

Bread, Milk, Cheese, Eggs and an Insurance Payment

By Nate Worrell, FSA

Rahim just bought groceries for the week. He walks away smiling because he saved \$10 on fresh produce and applied half of the savings to his insurance fund. Because he's been buying healthy foods for a month, his multiplier went up and now \$1 buys him \$125 of insurance. He's practically skipping to his car because he feels great, having lost a few pounds over the same time period.

Jayda exits the drive through of her favorite burger and shake joint. The hot fries and juicy beef are loaded with flavor and are very satisfying at the end of a stressful day. She barely noticed the \$1 surcharge on her meal from the insurance company.

Introducing 'Food For Life' insurance, a form of micro insurance that funds insurance with every food related transaction. When coupled with artificial intelligence (A.I), it may offer a lot of attractive features to insurers and insureds.

First, it expands the risk pool. It would provide access to an affordable alternative to insurance to many who might be uncovered. It is a micro insurance plan, with nominal contributions at every transaction point, so the overall impact to the pocketbook is small. Additionally, underwriting needs are minimal. The insurance is earned over time on a transaction-by-transaction basis, so the amount at risk is low at the start. For this program, a predictive analytics algorithm or other grouping algorithm could help identify buckets of foods and their insurance purchasing power. Over time, as the insurance pool grows, so does the amount of information collected. Once again, A.I based analysis allows for an option for more continuous underwriting, where trends in consumption patterns may influence the risk rating.

Having the option as a point-of-sale opportunity would also save the insurance company money in terms of client acquisition as there are no agents involved and no initial underwriting costs. There would likely be costs with third party providers to handle the transaction processing, but this is a competitive and established marketplace. For example, you may have been given the 'round up' option to donate to a charity, or offered travel insurance on airfare purchases.

Secondly, it can enhance persistency. Embedded in the policy would be incentives to make healthier purchases. Many retailers and food chains have rewards-based customer loyalty programs that encourage repeat purchases. Having an insurance fund as a reward could be an additional perk that grocery and food outlets could add to pre-existing programs. Artificial intelligence is embedded in these rewards programs to set rewards tiers, predict what type of product a consumer may purchase next, and offer continued personalization.

Third, it can influence healthier behaviors. Many of the top causes of death have a consumption component: cardiac related issues, obesity, diabetes, and alcohol and drug overdoses. Riskier lives are denied issuance, or charged substandard rates that require a renewal process at a later point. The Food For Life program would have very little barriers to entry. Having a database of every food purchase would allow an AI application to update the rating on a more continuous basis. Also, it could develop nudges for better behaviors in the same way car insurers alert drivers to unsafe driving practices, or phones report back screen time usage, or wearable devices communicate miles walked, hours slept, and other biometrics.

Furthermore, in a different application of artificial intelligence, training, education, and logistical resources could be provided to consumers. Companies like Nourished Rx and Helper Bees are already successfully using data-based solutions to reach and teach patients in high-risk areas. Digital and physical assistants help them connect to healthy food providers, and to develop tailored meal solutions for their personal needs.

Food would not be the only thing in scope. The program could also assist with medication adherence, automating refills, or offering solutions and educational resources to help with conditions that the medicine may be addressing such as high blood pressure.

The product could have exponential opportunity and data when paired with other technologies. Food purchasing by itself only tells part of the story. Providing monitoring of vitals and other biometric data would complement the spending patterns with useful information. This can all be done rather passively, using wearable health devices, or by implementing passive monitoring devices such as smart toothbrushes or even smart toilets! These devices could even be perks of the program that are earned by making the right types of purchases.

Barriers still may exist with regards to consumers' willingness to share data and with regulatory constraints around health information. However, many consumers are willing to share these details if there are privacy protections in place. There may be some antiselection and fraudulent behavior risk as well, but once again artificial intelligence can come to the rescue to detect any abnormal behaviors.

In summary, maybe it is time for insurance companies to consider putting their money where the mouths are. Artificial intelligence appears across the insurance life cycle: to help design and price the product, study purchase behaviors to incentivize customer stickiness, support consumer education and logistical issues, and connect activity to health outcomes to mitigate adverse claim experience. Ultimately, the benefits of such a program, if successful, would result in more people having insurance protection and experience healthier and longer lives.

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