



GLOBAL  
**SELF-CARE**  
FEDERATION



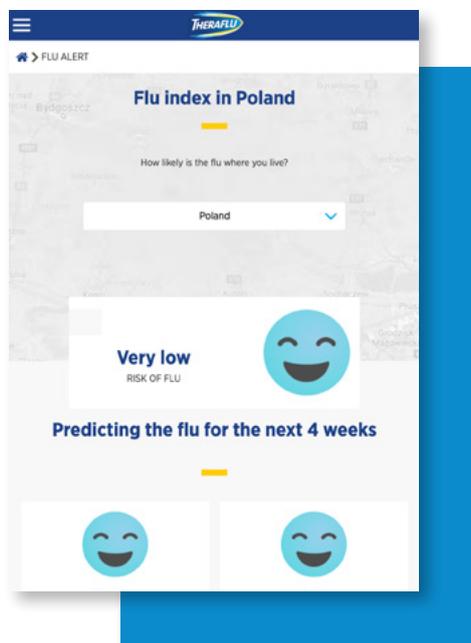
GSCF HEALTH DATA  
**CASE STUDIES**

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# CASE STUDIES

## THERAFLU™ FLU TRACKER: HELPING CONSUMERS AVOID THE FLU

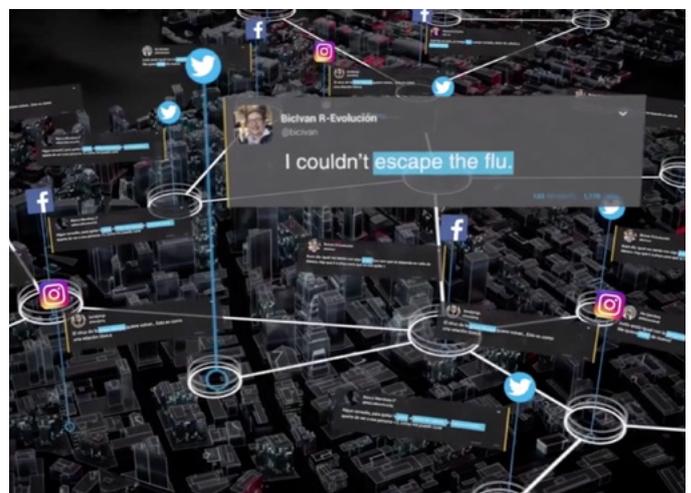
GSK developed an accurate predictive model, the Flu Tracker, which uses real time data to calculate the risk of contracting flu.



The Flu Tracker aims to help consumers cope with the unpredictability of the flu season and improve their ability to avoid catching flu by informing them of flu forecasts in their geographic area of interest. It also educates them on self-care products they could use and to relieve the symptoms of flu, should they catch it .

GSK first launched a Flu Tracker microsite in 2017. The microsite uses several sources of data to assess forecast where people could contract flu, for example breaking information down to the level of country regions. It further used weather data (temperature trends, humidity, and precipitations), search data (what are people searching for), social data (what is trending on social media) and sales and distribution data (the likes of Nielsen or IQVIA).

This data was processed into a flu score for the region and projected as a 'heat map'. The data was gathered via an agency (MediaCom), with no data directly related to an individual being captured.



The Flu Tracker offers an example of how data can be used to the benefit of consumers. Artificial Intelligence (AI) and machine learning boosted the accuracy of the flu heat map to 95%, which ensured that people could really rely on it and better protect themselves. People saw the forecasts when there was a very high probability of an outbreak of flu in a particular city or village. Moreover, customized advertisements were launched around the time the flu index started to rise so people were informed about cold and flu treatments such as Theraflu™.

Following the launch of the Flu Tracker in Russia in 2017, the tracker was also launched in Mexico, Hungary, Poland, Sweden, and South Africa in 2019.

The Flu Tracker is an example of how consumers can be **empowered** to take an active role in managing their own health. Furthermore, the data was translated into ready-to-use information that was **accessible** to people of all ages, including those without a high level of **data literacy**.

## TRIGGER: TARGETED ADVERTISING THROUGH SOCIAL LISTENING

GSK developed a programme called Trigger, which uses listening technology to investigate if there are geographical areas where a symptom (e.g., cough, headache) is frequently mentioned on social media. With this technology, key words on social media are traced and subsequently aggregated according to location. However, it should be noted that this data is not linked to individual social media accounts or to individuals. The health data that is being captured concerns symptoms mentioned online. The program runs in several markets including the US, UK, and Hong Kong.

Trigger results in targeted online advertisements for products which can help manage those symptoms that are mentioned frequently for a certain location, for people who have their location turned on. In this way, aggregated health data enables consumers to access information about products relevant to a symptom which their location suggests they have a higher likelihood of experiencing.

Trigger is an example of how data can **empower** customers to make informed choices concerning their health. By seeing relevant advertisements, they can easily access information about products which help manage their symptoms.

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## NICORETTE QUICKMIST SMARTTRACK: SELF-MONITORING NICOTINE REPLACEMENT THERAPY

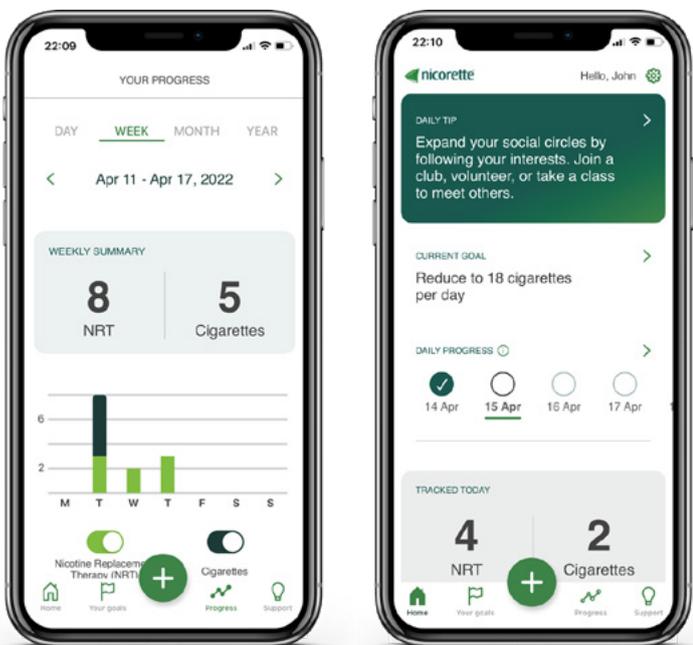
Bearing in mind that tobacco remains the single biggest cause of death, illness and impoverishment and multiple barriers to quit smoking exist, Johnson & Johnson launched the Nicorette® Quickmist SmartTrack™ in 2020. The world's first connected medicine, which combines the clinically proven Nicorette® mouth spray with a behavioural support app. It is currently only available in the UK but can be considered to be very promising in the area of self-care health.

Nicorette® Quickmist SmartTrack™ leverages near field communication (NFC) technology to allow

consumers to track their Nicotine Replacement Therapy (NRT) usage with a simple tap to the Nicorette® stop smoking app downloaded to their smartphone. Patients can also manually track other sources of nicotine intake including cigarettes smoked and other NRT formats. The behavioural support app allows users to set a personal quit plan in the app, track their progress & product usage towards their quitting goals and receive motivational tips to help them stay on track.

The features of the app were developed in collaboration with behavioural scientists with the aim of increasing compliance to NRT and quit goals to ultimately improve quit outcomes. Through the smartphone app consumers see their own personal data usage and can track this against personalised quit goals. Committing to certain goals and tracking against these goals reinforces

positive behaviour change to motivate users to stay smoke free. Other cognitive behavioural therapy techniques were employed to build coping and relapse prevention skills to improve the likelihood of quitting for good.



Several types of data are being collected to this end. It concerns aggregated anonymized and pseudonymized data on quitting behaviour (approach to quitting, stages/length of quit, relapse(s) to smoking) and on NRT usage. It also concerns data collected on smoking, app interaction (which features quitters are using, frequency of engagement, user satisfaction etc.), and user demographics (from store-card purchase data behaviour: pre-quit & tracking during usage). Furthermore, aggregated app data usage was captured for analysis. Despite the promising result, there were several key considerations

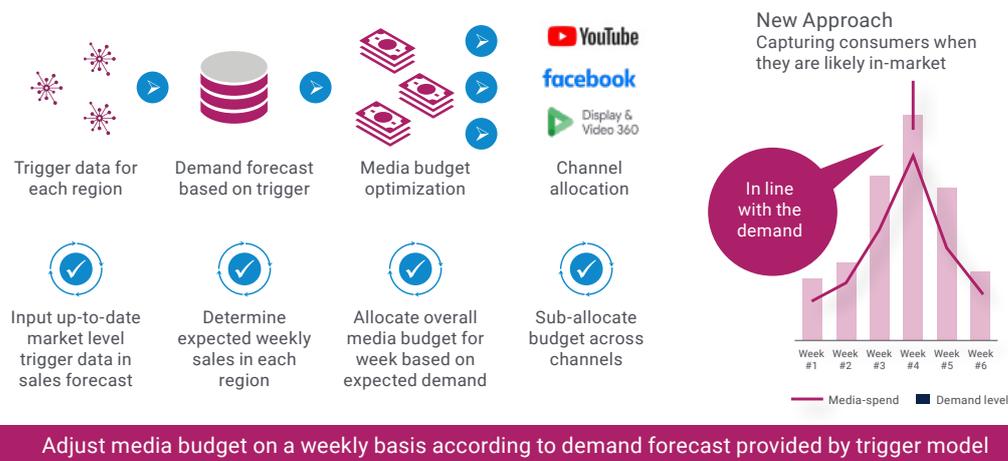
and challenges met along the way. Some of these challenges include data privacy, resources, the regulatory framework for connected medicines and both Software and Medical Device considerations. No individual personal data, however, was captured, meaning that GDPR data privacy requirements are not applicable.

The aggregated app data usage will be used by Johnson & Johnson to understand how smokers approach quitting, how they are using NRT and what features within the app users are engaging with. This data will allow Johnson & Johnson to not only optimise the SmartTrack™ app but the insights generated will also be used to develop new solutions (both digital & product solution) to meet new unmet consumer needs uncovered. With the Nicorette® Quickmist SmartTrack™, Johnson & Johnson demonstrates how self-care health data can be a catalyst for more innovation to the benefit of consumers.

The Nicorette® Quickmist SmartTrack™ **empowers** people to take better care of their own health. Moreover, the **user-friendly** nature of the app allows **many people to find their way to it**. In the long run, it has the potential to help many people to stop smoking, which will be a great **improvement to the health of many people** and their environment. The fact that such digital innovation is accompanied by the necessary **safeguards in terms of privacy** can serve as an example for all companies that aspire to be innovative in the field of self-care health.

Sources: PPT, poster, <https://hbw.pharmaintelligence.informa.com/RS151046/JJs-Nicorette-QuickMist-SmartTrack--Getting-Inside-One-Of-2020s-Biggest-UK-Launches-NICORETTE-QuickMist-SmartTrack-to-Quit-Smoking-|NICORETTE-ViewPoints-Interview-J&J's-Sven-Sjovall-&Dr.-Mark-Watt-Share-Insight-on-Nicorette's-Latest-Digital-Smoking-Cessation-Offering-|PharmaShots>

## TARGETED ADVERTISING THROUGH AI MODELS



Artificial intelligence (AI) has been gaining popularity worldwide and in a variety of sectors. In healthcare, hopes hinge around AI to achieve more efficient and better outcomes for patients. Like many other companies, Sanofi sees numerous advantages that AI can bring to its consumers. In that context Sanofi’s internal data science team has built AI and machine learning models to predict when and where consumers would be likely to suffer from seasonal symptoms such as an allergy or a cold.

Sanofi Consumer Healthcare has been investing on building such a capability internally as they believe that data can help better engaging with their consumers along the entire consumer journey. More specifically, the data enable Sanofi to get a better understanding of their consumers’ needs and enables brands to provide relevant information to them at the time they want it.

The AI and machine learning models rely on aggregated and anonymous data from consumers’ mentions of symptom-related topics and diverse environmental data. In addition, data on weather, pollution, flu indices and online user behavior

are also used, providing sophisticated signals that allow Sanofi to generate accurate outputs. These outputs are used to adjust media budget on weekly basis and to communicate about company products that will help manage these symptoms on digital advertising platforms at the right place and the right moment.

Sanofi’s campaigns, meant to generate awareness, consideration, and to drive purchase choices, can improve the life quality of their consumers, and are better addressed to the audience that is really in need, in that specific place and moment in time. This targeted approach results in advertising efficiencies for the company, while delivering relevant, targeted information to consumers. Results from geo-targeting and timely campaigns confirm this approach which encouraging companies like Sanofi to continue working on this kind of sophisticated and large-scale models.

There is no doubt that such AI models bring **benefits to companies as well as consumers**. They allow companies to target their consumers more effectively, which in turn benefits the consumers. These AI models and learning machines help companies to **empower** their consumers to take better care of themselves and **guide** their **purchasing choices** when they are in need. In the future, using AI and learning machines on a larger scale, can play an important role in enabling people to better engage in self-care.