## Peter Perfect's Pandemic Protection Policy

Peter Perfect was an actuary's actuary. For him, two plus two was always four. Not three. Not five. Not even anything between 3.999 and 4.001. Exactly four and only four. When Peter was taking actuarial examinations, he received the top score of ten on each one. With this background, it was not surprising that Peter's risk management skills were the envy of the entire profession. His employer, Pacific Pinnacle Insurance (PPI), was delighted to have him as their chief product development actuary.

But, it is now June, 2022, and the PPI executives have provided Peter with a new and exciting challenge – pandemic protection insurance. Back in 2020 when the COVID-19 crisis hit, the PPI management team learned that they had some unhappy policyholders. There were retirees who had purchased travel insurance, but then had to cancel their trips because of the pandemic. When they tried to collect on the travel insurance policy, they were not happy to learn of the "pandemic exception" in the fine print. Also, there were company managers who had purchased business interruption insurance. These policyholders were equally unhappy to learn of the "pandemic exception" clause as part of the fine print with their policies. (It raises a question: Does any prospective policyholder actually READ the fine print?)

Given the unhappiness of these policyholders, the executive team at Pacific Pinnacle Insurance decided to approach Peter about developing policies that could be written without the pandemic exclusion. They could easily see that these policies would quickly become the market leaders. Yes, they would be more expensive than the traditional policies that would still have a pandemic exclusion, but given the high level of pandemic fear following the COVID-19 crisis, they felt that the policies would sell like hotcakes. You could just see their eyes glowing brightly as they rubbed their hands together. And, Peter Perfect, not one to shy away from a challenge, leapt at the opportunity to create these exciting new policies.

Peter started the process by learning as much as he could about the COVID-19 crisis. The lessons learned here would certainly impact any potential pandemic in the future. First, Peter noted the record time for the development of the COVID-19 vaccine. He was particularly excited to see that it was developed with genetic coding, and not a reduced strain of the actual virus. Because of this change in vaccine development, Peter reasonably concluded that significant improvements in vaccine development will be achieved if a new pandemic-like situation presents itself in the future. Based on the knowledge gained this first go round, new vaccines could be developed in a much shorter time frame. It would not be unreasonable to see a highly effective vaccine emerge within two months of the pandemic's original outbreak.

Peter also noted that with knowledge gained from 2020 pandemic, vaccine production could be ramped up many fold. Given the new vaccine development technology, it would be far easier to loop in many more actual vaccine production facilities. Sufficient vaccine to provide herd immunity could now be produced in as little as five weeks. And lastly, improved vaccine delivery methods would also emerge

quickly. In particular, the possibility of an oral delivery system could reduce the time needed to provide country-wide protection considerably.

Given these greatly reduced time frames, Peter began to conclude that the elimination of the pandemic exception might be a very real possibility. After all, during the 2020 pandemic some businesses (and individuals) suffered much more than others. The financial consequences did not impact everyone equally. Given the basic nature of insurance to spread the risk, those individuals and businesses who suffered losses would be far less than the entire pool of policyholders. Also, by building in reasonable, but manageable, deductibles and co-insurance, Peter began to see a clear path to the goal of eliminating the "pandemic exclusion" from a variety of policies. Yes, the policies would be more expensive, but given the recent COVID-19 tragic financial consequences, the extra cost would seem to be a very prudent expense. Clearly this would be a huge breakthrough. Only a little more tweaking, and some careful modelling, and the new policies would be ready to bring to the market. The PPI executives were, of course, absolutely delighted. Peter Perfect had come through one more time. His string of fantastic accomplishments was left firmly intact.

On the way home from the office after all of these wonderful developments, Peter (who was a bachelor at the time) saw a beautiful princess, Princess Polly Anna, who had been lulled into a deep sleep after eating a poisoned apple. Peter, handsome actuary that he was, approached the princess to give her a gentle kiss the cheek. (Careful readers will notice that this portion of the story reflects the usual actuarial style!). She awoke from her deep sleep, and smiled brightly at Peter Perfect.

They were soon married, and lived happily ever after. Peter Perfect and Princess Polly Anna in their Park Avenue penthouse.

The End