## MedOrion

### Applying Ethical Governance to Population Health Management

A look at how MedOrion Health Behavior Management platform addresses ethical governance and data sensitivity considerations in healthcare communications

### Intro

Risk governance is no stranger to the healthcare industry, health plans carry the burden of managing complex problems and the pull of emerging technologies that offer to help maximize benefits to members but still pose risks for population health. While risk governance is a favorable tool for health plans and practitioners, such a robust, rigorous and reliable framework has yet to present itself. One that can minimize risk to a member's health and create viable opportunities for population health.

In this white paper, we outline key considerations in ethical governance and how MedOrion's Health Behavior Management (HBM) platform approaches data sensitivity. We describe how ethics are applied at all stages of the user journey, a core element within the DNA of the HBM platform. This approach is similar to Macnamara's pyramid model (2002) for public relations campaigns, but is applied in the healthcare environment to the context of persuasive technology.

This white paper is informative for health plan decision makers who are interested in learning more about how MedOrion's technology can help in managing health behavior while practicing ethical governance in a way that serves members and health plan objectives.

## Persuasive Technology: Identifying the line between ethical persuasion and manipulation

For some people the word persuasion immediately suggests manipulation or coercion. This definition is not purely academic or conceptual; it highlights the dividing line between ethical persuasion and manipulation. Therefore, it is important to define and clarify persuasion in relation to ethics as a guiding framework for platforms or organizations using persuasive techniques to influence individual attitudes and behaviors.

MedOrion's platform can be classified as Persuasive Technology (PT), a class of technologies designed to better influence a person's attitude, behavior, or both. A popular definition of PT proposed by B. J. Fogg outlines that PT must not be coercive and should aim to bring about voluntary changes in behavior or attitude without manipulation<sup>4</sup>. In contrast, manipulation disrupts the target's capacity for awareness of the influence, undermining their autonomy.

"This approach explicitly excludes influence by coercion or manipulation, and is consistent with the widely endorsed definition of persuasion as" a successful intention effort at influencing another's mental state through communication in a circumstance in which the persuade has some measure of freedom" (Vicede, 2015, p. 4).

#### Influencing Awareness of Health Behavior: Choosing ethical objectives

Using technology for persuasion might raise legitimate concerns. MedOrion's HBM platform harnesses PT to benefit health organizations and its membership by promoting individual and public health objectives, without undermining member autonomy.

One of the major applications of the MedOrion platform is member communications. We apply behavioral science and persuasion to tailor communication in a way that helps members with important health-related decisions. At first glance, this may raise questions or concerns about whether organizations and technology companies should be in the business of influencing people's health behaviors. These concerns are valid, and are of increasing importance in light of the public debate surrounding the unethical and manipulative use of individual data and persuasive technology for commercial or political gain. These concerns are also reflected in popular culture (e.g., The Social Dilemma) and in news coverage, including in coverage of the notorious <u>Cambridge Analytics scandal</u>. MedOrion's approach to managing health behavior reflects the need to consider not only ethical objectives but also moral means and ends. This approach begins with defining the objective which should benefit the members, and be clear and measurable. For health behavior in particular, ethical standards must incorporate a discussion of data protection and privacy, the need to provide accurate health information, and the consideration of unintended outcomes (e.g., stigmatization).

For example, if the objective was to promote flu vaccination, MedOrion's HBM platform would apply decision factors and messages derived from (recent and extensive) behavioral science research on this behavior. Rather than have the data predict a behavior or drive the process, the platform begins with our science approach, which informs what we communicate and how we may influence that behavior.

#### Personal Relevance-Based Segmentation: How to speak to various populations

The goal of ethical health behavior management is to promote individual health, which also requires addressing disparities in health and taking into account the social determinants of health. Segmentation and tailoring lie at the core of effective persuasion technologies such as MedOrion. However, segmentation must be conducted with ethical oversight to identify and correct algorithmic bias that may further widen disparities in health outcomes, particularly among disadvantaged population segments associated with race or ethnicity.

#### A Platform in Practice: The Rise of Ethical Governance

MedOrion's HBM platform analyzes member data at scale to identify groups and individuals at higher health risk of a particular health condition. Users of the platform can then prioritize these segments for tailored outreach through ethical governance. For example, if the behavioral objective is to promote prostate cancer screening among men ages 50 and older, research indicates that the risk of prostate cancer is likely to be higher among black males compared to other groups, and so MedOrion would identify groups at higher health risk for this condition.

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These insights would also be applied to message segmentation to ensure that messaging provides relevant information that can influence risk perceptions and promote prostate cancer screening. This is done by understanding the audience's ability to process information; this is where additional segmentation can be applied. See our previous white paper, <u>Building Persuasive Communications for</u> <u>Health Plans</u>. By identifying and prioritizing higher risk groups, the platform can also supplement messaging outreach through communication segmentation that is matched to the use patterns of the individual – for example, a preference to communicate with a call center agent).





# Managing Decision Factors: Tailoring interactions to individual members

The decision factors are derived from validated models from behavioral science and psychology that have been tested across different populations and validated (such as social cognitive theory, theory of planned behavior, social norms theories etc.). In this way, a member in a given audience would receive messages or interactions that target specific decision factors with the goal of addressing what MedOrion believes to be the most likely obstacles to the individual's attitudes or internon.

#### **Ethical Evaluation: Accountability and Transparency**

The final stage in a communication plan is evaluation, in which health plan marketers can understand whether and to what extent outreach influenced the behavioral objective. Insights must be reliable, valid and transparent, allowing teams to apply the findings for learning purposes and to improve outreach efforts.

MedOrion's Health Behavior Management platform applies the highest standards of the scientific process to ensure that the results can be trusted, providing clear and transparent evaluation analytics throughout the outreach journey, both for engagement as well as behavior change purposes.

#### Conclusions

Ultimately, human behavior sits at the core of most commercial platforms; without it, commerce could not be conducted and thanks to the combination of human behavior and technology, companies can offer consistently better service and experiences. When it comes to health however, human behavior requires a more sensitive approach and more rigorous business practice standards.

We apply the same approaches implemented by the world's leading e-commerce companies but because health behavior rightly carries with it risks and opportunities that far outweigh any online purchase, the MedOrion platform is designed to reason accordingly with members. The HBM platform can encompass a broad spectrum of applications such as governance of strategic objectives, member analytics, insurance product planning, and actuary calculations. The prime goal is to gain a deeper understanding of the member and apply the insights to cater to the individual's needs, risks and behavioral tendencies with ethical-minded, tailored communications to help with important health-related decisions.

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