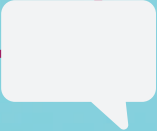



Can AI be used to refresh messaging more efficiently for pharma brands?



Pharma brands can use a message refresh every 12 months, but often marketing teams don't have new clinical data or customer insights to refresh messaging.

Even when there is nothing new to say creatively, messaging AI offers a faster, cheaper, better alternative to refresh your messaging.



The future of pharma marketing will require more frequent message refreshes

The pharma commercial marketing model is evolving rapidly and brand teams are discovering that they need to refresh their HCP and patient messaging more frequently to stay competitive.

Several factors are leading to the need for more frequent message refreshes:



Competitive Activity

Most disease states are significantly more competitive today than 10-20 years ago because multiple brands with equally good clinical data are now-a-days launched within months of each other. The competitive activity is intense with little first mover advantage and message wear-out happens quickly in the market, even a brand's messaging is highly effective.



Omni-channel Messaging Execution

COVID turbo charged the shift from personal promotion channel to omni-channel execution for pharma messaging. A large % of physicians sold their practices to IDNs during the pandemic and are now employees of large health networks, which is changing their prescribing behaviors and also changing how they interact with brand messaging.



More market events

Most brands are pursuing lifecycle management initiatives earlier in the brand's lifecycle, which is leading to more market events that require messaging. If a competitor launches new Phase IV data, other brands in the category may also have to refresh their messaging to piggyback on the class effect or to defend share.

A top-down view of various medical supplies including a syringe, a vial, and a small container on a teal surface. A light blue speech bubble is positioned in the upper right corner of the teal area.

Barriers to refreshing messaging more frequently

Pharma brand teams face many barriers to refresh their messaging more frequently than the current message refresh cycle of 18-24 months. As a result, many teams don't even undertake a message refresh when they should or just make minor changes to their vis aid and consider that a message refresh.

1

Information Barriers

If the brand team feels that they don't have enough "new information" to drive a major message refresh, they are hesitant to even get started. New information could constitute new clinical or real-world data, new customer insights, new competitive intelligence, etc. Historically, since most message refreshes were accompanied/driven by new clinical data, there can be a prevailing belief among brand teams that, "If you have nothing new to say, can you really say it differently enough?"

2

Budget Barriers

All pharma brands, big and small, are under intense pressure to maximize profit even early in the lifecycle and funding a message refresh more frequently can be challenging for brands. Management can question the ROI of investing in more frequent message refreshes or require the brand team to demonstrate an unrealistic return on the investment.



3

Resource Barriers

Brand teams are often short on people and resources needed to manage a message refresh and may have a limited contract with their agency of record for messaging campaigns.

4

Process Barriers

The traditional processes established for a message refresh can be lengthy and can take over 6 months to just develop and test messages in market research.

5

Implementation Barriers

MLR approval is a major barrier to implementation for a message refresh. Not only does it delay the process by weeks or months, it often results in significant watering down of messages by the time they are actually launched, questioning the logic of implementing a message refresh in the first place.

Messaging AI offers a different approach to message refresh...one that is faster, cheaper and better!

Artificial intelligence has made very significant progress in the past 5 years and can be utilized as a supporting tool for many messaging related tasks.



Predictive AI can be used to analyze the effectiveness of marketing messages for all brands in a disease state and identify underperforming messages for your brand without any customer feedback.

Generative AI can now be used to generate messages for brands by paraphrasing or even writing new content based on prompts.

Finally, **Evaluative AI** can turbocharge the way messages are tested with customers in primary market research, testing 100s of messages and billions of storyflow options in one survey.

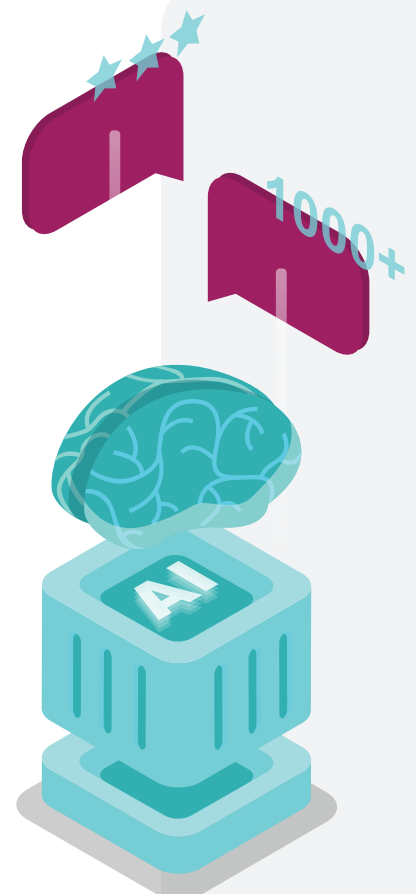
Predictive AI

Use AI to analyze the effectiveness of your messages vs. competitors and benchmark databases.

Predictive AI is designed to make predictions for tasks that would otherwise require customer feedback. Historically, brand teams have used message recall, brand ATUs and sales effectiveness type market research studies to analyze the effectiveness of their marketing messages. Predictive AI can learn from past studies and make predictions on how effective each message will be without needing new customer feedback.

Since Predictive AI can score one message at a time, it can be used to score messages at scale in a disease state, i.e. 1,000s of messages from all competitors can be analyzed for effectiveness quickly. Messages that score low can be considered as underperforming messages and can be the focus of the next message refresh.

Using Predictive AI to analyze effectiveness of messages can also allow industry database comparisons, which can reveal gaps in messaging. The analysis can be done quickly and at a low cost compared to traditional methods like message recall, ATU research, and sales effectiveness research.



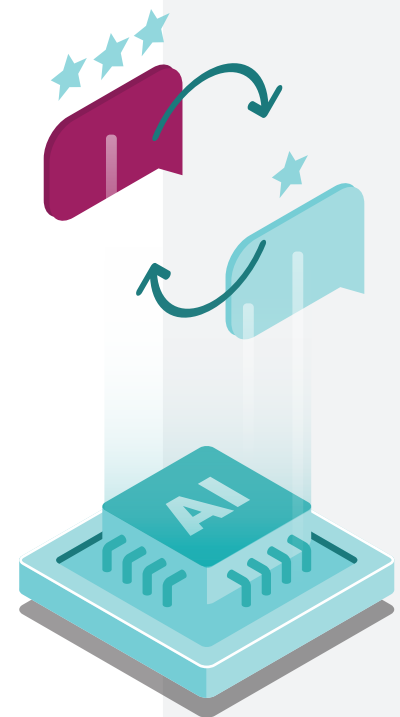
Generative AI

Use AI to identify new ways of articulating your clinical data and your messages

With the introduction of large language models like GPT-3, Jurassic, LAMDA, Bard, etc, generative AI has made very significant progress and LLMs can now generate marketing content like messages, taglines, educational content within seconds. General purpose LLMs like ChatGPT make a lot of errors in generating content for highly technical and regulated industries like pharma. However, large language models can be fine tuned on pharma industry specific messaging databases, and can be used to create branded and unbranded messaging for pharma brands more efficiently.

Messages generated by AI can be further optimized by applying decision heuristics science to them. Decision heuristics science is the 3-time Nobel Prize winning field of research that explains how humans make decisions using mental shortcuts called heuristics. Over the past 40 years, 600+ specific decision heuristics have been discovered in academic research, shedding light on the hidden drivers of human decision making.

Physicians, patients and payers also use decision heuristics to make decisions in a disease state. Talking to their dominant decision heuristics through fine-tuned language can make the branded and unbranded messaging for pharma brands significantly more compelling and persuasive.



Evaluative AI

Use AI to test 100s of new messages in one survey and find the winning messaging story flow out of billions of possibilities

Artificial intelligence can be used to make the output of message testing surveys more actionable and campaign ready. Historically, data from message testing market research studies would be loaded into statistical software systems like SPSS and the output would be standard message hierarchies and/or a TURF analysis.

Using artificial intelligence on data collected from message testing surveys can produce optimal message bundles and story flow out of billions of possibilities and even personalize them down to the segment and channel level. With evaluative AI, pharma brands can get a channel- and segment-specific messaging playbook that is ready to execute instead of getting the conventional deliverables of a message testing survey like a message hierarchy, TURF analysis, etc.

AI can also be used live during a survey, learning from the respondents' choice patterns in real-time and customizing future choices for each respondent in order to get higher quality preference data from the survey. When respondents are showed several highly appealing choices, they are forced to think harder about the choice, leading to more differentiated data.





CASE STUDY

**Re-igniting growth for a
pharma brand with a
message refresh in just**

12 weeks!

Leveraging the power of AI to drive a message refresh with 40+% improvement in messaging performance even in the absence of new clinical data or new customer insights

Brand Situation

PRODUCT X is a longer-lasting injectable (LAI) form introduced after patent expiration of a market leading oral. While the LAI formulation is not as large in revenue as the original formulation, it is still a blockbuster with over \$1 billion in sales and several years of patent life left.

The LAI category competition was heating up with LCM formulations of other older oral competitors as well as new competitors entering the market. Product X had no new clinical data and no recent market research on barriers to the adoption of LCM dose, but the marketing team knew that they needed an HCP message refresh.

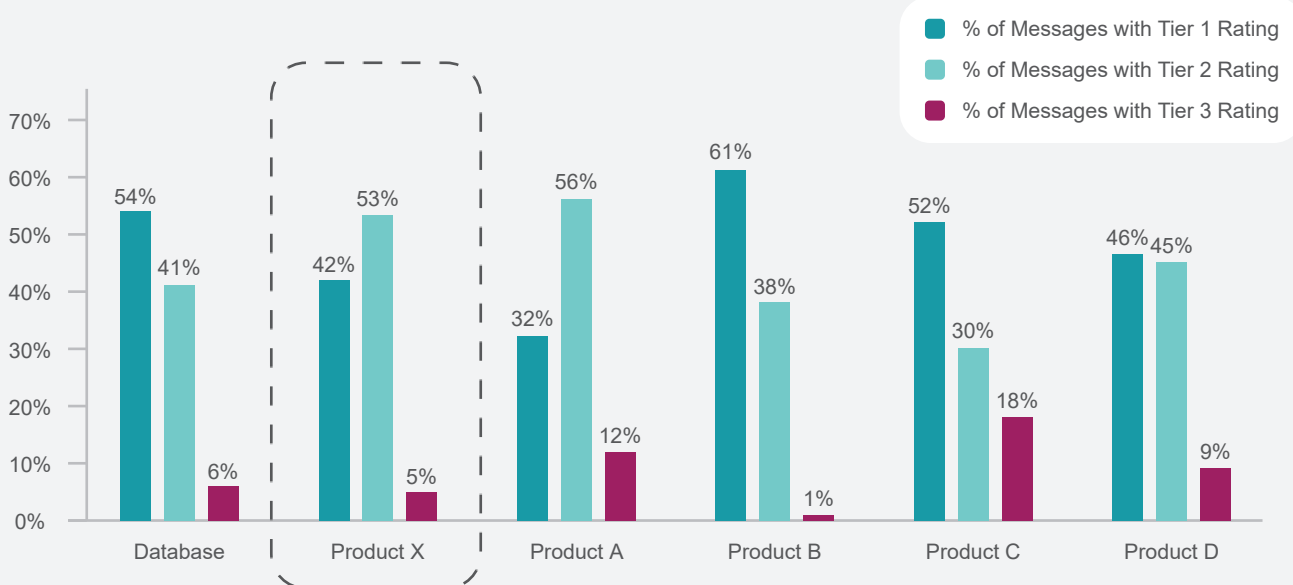
The power of AI was used to lead a major message refresh for the brand in less than 12 weeks, leading to a new message story flow that had 40+% higher preference share in market research testing.

Step 1: Predictive AI

Effectiveness of PRODUCT X's current messages vs. competitors and benchmark database was analyzed using Predictive AI

To analyze the effectiveness of PRODUCT X's current messaging vs. competitors and vs. a benchmark database, 700+ messages were collected from all brands in the disease state. Branded and unbranded messages were collected from a variety of channels including vis aid, website, in-office leave behind, physician social media, etc.

Heuristics were appended to every message. Then, messages were scored on effectiveness by predictive algorithms trained on data from past message testing studies. Every message was predictively scored on a 3-tier grading system based on how persuasive it will be to customers. All brands were compared in the category against each other and against the Newristics database.



PRODUCT X current messaging had significant room for improvement vs. benchmark database and some competitors. Since every message had been scored individually, messages were broken up into groups based on performance and all the underperforming messages were identified were targeted for improvement.

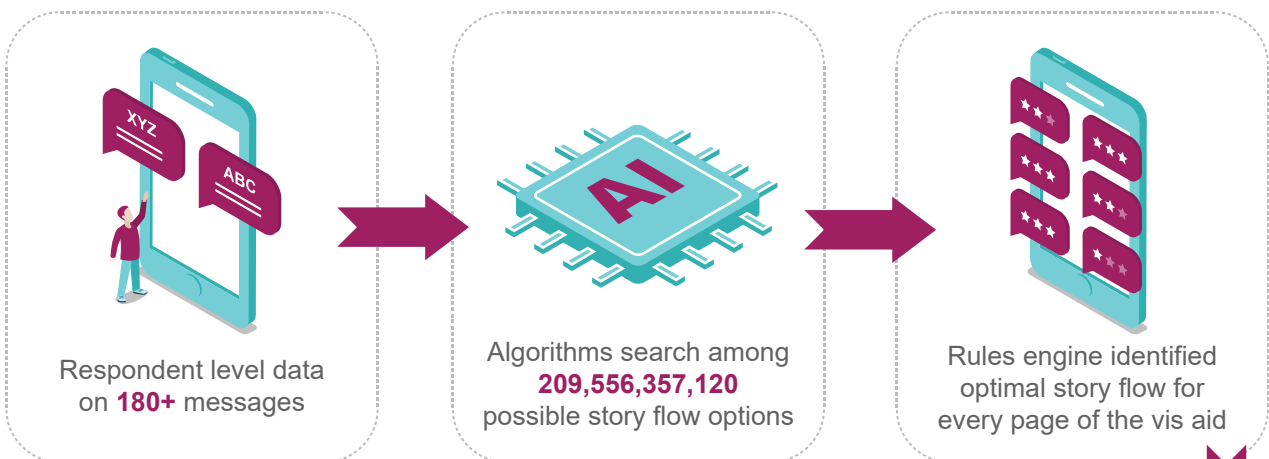
Step 3: Evaluative AI

180+ Product X messages were tested in AI-powered quant research to identify best message story flow for a new vis aid

AI-powered messaging testing made it possible to test >180 different messages in one survey with only 237 HCPs. Respondents were matched to PRODUCT X target list and also broken into behavioral segments based on prescribing data.

With respondent-level data on 180+ messages, the algorithm first searched among **209,556,357,120** possible message bundles and then identified the optimal story flow for every page of the vis aid.

Data from the message testing was used to identify the optimal story flow for every page of the new vis aid.

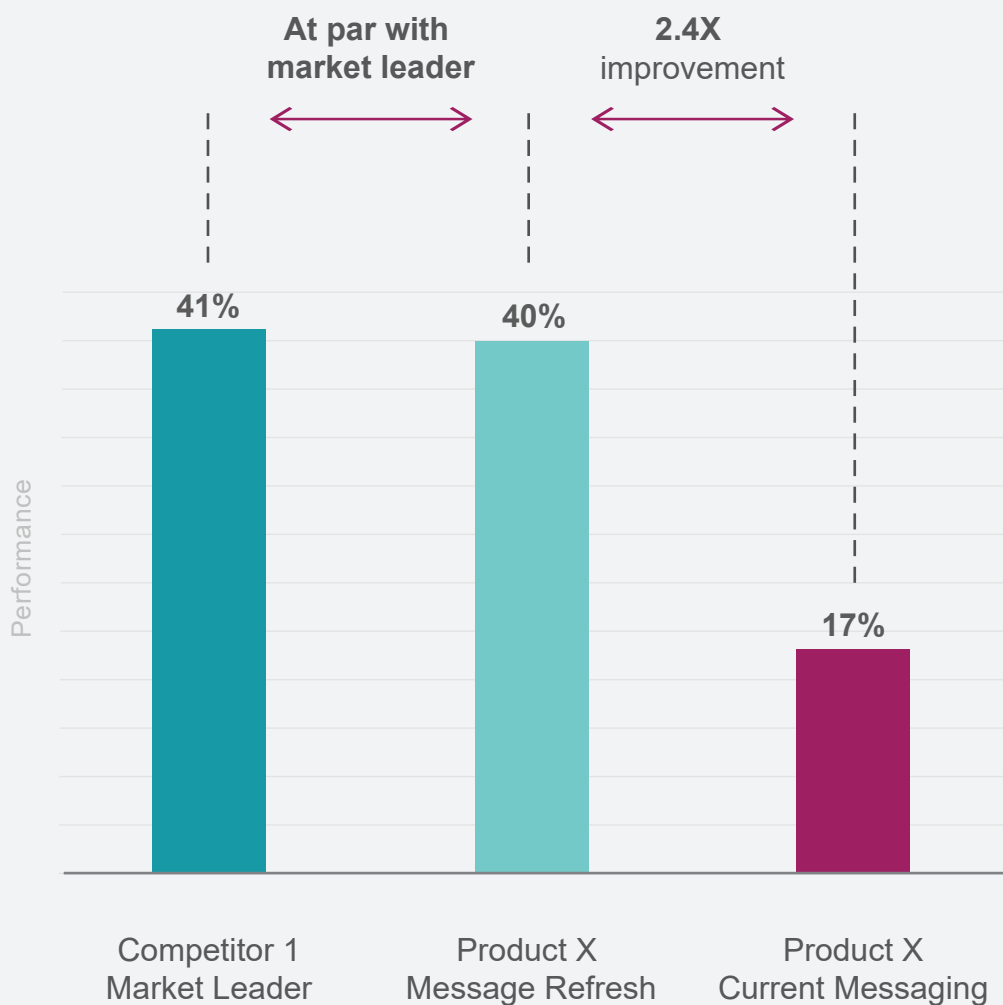


Vis Aid Pages



Results

New messaging story flow performed 2.4x better vs. current messaging in market research and led to an immediate rollout of new vis aid.



Product X message refresh produced a story flow that was at par with the market leader.

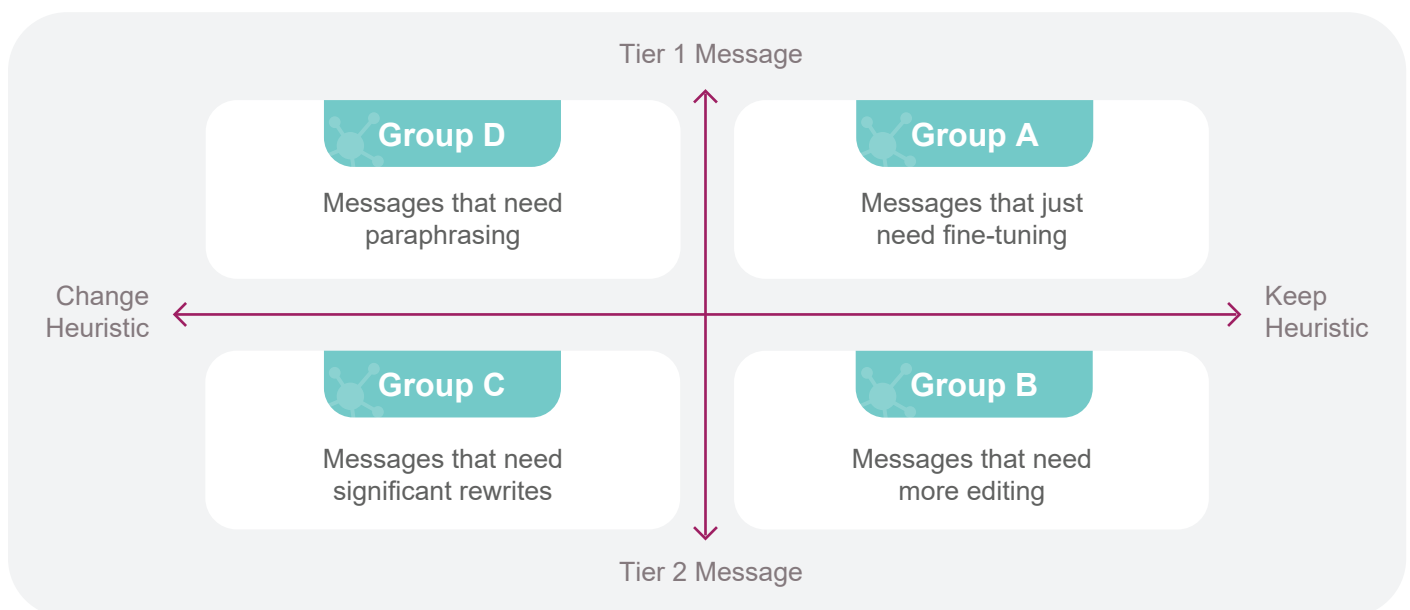
Product X message refresh produced a story flow that was 2.4x better than current messaging.

Step 2: Generative AI

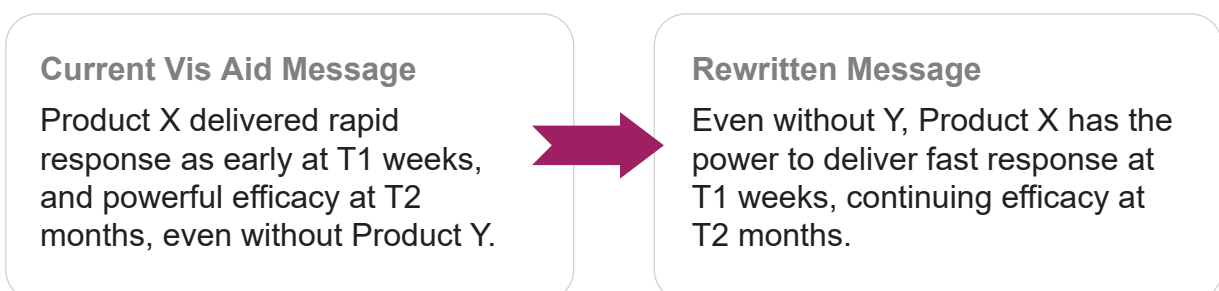
Large inventory of 400+ new messages for Product X was generated with human-in-the-loop AI trained on pharma heuristics

Even though no new clinical data was available to guide fine tuning and rewriting of messages, decision heuristics science and generative AI was used to create many alternative ways of articulating the same message through rephrasing. Since generative AI is still in its early stages of development, pharma industry messaging experts were used for human-in-the-loop review of all messages generated.

Alternative versions of each message in the current vis aid were generated based on results of the heuristic analysis. All messages were organized into four groups and a different message refinement strategy was used for each group.



Example of Human-in-the-loop AI-based message refinement





New message refresh also identified a major shift in messaging strategy for the new vis aid.



Focus more on “risk-reduction” messages

The new vis aid storyflow put more emphasis on messages that communicate lower risk of serious and/or negative events with Product X. Messages written to “risk reduction” related endpoints became significantly more important in the new vis aid because they addressed decision heuristics like Dread Risk Bias and Negativity Bias.

- Reduction in risk of relapse
- Reduction in risk of hospitalization
- Reduction in recurrence of episodes



Focus less on “improvement” messages

Counterintuitively, messages focused on clinical endpoints related to the upside or improvement in patient’s condition were not did not perform as well in the research and were de-emphasized in the vis aid.

- Improvement in Function
- Improvement in Quality-of-Life



Evolve the brand positioning

- The new messaging storyflow even laddered up to a potentially new brand positioning for Product X based on the idea of a “safety net for patients who need protection.”
- The brand team was already planning to take up a repositioning project after the message refresh and the was able to accelerate the process since a powerful brand positioning emerged organically from the research.



Differentiate Product X from competitors by framing it as an easy choice

- Product X allows for a more convenient transition from oral to LAI dosing, which makes it easier to keep the patient treated with no gaps in care.
- Product X is affordable for most patients, which means it’s easier for HCPs and their staff to get their patients on Product X.