

Remote Patient Monitoring Transformation

Turning Continuous Device Data into Real-Time Clinical Action

Platform: Salesforce Health Cloud, Salesforce Data Cloud, MuleSoft

Business Impact

95%

faster response
to abnormal
readings

70%

reduction in manual data
entry, reclaiming care-
team time

90%

improvement in alerting
quality with real-time
signals

100%

automated case creation
from
device data

Client Overview

The client is a mid-sized healthcare organization operating across multiple US states, managing a growing population of patients requiring continuous monitoring. As the organization scaled, care teams struggled with fragmented device data, manual workflows, and delayed clinical response, limiting their ability to act on critical patient conditions in real time.

Challenges

The existing remote monitoring model created significant clinical and operational risks:

Fragmented Vitals Data

Patient data was distributed across multiple device vendors and portals, preventing a unified clinical view at critical moments.

Manual Observation Workflows

Nurses manually transcribed readings into clinical systems, introducing delays, transcription errors, and inefficiencies.

Silent Device Failures

Device dropouts and missing data went undetected, making it impossible to distinguish between a stable patient and a disconnected device.

Reactive Case Creation

Abnormal readings required manual identification and routing, delaying clinical response by hours.

The Solution

A **Salesforce-native Remote Patient Monitoring platform** was implemented to convert continuous device data into structured clinical action in real time, with HIPAA-grade controls applied end to end.

Core Capabilities



Multi-Device Ingestion

A unified integration layer ingests vitals from diverse medical devices - including blood pressure monitors, glucose meters, and pulse oximeters - without requiring re-engineering for each new vendor.

Trusted Identity Matching

Each device payload is accurately linked to the correct patient record using device serial mapping, ensuring clinical data integrity.



Structured Clinical Observations

Every reading is automatically converted into standardized Care Observations within the clinical data layer.

Real-Time Detection & Alerts

Threshold-based evaluation identifies abnormal readings instantly, while missing data triggers fallback alerts to prevent unnoticed failures.

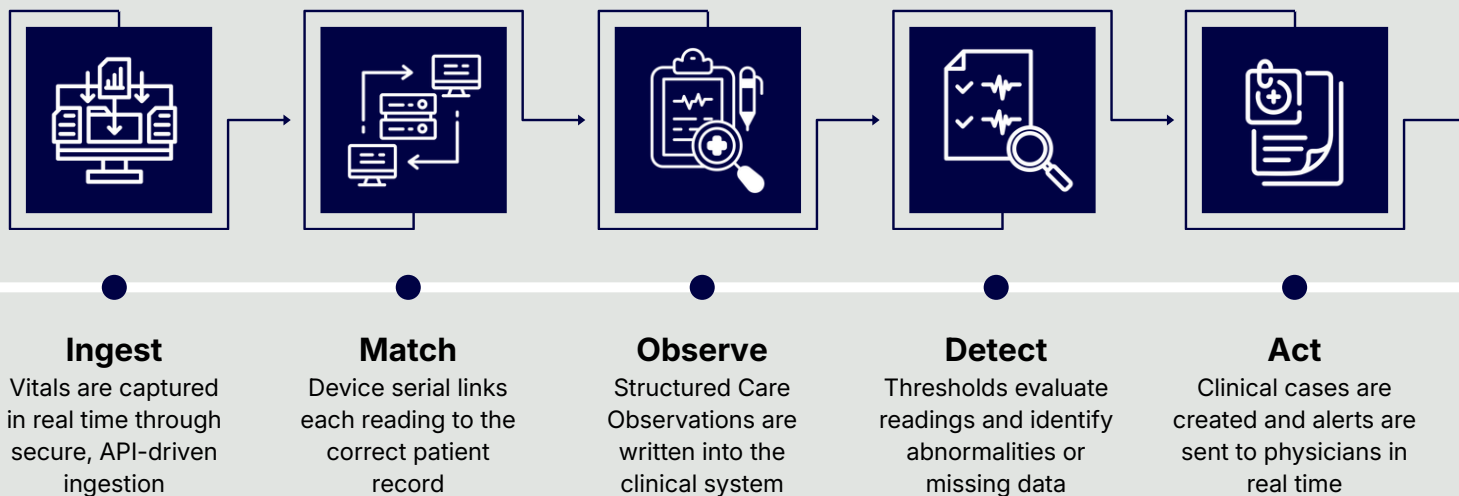


Automated Case Creation

Health Cloud cases are generated automatically from device data, ensuring immediate clinician awareness and action.

How It Works

Every incoming device reading follows a standardized five-stage workflow:



Behind the Scenes

While the platform delivers real-time clinical action on the surface, its effectiveness is driven by a robust, compliant, and intelligently designed backend:

What Makes It Work

Multi-Device Ingestion Layer

A single secure integration layer supports heterogeneous devices - blood pressure, glucose, SpO₂, and more - allowing new vendors to integrate without re-engineering pipelines.

Trusted Identity Matching

Each incoming payload is reliably mapped to the correct patient using device serial linkage, ensuring accuracy and eliminating misattribution.

Silent-Failure Detection

The system detects missing data and device dropouts, triggering fallback alerts so that a disconnected device is never mistaken for a stable patient.

Built for PHI – Not Bolted On

Encrypted End-to-End

Protected health information (PHI) is encrypted both in transit and at rest, ensuring that no data moves through the system in plaintext.

Role-Governed Access

Access to patient data is strictly controlled based on user roles, ensuring clinicians and staff only see data relevant to their scope.

Audit-Ready by Default

Every ingestion, observation, case, and alert is timestamped and traceable, enabling compliance reporting without reconstruction efforts.

Outcomes



Unified and structured
clinical data from multiple
device sources



Real-time visibility into
patient vitals and
conditions



Elimination of manual
transcription and
associated errors



Immediate detection of
abnormal readings and
device failures



Faster and more
consistent clinical
response



Scalable architecture
supporting additional
devices and patient
volumes

Business Value Realized

The organization achieved measurable transformation across operations:

Significant acceleration in response to patient risk signals

Reduced administrative burden on care teams

Improved accuracy and reliability of clinical data

Enhanced patient safety through proactive monitoring

Streamlined case management and clinician workflows

Stronger alignment between device data and clinical action

Conclusion

The Remote Patient Monitoring platform transforms continuous device data into **real-time, actionable clinical intelligence**.

By automating ingestion, validation, detection, and response, the organization can:

- Detect patient risk earlier
- Respond faster with confidence
- Eliminate manual inefficiencies
- Scale monitoring programs without increasing operational burden

The result is a system where every reading matters, every signal is captured, and every patient receives timely care.