How Can LIfe Insurers Improve the DTC Application Process?

A Behavioral Science Analysis

By Peter Hovard
Lead Behavioral Scientist, RGA UK

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www.rgare.com

Abstract

Life insurers are increasingly offering direct-to-consumer (DTC) application processes, a trend hastened by necessity during the COVID-19 pandemic. Applications completed the traditional way – across the desk from an agent or an adviser – are giving way to completion via a phone call, or online.

Mis- or non-disclosure is always a risk, whether the application process takes place in person or not. However, there are specific risks inherent in DTC channels. In this article, we will discuss our research into the psychological underpinnings of the reasons an applicant might mis-disclose (or not disclose) health history and lifestyle details, whether in person, over the telephone, or online. We will also discuss how each of these channels can affect the emotional context of the response process, and how that, in turn, can affect the potential for genuine as well as intentional mistakes.

As the industry continues to adopt DTC application methods, understanding the psychology underlying these behaviors may help insurers design applications and processes that minimize the possibility of mis- or non-disclosure while improving customer journeys.

Traditionally, life insurance applications have been paper-based and designed to be completed alongside an agent or adviser. There are many benefits to this design: agents or advisers can immediately explain unclear or difficult questions, thereby helping applicants answer correctly and avoid genuine mistakes.

However, the fact that agents or advisers receive commissions for selling insurance may cause conflicts of interest in this part of the process. Commissions create an incentive to sell, rather than collect accurate information, which could influence the application process. In addition, form designers have little control over how questions and clarifications are phrased by advisers in practice, which risks the possibility of advisers paraphrasing and asking leading instead of fact-finding questions. Finally, customers may feel embarrassed to disclose sensitive health and lifestyle-related details to another person, no matter how trusted, which also could lead to mis- or non-disclosure.

There is evidence that the risk of gathering incorrect information due to psychological factors, when the life insurance application process is adviser-led, is real. One recent research paper in Applied Economics, "The Adviser Effect on Insurance Disclosures," (Christodoulou and Samuell, 2020)[1] found that smokers were more likely to be offered standard terms if they were screened by an adviser than if they were screened by a representative of the insurer.

Why do applicants mis-disclose or non-disclose information on insurance applications?

Financial gain:
People prefer to avoid disclosing details that would increase their premium.

Psychological gain:
People like to present themselves positively. Psychologists refer to the phenomenon of responding to questions in ways that might make others think better of us as **social desirability bias**. An example: applicants might not disclose illegal drug use because it is socially frowned upon, rather than to get a better deal.

Unintentional inaccuracy:
Applicants may not know or be able to remember certain key details.

Unintentional inaccuracy can also be due to misunderstanding a question or confusion related to how to input an answer correctly.

Exploring how channel influences disclosure rates – RGA experiment method

We conducted a series of experiments to understand how different contexts influence relative disclosure rates. The findings are discussed throughout this paper.

Simulating the incentive to lie

We recruited participants for "healthy living" surveys and put them randomly into groups. Each group had the questions presented to them differently or the context manipulated in some way (see below).

- One challenge of studying the insurance context is the incentives at play. It is difficult to recreate the real-world incentive applicants have in experiments. Our method sought to incentivize dishonesty by increasing how much participants were paid if they showed themselves to be healthy, which would also unlock a second part of the study. In reality we were only interested in the answers to the first part of the survey.

The target survey questions asked for similar information to what is collected in a life insurance application:

- Alcohol intake
- Smoking status and frequency
- Illegal drug use
- Height and weight
- Medical conditions
- Family history

Study 1: Exploring question framing

Our first experiment recruited over 20,000 participants from markets around the world. Participants saw the same questions presented in different ways intended to make it easier to be accurate, easier to be honest and harder to lie.

Study 2: Exploring channel influences

To explore the direct influence of channel we asked the same questions of 1,100 nationally representative U.S. residents either in a telephone interview or an online survey.

Study 3: Exploring the effects of time pressure and social norms

2,000 nationally representative U.K.-residents completed a survey under one of four conditions:

- A standard survey with extra incentives for appearing healthy
- As 1 but with a challenging time limit to answer each question
- As 1 but each question used a message which explicitly stated that the behavior was widely adopted
- A standard healthy living survey with no extra incentive to appear healthy

Psychological aspects of DTC applications

One might think that DTC applications would return higher disclosure rates than adviser-led applications. As insurer representatives do not earn a sales commission, there should essentially be no conflict of interest when a representative collects application information. Indeed, the incentive would be to collect accurate information.

However, other psychological factors could influence disclosure rates over the telephone or online.

The possibility of getting caught

Does involving an insurer-representative in telephone interviews objectively increase the chance of identifying non-disclosure? If this is so, insurers could rectify inaccuracies or even dissuade potential non-disclosures up front. This would reduce the **utility** (value) of intentional dishonesty for applicants.

Psychologists have found that people trying to deceive without being detected inadvertently give certain physical signals. Increases in heart rate driven by nervousness can lead to changes in speech and mannerisms (DePaulo, et al. 2003).[2] However, even though deception is part of everyday life, humans can be poor at picking up the signals. Indeed, studies estimate that people detect deception only slightly more than half the time, which is not much better than what would be expected by chance (Vrij and Mann, 2001).[3]

Unlike a face to face interaction, applicants remain relatively anonymous over the telephone. (An interviewer can't, for example, visually validate responses such as height and weight.) It is unlikely, therefore, that any objective possibility of getting caught mis- or non-disclosing to a telephone interviewer might be a deterrent to not being truthful.

The emotional consequences of deception by telephone

While the objective possibility of getting caught is an unlikely deterrent, the subjective side of deceiving others may be one. Most people, when they tell an untruth, notice their hearts beat faster, their blood pressure rises, and they feel a little nervous, fearful, and guilty.

Deliberate lying makes most people feel uncomfortable, especially when they think they are giving off cues that betray the deception, when they are less in control of the conversation, or if they believe there is an actual person who will experience consequences of the lie (DePaulo et. al., 1996).[4]

Reducing the **psychological distance** between the deceiver and the deceived could heighten the deceiver's uncomfortable emotions. This is indicated by evidence that in discussion deceivers will often use language to attempt to distance themselves from the deceit (for example using fewer personal pronouns, and more tentative words such as "maybe") to make it psychologically easier to deceive (ten Brinke & Porter, 2012).[5]

Psychological distance

Feeling close to an event or person can change people's behavior. In the case of honesty, feeling close to real victims can increase empathy, guilt, and shame, potentially making it harder to lie.

The presence of another human, whether face-to-face or in telephone interviews, makes the identity of the victim of a deception more concrete and immediate and diminishes the applicant's control over the process. Research shows that participants, when given a choice of whether to deceive a partner in an experiment via texting or face-to-face, were more likely to deceive in a text. This suggests that people may find it easier to deceive through channels that provide participants with greater psychological distance (Van Swol & Braun, 2014).[6]

Asynchronous (the communicator and reciever are separated in time and space) DTC application channels, such as online and paper forms, widen the psychological distance between applicant and interviewer. Such interactions lack the humanizing elements that could prevent non-disclosure and applicants could feel more confident to mis- or non-disclose when using these channels.

Social desirability bias

A powerful psychological motivation to present oneself in the best light, which influences applicants to mis-disclose details which they think others may disapprove.

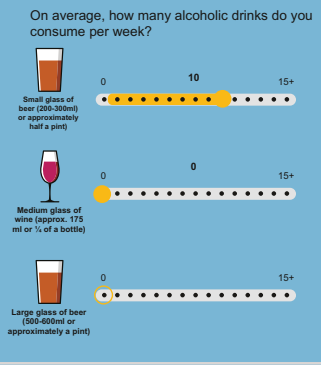
Disclosing sensitive information can be embarrassing

People's decisions are influenced by a **social desirability bias**. This bias refers to the human tendency to answer questions in a manner that would be viewed favorably by others.

RGA research has shown that the social desirability bias is an important driver of non-disclosure in life insurance applications. We found that by using subtle cues to make sensitive details feel more normal and less stigmatizing – for example, for certain items, using a sliding scale with a high upper limit, or "anchor" – disclosure rates could improve (see Figure 1).

Figure 1: Alcohol Questions Using Sliders and High Anchors

Using sliders with high anchors can destigmatize alcohol intake. RGA research found that a combination of sliders, asking separately about key alcoholic drink categories and providing pictures to jog respondents' memory, increased disclosure rates compared to typical open-form questions.



However, people also come to the application process with their own beliefs about what is socially acceptable, such as believing that smoking, drug use, or high weight are frowned upon.

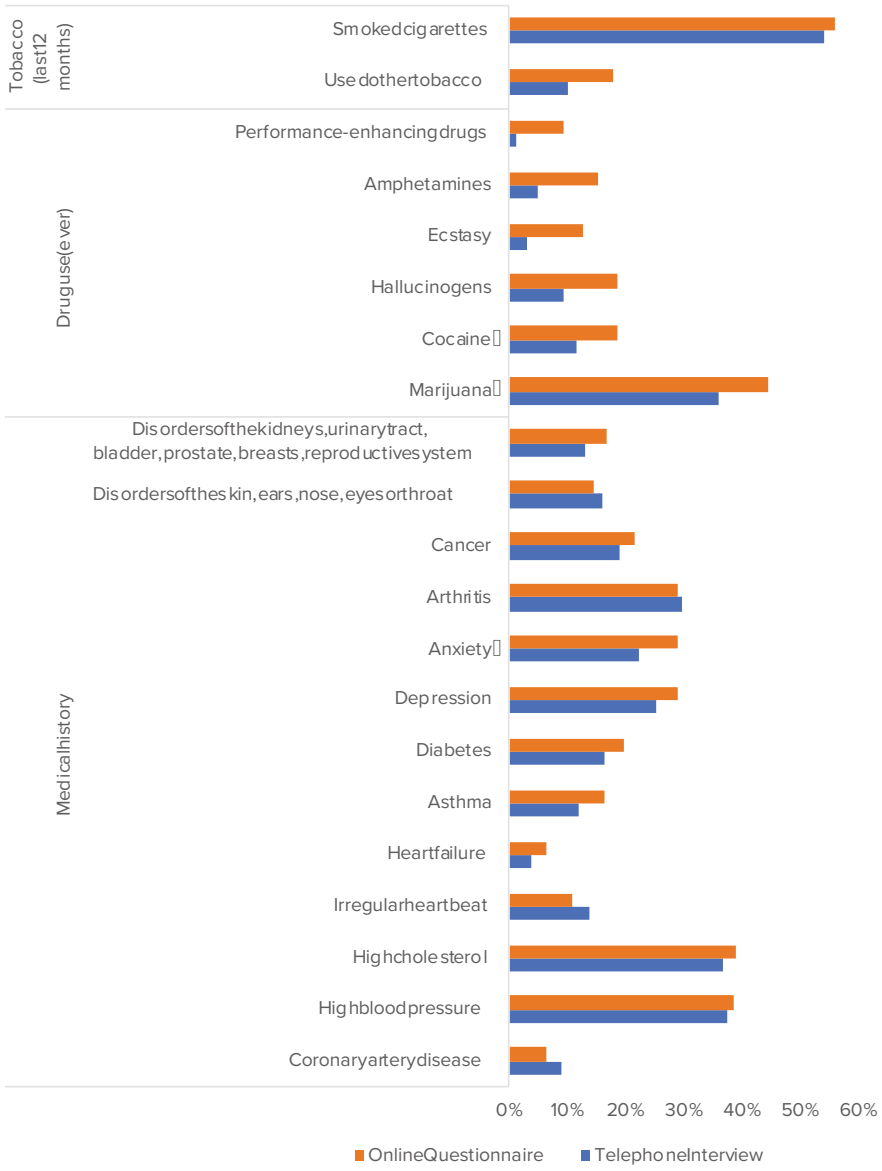
In a follow up insurance application simulation study, we found that language that explicitly communicated social norms, such as *"Smoking cigarettes and using other tobacco or nicotine products is common in the U.K. Some people use cigarettes or other nicotine products habitually, and some use them socially. Research shows that nearly half of people in the U.K. have smoked at some point, including more than 7 million current smokers,"* decreased disclosure rates.

Such overt statements can be counterproductive, as they increase the **salience** of applicants' existing beliefs about how society views sensitive behaviors and makes them feel less rather than more comfortable to report them.

Can the application channels provided change how much applicants are motivated to show themselves in the best light? Highly interpersonal experiences, such as telephone interviews, could remind applicants that some behaviors are less socially accepted, and might therefore make applicants more embarrassed and less likely to disclose. Our research supports this idea. In an experiment involving 1,100 U.S.-based participants who were incentivized to appear healthy (see page 4), we compared disclosure rates of factors typically collected by life insurers. We found that participants were less likely to disclose issues such as mental health conditions and drug use in a telephone interview than in an online questionnaire (Figure 2).

Salience

This refers to the degree to which information stands out in our attention. Referring explicitly to sensitive behaviors, such as smoking, even by trying to normalize it, could bring social standards (e.g. "smoking is disapproved of") top of mind.


Tobacco (last12 months)
Smokedcigarettes
Usedothertobacco
Druguse(ever)
Performance-enhancingdrugs
Amphetamines
Ecstasy
Hallucinogens
Cocaine
Marijuana
Medicalhistory
Disordersofthekidneys,urinarytract, bladder,prostate,breasts,reproductivesystem
Disordersoftheskin,ears,nose,eyesorthroat
Cancer
Arthritis
Anxiety
Depression
Diabetes
Asthma
Heartfailure
Irregularheartbeat
Highcholesterol
Highbloodpressure
Coronaryarterydisease
0%
10%
20%
30%
40%
50%
60%
OnlineQuestionnaire
TelephoneInterview

Cognitive load and online disclosures

As well as the emotional context, DTC applications also need to account for how people process information. The human capacity to process information is limited, and for most, paying attention to more than one task at a time is difficult.

Psychologists Aldert Vrij and Samantha Mann, in 2001,[3] discussed how formulating a deception often takes time and mental resources. Unlike live conversations, online application forms give applicants time to consider how to respond. This means there is greater potential for applicants to take time filling out the application and think abstractly about how to "game" it, whereas adviser-led and telephone interviews limit the time applicants have to think through a response.

For example, consider the effort it might take to think through how to answer an alcohol intake question in order to get more favorable underwriting, then to adjust from your actual alcohol intake to give an answer you believe might produce a better result. Having more time to do this, as online applications afford, is clearly an advantage that could lead to lower disclosure rates.

Researchers have shown that prosocial behavior (i.e., behavior through which people benefit others) is intuitive and quick, and people need time to counteract these impulses to formulate self-interested decisions (Rand, Greene, & Nowak, 2012).[9] Deception, as mentioned earlier, is more cognitively taxing than honesty. Hence application channels that allow more thinking time, such as online forms, could lead to lower disclosure rates as applicants could potentially formulate more self-interested responses.

Similarly, advisers taking applicants through forms are experienced using these applications and therefore require fewer mental resources to consider how to phrase questions. This also leaves room for adviser paraphrasing, which could lead to lower disclosures.

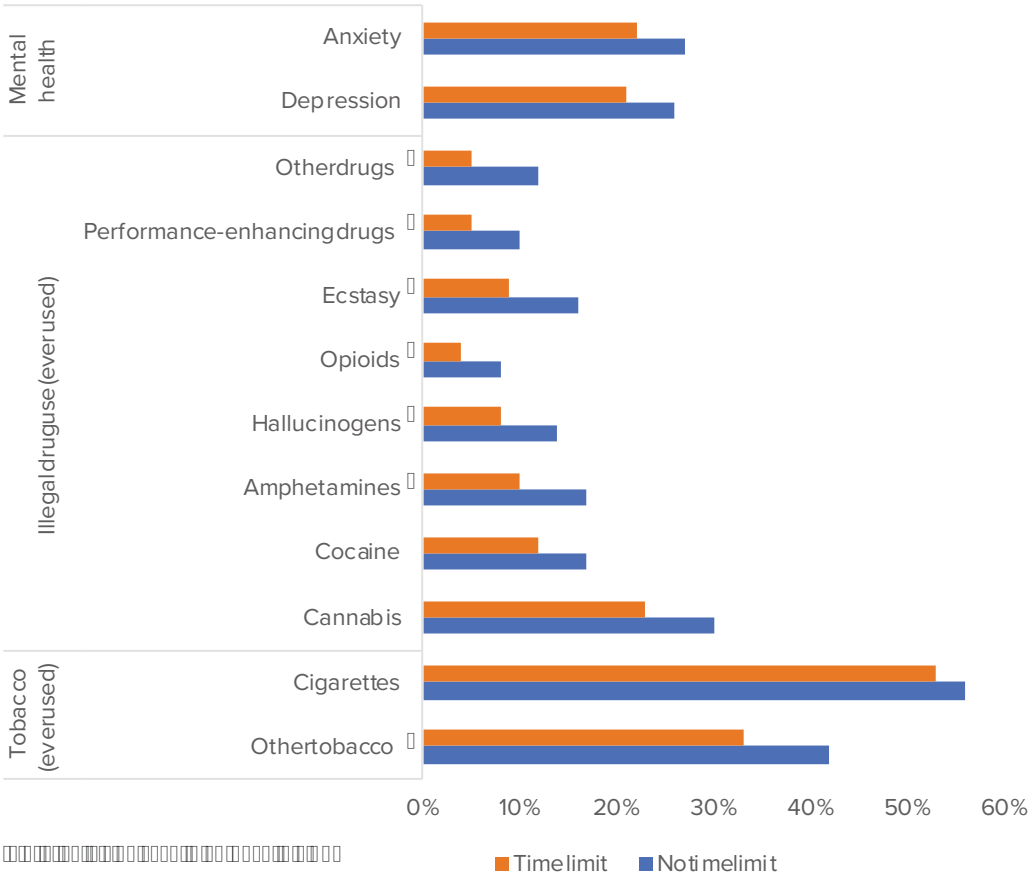
On the other hand, if time pressures and **cognitive load** increase, for example due to working with an agent or representative, it may force people to respond intuitively, which will increase the influence of intuitive mental shortcuts and biases such as social desirability. This was shown by a U.S. study of 1,500 individuals, which found that those encouraged to respond to a survey quickly were more likely to respond in ways that boosted their **social desirability** (Protzco, Zedelius, & Schooler, 2019).[10] Hence, an applicant who might otherwise be motivated to be accurate could, if experiencing time pressure, be more likely to intuitively answer "no" to sensitive questions such as whether they have used illegal drugs.

Because time pressure restricts the mental resources available to make decisions, people use simplification strategies such as **satisficing** (choosing an acceptable, rather than perfect, answer) and are less likely to consider a problem carefully when under pressure (Klapproth, 2008).[11] It can

Cognitive load

This refers to the amount of mental resource used for an activity.

The resources humans have to process information are finite, which can make it difficult to process simultaneous intensive activities. Simultaneously holding a conversation and considering how to respond to secure cover could be highly taxing mentally. Online forms remove this pressure.


Mental health
Anxiety
Depression
Illegal drug use (ever used)
Other drugs
Performance-enhancing drugs
Ecstasy
Opioids
Hallucinogens
Amphetamines
Cocaine
Cannabis
Tobacco (ever used)
Cigarettes
Other tobacco
0%
10%
20%
30%
40%
50%
60%
Time limit
No time limit

Help with difficult questions

Finally, genuine mistakes resulting from a misunderstanding of questions can also lead to lower disclosure rates. A disadvantage of digital application forms completed alone by the applicant is the lack of interactive support when needed. Often help text can be highly accurate, as it is displays as the insurer intended. However, if an online form lacks suitable help text or other support, applicants may be more likely to make genuine mistakes.

Advisers and insurance company representatives have a high capacity for being able to explain over the telephone questions for customers who get stuck or misunderstand. However, as indicated earlier, they may be susceptible to paraphrasing the needed clarifying information, leading to help that could result in mis-disclosure.

Our previous research showed that making online questions simpler to process not only improves disclosure rates but also speeds up the application process. What makes questions "simpler," however, is not always obvious, and is sometimes conflated with providing "fewer" questions.

For example, the question "On average, how many alcoholic drinks do you consumer per week?" is more difficult to answer than "On average, how many bottles of beer do you consumer per week?" followed by "On average, how many glasses of wine do you consumer per week?"

Although splitting drink types into sub-categories creates more questions on an application, the net effect is better disclosure. Why? The need for less thought (i.e., calculation) on the part of the applicant. Our research shows that these more precise question types not only improve disclosures but also the speed at which applicants can complete the form, suggesting an easier experience.

Conclusion

As the life insurance industry continues to offer DTC applications, it is increasingly important to understand underwriting disclosure via telephone and online channels from a behavioral science perspective. These DTC methods have different challenges from those associated with adviser-led methods, and an appreciation of the benefits and challenges of existing methods may help strengthen the design of DTC applications in the future.

Life insurance, like many industries, is currently keen to digitize, especially as the COVID-19 pandemic continues to keep the prospect of face-to-face meetings rarer than not. Behavioral science suggests that benefits of a digital application model include the increase in psychological distance between the customer and insurer, which reduces applicant embarrassment. But there are still risks, such as:

- The psychological distance between the customer and insurer reduces emotions such as guilt that dissuade intentional dishonesty
- The focus on speedy and simple user experience pushes users to respond intuitively, which can encourage responding biases such as social desirability
- Customers have more time to consider how to respond in ways that "game" the application process
- Customer embarrassment about disclosing sensitive personal details is not entirely eradicated
- Help can be limited for applicants confused or hindered by difficult questions if explanatory (help) text is poor

We strongly encourage insurers to embrace behavioral science-led approaches to designing applications that could maximize disclosure while mitigating these risks. RGA research has already demonstrated several methods and techniques for digital and paper-based forms that can reduce non-disclosure.

We also encourage insurers to continue to perform controlled testing and to collect data in order to improve the industry's understanding of disclosures through DTC channels. RGA's Behavioral Science team can help to design and test disclosure-maximizing digital and paper-based application forms. Ultimately this will benefit consumers if the industry can offer more accurate prices and better user experiences. ■

Peter Hovard
Lead Behavioral Scientist, RGA UK

References

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