

Healthcare Success Stories: Prescriptions for Healing Backup and Continuity Headaches

Healthcare is a unique industry. Beyond making up almost 18% of the US gross domestic product, there are many factors that make hospitals, physician collectives, laboratories, and therapy services different from other businesses.

Unitrends Compliance Manager

If you are in the healthcare industry you already know your organization must follow HIPAA mandates. Unitrends Compliance Manager will guide through a HIPAA audit and is the only product that automates the collection of the data, analyzes it for you, and produces dynamic worksheets customized on your data.

When you combine your IT knowledge with the subject matter expertise built in to Unitrends Compliance Manager, you have everything you need to meet HIPAA compliance standards and pass an audit.

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Introduction

Healthcare is a unique industry. From the need to be available 24x7x365 to the ultra-proprietary content of the electronic health records (EHRs) they need to protect, healthcare institutions face a unique set of requirements for data protection and business continuity.

For example no other industry has as over-riding a set of requirements as HIPAA (Health Insurance Portability and Accountability Act). The HIPAA Security Rule establishes national standards to protect individuals' electronic personal health information. The Security Rule requires appropriate administrative, physical and technical safeguards to ensure the confidentiality, integrity, and security of electronic protected health information – including protection from loss. HIPAA mandates both a data backup plan AND a disaster recovery (DR) plan. HIPAA requires an operations plan that lets critical processes continue in an emergency. Medical institutions need to be able to run critical processes if the primary facility is destroyed.

Data pressures continue to evolve. In October, 2015, the Centers for Medicare & Medicaid Services (CMS) and Office of the National Coordinator for Health Information Technology (ONC) released final rules that simplify requirements and add new flexibilities for providers to make electronic health information available when and where it matters most and for health care providers and consumers to be able to readily, safely, and securely exchange that information – what is now referred to as “Meaningful Use”.

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We are small hospital, and we have a small IT staff. We have to wear many hats to keep the packets flowing. Server, desktop, virtual infrastructure management, .. what ever it takes.

Joe Sauter
Network Analyst
Marengo Memorial Hospital
Marengo, Iowa

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To achieve Meaningful Use and avoid penalties, providers must follow a set of criteria that serve as a roadmap for effectively using an EHR. Meaningful Use means providers need to show they're using certified EHR technology in ways that can be measured significantly in quality and in quantity. Quality must include data backup and business continuity protections, including measurable and actionable RTOs (Recovery Time Objectives) and RPOs (Recovery Point Objectives.)

This white paper will discuss the unique challenges of the healthcare industry and demonstrate how they can best be met through data backup and business continuity solutions.

Healthcare's Unique Challenges:

Uptime Requirements

Healthcare requires the highest levels of uptime. EHRs need to be accessible 7x24x365 as patient lives depend on it. And the data is growing exponentially particularly for medical imaging. The new requirements of MACRA (Medicare Access and CHIP Reauthorization Act of 2015) that require multiple data elements that will determine physician's reimbursements from Medicare will grow data access and uptime requirements. While other industries may have recovery time objectives (RTO) in hours, the healthcare industry needs RTO times measured in seconds or minutes. Healthcare IT professionals need to know that EMRs (Electronic Medical Records) and EHRs are fully protected and applications using those files can recover in minutes with no room for error. Critical processing systems must stay up and running or patient care will be impacted.

"The ability to rapidly restore a server was far superior to competitors and allowed for recovery of core systems to be accomplished within a time frame that met our executive mandates." - [Matthew Cook, IT Director, Arrowhead Dental.](#)

Response – Healthcare requires instant recovery that can failover applications in literally seconds. This should include automated recovery testing, site and application failover, ransomware detection, and disaster recovery compliance, both locally and in a HIPAA-certified cloud. To be 100% confident in recovery, users need to be able to test application recovery right up to the point of spinning up an application to be sure that all components for a successful recovery are in place, are the right versions and are capable of being operational. Unitrends also offers Instant Recovery, the ability to launch failed applications on the Recovery Series hardware appliances or on alternative hardware orchestrated by Unitrends Backup software from backup files locally, remotely, or in the Unitrends Cloud.

Highly targeted by ransomware

There is a special and growing type of downtime threat to the healthcare industry - ransomware. Recognizing that hospitals and doctors need access to their data at all times, ransomware criminals are targeting healthcare providers because they understand the importance of EHRs. The FBI recognizes the threat of ransomware and has even suggested that hospitals may find it easier to just pay the ransom to speed the process of regaining access to important data. However, for targeted attacks on hospital data the ransom demand can reach ten's of thousands of dollars.

"Because we had a very recent image that we knew was good,



thanks to the excellent reporting, we were able to restore that server in 27 minutes. The shipping process was not impacted at all and our shipments went out on time." - [Matthew Cook, IT Director, Arrowhead Dental.](#)

Response - Virus scanners provide protection against only well-known ransomware versions but are useless against new or slightly modified variants. With thousands of new variants spotted each day, the only real protection is to have a data backup and recovery program so that you can roll your system back to a recovery point before the infection occurred. Ransomware targets need to be able to automatically do security scans against your production applications – but using your backup data instead. Additionally users must be able to spin up applications in a specific order, isolate them from production, execute security tests, and receive automated reports and alerts immediately upon detection of ransomware. Even the FBI agrees that [this is the best approach.](#)

Highly Regulated

Healthcare information is some of the most highly regulated data across all industries. Again HIPAA, sets the standard for protecting data as sensitive as PII (Personally Identifiable Information). Any company that deals with Protected Health Information (PHI) must ensure that all the required physical, network, and process security measures are in place, documented and followed. Additionally, the Health Information Technology for Economic and Clinical Health (HITECH) Act established Health and Human Service's Office of the National Coordinator for Health Information Technology's (ONC) and provides them with the authority to establish programs to improve health care quality, safety, and efficiency through health



IT. The HITECH Omnibus Rule extends data requirements and associated liabilities under HIPAA to business associates, such as labs and independent physicians groups. Healthcare business suppliers are required to comply with the same data requirements as a covered healthcare entity.

“This appliance has made it so easy for us to get dependable backups and maintain our HIPAA compliance, all in one place from a single product.” – Sar Perrott, Network Analyst, Mason General Hospital

“The Unitrends Recovery Series appliance made a HIPAA audit very easy, with Unitrends Disaster Recovery as a Service and their RPO and RTO reports.” – Zackery Radke, Santa Fe Senior Living

Unitrends Response – Healthcare users must be able to select appliances that are pre-loaded and pre-tuned with powerful software that not only covers on-premises backup but also long-term retention and disaster recovery in a HIPAA compliant

cloud. The backup and recovery process must be able to provide documentation on the results of the testing that can be used in a HIPAA audit to prove systems are in place to protect patient’s health and access to the data. In addition, appliances and software should include the ability to encrypt targeted files so that they cannot be accessed illegally. The solution must include built-in AES 256-bit encryption to protect healthcare data both at-rest and / or in-flight.

Control Proprietary Data

As a result of HIPAA and other legal mandates, medical institutions must keep control of their data at all times. According to the HIPAA Security Rule, technical safeguards require “the technology and the policy and procedures for its use that protect electronic protected health information and control access to it.” Healthcare IT must know where their physical data is located at all times of the lifecycle as well as control who can access it.

“Unitrends gives us the option to access recovery files across our own network. That was one of the big bonuses since we use our remote locations to store our backups.” – [Kenney Moore, IT Specialist, Altirum Institute](#)

Response - Healthcare providers want to keep absolute control of their data. This can mean keeping the data on premise, including backed up at remote locations or stored in a cloud with clear ownership and control procedures in place. Data backup and business continuity solutions must be able to replicate data locally, to a remote site or to a HIPAA-compliant cloud. From any of those locations data can be stored for long term retention and / or used for disaster recovery purposes.

Supporting large numbers of non-computer savvy users

Healthcare IT mostly supports a community of fairly unsophisticated users who are prone to making mistakes. Doctors, nurses and administrative support staff are generally not IT or compliance experts. They are quick to click on dangerous links or delete and lose files that they may need in the future. As all records are critical, HIPAA requires that no files can be lost and must be able to be restored quickly.

“When files are mistakenly deleted, I can fix it in about 3 minutes with Unitrends.” – [John Brown, IT Director, Northeast Missouri Health Council](#)

The CFO came to the IT office very upset that someone had erased an important document. Once I was able to determine where this document was previously located I was able to get the file restored before he could walk away. Immediately he was grateful and his attitude towards IT turned an obvious corner.” – [TJ Wertz, Network Administrator, Central Iowa Healthcare](#)

Response – The rapid recovery of lost files is where disk-based backup really shines. With an intuitive user interface, even untrained IT staff must be able to easily find individual files in backups. The process should require no more than a few clicks and the entire recovery process, from login to file restoration should take less than 5 minutes. This process and speed needs to be the same whether recovering individual files, folders or full data sets.

Conclusion

Unitrends has a long history of protecting the IT assets of the healthcare industry, with hospitals, clinics and medical labs using thousands of Unitrends products daily. Unitrends offers actual Service Level Agreements (SLAs) to users of our Disaster Recovery as a Service (DRaaS) offerings and the ability to do DR with both private and purpose built public clouds. Unitrends offers its own purpose-built cloud that is HIPAA certified to host business continuity solutions for the demanding healthcare industry. Gartner has even rated Unitrends a “Visionary” in their DRaaS Magic Quadrant report for 2016.

“As for savings in hours and productivity, I can’t even imagine what we are saving with Unitrends.” – [Philip Moya, IT Manager, San Antonio Kidney Center](#)

The Unitrends portfolio of all-in-one, cloud-empowered, backup and continuity solutions provide healthcare IT departments with the ultimate portfolio of data and business protection while having the ability to offer unmatched flexibility as your needs evolve. Plus, you have our promise that you can recover virtual, physical, and cloud-based data, systems, and applications with 100 percent confidence.

Our local partners can work with each institution to learn their unique needs and suggest the right Unitrends product to match.

For more information, please visit unitrends.com or talk to a Unitrends Partner.