

## **Case Study**

# Home Healthcare







HealtheMed's Clinic@Home digital care system facilitates virtual clinical visits, remote patient monitoring, and enhanced medication adherence for Medicaid-waivered patients. Using a TV application as a hub with video capability and integrated Bluetooth devices, like a medication auto-dispensing unit, pulse oximeter, and thermometer, it securely processes and shares client data with care team members. This efficient solution streamlines provider communication, integrating with existing EHR systems.

#### **CLIENT CHALLENGES**

This organization needed an engineering partner to renovate their existing software system to support integration with other systems, automate manual processes, and scale to meet the growth of its customer base.



KMS Healthcare developed a robust solution to:

- Fully control the application with unlimited scope for augmenting functionalities.
- Allow HealtheMed to integrate with standard EHR systems seamlessly and increase scalability with flexible backend services.
- Gain comprehensive oversight of the data and utilize them with maximum efficiency.

#### **KEY SUCCESS FACTORS:**

- Achieve high extensibility and flexibility to accommodate future growth and facilitate seamless integration with standard EHR systems like CharmHealth EHR.
- Design a system adaptable for RPM readings compatible with modern RPM devices, streamlining remote healthcare management.
- Implement a microservices architecture to break down the application into independent services, optimizing functionality, productivity, maintenance, and testability.
- Utilize AWS-managed services for enhanced security, automated scalability, high availability, and cost-efficiency.
- Ensure strict compliance with both HIPAA and HITRUST standards throughout the system.

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#### **KMS IMPACT**



**HealtheMed Patient App:** A responsive UI application for Android TV was developed that could be ported to mobile devices. The existing Adhere TV and hLink applications were merged to improve the response time of data readings, increase patient engagement, and simplify the installation on various devices.



**HealtheMed Portal:** A web portal was created for nurses and doctors to configure and manage patient features and settings. The design provides a single sign-on method for a better user experience.



**HealtheMed Backend Services:** All Portal and Patient App business rules were streamlined while facilitating the integration with CharmHealth and other EHR systems (Epic, Cerner, etc.).



**HealtheMed Database:** This database stores all data collected from the Portal-Patient App and other EHR systems (CharmHealth, etc.).



**AWS Infrastructure:** AWS-managed services were leveraged to ensure cost-efficiency, regulatory compliance (HIPAA BAA, HITRUST CSF), automated scalability, and high availability.



When you talk about delivery on time and on schedule, this is one of the best teams I've seen - and at the end of it, that delivery matters. We don't want to miss deadlines, we want to make sure we are meeting our goals, and the KMS team really takes extra effort to make sure we are doing that.

Director of Delivery

The KMS team stood out to me as being very professional and excited about the platform. You could tell that people were invested, really wanted it to succeed, and took pride in their work - which is really great to see because it means higher quality across the board.

Sr. Product Owner

### **CONCLUSION**



HealtheMed partnered with KMS Healthcare to create an innovative digital care system, empowering remote patient monitoring functionality at home to meet patients' needs. KMS delivered a user-friendly web portal for healthcare professionals, integrated with EHR systems including CharmHealth. Utilizing AWS-managed services, they were able to achieve cost-efficiency, a scalable framework, and regulatory compliance.

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