capabilities**

	vitalcenter	Disaster Recovery	Cluster DB / Web Farm	High Availability / Hot Site	Redundant WAN
Network Downtime	<u> </u>	×	×	<u>.</u>	<b>(</b>
Severe Performance Degradation	<b>Ø</b>	×	×	X	×
Scheduled Upgrade	<u> </u>	×	×	×	×
Time to Switchover	Seamless	Hours to Days	Seamless to Seconds	Hour(s)	<b>Ø</b>
Server Hardware Failure	<b>Ø</b>	<b>Ø</b>	<b>Ø</b>	<b>Ø</b>	8
Application Failure	<b>Ø</b>	<u>.</u> !	×	1	×
Data Corruption	<u> </u>	<b>U</b>	× ×	1	×
Cost	\$\$	\$\$\$	\$	\$\$\$\$\$	\$\$\$\$

Indicates that the solution above only performs in limited scenarios. As an example, with application failure a hot site would only function if the failure had not been replicated to the hot site servers, which depends on the hot site configuration and timing of the failure.

#### Compatibility

VitalCenter is fully compatible with all versions of Allscripts Enterprise EHR from v10 to the latest versions as they are released.

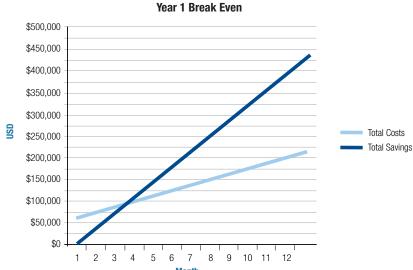
#### **Same-Day Appointments**

Health care groups cannot produce a full ETL during the day due to the potential negative impact on the system. Because pulling same-day appointments requires very little data, VitalCenter makes charts available for same-day appointments throughout the day. This means any same-day appointments will show up in VitalCenter soon after they are scheduled.

### III. What is Your VitalCenter™ Number?

#### **Impact to the Allscripts Customer**

Allscripts' customers stand to gain the most from investing in and using VitalCenter. The projections below show both the downtime and uptime revenue retention potential for a group of 200 providers. Regardless of the variables and assumptions involved, the return on investment is quick and significant.



#### Annual Positive Revenue Retention

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Number of Providers	200
Interruptions Per Year	2
Outage Duration (hours)	2
Monthly VitalCenter Subscription Per Provider	\$65
Cost Savings	
Increased Productivity (Per Group Per Year):	\$390,400
Savings Under Normal Business Conditions	
Request for Records (Per Group Per Year):	\$23,400
Insurance Audit (Per Group Per Year):	\$25,000

#### **Overall 5-Year Savings: \$1,359,000**

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	Year 1	Year 2	Year 3	Year 4	Year 5			
Savings	\$438,800	\$438,800	\$438,800	\$438,800	\$438,800			
Subscription	\$156,000	\$156,000	\$156,000	\$156,000	\$156,000			
Server	\$30,000	0	0	0	0			
Implementation	\$25,000	0	0	0	0			
<b>Total Savings</b>	\$227,800	\$282,800	\$282,800	\$282,800	\$282,800			

Assumptions: Downtime Cost Savings: (Frequency of outages \* average duration) \* cost savings per hour \* number of providers. Average Cost per Provider per hour = \$488. Request for record reduction in cost: # Requests for records \* hourly cost of employee \* time to fulfill request \* efficiency improvement = 1/provider/week \* \$15/hr \* 10 minutes \* 90% = \$117 annual savings/provider. Insurance audit cost reduction: # Charts audited per year \* Cost per chart = 5,000 charts requested annually \* \$5/chart = \$25,000 cost reduction per year.



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### IV. Client Testimonials

"Our organization is reliant on the information contained in the EHR, and it is my group's responsibility to ensure access to that information. VitalCenter™ provides me that capability."

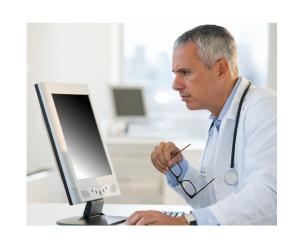
**Lenny Brunson** - Chief Information Officer, Queens-Long Island Medical Group

"VitalCenter gives me peace of mind from a patient care perspective. We need to provide the best patient care possible at all times, and VitalCenter allows us to ensure patient records will be available in downtime scenario."

Joe Berman - Chief Operating Officer, Acton Medical Associates, P.C.

"Galen's technical services have allowed us to utilize Enterprise EHR in ways that we never imagined were possible."

**Tom Goodwin** - Director of Clinical Information Systems, MIT Medical



### V. About Galen Healthcare Solutions

Galen Healthcare Solutions is a professional and technical services company specifically focused on assisting members of the health care community with the challenging, sometimes painful task of migrating to a predominantly paperless world. Galen is uniquely positioned to leverage its experience, its relationships, and its expertise to empower its partners in their efforts to provide extraordinary patient care through the use of technology.

Galen resources possess decades of clinical and electronic health record experience. We are on the forefront of the EHR movement and offer a vast array of skills including database architecture, project management, implementations, and custom application development. Galen has been involved in hundreds of EHR implementations, from inception to completion, varying in size from six physician specialty practices to 1,200 physician integrated delivery networks.

Galen has been implementing Allscripts Enterprise EHR for more than six years, executing a range of activities including project management, implementation, custom interfaces, and reporting. Allscripts staff and clients know the Galen EHR implementation team as "reliable Allscripts experts that get it right the first time." Over the years, Galen has earned a reputation as a fundamental resource in implementing Allscripts systems.

- Decades of clinical and EHR experience
- Dedicated Allscripts Enterprise EHR implementation experts for more than six years
- Experience with various sizes of provider networks



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