

Situation

A regional home health provider was rolling out an electronic medical records (EMR) system for its field clinicians—but quickly ran into a major roadblock:

- **Uncontrolled networks.** Clinicians needed to chart visits from patients' homes, where the agency didn't manage Wi-Fi or security settings.
- **Security & compliance risk.** Allowing unfettered "remote user" access to the EMR platform exposed the client to potential breaches. At the same time, managers wanted to restrict entry-level staff from logging in at any time or location.
- Operational impact. Without a secure solution, caregivers had to wait until they
 returned to the office—often the end of their shift—to record vital patient notes,
 jeopardizing both care quality and regulatory compliance.

Action

Silver Linings Technology designed a tightly controlled remote-access environment—without buying any new hardware or software—by:

- 1. **Building a secure virtual desktop:** Spinning up a company-owned desktop environment on a locked-down EL (Enterprise Linux) operating system, rather than a standard Windows or Google OS.
- 2. **Layered authentication:** Requiring two-step security:
 - User-level: Only approved clinicians with valid credentials could initiate a remote session.
 - Machine-level: The virtual desktop itself recognized and admitted only known devices.
- 3. **Bypassing VPN limitations:** Because traditional VPNs couldn't interface with the EL environment, the team implemented a proprietary remote desktop gateway that enforced





both security checks before granting access.

4. **Leveraging existing assets:** No additional purchases were needed—Silver Linings simply reconfigured the agency's current servers and security tools into this new, "always-available but highly controlled" setup.

"We didn't buy anything new. We already had both pieces—we just put them together."

— Greg Shenefelt, Lead Engineer, Silver Linings Technology

Resolve

Within days of deployment, the home health provider saw immediate benefits:

- **100% real-time charting.** Field clinicians can now record patient notes on the spot—eliminating the end-of-shift backlog.
- **Improved compliance.** Management gains instant visibility into visit records and can hold staff accountable.
- **Zero security incidents.** The dual-layer authentication completely mitigated unauthorized access risks.
- **Cost savings.** By reusing existing infrastructure, the agency avoided new capital outlays—while boosting both productivity and data security.

"Now our team can fully perform their job duties in any home without delay—and we didn't compromise on security."

— Greg Shenefelt, Lead Engineer, Silver Linings Technology



Key Takeaways

- When rolling out critical cloud-based apps to remote or uncontrolled networks, **tightly** manage both user and machine authentication rather than relying on generic VPNs.
- You can often meet new security requirements without extra spend by creatively recombining your current IT assets.
- Real-time data entry not only improves patient care—it also drives staff accountability and regulatory compliance.