

Innovation: loading the dice on facilitating IVF

March 03, 2023

Insurers urged to take ‘a hard look’ at innovation, as Beazley launches IVF insurance product conceived with insurtech Gaia.

The insurance market “needs to take a pretty hard look at how it does innovation” and ask itself “are we doing enough?” to ensure that insurance is relevant in the future.

This was the view of George Beattie, head of incubation underwriting at Beazley, as he discussed the launch of the firm’s innovative in-vitro fertilisation (IVF) insurance product in a video interview

for *intelligentinsurer.com*. Developed in partnership with

insurtech *Gaia*, the product aims to introduce greater predictability into the fertility process and clarify the options for people considering treatment.

Beattie took a risk himself in backing what he describes as a “wild card” product, but said that Gaia had “exceeded my expectations”.

“More insurers need to be a lot more aggressive as an industry about practical innovation, about new products, targeting new risks in new ways and being prepared to put our money where our mouth is,” he said.

“Failure to address this issue will constitute a sure-fire route to redundancy if insurance companies don’t start to sell the products that people and companies need.”

IVF breakthrough

Explaining the inspiration for the new IVF insurtech Beattie said: “For many people IVF is a very confusing topic. It’s hard to know what and

how much treatment you should have, and what to spend on it.

“It’s financially, physically, and mentally one of the most difficult things a person or a couple can do.”

Insurtech Gaia can alleviate these problems in three ways. First, it enables people to finance their IVF treatment across as many rounds as they need with monthly instalments. This negates the need to save up and pay for their treatment in lump sums, which can be a barrier for some people. Gaia’s finance option means they can start their treatment immediately.

“As long as they can afford the finance payments after having a baby they are good to go, which is extremely exciting for many people,” Beattie said.

Second, the insurtech uses a statistical model to help predict the probability of success of an IVF programme. It analyses variables including things such as egg donor and sperm donor age and from this extrapolates the chances of success over the course of an IVF programme, which is made up of a number of rounds of IVF.

Third, Gaia offers a community where people can connect with others undergoing the treatment and with medical professionals, which provides another layer of support.

“People who take up the insurance component with Gaia and go on to have a baby as a result of the IVF programme will pay the pre-agreed finance each month. Anyone who does not have a baby as a result of the IVF programme will pay nothing except the insurance premiums,” Beattie explained.

Behind this seemingly simple product is a range of smart modelling, process design and product crafting, he said, adding: “The product is designed to be interpreted by non-specialists. There’s no Shakespearean language, it doesn’t look like a normal insurance product—it is designed to be picked up by the public and understood very quickly.”

Infertility is a complex issue and anyone who has considered IVF may have been disheartened by what may appear to be low success rates depending on their age and other variables. In 2019, IVF success rates in the UK published by the National Health Service ranged from 32 percent for women under 35 to 4 percent for women aged over 44.

Many people base their plans on doing just one or two rounds of IVF, but there is a way to boost the probability of success, Beattie said.

“The thing about probability and IVF, on the basis that Gaia estimates it, is that an IVF programme will be formed of up to six rounds depending on what you want to take on. As you go through those rounds, it’s a compounding learning experience for the clinic, so you’re not rolling the dice fresh each time.

“The dice are being loaded in your favour every consecutive round you have because between the rounds they’re learning about what medicine to give you, about what works for you, what doesn’t, and the causes of failure.

“So the probability for many people can be upwards of 75 or 80 percent across a programme, which is a lot higher than you might think,” he added.

Backing a wild card

Beazley’s decision to back Gaia could, to some, look like a long shot. But Beattie explained: “My role is to push the boundary of insurable risk out to encompass things that are causing pain to modern insurance buyers, and to crack problems that others haven’t been able to.”

Entities such as Gaia know everything about their market, said Beattie, but very little about insurance. This is great, he added, because Beazley can bring that piece to the table.

He first saw the insurtech startup in the Lloyd’s Lab. “As co-chair of the product launch pad at Lloyd’s I championed Gaia to be included as a wild card, meaning a company that doesn’t fit within the Lab’s theme.

“They exceeded my expectations. They had absolute passion, laser-like focus on the sector and a very good ethical position on trying to help people,” he recalled.

As to the potential market growth for a product like this, Beattie pointed to declining fertility rates in many countries and increasing take-up of IVF treatments.

Between 1950 and 2017 the global fertility rate dropped from 4.7 to 2.4, according to a study by the Institute for Health Metrics and Evaluation (IHME) at the University of Washington, published in 2018 in *The Lancet*. The same study projected the rate will drop to 1.7 by 2100.

Further research by IHME, published in *The Lancet* in July 2020, found that 23 nations, including Japan, Italy and Spain, are expected to see their populations halve by the year 2100.

“Societal change and fertility concerns and restrictions are going to drive higher usage of IVF along with the fact that the traditional sense of the nuclear family is now changing. People can do IVF as a single individual—there are any number of ways that you can pursue this,” Beattie said.

“Essentially, IVF is opening up what it means to have children for a far broader range of people than the natural process was able to deliver. That means it is going to increase pretty exponentially in terms of how important it is to society. In the future IVF may be the norm,” he concluded.

Beazley, Gaia, Partnership, Technology, IVF, Risk Management, Insurance, Reinsurance, George Beattie, London, UK

This article was featured in [Intelligent Insurer](#).

