



# Delivering fleet-wide predictive analytics on improving machine uptime using Glassbeam Clinsights™

Learn how a leading medical equipment managed service provider in North America increased asset utilization by 20% and avoided revenue leakage of ~80000 \$ per machine per year at its customer sites.

## The Challenge

Agility, the medical equipment management and services company, currently serves 7000 national, regional, and local acute care hospitals across the U.S. With over 800,000 units of medical equipment managed by its clinical engineering teams, Agility was looking to efficiently monitor the utilization of the hundreds of various machines and seek a data-driven approach to optimize the maintenance operations.

Agility has a long history of running its Equipment Value Management (EVM) services that helps its customers to reduce the maintenance cost of their equipment and streamline operations. Its primary challenge was to unlock the power of predictive analytics to elevate the EVM service offerings from a dispersed, reactive service to a cohesive, proactive service using real time machine data analytics.

The other challenge was to support zero disruption of services at some of the largest healthcare facilities in the southern California. Agility's field engineering teams needed to respond rapidly with precise knowledge of the root cause, for instance, to machine downtime, before showing up on site.

## The Solution

Agility chose Glassbeam Clinsights™ as the Artificial Intelligence & Machine Learning (AI/ML) powered cloud-based analytics solution to meet equipment SLAs, decrease management costs, predict equipment part failures, and efficiently engage using a single pane of glass to manage all its customers at geographically dispersed sites.

### Daily Email Alerts

Clinsights provides daily email alerts to Agility engineers on the health of all MRI and CT Scanners grouped by different customer sites. The staff now gets alerts each time a magnet pressure or helium level is going out of bounds against set thresholds. Similarly, a CT Scanner email alert allows Agility engineers to check on the life of the x-ray tube by observing an abnormal number of Arcs and Aborts happening during a specific period of time.

### Environmental Sensor Analytics

All Agility sites are equipped with environmental sensors deployed as part of Glassbeam's CLEAN™ (Clinical Engineering Analytics) blueprint. The data is analyzed every few minutes in the cloud and results are displayed in a dashboard to monitor Compressor Power, Room temp/humidity, and Chiller water temp in/out. All telemetry data is analyzed, correlated and displayed alongside machine log data.

### Predictive Analytics

All dashboards at Agility sites are powered by AI/ML to predict part failures, including CT tube failures, to minimize unplanned downtime. The analysis is also applied for anomaly detection to identify early warning trends and that in return automates tasks of field service engineer in defining lower and upper bounds of specific thresholds (that can be manually adjusted as well).

## The Impact

### Reduced Overall Costs

Managing costs is a critical part of Agiliti's business value to its customers. Glassbeam Clinights analytics platform has helped decrease Agiliti costs of operations and services by reducing cost of servicing each asset by well over 20%, providing them the unique ability to proactively manage their customer sites that house multiple modalities such as MRI and CT Scanners from multiple manufacturers such as GE, Siemens, Phillips, etc.

### Reduced Downtimes and Increased Utilization & Revenue

Clinights is used to provide continuous status and predictive analytics on key components such as compressors, chilled water supply, shield temperature, and helium level. As an example, a 30%

cryogen loss can cost \$15K and downtime can cost more than \$2,000 per hour and a quench event can take days to recover from. By using Clinights capabilities, Agiliti has reduced their unplanned machine downtimes, and the utilization of the equipment has increased by 20%, therefore avoiding a potential revenue leakage of \$70-80K per machine per year, for their CT and MRI machines.

### Ease of Management & Single Pane of Glass

Agiliti's ability to view the aggregate events, alerts, and manage imaging assets across 40+ facilities across the state through Clinights SaaS platform, has resulted in providing a comprehensive operational view across the organization, functions, and location, whether it be the field engineer or departmental head at a customer site.

*"Glassbeam's Clinights platform is a perfect fit for our innovative Equipment Value Management (EVM) framework offering which allows us to manage the entire life cycle management process for medical equipment. We chose Glassbeam's platform capabilities because it is cutting edge and truly innovative for the healthcare industry at large."*

**Cary Lucian**  
Senior Vice President  
Agiliti Health



## About Glassbeam

Glassbeam is the premier machine data analytics company bringing structure and meaning to complex data generated from any connected machine in the Industrial IoT with a strong focus on medical and data center equipment. Funded by several ultra-high net worth investors, Glassbeam's next generation cloud-based platform is designed to transform, analyze, and build Artificial Intelligence applications from multi-structured logs, delivering powerful solutions on customer support, machine intelligence & utilization for companies such as IBM, UCSF Medical, Novant Health, Scripps Health, PTC and Dimension Data.



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