



Gerber Memorial Health Services Gains the Power of Mobile Delivery without “Rip and Replace” as a Plan for Growth and Expansion

EXECUTIVE SUMMARY

Gerber Memorial Health Services

Gerber Memorial Health Services (GMHS) is located in Fremont, Michigan, 45 miles northwest of Grand Rapids. It is the only hospital in Newaygo County (population 48,000), a very popular rural vacation community.

GMHS, founded 1918, is a 77-bed not-for-profit community hospital that offers a complete range of basic medical services you would find in urban hospitals. It has consistently been named one of the Top 100 Hospitals in the United States.

Challenge

Continuing its quest to improve the level of staff efficiency and healthcare provided to its community, GMHS realized the need to implement a secure mobile delivery platform to support its new laboratory information and patient care management systems and provide guest access, as well as support future healthcare information technology applications, mobile IP telephony and asset location services.

GMHS also wanted to find a way to deploy the mobility platform as budgets permitted, with the initial installation meeting current requirements and a blueprint for improving the platform's performance as additional applications were rolled out.

Solution

GMHS contracted with Azure for its MD *First* strategy, which resulted in a mobile delivery plan that accommodated GMHS' current and future application requirements while permitting an interruption- and obsolescence-free phased implementation.

Leveraging equipment from Cisco Systems, Azure was able to provide GMHS a secure and reliable mobile delivery solution that offers an enhanced user experience and also meets the technical application requirements of GMHS. The mobile delivery platform is very easily managed and enforces user policies and access to their specific applications.

Value

- A mobile delivery strategy permitting deployment to meet current application requirements and enhances to meet future requirements without interruption to existing applications.
- Highly secure, HIPAA-compliant, robust mobile delivery platform capable of supporting advanced services like Point of Care sessions, mobile telemetry, PACS, mobile IP telephony and asset location services.

Community hospital provides mobile delivery for new laboratory information and care management systems with Azure's MD *First* strategy that provides for interruption-free enhancement to support future applications.



CHALLENGE

Consistently recognized as one of the Top 100 Hospitals in the United States, Gerber Memorial Health Services (GMHS) of Fremont, Michigan continuously looks for innovative ways to improve its operations and the level of care it provides to its community and patients.

The 77-bed, 132,000 square foot, not-for-profit community hospital recognized that it would need a mobile delivery platform to realize the maximum benefits from its new laboratory information system from SCC and a care management system from Care Fusion by extending access to mobile caregivers. GMHS also wanted to use the delivery platform to provide guest wireless access services to patients, visitors and guests without jeopardizing the security of patient and hospital information.

“Azure demonstrated a strong understanding of the mobile delivery of applications in healthcare. They took the time and effort to understand our current and future applications and designed a delivery platform that accommodates those applications.”

Peter Mulford
Director, Information Technology
Gerber Memorial Health Services

GMHS also anticipated future implementations of other healthcare information systems (HIS) that would require mobile delivery and the potential use of the network for such other applications as mobile IP telephony and asset location and tracking services.

The hospital was also aware of the experiences of other organizations who had implemented a mobility platform and found that, over time, as more and more applications were enabled for mobility, the platform proved to be unable to provide the capacity required by the applications. GMHS wanted to ensure that its new mobile delivery strategy would be robust enough to support such future uses without obsolescence.

And, in an effort to meet capital spending budgets, GMHS desired a strategy for enhancing its mobile delivery platform over time, constructing the platform as budgets allowed and applications required. Ideally, the platform could be implemented in phases, with coverage and capacity growing as required, with no obsolescence to equipment required for previous phases and no interruption to existing applications during periods of mobile delivery expansion.

SOLUTION

MD First - A Budget-Conscious, mobile delivery of healthcare applications strategy

GMHS began investigating options for its new mobile delivery platform and identified Azure of Rochester Hills, MI as an experienced provider in the mobile delivery of healthcare applications. Not only did Azure have extensive experience in healthcare; it had a demonstrated understanding of designing turnkey mobile delivery platforms specifically to support healthcare applications and advanced services such as mobile IP telephony. Azure approached the project with a consultative approach, striving to learn of GMHS' current and future plans for mobile delivery and the impact of the applications that GMHS intended to deploy over time.

GMHS was also intrigued by Azure's innovative strategy offering, MD First. MD First was developed in response to what Azure had identified as an emerging need in the mobile applications marketplace for capacity-based designs that could grow to meet an enterprise's future needs without interruption to applications already supported by the mobile delivery platform.

Azure had witnessed a growing number of healthcare providers and enterprises whose mobility platforms, originally designed to provide coverage with little regard to the capacity required to support applications added over time, was proving incapable of serving as a delivery platform for current application loads. These organizations required a complete redesign and new installation, and Azure developed MD First as a scalable design method that would allow enterprises to expand their mobile delivery platforms as applications required and budgets allowed while ensuring that such expansion would not disrupt communications for existing applications that relied on mobile delivery.

"As a result of Azure's strategy to work with our software application provider, we were able to realize security shortcomings of barcoding hardware offered by our provider and were able to change to industry standard hardware that offered HIPPA compliance and investment protection."

Howard Lee
Director of Laboratories
Gerber Memorial Health Services

“After a few years, early adopters of mobility platforms are recognizing that their current mobile delivery systems are not well-suited to supporting long-term goals and requirements. The early mobile delivery platforms were designed to provide coverage for portable network access and are not readily upgraded to provide additional capacity or support applications that require true mobility and roaming such as mobile voice and Point of Care sessions. MD *First* enables enterprises to cost-effectively meet the mobile delivery of healthcare application requirements without having to shut down the application and disrupt the quality of care in order to repair the mobile delivery of HIS,” said John Anderson, director of sales for Azure.

GMHS realized that MD *First* would provide a blueprint of a mobile delivery system that could be implemented to meet existing requirements and be expanded as required for new applications and as budgets permitted.. MD *First* would not only provide a design for mobile delivery that would support GMHS’ most demanding anticipated services, mobile IP telephony, Point of Care sessions and staff or asset tracking, but also provide a design for a mobile delivery system that would initially utilize a subset of the “voice-ready” solution, configured to meet current coverage, users and capacity requirements. GMHS would be able to deploy a strategy that would be within current budget limitations, support its laboratory information and care management systems and be capable of expansion without interruption.

GMHS’ MD *First* - A Foundation for the Future

Upon completion of its MD *First* plan, GMHS was able to select the required application coverage and user capacity desired of its mobile delivery platform to support its current applications and bring the project in under its current capital budget, able to initially deploy fifty percent of the mobility plan required for the “voice-ready” mobility platform in order to support its new applications, while preserving the ability to enhance the system to provide additional capacity and coverage when additional applications and services were added.

Azure was then contracted to supply and implement GMHS’ new reliable and secure mobile delivery system. The MD *First* also allowed GMHS to extend the mobile delivery system to a remote medical office building, providing access to the laboratory information and care management systems, while realizing centralized system control and management by leveraging the main hospital’s previous investment.

“With Azure’s IntelliPlan wireless network design, we are able to implement a wireless network as our requirements and budget allow and are assured it can be expanded to support the most demanding applications without interruption or obsolescence”

Peter Mulford
Director, Information Technology
Gerber Memorial Health Services

HIPAA security requirements are met with the mobility systems ability to support industry standard methods, and the users’ experience is enhanced with the mobility system’s ability of securing access seamlessly, controlling the information or applications that are intended for them and providing the reliable availability that is demanded for successful application usage.

Azure also upgraded GMHS’ delivery distribution system to enhance the efficient management of application usage and provide the security required of each specific application.

VALUE

Gerber Memorial Health Services implemented a highly secure, HIPAA-compliant mobile delivery solution that provided mobile caregiver access to its new laboratory information and care management systems and provided wireless internet services to patients, family members and visitors.

The laboratory information system will provide caregivers with instant access to laboratory results, reducing the waiting times associated with waiting for the return of lab results. The care management system will promote positive patient identification (PPID) at the bedside, utilizing wireless barcode readers and barcoded patient wristbands. PPID protects caregivers from making preventable errors and patients from the consequences of those errors by helping to safeguard clinical processes most prone to error.

The hospital expects to realize improved patient care and patient satisfaction, with caregivers gaining efficiency and able to spend more patient-facing time and making more timely assessments of patient conditions as a result of the immediate, mobile access to the information provided by the new healthcare information systems applications.

As a result of the improved levels of patient care, the hospital anticipates that it will also realize improved patient throughput from faster patient recovery resulting from the improved care levels and patient satisfaction and increased caregiver efficiency.

The hospital was able to implement Azure's MD *First* strategy, within budget, that provided coverage and capacity sufficient for supporting current applications and capable of being enhanced to support the most demanding applications without interruption to applications. The mobile delivery solution will simplify the user interface to applications and the administration tasks for GMHS' Information Technology staff, and Azure's MD *First strategy* will provide for efficient and orderly expansion of the mobile delivery of future applications.

In the future, the mobile delivery strategy is capable of supporting the most challenging applications to deliver such as mobile IP telephony, which would provide caregivers and staff with anywhere, anytime telephone and messaging access, and support location tracking services, reducing costs associated with unknown staff and patient location and lost, misplaced and underutilized medical equipment and track the length of time that physicians are with specific patients.



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