Secure, Scalable and Seamless: Mayo Clinic's Patient Video Network in Action

Project Overview

Mayo Clinic, one of the world's most respected healthcare institutions, serves more than one million patients annually across major campuses in Minnesota, Arizona, Florida and its wider Midwest health system. As part of its digital transformation initiative - and in parallel with tightening security standards - Mayo sought to modernize the video and display infrastructure powering patient rooms, corridors and public spaces.

The Objective Was Clear

Create a single, reliable, secure, remotely managed platform to deliver a consistent Mayo-standard experience across every screen in the enterprise.

To achieve this, Mayo partnered with Amino and Advanced Media Technologies (AMT), deploying the Amino H200 media player across its estate and centralizing device management through Amino Orchestrate.

Customer Testimonial

"The H200 has been rock solid for us: when a patient turns on the TV, it just works. Overall, the API integration, remote management tools and unrivalled Customer Service have been game changing."

John Olson, Senior Media Systems Engineer, Mayo Clinic

The Challenge:
A Fragmented, Hard-to-Support Display Estate

Over time, Mayo's screen ecosystem had become inconsistent. Multiple one-off Android devices were introduced to satisfy local needs, but these lacked standardization and were increasingly difficult to secure and maintain.

Key challenges included:

1. **Operational inconsistency and device instability**
   Unreliable devices frequently dropped off the network, software updates were uneven and failures often required IT staff to physically enter patient rooms - an inefficient process that became especially problematic during COVID-era restrictions.

2. **Stringent healthcare security and compliance requirements**
   Any replacement platform needed to pass rigorous audits, workflows, follow predictable patch cycles and avoid unnecessary wireless radio operation in sensitive clinical spaces. Many alternative devices failed these evaluations.

3. **Lack of remote visibility and diagnostics**
   Teams could not easily see what was displayed on a screen, control devices remotely or troubleshoot without entering patient areas, slowing issue resolution and increasing the support burden.

4. **Need for one standard device across diverse healthcare uses**
   From bedside IPTV to digital whiteboards, signage and clinical workflows such as virtual nursing, Mayo required a **single hardware platform** capable of powering all use cases efficiently and at scale.

Collaboration in Action:
A Unified Platform Built for Healthcare

Working closely with Amino and AMT, Mayo established a unified display architecture built around the **Amino H200** and managed through **Amino Orchestrate**.

Amino H200: Hardened, Reliable, Healthcare-Ready

- Enterprise-grade Android OS tailored for medical environments
- Rugged chassis and flexible mounting options
- Power-over-Ethernet (PoE) for clean installations and simplified sanitization
- USB, RS-232 and physical reset controls for AV and clinical workflow integrations

Clinical-Grade Security & Lifecycle Management

- Predictable quarterly security releases and rapid CVE patches
- Compliance with strict hospital network rules (including multicast IPTV)
- Reduced risk of "device drift" common in mixed-vendor estates

Orchestrate: Centralized, Scalable Device Management

- Zero-touch provisioning for rapid onboarding
- Centralized configuration across regio
- Remote screen viewing and software-based remote control
- Logging, alerts and deep operational insights
- API integration into Mayo's enterprise IT stack

Enabling Advanced Clinical Workflows

A major innovation was support for **virtual nursing**. The H200 was designed for this market and therefore features necessary ports such as RS232.

- Virtual visit sessions take over the TV display automatically
- Entertainment content pauses and audio levels adjust
- No dedicated telehealth hardware is required

This created a seamless, multi-purpose bedside screen experience that supports both entertainment and patient care.

Flexibility for the future
Due to the flexibility of the platform Mayo can deploy Android with a browser and a rich set of device control API's: they can easily transition CMS platforms, deploy new apps or expand clinical integrations **without replacing hardware**.

The hardware has been thoughtfully designed with flexible interfaces, diverse mounting options, robust construction and ongoing security updates, making it suitable for a wide range of use cases. For example, a lower-security device might be acceptable for basic digital signage, while video applications may require moderate security. But when handling sensitive data, such as patient health records, a much higher level of security is essential.

Deployment & Scale

Mayo has deployed over **6,000 Amino H200 units** across Rochester (MN), Jacksonville (FL), Phoenix (AZ) and multiple Midwest health system sites.

Each site receives tailored configurations delivered centrally through Orchestrate. After more than **five years in production**, the frequent upgrades which add security and new features enable the device to have a much longer lifespan than competitors, underscoring the platform's durability.

AMT provided:

- Reliable supply continuity (including during global hardware shortages)
- Deployment logistics and staging support
- Consistent rollout practices across geographies

The Results:
Clinical-Grade Reliability at Enterprise Scale

1

Improved Patient Experience
Bedside screens now operate as essential communication and engagement tools. Reliability has dramatically improved and issues – if they arise – are typically resolved remotely and quickly.

2

Reduced IT Workload and Support Costs

- Fewer in-room visits
- Faster troubleshooting through remote visibility
- Simplified training on a single standardized platform
- Streamlined zero-touch provisioning for rapid expansion

3

Strengthened Security & Compliance
Regular updates, predictable security cycles and adherence to modern network standards satisfy Mayo's stringent governance requirements.

4

A Scalable Foundation for Innovation
One device now powers:

- IPTV entertainment
- Digital whiteboards
- Corridor & lobby signage
- Virtual nursing integrations
- Diverse set of future applications

This **"one device, many use cases"** strategy aligns with Mayo's long-term digital roadmap.

Conclusion

Through a close multi-year collaboration, Mayo Clinic, Amino and AMT delivered a unified, secure and remotely managed screen platform that enhances patient experience, reduces operational overhead and provides a future-proof foundation for clinical innovation.

This modernization enables Mayo to deliver consistent, high-quality video and communication experiences across its entire healthcare network – today and into the future.

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