

## Contributed by: António Pregueiro, Ph.D. VP, New Offerings, Customer Engagement COE, IQVIA

## How Can Connected, Intelligent Suggestions Improve Engagement in Life Sciences?

The pharma go-to-market model has been changing for the last decade and a half, from mass promotion to targeted, value-driven engagement. Healthcare professionals (HCPs) are increasingly difficult to visit, other stakeholders, such as patients and payers, are influencing treatment decisions, and the ways of engaging have multiplied. To manage this fluid and complex environment, organizations are looking to programs that can produce guidance and drive better engagement by leveraging artificial intelligence/machine learning

(AI/ML) and rules-based algorithms.

IQVIA refers to these as Next Best programs, as they produce suggestions about the customers, actions, channels, and content that are most likely to improve customer engagement, increase sales, or drive adoption of channels and messages. These suggestions are based on calculations and predictions that use continuously updated data that reflects brand strategy and tactics. The derived insights are translated into easy-to-follow suggestions that field teams can use to plan and execute their engagement, and marketers can leverage in non-personal campaigns.

An example of the former can be illustrated by prioritizing a medium value prescriber that has been initiating new patients on therapy and is receiving few calls, over a high value prescriber that has maxed out their potential, despite receiving a lot of attention from the field team. In other words, Next Best can support focus on customers that have growing potential and react to promotion when that makes sense for the brand. Similarly, Next Best could suggest that prescribers that received emails from reps during a certain week are excluded from campaign emails until later, if the algorithms detected a reduced impact of campaign emails in such a sequence.

A Next Best program might begin with a rules-based approach to produce suggestions for a sales rep. For example, after a face-to-face visit with the HCP, a rule could be instituted to remind the rep to follow up within three days with relevant information or add insights to their profile. The rules that establish ways of interacting between customers and field team have been shown to be effective at helping build relationships and reflect the field leadership guidance. These rules also evolve to reflect other ways of engaging that reflect customer preferences, campaign directives, or even rep knowledge and personal style.

But, what about guidance around the thousands of data points that reflect interactions across personal and digital channels? That is when AI/ML can help. Beyond suggestions based on rules that support follow-ups and reminders, AI/ML can find patterns in the data that are invisible to humans. By considering combinations of interaction points between customers and reps or digital channels, and looking at cadence, type of channel, and message or

content delivered, AI/ML can uncover which sequences drive the highest Rx uplift. It then suggests the next best sequence of engagements based on successful patterns and continues to update those with each new interaction. This is why Next Best programs are a core part of the solution to orchestrating omnichannel engagement.

Similarly, AI/ML can predict when patients are likely to be diagnosed or progress to different stages of treatment based on their clinical history, demographics, and digital footprint (e.g., when reacting to certain banner ads or searching for disease information). By matching those patients with their likely prescribers, Next Best suggestions can identify windows of time for reps to engage with those prescribers, when patients are most likely to surface and benefit from treatments. You could imagine if a patient saw an ob-gyn two years ago, then saw an oncologist six months ago, and then had a biopsy three weeks ago, AI/ML could predict that the patient is X% likely to be diagnosed with ovarian cancer in the next 60 days. ML algorithms are required to estimate how much each feature contributes to the accuracy of the prediction (e.g., the timing of a visit with a specialty doctor) and ignore others that don't improve accuracy or precision (e.g., the brand of needles used for a biopsy). Next Best programs then turn these predictions into suggestions that are surfaced to the field teams at the right time, describing the rationale and even estimating the impact of their actions. This transparency is crucial to secure buy-in and adoption, further cementing the power and impact of a Next Best program.

When this process is applied across all available patients, AI/ML models can predict where and when companies can focus their efforts – be that sales reps, educational campaigns, patient support programs, or other initiatives – where and when they are most likely to benefit patients.

## **Building a Multi-Stakeholder Model**

Knowing when and with what channel to reach customers is a crucial step to building stronger engagement. But how do companies shift from a personal, HCP-centric model to an omnichannel, multi-stakeholder model?

First, companies must understand when treatment decisions are happening and where are the most significant points of influence — be that at the prescriber, pharmacist, insurer, or patient level. This understanding needs to be quantified and regularly updated, which in turn, requires the ability to capture, store, and manage data. This data must be efficiently converted into actionable information so that learnings can be assimilated for adjustments as needed. This is something many organizations struggle with, in part because of legacy systems and slow-to-change attitudes. Large investments in data science, for example, don't match the investment in change management, or in tools and

