

CASE STUDY · AMBULATORY INNOVATION

Innovation Workshop

How TeleTracking's forward-deployed engineers and clinical executives built a working prototype in three days – solving Carilion Clinic's most critical ambulatory challenge.



 **3 Days**
WORKSHOP
DURATION

 **Since 2003**
TELETRACKING
PARTNER

 **3 Use Cases**
PROTOTYPED
LIVE

 **Epic EMR**
INTEGRATION
PLATFORM

 **Roanoke, VA**
ON-SITE
DELIVERY

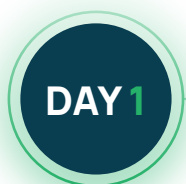
THE CHALLENGE

Carilion Clinic's referral system lacked **real-time visibility** into queue aging, patient acuity, and provider availability. High-priority patients went unidentified, bottlenecks stayed hidden, and referrals aged for months despite open slots – causing **preventable delays**, stalled critical referrals, and lost volume to competitors offering faster access.

USE CASES IDENTIFIED

- 01 Intelligent Referral Queue Management** – Dynamic prioritization by acuity, aging, and provider fit
- 02 Template Optimization & Capacity Demand Alignment** – Match supply and demand across scheduling templates
- 03 Real-Time Enterprise Visibility & Analytics Dashboards** – Live operational intelligence across all ambulatory sites

THE WORKSHOP PROCESS



Discover

Align on problem, data sources
& strategic priorities



Build

Forward-deployed engineers
prototype live solutions



Demo

Working prototype presented
to leadership for go/no-go

WHAT WAS BUILT

3

Functional prototypes delivered by Day 3

Live

Real-time referral queue dashboard built on actual data

Days

Not months – from concept to working solution

CROSS-FUNCTIONAL COLLABORATION

The Workshop brought together Carilion Clinic's most critical decision-makers alongside TeleTracking's clinical executives and forward-deployed engineers – enabling real-time alignment, instant iteration, and a prototype built on the health system's own data.

Chief Information Officer

Ambulatory Leadership

Medical Directors

Hospital Operations

Nursing Informatics

Solution Architects

System Architects

TeleTracking Clinical Execs

STRATEGIC VALUE DRIVERS

VALUE DRIVER	WHY IT MATTERS
Revenue Growth	Capture downstream referrals and specialty volume lost to referral breakdowns or access constraints.
Leakage Reduction	Keep patients in-network by improving referral conversion and reducing externally redirected referrals.
Access Leadership	Compete on time-to-care by reducing referral-to-appointment delays across all sites.
Margin Expansion	Maximize specialist capacity and align provider productivity with contracted FTE expectations.
Value-Based Performance	Connect operational performance to quality metrics, risk contracts, and care continuity.

QUICK SNAPSHOT

TIME-TO-VALUE Working prototype in days; production in months, not years	DE-RISKED Stage-gated with clear go/no-go decision points
VALUE-LED "Show, don't tell" – prototypes tied directly to KPIs and ROI	CLEAR PATH FORWARD Commercialization → Development → Deployment