Remote Therapeutic Monitoring in Oncology Clinical and Financial Impact

Staywell Therapy, DBA Relay RTM info@relayrtm.com | RelayRTM.com October 2025

Pilot Background

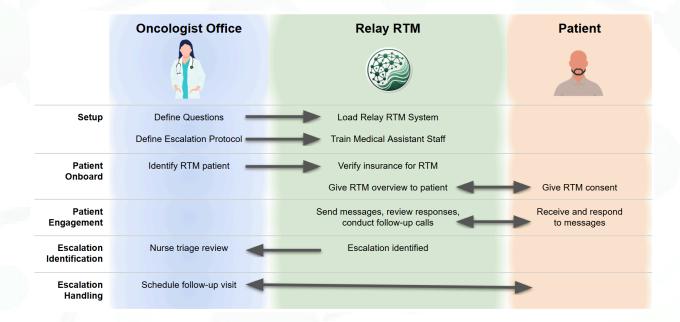
A community oncology clinic (single physician with nurse practitioner support; ~40 daily patient encounters) initiated a Remote Therapeutic Monitoring (RTM) pilot to determine if this service and technology could improve overall symptom management. There is a well-established body of evidence that strong symptom management can lead to better health outcomes for patients. Specific goals for the pilot included goals included:

Pilot Program Goals

- Reduce the median time to address patient-reported issues from as much as 72 hours to a same-day or next-day response standard.
- Standardize and streamline patient communication channels (e.g., phone, text, portal) into a structured, measurable process that can generate actionable data and support billable follow-up.
- Proactively manage treatment-related symptoms to help avoid preventable hospitalizations and maintain planned therapy schedules.
- Improve patient satisfaction.
- Minimize the impact to normal day-to-day operations.
- Have the pilot fully funded by the RTM billable events.

Intervention: Relay RTM

The clinic implemented Remote Therapeutic Monitoring (RTM) via Relay RTM's managed service:



- Daily SMS-based symptom assessments capture structured quantitative scores and optional qualitative context.
- Monitoring was delivered under physician supervision while the Relay RTM team evaluated responses, escalated clinically significant findings, conducted monthly interactive calls, and generated billing-ready documentation.
- Operational integration required minimal additional clinician workload while providing patients with reliable, proactive follow-up. No new technologies or EMR/EHR integrations required for staff.

Results: First 50 Patients, 30-Day Cycle

Metric	Outcome
Total messages sent	1500
Patient all-message response rate	71% (1065/1500)
Total escalations from Relay RTM staff	54
Escalations resulting in billable audio only communication or in-person visits	≈50%
Avoided hospitalizations	3–5
Median response time	Same business day
RTM revenue per patient	~\$185
Total new revenue (50 patients / 30 days)	≈ \$9,250
Pilot cost	<45% of total revenue

Clinical Interpretation

Remote therapeutic monitoring provided an early warning system for treatment-related toxicities. Median response time for escalated issues decreased from as much as 72hrs to same-day intervention. Among 50 patients, 54 symptom escalations were recorded, with approximately half resulting in RTM code eligible audio-only calls or in-person visits. The supervising oncologist estimated between three and five hospitalizations were likely avoided, including cases of severe dehydration and adverse drug reactions. Faster issue resolution likely supported adherence to planned therapy and reduced treatment delays.

Operational and Workflow Impact

The program required minimal additional physician time, as oncologists were only involved when clinically significant issues were escalated or documentation required review. Routine daily monitoring and patient outreach were managed through the RTM service, replacing fragmented inbound nurse triage calls with a structured, proactive workflow. Emergency communication protocols were not impacted by this pilot, the Relay RTM service directed patients to the appropriate clinic hotline for emergencies.

Financial Analysis

RTM codes (98975–98981) averaged approximately \$185 per patient per 30 days. For the 50-patient pilot, this equated to approximately \$9,250 in gross revenue in one month with a gross margin exceeding 50% after service delivery costs. Extrapolated to a 100-patient sustained program, the model could generate an estimated \$200,000 in annual recurring revenue while maintaining high margins and low operational burden.

Patient Satisfaction

This is a key indicator of an RTM program's success, as positive experiences build trust, drive engagement with remote monitoring, and increase the likelihood that patients report symptoms early, enabling timely interventions and better outcomes. The comments below were collected during monthly check-ins between patients and the MA on staff:

"It's nice that someone is checking on me... it takes a load off knowing someone is following up."

"I appreciate that someone is thinking about me when I am at home."

"The texts are easy to respond to... doesn't bother me."

Strategic Value

This model transforms the way oncology practices engage with patients between visits.

- Converts unstructured outreach into measurable care: Every call, text, or unreported symptom is transformed into structured, documented, and billable data— creating a clear record of proactive management.
- Establishes a new, recurring revenue stream: Each monitored patient generates
 reliable monthly revenue tied to RTM, with margins exceeding 50% after service delivery.
 At scale, even modest patient volumes can add meaningful, predictable income that
 supports staff and offsets pressure on infusion and office visit margins.
- Supports value-based care readiness: Structured symptom surveillance and rapid
 intervention reduce avoidable ED utilization and hospital admissions a core metric for
 payers and alternative payment models. Practices can demonstrate improved quality of
 care, lower total cost of care, and readiness for evolving reimbursement models.

- Enhances patient experience and retention: Patients feel continuously supported during therapy, increasing satisfaction, adherence, and loyalty to the practice. Multiple patients reported positive feelings towards this program.
- Operational leverage without physician burden: The model adds scalable clinical capacity, enabling proactive follow-up and revenue capture without adding to physician inboxes or disrupting workflow.
- Tighter controls on symptom management: Remote monitoring allows for a proactive approach to symptom management and captures significant escalations that potentially would have otherwise gone unreported.

Key Insights

The pilot met every stated goal – cutting response times to same day, standardizing patient communication, proactively managing treatment-related symptoms, improving satisfaction, minimizing operational disruption, and fully funding itself through RTM reimbursement. Additional highlights include:

- Structured, actionable data: converts untracked patient outreach into measurable, billable activity.
- Proactive safety net: same-day escalation reduces acute care episodes.
- Economic sustainability: ~\$185 per patient per month in new revenue; delivery cost
 <50% of revenue generated.
- Low operational burden: physicians maintain oversight without inbox overload.

Conclusion

This pilot demonstrates that remote therapeutic monitoring can simultaneously improve patient safety and create a financially sustainable care model for oncology practices. Practices seeking to modernize symptom management and diversify revenue streams may benefit from evaluating this approach.

Contact: info@relayrtm.com | relayrtm.com

Publications on Symptom Management for Cancer Patients

Symptom Monitoring With Patient-Reported Outcomes During Routine Cancer Treatment: A Randomized Controlled Trial

Basch E, Deal AM, Kris MG, et al. J Clin Oncol. 2016. PMID: 26644527 PubMed+1

- Patients receiving outpatient chemotherapy for advanced solid tumors were randomized to report symptoms via tablet (with alerts to care teams) vs usual care.
- The intervention group had less decline in health-related quality of life (HRQoL) over 6 months (fewer patients with HRQoL worsening). Rethinking Clinical Trials+3PubMed+3ASCOPubs+3
- They also had fewer emergency room visits (34% vs 41%, P = .02) and stayed on chemotherapy longer (8.2 vs 6.3 months). ResearchGate+2ASCOPubs+2
- The one-year overall survival was 75% vs 69% (P = .05) in the intervention vs control groups. Rethinking Clinical Trials+3ResearchGate+3ASCOPubs+3

Two-Year Survival Comparing Web-Based Symptom Monitoring vs Routine Surveillance Following Treatment for Lung Cancer

Denis F, Septans AL, et al. *JAMA*. 2019;321:306–307. PMID: 30667494 <u>Journal of Translational Oncology+4PubMed+4JAMA Network+4</u>

- Patients with nonprogressive lung cancer after initial therapy were randomized to web-based symptom self-reporting (with alerts) vs standard follow-up.
- The median overall survival was **22.5 months** in the intervention group versus **14.9 months** in control (uncensored). <u>Journal of Translational Oncology+3JAMA Network+3PubMed+3</u>
- This suggests that earlier symptom detection and intervention may lead to survival benefit in that setting.
 OUP Academic+2advancesradonc.org+2

Effect of Electronic Symptom Monitoring on Patient-Reported Outcomes Among Patients With Metastatic Cancer: A Randomized Clinical Trial

Basch E, Stover AM, Schrag D, et al. JAMA. 2022. (PMCID in PMC) PMC

- The intervention group had improvements in symptom scores, less deterioration in health status, and better patient-reported outcomes. PMC
- The trial also supports that electronic symptom monitoring is feasible and beneficial in real-world oncology care. PMC

Personalized symptom management: a quality improvement project in oncology practice

Howell D, Molloy S, Wilkinson K, et al. Implementation / real-world context. (PMC) PMC

- The article describes a quality improvement initiative using patient-reported outcomes (PROs) in "real-world" multi-site oncology practices.
- It reports that PRO integration was associated with reduced anxiety, lower healthcare utilization, better patient experience, and patient activation. <u>PMC</u>
- The authors also note that systematic reviews of randomized trials have suggested that PROs can improve
 provider-patient communication and may improve quality of life and reduce emergency visits. PMC

Experiences of Patients With Cancer Using Electronic Symptom Management Systems:Qualitative Systematic Review and Meta-Synthesis

Zhu S, Dong Y, Li Y, et al. J Med Internet Res. 2024. PMID: 39466301 PubMed

- Patients generally recognized the value of electronic systems in symptom monitoring and management and perceived improvements in health-related outcomes. PubMed
- Though qualitative, such work helps support the acceptability and potential mechanism by which symptom monitoring leads to better outcomes. <u>PubMed</u>