

The digital landscape has been transformative for the pharma and medtech industries, opening new pathways for reaching more healthcare providers (HCPs) in more places and more efficiently. Artificial intelligence (AI) has taken HCP marketing a giant step further, using the power of data analysis to combine and apply to new strategies what we know about past physician behavior and clinical data. The healthcare industry can now embrace the concept of "next-best action" (NBA) in a unique way – using those data insights to help educate and prepare HCPs for writing a new script, or helping patients gain access to the treatments they prefer.

But in the rush and noise of AI, "omnichannel," and NBA, a critical audience is getting lost: patients.

Patients are living, dynamic individuals whose health, existing conditions, personal situations, and so much more are always changing. It makes relying only on past physician behavioral data or older real-world data a bit like marketing blindfolded or taking a shot in the dark. You might hit your mark – or not.

But we're in an exciting, unprecedented new era of AI – it's now possible to find the right patients and predict when they will experience pivotal disease milestones that determine brand eligibility or compliance hurdles. This patient intelligence should be the leading driver for improving the outcomes of HCP engagement activities.

Because absolutely nothing is more effective for an NBA approach than information delivered when HCPs are currently treating a brand-eligible patient.

NEXT-BEST ACTION: AN OLD IDEA WITH NEW POTENTIAL

Next-best action is hardly new, and a customer- or patient-first approach is more a part of its history than one might think. The concept of taking the next best action has its roots in mid-20th century military strategy, when an "OODA Loop" – observe, orient, decide, act – was adopted as a more effective approach to combat. Making decisions "on the fly" using real, current conditions was a dramatic shift from pre-planned campaigns and blanket assaults based on hypothetical scenarios.¹ It was about better decision making and accepting the dynamic nature of the players involved. As with many military strategies, its success carried over into business. Rather than launching a product proposition onto the "battlefield" of the marketplace, consider what the customer might do or need.

The concept of customer centricity was also taking hold during this period, thanks to highly influential publications such as Peter Drucker's 1954 *The Practice of Management*, in which he said, "It is the customer who determines what a business is, what it produces, and whether it will prosper." And in *Quality and Competition*, Lawrence Abbott was one of the first to claim that "what people really desire are not products but satisfying experiences." A few decades later, data warehousing enabled customer relationship marketing (CRM) and analysis of customer segments and preferences.

Tech-driven next-best-action strategies began to emerge. Converging with increasing consumer sophistication and AI capabilities, these ideas coalesced into next-best action, which gained popularity across industries. Next-best action is defined by SAS Insights as:

A customer-centric marketing technique that considers the alternative actions during a customer interaction and recommends the best one. Determining what the next best action is leverages an organization's competitive assets – the data and analytical insights used to understand a customer – in the moment of engagement and serves that customer in a relevant and contextual manner whether it's marketing- or service-related. Next best action is effective because it is able to cut through clutter to reach customers. Using modern technology, it implements what is a traditional, but effective, marketing approach.³

How much have customer-centricity and NBA evolved? Consider that one of its earlier retail manifestations was the question heard at McDonalds around the world: "Do you want fries with that?" This simple tactic considered another action the customer could take, while supporting organization revenue goals (an estimated 15-40% increase annually). The problem is that customers are unique, and the question rules out other wants or engagement possibilities.

But today, the existence of AI and machine learning (ML) lets marketers collect unique customer data across hundreds of thousands of individuals and create highly contextual, actionable content. In an instant, a business can recommend products to us, text us with a discount when we abandon a cart, trigger a sales call, or prompt a call center rep's recommendation – all aimed at moving closer to conversion.



A significant opportunity to advance patient centricity

In healthcare, "customer first" means "patient first."
Both healthcare systems and life science companies have already embraced a "patient first" mindset in clinical care development and delivery, disease awareness and prevention and consumer education. But among pharma's three main segments – physicians, payors, and patients – patients have not been prioritized as effectively within HCP marketing. Brands have instead relied on proxies such as static patient journey modeling, past physician prescribing volumes, and past physician-level behavior data (a newer source) in hopes of predicting future patient volumes and needs.

The rapid evolution in NBA, particularly the availability of privacy-safe patient data, is a game changer for HCP marketing.

New technologies allow for re-examination and redefinition of "patient first" in HCP marketing. The patient journey doesn't have to be modeled anymore. Identifying the patient journey in privacy-safe ways and in real-time wasn't possible just three years ago. This short incubation period illustrates how rapidly technology that drives next-best-action strategies is evolving – and new data sources are emerging every day.

Life science brands can now offer more support and value to patients in the form of drug access information, clinical trial updates, affordability options, and more - *if* they know the window within which their ideal patients will be visiting their physicians. The patient, like their retail consumer counterpart, is key to a customer-centric, next-best action strategy.



All the data and analytics in the world won't deliver an impactful experience without the ability to put it into action with your customer in the moment of execution or interaction."⁵

CURRENT SEGMENT APPROACHES TO NEXT-BEST ACTION – AND WHAT'S MISSING

Across marketing segments and roles, next-best action has been adopted as a promising, sustainable approach for HCP engagement, with good reason: delivering information that supports writing a script, or that creates conditions supportive of that goal by building brand trust and knowledge, is far more effective than generic, mass advertising. That's especially true in saturated markets and with increasing demands on HCP time and attention. Focus is appropriately put on moving toward "closing" the transaction, so to speak, and getting patients what they need as quickly as possible.

In understanding how a more effective patient-first approach fits in, it's helpful to look at how these segments are currently practicing next-best action and what gaps exist.

Life Science Manufacturers

Pharma and medtech manufacturers continue to bring marketing data (or generally any novel data) in-house alongside their more traditional real-world data assets such as claims and EHR to support market strategy and commercial decision making. They are wisely using their data to better understand how and when to deploy their field sales resources in the most efficient manner – and align HCP marketing and field efforts with their consumer-focused advertising.

By measuring the return and impact of their commercial strategies, they gain a more accurate picture of their customers' needs and can communicate with them in a way that's as relevant and immediate as possible. In other words, pharma manufacturers have embraced next-best action and are deploying new data and knowledge against this approach to drive engagement. But by over-focusing on physician data, and taking a siloed approach to their data analysis of both patient and physician data, pharma brands are missing the live patient milestones that drive next-best action in HCP-focused marketing efforts.

We've talked with hundreds of life science brands, and their data analysis is usually built on scripts that HCPs have written in the past or old responses to previous campaigns. The insights gained from this data were tapped out long ago. What marketers need is dynamic, real-time patient data, integrated WITH outreach and sales activities, to know if a brandeligible patient is in front of that HCP, and when."

- Mike Rousselle, OptimizeRx VP of Data Products Eligible patients don't behave according to a set media run – they may come in steadily, during a specific month, or not at all. Consider diabetes: past physician behavior approach has no relation to when a patient's A1C becomes elevated. Considering the total audience and real-time patient flow delivers the highest impact possible. Otherwise, you're likely over- or undercommunicating with your HCP customers."

Maria Cipicchio,
 OptimizeRx SVP of Marketing and Communications

Healthcare Advertising Agencies

Agencies play an important role in implementing next-best action strategies by advising life sciences clients on the types of campaigns they should execute and how they should best prioritize their resources across the omnichannel digital environment. By acquiring their own data in-house or partnering with technology providers, they're analyzing HCP behaviors that may include past prescription writing behavior, past campaign engagement behavior across channels, geographic or patient life trends, and social listening. They're also providing guidance on "business rule" development and projecting the cost to reach specific subsets of HCPs.

This data, along with their media expertise, helps agencies determine what content to put on what channel and when and launch programs that attempt to support next-best action. But without finding eligible patients and capturing their dynamic flow along the care journey – and focusing instead on calendar-based, siloed, media buys – many of their clients' dollars and impressions will be unproductive.



Technology Solution Providers/Partners

Technology providers deliver new innovations and data sources, some by using advances in AI that enable next-best-action strategies. They build customer intelligence for life science brands and their agency partners aimed at giving these organizations the ability to find and reach their patients in more places and at more times, which can facilitate a next-best-action approach.

The ultimate collective goal among brands, agencies and tech providers is to build a responsible, accessible healthcare engagement ecosystem that increases transparency and access to the best information and treatments. Tech partners need to encourage a dynamic, patient-first approach and develop more personalized engagement models – while remaining cognizant of privacy concerns and regulatory protections.

NEXT-BEST-ACTION STRATEGY PILLARS

Robust audience intelligence – both physicians and patients

Coordination of digital and off-line engagement

Integration of an omnichannel approach Patient-first messaging distribution and delivery

How Patient-First Data Fits In:

- Patient qualification criteria is applied to both local EMR systems and other RWD sources and used to train AI software on the characteristics that define eligibility.
- Predictive AI software runs a weekly, real-time check for patients approaching brand eligibility or compliance milestones and identifies their treating HCP(s).
- The treating HCPs are then activated for the appropriate brand messages on their preferred channels during the relevant care window.

MAXIMIZING NEXT-BEST ACTION: HOW AI "ACTIVATES" PHYSICIANS THROUGH VERIFIED PATIENT ELIGIBILITY

With a world of de-identified data available, why is locating brand-eligible patients such a new phenomenon? Why haven't HCP marketers and their partners been patient first all along? Simply put, because we are human. Compiling, ingesting, connecting, and actioning this information manually can become unscalable quickly. The most recent advanced AI algorithms can rapidly identify the right patient conditions under which an HCP should have a specific treatment top-of-mind, and robust technology connections enable immediate outreach to each HCP on a variety of digital channels.

The right conditions include delivering messaging at an optimal, repeated frequency and when an HCP is actively treating a brand-eligible patient (and not messaging them when they aren't treating a brand-eligible patient). Aligning patient eligibility with key care windows and HCP-preferred channels ensures a truly efficient, integrated program and ensures there is a "best" in next-best action.

Only a highly advanced, highly robust AI engine can answer, with high reliability and speed, the following questions to enable a patient-first approach:

- When is a patient brand eligible?
- When does a physician have a patient who is at risk of non-compliance?
- When will the patient reach an inflection point where their HCP may consider a switch or therapy progression, and how much does the patient access landscape influence this decision?
- What channel is best for reaching this HCP? (Al can "weight" channels and determine the channel combination and messaging frequency that will work best for a specific and unique audience, regardless of perceived value or popularity.)

In developing the AI model, identifying the ideal patient profile will depend on the goals the brand is looking to achieve with its engagement strategy. Technology partners must determine the combination of data points that represents the patient a brand is trying to reach and assist.

Testing Patient- First Intent

OptimizeRx set out to determine how impactful patient-first intent can be in HCP engagement campaigns designed to support next-best actions. Would the patient journey prove to be as effective as the customer journey is in other industries? Can the EHR function, in effect, like a "shopping cart"? Do personal, actionable information and recommendations matter in the same way they do for retail consumers?

Our research on 68 programs deployed over 11 months on our Dynamic Audience Activation Platform (DAAP) showed increasing script impact (more effective next-best action) when campaigns took on a "customer centric," or patient-first approach, layered with multiple channels and consistent messaging frequency (a separate study determined three months was the minimum time period needed to make an impact, with five to seven months being the optimal exposure period for prolonged impact on script lift.).

AVERAGE SCRIPT IMPACT

15%

MESSAGES APPEAR IN EHR AT A SINGLE POINT IN TIME WHEN HCP IS VIEWING A SPECIFIC PATIENT CHART

28%

PATIENT FIRST DATA, DYNAMIC AUDIENCES, AND MULTI-TACTIC, MULTI-CHANNEL – INCLUDING EHR

Patient First, Next-Best-Action Success Stories

The positive impact from following patient-first principles can be clearly seen in recent campaigns run on OptimizeRx's Dynamic Audience Activation Platform (DAAP). Only DAAP's highly advanced Al engine leverages real-world, deidentified patient data to govern next-best-action program execution - predicting future patient care windows then communicating to their treating HCPs during those highvalue times. Here are some of the exceptional results.

Success Story

Multinational manufacturer avoids missed diagnoses

GOAL

The manufacturer expected FDA approval and wanted to improve HCPs' awareness of the underlying disease state while helping physicians more accurately diagnose patients.

CHALLENGES

Many patients with this long-term disease experience substantial deterioration in quality of life. Yet most aren't diagnosed with the proper ICD-10 code when they see their physician – depriving them of the chance to receive the drug's potential benefit and making a trigger-based engagement strategy in the EHR impossible.

APPROACH AND RESULTS

DAAP by OptimizeRx used patient data to identify patients showing signs of this disease state and then educated their treating physicians about it with EHR-based communications. Within a six-month program, DAAP generated:

2,683 INCREMENTAL PATIENTS DIAGNOSED

OF NEARLY 16K EXPOSED PROVIDERS WERE NEW DIAGNOSERS



Success Story

Global biotechnology company drives brand demand

GOAL

Increase awareness among HCPs treating newly diagnosed and relapsing patients with a rare disease.

CHALLENGES

HCPs seeing patients early in the patient journey need help identifying and qualifying them for treatment or identifying those already diagnosed patients who show signs and symptoms of relapse.

APPROACH AND RESULTS

DAAP by OptimizeRx discovered brand-qualified patients and their care teams (potential prescribers). We messaged HCPs when their patients were early in their disease journeys, or when previously diagnosed patients were experiencing symptoms of relapse. Within a five-month initial program, DAAP generated:

19% SCRII HCPS PATIE

> OF EXPOSED HCPs WROTE BRAND SCRIPTS DURING THE CAMPAIGN PERIOD

9%

WERE NEW SCRIPT
WRITERS, PREVIOUSLY
UNKNOWN TO THE BRAND



Conclusion

Technology is dynamic. The treatment landscape is dynamic. And patient and physician behaviors are dynamic. Any HCP marketing approach that only uses historic, physician-level data can only make static predictions which deliver less relevant or generic info. This approach may also over- or under-expose its audiences and undoubtedly miss brand-eligible patients and their HCPs. And more importantly, it creates a risk that patients miss out on treatments that could improve their lives and outcomes. Fortunately, rapid advances in AI and ML capabilities and new sources of privacy-safe data make it possible to conduct customer-centric HCP programs with unheard of results and script impact – and higher quality of life for those most in need.

With the right Al-driven platform, and its ability to meet the patient's, brand's and HCP's needs, a next-best-action strategy promises to be revolutionary for healthcare.

- ¹ Lewis, Sarah. "OODA Loop." <u>TechTarget</u>.
- ² Customer Centricity. <u>Scholarly Community Encyclopedia</u>.
- ³ Duquette, Monique. "Mastering the art and science of a next-best-action strategy." <u>SAS.com.</u>
- ⁴ "How McDonald's mastered cross-selling to add 15-40% in revenue." Shopney.
- ⁵ Duquette, <u>SAS.com.</u>

About OptimizeRx

Founded in 2006, OptimizeRx is an award-winning health technology company providing best-in-class solutions to leading life sciences organizations and healthcare providers. OptimizeRx helps manufacturers engage and support their customers with its Dynamic Audience Activation Platform (DAAP), which connects over 2MM U.S. healthcare providers and millions of their patients through an artificial intelligence engine embedded within a proprietary omnichannel network.

To learn more about DAAP, or to schedule a meeting with our team, visit us at optimizerx.com.

