

## Case Study

# AI-Powered EHR Engagement Drives Significant Prescription Lift for Later Line Oral Chemotherapy Agent

A Pharmaceutical Company and OptimizeRx Partner to Achieve 10.5% Script Lift and 236 New Prescriptions for an Oral Chemotherapy, Demonstrating a 7.4:1 ROI.

## Challenge

A pharmaceutical company aimed to drive awareness and adoption of an oral chemotherapy drug designed for 3rd/4th line treatment of metastatic colorectal (mCRC), gastric, or GEJ cancers. The main KPI was to quantify the incremental lift in prescribing behavior among healthcare professionals (HCPs) exposed to the EHR campaign, while controlling for baseline prescribing trends and external market factors, to determine its effectiveness in driving prescribing decisions and clinical outcomes aligned with campaign goals. The campaign sought to reach HCPs at the point-of-care and within their social networks.

## Results

The campaign ran throughout 2025 and is slated to continue based on positive results:

**Absolute NRx Lift**  
**+10.5%**

among exposed HCPs

**Total Incremental TRx**

**519**

total incremental prescriptions

**New Writers**

**459**

new-to-brand  
prescribers engaged

**Total Incremental NRx**

**236**

additional new  
prescriptions generated

**ROI**

**7.4:1**

**Incremental Revenue**

**\$6,204,959**

Further insights from the campaign revealed that **69% of the incremental new prescriptions (NRx) originated from Oncology and Hematology specialists**. Additionally, **85% of new writers issued 1-4 prescriptions**, indicating initial brand adoption despite low condition prevalence, while **15% wrote 5+ prescriptions**, highlighting potential growth opportunities among higher-volume writers.

## Solution

The pharmaceutical company partnered with OptimizeRx to implement its **AI-powered Dynamic Audience Activation Platform (DAAP)**. DAAP leverages AI, machine learning, and predictive analytics to identify key HCPs and patients, enabling contextual engagement and improving the accuracy of outreach timing at the point-of-care and beyond.

**Key strategic actions for the campaign included:**



Using AI to generate weekly prioritized HCP lists based on factors such as identifying patients at the point of disease progression requiring additional or different treatments within a given HCP's patient panel and incorporating behavioral data from HCPs who demonstrated script impact after EHR messaging exposure.



Delivering contextual messages directly **in-EHR workflows** and across digital channels, including social media, during active clinical decision-making. Messaging included banners within the point-of-care network triggered by ICD-10, NPI, and predicted priority NPI.



Leveraging OptimizeRx's extensive proprietary network of over 300 EHR systems, reaching over 600K verified U.S. prescribers to provide unparalleled visibility and scale at the moment of patient care.

## Why It Worked



**AI-driven precision targeting** ensured the right message reached the right HCPs, by predicting patient brand eligibility and upcoming prescribing opportunities, thereby significantly reducing wasted media spend.



**Real-time updates** ensured outreach remained aligned with care delivery, as DAAP's audience prioritization is refreshed every two weeks and generates weekly NPI lists.



**Workflow-native messaging** increased attention and trust, making the information actionable by delivering it directly within the HCP's clinical workflow, specifically the patient chart and prescribing settings.



**Omnichannel coordination** connected marketing efforts, enabling the synchronization of EHR, social, and programmatic media buys to create "surround sound" for important HCPs and increase reach.

## Lessons Learned & What's Next

The success of this program underscores the potential of AI-powered, omnichannel HCP engagement, particularly when timed to key inflection points in the patient journey. The brand team especially valued how the **weekly AI-generated HCP lists** could inform all media buys and sales planning, not just EHR engagement, strengthening sales enablement by giving reps intelligent lists aligned with marketing.

Looking ahead for **Product X**, the brand plans to:

- **Sustain and enhance engagement** within Oncology and Hematology through continued outreach and education to reinforce early adoption of late-line therapy.
- **Strengthen engagement among Internal Medicine** professionals using educational materials and patient identification tools.
- **Increase writer-volume** by leveraging higher-volume writers as peer educators and providing efficacy and safety education and patient identification tools.

OptimizeRx plans to explore further personalization of messaging based on individual HCP prescribing patterns and patient profiles and continue optimizing omnichannel orchestration using real-time audience intelligence for other product launches.