2021

# Annual Report

trupanion™

Medical insurance for the life of your pet.

# To Our Shareholders

Based on our key financial metrics, 2021 was a particularly strong year.

Total revenue grew 39% over the prior year to $699.0 million. Adjusted operating income grew 37% year-over-year to $78.5 million. We deployed $69.0 million of these funds within our subscription business at an estimated internal rate of return of 36%.

Grounded on our internal assessment of actual results, and without speculating on the potential newer initiatives, the per share intrinsic value of our company grew 41.4%. After sharing 1.5% of this outsized growth with the team, our calculation (if correct), would have your intrinsic value per share growing 39.9% over the last 12 months.

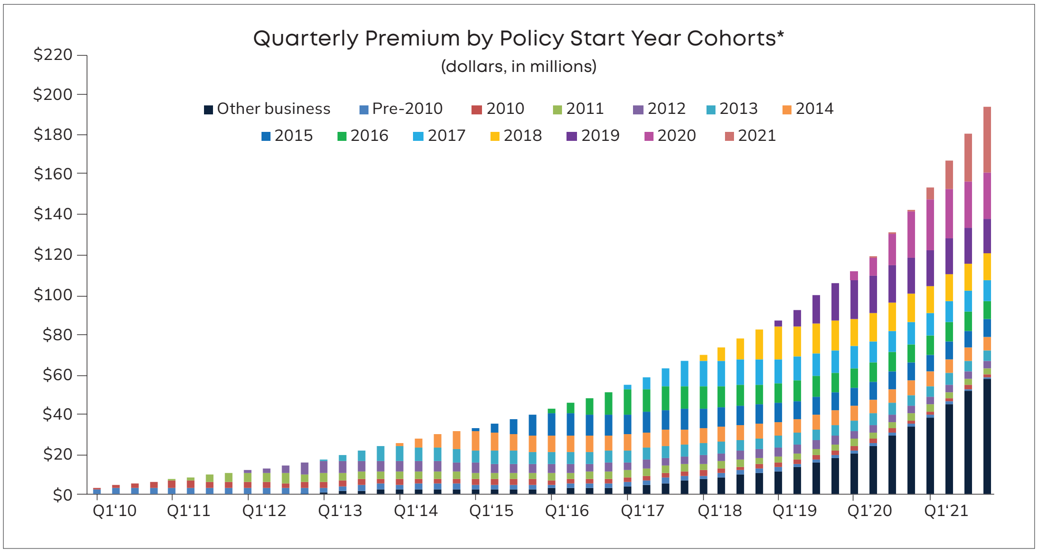
**Table 1.** Key Metrics

| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|---|---|---|---|
| **Revenue** | $115.9M | $147.0M | $188.2M | $242.7M | $304.0M | $383.9M | $502.0M | $699.0M |
| **YoY change** | 38% | 27% | 28% | 29% | 25% | 26% | 31% | 39% |
| **Adjusted operating income** | $900K | $3.6M | $14.8M | $23.4M | $31.9M | $44.2M | $57.1M | $78.5M |
| **YoY change** | N/A | 300% | 311% | 58% | 36% | 39% | 29% | 37% |
| **Pet acquisition spend** | $11.1M | $14.8M | $14.7M | $18.4M | $23.7M | $33.3M | $45.1M | $69.5M |
| **YoY change** | N/A | 33% | -1% | 25% | 29% | 41% | 35% | 54% |
| **Development costs** | N/A | N/A | N/A | N/A | N/A | N/A | $0.3M | $3.7M |
| **Subscription internal rate of return (IRR)** | N/A | N/A | 33% | 43% | 46% | 40% | 41% | 36% |
| **Free cash flow** | ($16.4M) | ($15.3M) | $3.1M | $6.5M | $8.3M | $10.8M | $14.1M | ($4.9M) |

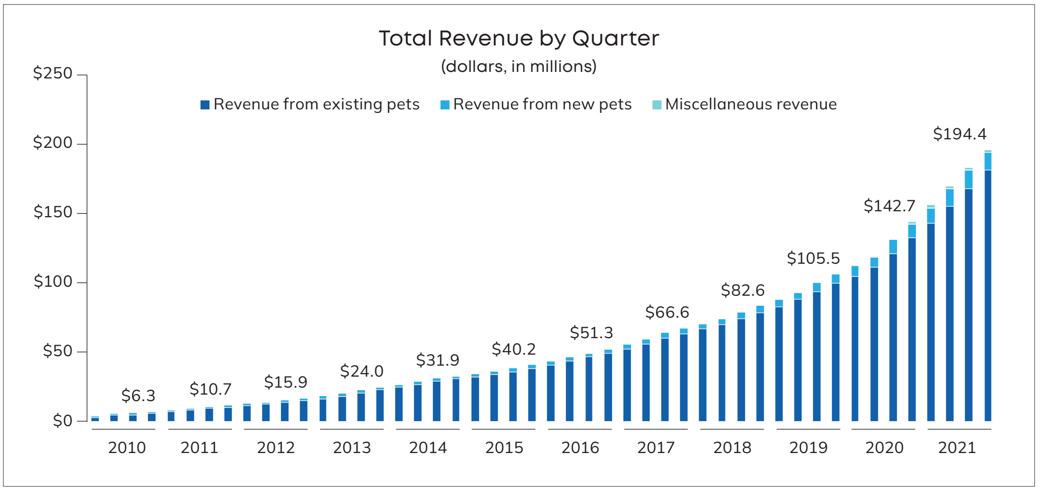
Of the $78.5 million in adjusted operating income generated in 2021, we spent approximately $69.5 million acquiring pets, $12.4 million funding capital expenditures and $3.7 million on strategic investments. Taking into account $2.5 million in other miscellaneous sources and uses of cash, we had a free cash flow deficit of $(4.9) million.

**Table 2.** Reconciliation of Adjusted Operating Income to Free Cash Flow

| | 2020 | 2021 |
|---|---|---|
| **Adjusted operating income** | 57.1M | 78.5M |
| **Pet acquisition spend** | (45.0M) | (69.5M) |
| **Changes in operating assets and liabilities** | 11.2M | 4.7M |
| **Purchases of property and equipment** | (7.5M) | (12.4M) |
| **Development expenses** | (0.3M) | (3.7M) |
| **Other, net** | (1.4M) | (2.5M) |
| **Free cash flow** | 14.1M | (4.9M) |




*Excludes miscellaneous revenue.



## Our 60-Month Plan.

Our goal in our 60-month plan (which we published in last year's letter and spans from January 2021 to December 2025), is to grow our intrinsic value per share by 25% per year. As a large shareholder of the company, I would expect at least a 20% year-over-year rate of return. Based on the size of our addressable market and our business model, I would be disappointed if we achieved anything less than 15% growth in a given year. Any year that we hit 25% or higher—like the one we just had—I am thrilled!

By the metrics, our 60-month plan is off to a very promising start. While our 2021 metrics highlight strong performance in areas that have a meaningful impact in both the short and longer term, they do not tell the whole story. Our 60-month plan has many new initiatives, moat building, and overall strategies that don't readily show up in our short-term financial metrics. In these areas, while we are making progress, our results were mixed, and I'll share this year's scorecard with you later in this letter.

Collectively, these efforts help lay the foundation for us to deliver against our goal of 25% growth in intrinsic value per share over the duration of the 60-month plan. At the time of writing this letter, we have 44 months to go, and Trupanion's President, Margi Tooth, is responsible for the execution of the plan, and the oversight of our team of over 1,400 mission-driven individuals now spanning multiple continents.

## The Importance Of Adjusted Operating Income.

The single most important period-over-period financial metric that I look at is our Adjusted Operating Income. Adjusted Operating Income (AOI)—a non-GAAP measure—is a financial metric that we use to manage the business. It represents the funds generated from our existing pets before we spend money to acquire new pets or invest in new initiatives.

In our 2019 Shareholder Letter, you'll recall our discounted cash flow (DCF) analysis, which included a 15 year forecast of the total cash generated from our subscription pets. For your reference, I've included the original table on the next page. At the time, we forecasted total cash from our subscription pets of $61.7 million in 2021. As you'll see, compared to our actual result of $65.3 million, we are ahead of where we expected we would be.

Building out that same internal discounted cash flow model, by updating for our actual results, we believe the year-over-year increase in our intrinsic value per share was 41.4% in 2021. Note that the year-over-year increase in our AOI was 37.4%, a very similar growth rate to that which was calculated from our discounted cash flow model. This correlation is why I believe our AOI is the leading indicator of the value we create each year, assuming our internal rate of return (IRR) for new pet acquisition remains consistent.

At Trupanion, we want to maximize value creation, while at the same time making it easy for all of our constituents to track our progress in a very transparent way.

**Table 3.** Discounted Cash Flow Model Inputs 1.1 From 2019 Shareholder Letter

| | Monthly cash generated from the average subscription pet | Total pet months | Total cash generated subscription pets |
|---|---|---|---|
| 2018 Actual | $5.74 | 4.8M | $27.8M |
| 2019 Actual | $6.85 | 5.5M | $38.2M |
| 2020 | $7.78 | 6.4M | ~~$49.9M~~ $50.2M |
| 2021 | $8.47 | 7.2M | ~~$61.7M~~ $65.3M |
| 2022 | $9.18 | 8.2M | $75.6M |
| 2023 | $9.81 | 9.3M | $91.3M |
| 2024 | $10.32 | 10.4M | $108.1M |
| 2025 | $10.86 | 11.7M | $127.9M |
| 2026 | $11.43 | 13.2M | $151.2M |
| 2027 | $12.04 | 14.8M | $178.8M |
| 2028 | $12.68 | 16.6M | $211.4M |
| 2029 | $13.37 | 18.7M | $250.1M |
| 2030 | $14.09 | 20.9M | $295.9M |
| 2031 | $14.86 | 23.5M | $350.1M |
| 2032 | $15.67 | 26.4M | $414.4M |

For many companies that are constantly re-investing in growth, it is difficult for an existing or potential investor to determine what the cash flows would be if, instead, that company were being optimized to pay dividends.

### Take Amazon for example...

In the early years, many investors overlooked Amazon; for the less informed that was understandable, but it was also a mistake. Amazon was building and growing very rapidly (still is), all the while being very mindful of their cash. Some critics said they "would never be profitable," or "Amazon.toast." To that, Jeff Bezos said during a 2012 interview, "Nobody has to fail for Amazon to do well."

In 2004, with nearly $7 billion in revenue, Amazon had 410M outstanding shares, equating to revenue per share of $16.83. Many companies that grow primarily through acquisitions, or that consume a great deal of cash to grow, may see revenue growth of 30%, 50% or even 100% over a period of time, but often do not see corresponding expansion in their per share metrics.

Amazon had discretionary profits for many years, but they clearly re-invested those discretionary profits very effectively. This is evident when you consider Amazon's revenue per share, which between 2004 and 2017, grew at a compounded annual growth rate of 25% to approximately $368.00 per share. Amazing...

**Table 4**. Amazon Financial Metrics*

| | Outstanding shares | Annual revenue | Revenue per share |
|---|---|---|---|
| 1997 | 287M | $148M | $0.52 |
| 2004 | 410M | $6.9B | $16.83 |
| 2017 | 484M | $178B | $367.77 |

* Note this chart was inserted by Darryl after a quick Internet search (i.e. don't get mad at me if these numbers are not perfectly accurate—it is illustrative at best).

We break out our adjusted operating income—and more importantly our adjusted operating income per share—to show the cash flow we could afford to pay out in dividends, if unlike today, we were to not re-invest our discretionary income to acquire new pets.

**Table 5.** Key Financial Metrics on a Per Share Basis

| | Total share count plus options and warrants granted** | Revenue per share | YoY growth | Adjusted operating income per share | YoY growth | Cash, short-term investments, our building assets, minus debt per share | YoY growth | Earnings (loss) per share* |
|---|---|---|---|---|---|---|---|---|
| **2012** | 22,467,205 | $2.47 | 53% | $0.13 | -7% | $0.23 | -30% | ($9.76) |
| **2013** | 24,889,316 | $3.37 | 36% | $0.17 | 31% | $0.32 | 39% | ($6.23) |
| **2014** | 33,813,736 | $3.43 | 2% | $0.03 | -82% | $1.79 | 459% | ($1.64) |
| **2015** | 34,138,237 | $4.31 | 26% | $0.11 | 267% | $1.27 | -29% | ($0.62) |
| **2016** | 34,879,610 | $5.40 | 25% | $0.42 | 282% | $1.40 | 10% | ($0.24) |
| **2017** | 35,444,460 | $6.85 | 27% | $0.66 | 57% | $1.53 | 9% | ($0.05) |
| **2018** | 37,862,667 | $8.03 | 17% | $0.85 | 28% | $3.56 | 133% | ($0.03) |
| **2019** | 37,951,839 | $10.12 | 26% | $1.16 | 37% | $3.67 | 3% | ($0.05) |
| **2020** | 42,358,814 | $11.85 | 17% | $1.35 | 16% | $7.03 | 91% | ($0.16) |
| **2021** | 42,842,831 | $16.32 | 38% | $1.83 | 36% | $6.72 | -4% | ($0.89) |

* Earnings / loss per share is calculated using the GAAP basic weighted-average shares at year end.

** Share count includes outstanding shares plus unexercised options and unvested restricted stock, as well as shares granted in subsequent years pertaining to the year's performance. In addition, total outstanding shares increased by 3,636,364 shares in 2020 due to Aflac's common stock purchase.

### Value creation through investment and moat building.

I recognize that it can be difficult to track value creation when a company is re-investing in growth. So let me walk you through a simplified modeling exercise that builds on the principle of value creation through investment and moat building.

**SCENARIO #1:**

Valuing the Return on a Loan

Valuing the return on a loan is simple. Since it's spring, let's assume your neighbor wants to buy a mobile hot dog stand. Your neighbor wants to build brand equity within her community and will set up shop near local workplaces, high school sporting events, music venues, farmers markets and more! You think this is an interesting idea and lend her the amount that it will cost to purchase—$10,000. She agrees to pay you 2.5%, or $250 per year in interest, for the next 10 years. In this scenario, you could easily calculate the rate of return.

**Table 6.** IRR Analysis: Valuing the Return on a Loan

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Loan investment** | ($10K) | | | | | | | | | | |
| **Year** | - | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| **Annual payback** | - | $250 | $250 | $250 | $250 | $250 | $250 | $250 | $250 | $250 | $10.25K |
| | | | | | | | | | | **IRR** | **3%** |

**SCENARIO #2:**

## Valuing a Business

Valuing a business becomes a little more complicated as you need to create a discounted cash flow model, but the principle is the same. As an owner you must determine how much cash you expect to get back each year for some period of time in the future (say 10, 15 or 20 years), what is the likelihood that your prediction will be correct (discount rate), and what if anything will the company be worth at the end of the period of time if you were to sell it at a fair price (terminal value).

Imagine if instead of loaning your neighbor the money, you decide to become an entrepreneur and purchase the stand yourself for $10,000. You figure that the stand nets $2,500 in profit. To determine if $10,000 is a worthwhile investment, you assume the hot dog stand would net $2,500 (pre-tax) in profit, every year for the next 10 years. After 10 years you intend to sell the business to your manager for $10,000, the original cost of the business. Therefore, the discounted cash flow shows that you pay $10,000 for a hot dog stand that is worth approximately $19,000 based on its cash flows. You calculate that it is an attractive internal rate of return of 25%.

**Table 7.** IRR Analysis: Valuing a Business Using a Discounted Cash Flow Model

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Purchase price** | ($10K) | | | | | | | | | | |
| **Year** | - | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| **Net profit, pre-tax** | - | $2.5K | $2.5K | $2.5K | $2.5K | $2.5K | $2.5K | $2.5K | $2.5K | $2.5K | $12.5K |
| **Discount rate** | 10% | | | | | | | | | | |
| | | | | | | | | | | **Present value of cash flows** | $19.2K |
| | | | | | | | | | | **Terminal year value** | - |
| | | | | | | | | | | **Enterprise value** | $19.2K |
| | | | | | | | | | | **IRR** | 25% |

**SCENARIO #3:**

## Valuing a Company that is Re-investing its Profits

In contrast to scenario #2, where you simply purchased an ongoing business with a finite life, you decide to be more ambitious. To create more value you might choose to build a hot dog stand empire rather than operate just a single hot dog stand. With the business and brand equity of the first stand established, you're able to open additional mobile hot dog stands in neighboring communities at the marginal cost of the equipment at ~$2,500. Each stand delivers $2,500 in pre-tax profits.

Every year, you take the pre-tax profits, and invest in expanding the number of locations using the same micro-community strategy for 10 years. At the end of 10 years, you are no longer investing in growth, and instead, you receive a stream of cash flow from your hot dog stand empire. Once again, you can calculate the internal rate of return on your future stream of cash flows.

**Table 8.** IRR analysis: Valuing a Company that is Re-Investing its Profits

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Purchase price** | ($10K) | | | | | | | | | | |
| **Year** | - | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| **Number of stands (beg)** | | 1 | 2 | 4 | 8 | 16 | 32 | 64 | 128 | 256 | 512 |
| **Net profit, pre-investment** | - | $2.5K | $5K | $10K | $20K | $40K | $80K | $160K | $320K | $640K | $1.28M |
| **Net profit, re-invested** | - | ($2.5K) | ($5K) | ($10K) | ($20K) | ($40K) | ($80K) | ($160K) | ($320K) | ($640K) | - |
| **Annual profit (net)** | - | - | - | - | - | - | - | - | - | - | $1.28M |
| **Discount rate** | 10% | | | | | | | | | | |

| | |
|---|---|
| **Present value of cash flows** | $0.5M |
| **Terminal year value** | $4.9M |
| **Enterprise value** | $5.4M |
| **IRR** | **88%** |

**SCENARIO #4:**

## Valuing a Company that is Re-Investing its Profits and Building Moats

Next, you will create some moats. You want to become the low cost operator (does this sound familiar?) You'll do so by reducing one of your biggest expenses, the hot dog buns! But you also know the bun is the secret sauce, the way to truly differentiate your hot dogs from the competition. So, you make your own buns, and in doing so, drive your costs down from $0.50 per bun to $0.25 per bun and pass on the savings to your customers by way of lower prices.

Next, you move to the hot dog. You strike a partnership with Sabrett Natural Casing Beef Frankfurters—the best hot dog manufacturer around—and become their regional distributor. As part of the deal, you will heavily brand the frankfurter on your mobile stands, increasing their retail demand. More importantly, you can now buy their hot dogs at a fraction of the prior cost and once again, return these savings back to the customer. With the best buns and best hot dogs at the best value, your business is considerably more compelling.

You hire good people, and treat them well. As a result, they treat your customers well and lines at your hot dog stands are long. You now sell the best hot dog around, for considerably less than anyone, all while making a reasonable margin. You have built a business that is durable, scalable, and therefore valuable. As a result, you increase the likelihood of your success (lowering your discount rate) and increase the value of your company (your terminal value).

**Table 9**. IRR analysis: Valuing a Company With Moats

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Purchase price** | ($10K) | | | | | | | | | | |
| **Year** | - | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| **Number of stands (beg)** | - | 1 | 2 | 4 | 8 | 16 | 32 | 64 | 128 | 256 | 512 |
| **Net profit, pre-investment** | - | $2.5K | $5K | $10K | $20K | $40K | $80K | $160K | $320K | $640K | $1.28M |
| **Net profit, re-invested** | - | ($2.5K) | ($5K) | ($10K) | ($20K) | ($40K) | ($80K) | ($160K) | ($320K) | ($640K) | - |
| **Annual profit (net)** | - | - | - | - | - | - | - | - | - | - | $1.28M |
| **Discount rate** | 8% | | | | | | | | | | |

| | |
|---|---|
| **Present value of cash flows** | $0.6M |
| **Terminal year value** | $7.4M |
| **Enterprise value** | $8.0M |
| **IRR** | **95%** |

### Cash is cash.

Some people think that a company that operates in one industry should have a different valuation than a company that operates in a different industry (say, hot dog vs. software vs. pharmaceutical). I say if they produce the same amount of cash, with the same amount of risk and with the same enterprise value, the hot dog, software, or pharmaceutical company's value should be the same.

## Ok, let's apply this to Trupanion.

What is intuitive to some is not intuitive to all, particularly when it comes to math.

In 2021, Trupanion had approximately $700 million in revenue and approximately $78 million in adjusted operating income. We'll look at 3 scenarios, each of which will assume adjusted operating income grows 25% year-over-year, but with varying levels of revenue growth. In scenario 1, let's assume that revenue grows approximately 20%. In scenario 2, we'll assume revenue grows in-line with AOI at 25%. In scenario 3, we'll assume revenue growth outpaces AOI growth at 30%. In each of these scenarios, AOI is $98 million (up 25% year-over-year). See table below:

**Table 10.** Revenue and AOI Comparison

| | 2021 | Scenario 1 | Scenario 2 | Scenario 3 |
|---|---|---|---|---|
| **Revenue** | $700M | $840M | $875M | $910M |
| **Adjusted Operating Income** | $78M | $98M | $98M | $98M |

**Q:** Using a discounted cash flow model, which scenario will drive the highest year-over-year increase in the value of Trupanion?

a. Scenario 1
b. Scenario 2
c. Scenario 3
d. They are equal

**A:** The answer is d, they are equal. Revenue is not a factor in a discounted cash flow model. Revenue is not cash flow. Our adjusted operating income are the funds that we generate from our existing pets. In each scenario, the funds generated grew 25%, so the value of the company would also grow 25%.

Now let's add in the deployment of capital at varying rates of return. We'll assume AOI is the same at $98 million, as is the amount of capital deployed at $80 million.

**Table 11.** Revenue, AOI + Deployed Capital at Varying IRR's

| | 2021 | Scenario 1 | Scenario 2 | Scenario 3 |
|---|---|---|---|---|
| **Revenue** | $700M | $840M | $875M | $910M |
| **Adjusted Operating Income** | $78M | $98M | $98M | $98M |
| **Capital deployed for growth** | $69M | $80M | $80M | $80M |
| **IRR on capital deployed** | 35% | 30% | 35% | 40% |

**Q:** Which IRR would drive the highest year-over-year increase in the value of Trupanion?

a. Scenario 1
b. Scenario 2
c. Scenario 3
d. They are equal

**A:** The answer is c, scenario 3, as it provides the highest internal rate of return on the $80 million invested. Note that it does not matter if there was 100K pets enrolled, 200K pets enrolled or 300K pets enrolled for the $80 million—what matters is the IRR. If the IRR remained constant year-over-year, intrinsic value would increase by 25%, or at the same rate of growth as AOI. If, like in the scenario above, the IRR were to increase from 35% to 40% year-over-year, intrinsic value would increase in excess of 25%.

My last example adds the value proposition to the pet owner.

Let's assume that AOI and IRR are constant across the 3 scenarios and, instead, evaluate the impact of different loss ratios (the % of revenue that is spent paying veterinary invoices).

**Table 12.** Revenue, AOI, IRR + Loss ratios

| | 2021 | Scenario 1 | Scenario 2 | Scenario 3 |
|---|---|---|---|---|
| **Revenue** | $700M | $875M | $875M | $875M |
| **Adjusted Operating Income** | $78M | $94M | $94M | $94M |
| **Capital deployed for growth** | $69M | $80M | $80M | $80M |
| **IRR on capital deployed** | 35% | 35% | 35% | 35% |
| **Loss ratio** | 70% | 70% | 71% | 72% |

**Q:** In this last example, which scenario would provide the highest year-over-year increase in the value of Trupanion?

a. Scenario 1
b. Scenario 2
c. Scenario 3
d. They are equal

**A:** The higher the value proposition is for the pet owner, the more difficult it is for others to compete. The answer is c, scenario 3, but as the loss ratio increased in both scenario 2 and 3, they would both have a positive impact on the intrinsic value of the company. If a company is vertically integrated and a low cost operator, the likelihood of future success or durability of the company increases. In a DCF model that would mean the lowering of a discount rate and, therefore, a corresponding increase in value.

Using a discounted cash flow model for valuation is, in my opinion, the gold standard.

## Our Subscription Business.

You've heard me say this before, but it is worth repeating: the vast majority of Trupanion's intrinsic value is derived from our core subscription business.

Of our $78.5 million of adjusted operating income in 2021, 90% or $71.0 million, was generated from our subscription business. We ended the year with over 704,000 total enrolled subscription pets. During the year, we earned subscription revenue of approximately $494.9 million. Of this, we spent approximately $351.9 million paying veterinary invoices on behalf of our members, $48.6 million providing 24/7 support, and $23.4 million on fixed expenses.

**Table 13.** 2021 Business Segment Performance

| | Sub | Other | Total | Sub | Other | Total |
|---|---|---|---|---|---|---|
| **Revenue** | 100% | 100% | 100% | $494.9M | $204.1M | $699.0M |
| **Less: paying veterinary invoices (COGS)** | 71% | 63% | 69% | $351.9M | $129.6M | $481.5M |
| **Less: variable expenses (fast 24/7 service)** | 10% | 28% | 15% | $48.6M | $57.4M | $106.0M |
| **Less: fixed expenses (G&A + IT)** | 5% | 5% | 5% | $23.4M | $9.7M | $33.0M |
| **= Adjusted operating margin / income** | 14% | 4% | 11% | $71.0M | $7.5M | $78.5M |

Below is our monthly per-pet economics, or cash flow prior to new pet acquisition, for our average subscription pet in 2021.

**Table 14.** Per Pet Monthly Economics

| | 2020 | | 2021 | |
|---|---|---|---|---|
| **Average monthly cost (ARPU)** | $60.37 | 100.0% | $63.56 | 100.0% |
| **Less: paying veterinary invoices** | ($43.26) | 71.7% | ($45.27) | 71.2% |
| **Less: variable expenses** | ($5.51) | 9.1% | ($6.25) | 9.8% |
| **= contribution profit** | $11.60 | 19.2% | $12.04 | 18.9% |
| **Less: fixed expenses** | ($3.17) | 5.3% | ($3.01) | 4.7% |
| **= profit per pet per month** | $8.43 | 13.9% | $9.03 | 14.2% |
| **Less: capital charge requirement** | ($0.60) | 1.0% | ($0.64) | 1.0% |
| **= cash generated per month for the average pet** | $7.83 | 13.0% | $8.39 | 13.2% |

In total, we added approximately 223,000 new subscription pets in 2021, or year-over-year growth of 35%. Net pets, accounting for churn, increased 51% in the year.

**Table 15.** Pet Growth 2018-2021

| | Gross New Pets | YoY Growth | Churn | Net New Pets | YoY Growth |
|---|---|---|---|---|---|
| **2018** | 126,182 | 20% | (67,095) | 59,087 | 22% |
| **2019** | 141,283 | 12% | (78,027) | 63,256 | 7% |
| **2020** | 165,738 | 17% | (81,807) | 83,931 | 33% |
| **2021** | 223,080 | 35% | (96,705) | 126,375 | 51% |

In 2021, we extended the average pet's life within our subscription business to 79 months, up from 78 months in 2020. Retention, as broken down by our three buckets was as follows:

**Table 16.** 2021 Churn By Rate Change*

| | Active pets at year end | Number of cancelled pets | Distribution | Monthly churn | Monthly retention rate | YoY change in monthly retention rate |
|---|---|---|---|---|---|---|
| No rate change | 174,868 | 38.3K | 24.83% | 2.21% | 97.79% | 0.08% |
| Rate Change < 20% | 480,123 | 46.7K | 68.17% | 0.92% | 99.08% | 0.05% |
| Rate Change >= 20% | 49,342 | 11.7K | 7.01% | 1.43% | 98.57% | -0.03% |
| Total | 704,333 | 96.7K | 100% | 1.26% | 98.74% | 0.03% |

*Monthly retention is calculated on a trailing twelve month basis for the period ended December 31, 2021.

Expansion in subscription adjusted operating income, coupled with improved retention, drove a 10% year-over-year increase in lifetime value of a pet. In 2021, lifetime value of a pet was $717—a new all-time high.

**Table 17.** 2021 IRR Calculation

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TTM Retention | 98.74% | Year | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Months | 79.4 | Months | 6 | 12 | 12 | 12 | 12 | 12 | 12 | 1.4 | 79.4 |
| FY PAC | $287 | Profit per pet per month | $9 | $9 | $9 | $9 | $9 | $9 | $9 | $9 | |
| Profit per pet | $9.03 | Profit per pet | $54 | $108 | $108 | $108 | $108 | $108 | $108 | $12 | **$717** |
| Capital charge | 1% | Capital charge | -$4 | -$8 | -$8 | -$8 | -$8 | -$8 | -$8 | -$1 | ($50) |
| FY ARPU | $63.56 | PAC | -$287 | | | | | | | | |
| | | | -$237 | $101 | $101 | $101 | $101 | $101 | $101 | $11 | |
| | | | | | | | | | **IRR** | **36%** | |

Within our targeted internal rates of return, growth in lifetime value of a pet increases our allowable pet acquisition cost (PAC), improving our ability to successfully execute our growth plans. Consider the following:

**Table 18.** Discretionary Funds Available for Acquisition Spend Per Pet

| | | | | | PAC allocation | | | |
|---|---|---|---|---|---|---|---|---|
| | Contribution profit* | Fixed expenses* | Total profit* | PAC | Lead** | Convert** | Retention** | Retention rate |
| 2016 | $631 | $341 | $290 | $123 | 85% | 15% | 0% | 98.60% |
| 2017 | $727 | $318 | $409 | $152 | 75% | 25% | 0% | 98.63% |
| 2018 | $710 | $261 | $449 | $164 | 60% | 40% | 0% | 98.60% |
| 2019 | $753 | $230 | $523 | $212 | 50% | 50% | 0% | 98.58% |
| 2020 | $899 | $246 | $653 | $247 | 50% | 46% | 4% | 98.71% |
| 2021 | $956 | $239 | $717 | $287 | 55% | 41% | 4% | 98.74% |

* Over the life of the average pet.
** Based on internal management estimates.

Pet acquisition remains the primary use of our adjusted operating income. In the last year, we added “development expense”, another use of our AOI, which is spent on longer-term initiatives. These pre-revenue initiatives are aimed at expanding our addressable market, increasing the odds of us growing at higher rates over longer periods of time.

As compared to prior shareholder letters, you’ll see we are now breaking out our addressable market, including the number of countries we are in, and the number of veterinary hospitals that we are calling on in those markets.

**Table 19.** Veterinary Hospital Metrics

| | Number of countries we are in | Number of hospitals in those countries | Number of territory partners and associates | Estimated number of hospitals we are visiting every 60-90 days* | Estimated aggregate number of face-to-face visits | Actual average number of active hospitals | Actual average number of new pets per active hospital per month | Number of hospitals with software** |
|---|---|---|---|---|---|---|---|---|
| **2012** | 2 | 25K | 34 | 15K | 262K | 5,034 | 0.918 | n/a |
| **2013** | 2 | 25K | 40 | 16K | 324K | 5,531 | 1.008 | n/a |
| **2014** | 2 | 25K | 58 | 15K | 404K | 6,098 | 1.053 | n/a |
| **2015** | 2 | 25K | 84 | 19K | 490K | 7,359 | 1.093 | n/a |
| **2016** | 2 | 25K | 105 | 21K | 577K | 7,875 | 1.066 | n/a |
| **2017** | 2 | 25K | 107 | 20K | 662K | 8,242 | 1.063 | n/a |
| **2018** | 2 | 25K | 123 | 20K | 751K | 9,279 | 1.133 | 3,184 |
| **2019** | 3 | 28K | 130 | 22K | 852K | 10,315 | 1.141 | 4,534 |
| **2020** | 3 | 28K | 152 | 17K | 909K | 11,517 | 1.199 | 5,442 |
| **2021** | 3 | 28K | 161 | 17K | 971K | 14,736 | 1.260 | 6,430 |

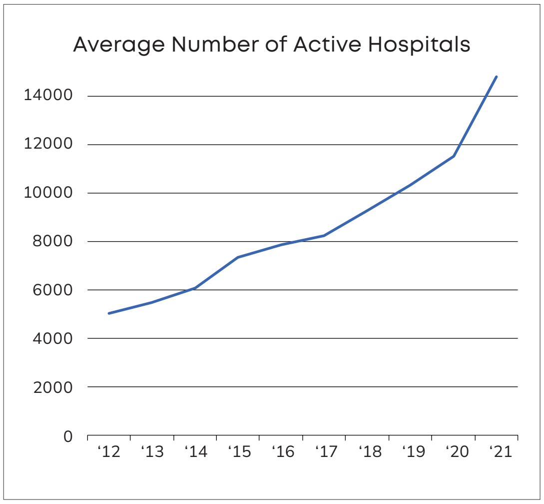
* Per the data available, this represents hospitals that have been visited at least once during the year. Given we don’t have perfect tracking of visits, this is the definition used to approximate visits every 60-90 days.

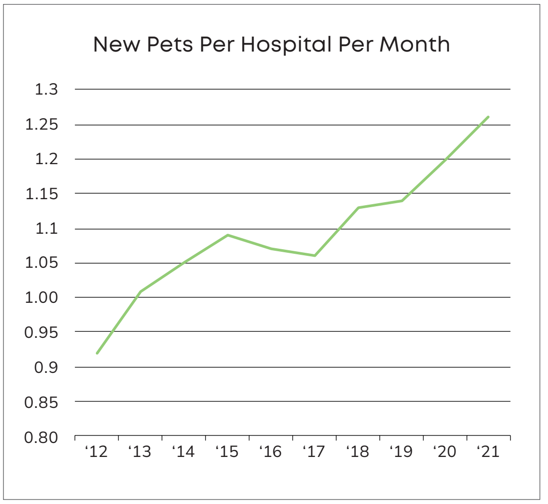
** Prior shareholder letters’ software hospital count were limited to hospitals with account manager coverage.

In 2021, we had 161 territory partners and their associates in the field visiting approximately 17,000 veterinary hospitals out of an estimated 28,000 veterinary hospitals in three countries. Since expanding into Australia in 2019, we’ve been focused on growing same store sales within just a dozen or so of its 3,000 veterinary hospitals.

In 2021, the veterinary community continued to feel the impacts of COVID. COVID disruptions, which forced veterinarians to periodically shut their doors and shift back and forth between traditional and curbside service, combined with persistent labor shortages, challenged face-to-face visits and the deployment of our software. In 2021, face-to-face visits were flat with 2020 and we ended the year with our software in approximately 6,400 veterinary hospitals.

With veterinary doors closed, we engaged with veterinarians through thousands of alternative touch-points, each building on the partnerships and moats developed over decades of visits. Webinars held by Trupanion in 2021 received nearly 4 million impressions, which helped to reinforce our understanding of the veterinary community and the growing presence of our brand within animal health.




In 2021, active hospitals averaged approximately 14,700. As a reminder, we define active hospitals as those that have had at least one pet enroll with Trupanion in the prior three month period. Our same store sales metric increased to 1.26 pets per hospital, per month, from 1.20 pets per hospital, per month, in 2020.

Building our footprint, growing our active hospital base, increasing same store sales, retaining pets and expanding our per pet profit margin are all inputs to our discounted cash flow model. Expansion in these metrics drives more adjusted operating income that we can then deploy at our high internal rates of return, creating intrinsic value.

## Capital allocation at different growth rates.

If executed extremely well, Trupanion's 60-month plan has the potential to drive growth above 25%, and possibly above 30%.

Below is a table that illustrates our funding requirements for new pet acquisition and required regulatory reserves at various growth rates. Using rounded numbers, the table below is a simple summary of our capital requirements.

**Table 20.** Capital Allocation at Different Growth Rates

| YoY revenue growth rate | New pet acquisition | Regulatory capital requirement |
|---|---|---|
| **20% or less** | Self fund if IRR's = 35% | Self fund |
| **21% to 30%** | Self fund if IRR's = 35% | 1. Debt financing or<br>2. Use of re-insurance or<br>3. Equity financing |
| **30% or more** | Equity financing required for growth above 30% assuming a 35% IRR on new pet acquisitions | 1. Debt financing or<br>2. Use of re-insurance or<br>3. Equity financing |

Living within our target margin profile for our subscription business (15% Adjusted Operating Margin and 35% Internal Rate of Return (IRR), when deploying capital to acquire new pets), we can self-fund our business at 20% year-over-year growth.

If growth is between 21% and 30%, we should be able to afford the incremental pet acquisition spend, but we would need a way of funding our capital reserves. To do so, we would prefer to continue to allocate our adjusted operating income to areas where we can earn the highest returns and use a lower cost form of financing like debt to meet our required surplus. In our minds, servicing debt for our required surplus is simply a variable expense needed to offer our product to pet owners.

If we are able to achieve the levels of success in our 60-month plan and grow in excess of 30%, while remaining disciplined in capital allocation (IRR guardrails), the company will need additional capital for new pet acquisition as well as the required insurance capital. Continuing to acquire new pets at these high rates of return is how we create value for our shareholders. Therefore, we are happy to self-fund this growth as well as sell equity from time to time for these pet acquisitions.

Options to fund capital reserves include:

- Raise equity (dilution)
- Use re-insurance to fund capital needs (adds frictional cost)
- Use debt financing (adds frictional cost to service debt)

At the time of writing this letter, we have secured a $150 million debt facility, which we expect will provide us the necessary capital to fund our expected capital reserve requirements for the next several years. Consistent with prior shareholder letters, we approximate the cost to service this debt at <1% of revenue. As noted, this variable expense adds frictional costs by way of servicing the debt, but importantly, allows our discretionary income for uses where we can earn an estimated 30-40% internal rate of return—thus maximizing shareholder value creation!

**A quick side-bar on the history of our regulatory capital requirements, and our expectations for how these requirements will evolve in the future.**

Pets are legally considered "property" in most countries, which is why pet health insurance is supervised by Property and Casualty (P&C) insurance regulators, not health insurance regulators. In the United States, the penetration of medical insurance for cats and dogs is low, and to-date the P&C regulators have inserted our product category into "inland marine," which includes various types of P&C risk. The current capital requirements are approximately 5:1, based on this classification.

We believe the National Association of Insurance Commissioners (NAIC) is aligned in giving pet medical insurance its own category in the future. We estimate this will occur in ~5-10 years. While we don't want to overly speculate, we believe it will result in better leverage than we see today.

If and when this occurs, we would expect to be able to self-fund higher growth rates than we can today.

## In 2021.

At year-end, Trupanion held no debt and our adjusted operating income of $78.5 million funded the majority of our growth and strategic investments, leaving a cash flow deficit of $4.9 million for the year. This deficit, along with our capital reserve requirements of approximately $38.7 million and other uses of cash of approximately $2.9 million, were funded from the $200 million in capital we raised from Aflac in 2020. On a consolidated basis, total cash consumption was approximately $46.4 million in 2021.

Our subscription revenue grew 28% and we operated at a 14% AOI margin (not 15%) with an estimated IRR of 36%. This means that our subscription business consumed capital. In total, it consumed approximately $36.7 million.[1]

[1] Capital consumption for our subscription and other business assumes adjusted operating income and acquisition spend by segment. Capital consumption for our subscription business also includes purchases of property and equipment and development expenses. Regulatory capital requirements as well as other uses of cash are allocated by segment based on revenue.

Our other revenue grew even faster, and with only a 4% AOI margin, consumed approximately \$9.7 million dollars[1]. At an earlier stage in our development, participating in other revenue streams added strategic value, as it helped us gain scale on our expenses and generated cash flow to re-invest in our subscription business.

We share this with you to reinforce the importance of cash flow in value creation. We also want to clearly layout the roadmap for value creation over the next several years and paint a transparent picture of how we intend to fund our growth.

It also ties to our compensation practices, including how we compensate our team members. This is important, because dilution comes at a cost.

Going back to 2021, building out our internal discounted cash flow model that we have shared with you in prior shareholder letters, we believe our year-over-year increase in our intrinsic value per share was 41.4%.

We provided the details of our Intrinsic Value Incentive Plan, which outlines the portion of our annual growth in intrinsic value per share that is shared with the team, in our 2016 Shareholder Letter. You'll notice we didn't initially plan for growth in intrinsic value per share to exceed 30%, but our performance in the past two years, along with an increase in opportunities available to us, has (happily) necessitated an update. The details of our updated approach are highlighted in the table to the right.

41.4% year-over-year growth in intrinsic value per share would equate to 3.8% of value creation to be shared with the team, or approximately 1,143,000 shares; however, with the company's accelerated growth and because the company consumed more capital than it earned in adjusted operating income, the difference was subtracted from the pool size.

**Table 21.** Performance Grant Program

| YoY increase to intrinsic value at the enterprise level | Overall company performance pool % | Net increase in intrinsic value per share |
|---|---|---|
| 1 - 10% | 0.0% | 1 - 10% |
| 11% | 0.3% | 10.7% |
| 12% | 0.3% | 11.7% |
| 13% | 0.4% | 12.6% |
| 14% | 0.4% | 13.6% |
| 15% | 0.5% | 14.5% |
| 16% | 0.6% | 15.4% |
| 17% | 0.7% | 16.3% |
| 18% | 0.8% | 17.2% |
| 19% | 0.9% | 18.1% |
| 20% | 1.0% | 19.0% |
| 21% | 1.1% | 19.9% |
| 22% | 1.3% | 20.7% |
| 23% | 1.4% | 21.6% |
| 24% | 1.6% | 22.4% |
| 25% | 1.7% | 23.3% |
| 26% | 1.9% | 24.1% |
| 27% | 2.0% | 25.0% |
| 28% | 2.2% | 25.8% |
| 29% | 2.3% | 26.7% |
| 30% | 2.5% | 27.5% |
| 31% | 2.6% | 28.4% |
| 32% | 2.7% | 29.3% |
| 33% | 2.8% | 30.2% |
| 34% | 2.9% | 31.1% |
| 35% | 3.0% | 32.0% |
| 36% | 3.1% | 33.0% |
| 37% | 3.2% | 34.0% |
| 38% | 3.3% | 35.0% |
| 39% | 3.4% | 36.0% |
| 40% | 3.5% | 36.5% |
| 45% | 4.0% | 41.0% |
| 50% | 4.5% | 45.5% |
| 60% | 5.5% | 54.5% |
| 70% | 6.5% | 63.5% |

Added to account for outsized company performance

After deducting the excess cash consumption of $46.4 million, the available share pool was reduced to approximately 631,000 shares. This equates to approximately 1.5% of the year-over-year value creation being shared with the team, with the remaining 39.9% benefiting shareholders.

Of the pool of 631,000 shares, approximately 158,000 shares were allocated during the year for new hire grants, individual performance awards and board compensation, leaving approximately 473,000 shares that were issued in 2022 for our performance grant program related to the 2021 year. We believe this is appropriate given the value that the team created in 2021.

## Our pay philosophy is simple.

We want to pay team members the maximum we can afford to pay, living within our guardrails, based on the value that they create. When the aggregate value exceeds 10% year-over-year, and in particular when the value created exceeds 20% year-over-year, more is shared back with the team that drove that outsized performance.

I believe there should be no cap on how much any one team member, or team, can receive, with one exception: the CEO. As the CEO of the company, I believe it is important that my compensation does not exceed an internally defined multiple to the median pay of all employees.

**Table 22**. 2021 Performance Based Grant Pool

| | |
|---|---|
| **Total share pool, pre-cash adjustment** | 1,142,782 |
| **Less: cash burn** | 511,830 |
| **Total share pool, post-cash adjustment** | 630,952 |
| **Less: new-hire and promotion grants** | 114,206 |
| **Less: individuals performance grants** | 32,829 |
| **Less: board compensation grants** | 11,103 |
| **Total performance-based share pool** | 472,814 |

I want to highlight that our stock compensation is an output of over-performance. If the company slowed its year-over-year growth to 10% or below, to become a dividend paying company, there would be no performance stock pool and no material stock-based compensation.

I often get asked about our IRR calculation, and why stock compensation expense is not included. To me, this is mixing the return on our pet acquisition spend with the returns we generate as a company. I agree that any company that pays "regular compensation" with stock should deduct the cost of the stock the same way that they would deduct if they paid it 100% in cash. This is not our compensation model! We pay regular cash compensation for doing an average job, which we define as a year-over-year increase in intrinsic value per share of 10% or less. At times, employees may elect to take monthly bonus in stock, and when they do so, we account for that expense in our per pet IRR calculation for the given period.[2]

Adding share based compensation, which is granted for prior period performance and vests over four years, to our per period PAC would mask the underlying returns we generated on that spend and make period to period comparables irrelevant. Swings in our stock price

[2] Beginning in 2022, we began incorporating monthly bonus elections, and the expense associated with those elections, in our IRR calculation. Previously, the magnitude of expense associated with this election was insignificant.

would be a bigger driver of our IRR than changes in retention, lifetime value, lead volume and conversion—this is wrong! We want to present a clean picture of the efficiency of our deployed PAC spend.

When we compare our year-over-year change in our intrinsic value per share—or the value we create on behalf of our shareholders—it captures 100% of our stock compensation.

## Our Culture.

This brings me to another point I want to reinforce, and that is that I do not expect, nor do I think it would be fair to the team to expect the level of value creation we saw in 2021.

To me, growing intrinsic value per share at 41%, as we did in 2021, is the equivalent of me running on a treadmill at a speed that only a young track star could sustain. As a Peloton fan, I support interval training where we have sprints and inclines for short bursts of times but the instructor always says after a period of great effort, ok turn the red knob to the left, and get some water, because we're just beginning this ride.

My expected speed (progress) for our company is 20% year-over-year growth in our intrinsic value per share. Through 2025, our aspirational goal is to grow our intrinsic value per share by 25%. If we hit this level of progress we should be thrilled, ecstatic, doing back flips! In 2021, we accomplished this level of progress—cue the back flip!

My sense though, as I write this letter, is that the team is not ecstatic. Rather, they feel that 40%+ is the new goal. It is not!

With our business model and large underpenetrated market, I've historically felt that our execution was average. In 2021, as I took a back seat to our execution, it was apparent to me that our execution has moved beyond average. Under the direction of Margi and Tricia, our results were humbling to say the least.

If in March of 2020 a bet was placed on our team's ability to make such monumental progress towards Trutopia and our net pet growth; to align with not one, but two industry leading partners in Aflac and Chewy; and finally, to assimilate our first acquisition with a technology team across the pond, all while doing so without being able to jump on an airplane, many would have lost the bet, including me.

Indeed, since March of 2020 and the beginning of COVID, the company stepped up into a new gear and the team has delivered in heroic ways.

I both love and hate how the team digests our wins and losses. I love the fact that we know we have so much to prove if we are going to win the trust of veterinarians and pet owners around the world. I love the fact that when we wake up in morning we don't celebrate a bump in our stock price when we know that we want to pay more hospitals directly. I love the fact that when we are at our best, we recognize when team members are no longer able to keep up, deliver the growth that we need, or align with our values, and we make the hard decision to move them on. We do this because in our large underpenetrated market, we need to have an evolving team that is capable of making the biggest possible impact on pets, pet owners and veterinarians.

On the flip side, I hate that in a remote work environment, we have not been able to have more group hugs, or bell ringings to celebrate paying over $1.7 billion in veterinary invoices. I hate that we have a hard time acknowledging that, if we did everything in our 60-month plan perfectly, our intrinsic value would grow by 100% per year, but realize that any year that we achieve above 20%, we should be happy and above 25% we should be ecstatic. I hate that when we try something really hard and fail in the early attempts that some people take it personally.

Should we not just be encouraged that we have so many opportunities in a large under-penetrated market that with time, effort and focus, we will get to most of them? It is like our WD-40 mindset is waning in a remote environment.

Team (because I know you all read this!), let's instead take a moment to appreciate our 2021 results. Let's carry on with our plan, and drive towards our 25% year-over-year aspirational growth goal for 2022. And, if after our best effort, we don't hit it, let's try harder in 2023.

With this context, let me provide you with the Company's scorecard for 2021, which Margi and Tricia helped me grade:

**Table 23.** 2021 Annual Score Card

| | |
|---|---|
| **Intrinsic Value** | A+ |
| **Revenue** | A+ |
| **AOM** | B+ |
| **IRR** | A |
| **Retention** | A |
| **Member Experience** | B |
| **Leads** | A |
| **Phone Conversion** | A |
| **Web Conversion** | C- |
| **Additional Insurance Products** | B- |
| **International Expansion** | C+ |
| **New Products** | C |
| **Culture** | B |

## Time Intervals.

Measurement of time is an interesting topic for me. Many companies spend a lot of energy coming up with annual plans or focusing on quarterly results. In my opinion, quarterly and annual results are the two worst measurements of time and performance when it comes to building a company.

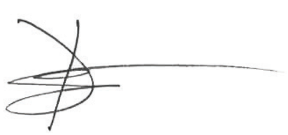
For Trupanion, we are focused on daily metrics, monthly metrics, and our 60-month plan. Our daily metrics drive us towards our goals for the 60th month. We don't change our strategy or plan every year, we simply measure our progress against it and adjust our tactics in order to make sure progress is achieved.

In our case, as a direct-to-consumer, monthly subscription business, it is our monthly metrics and corresponding results which we compete against. That is right, we compete against ourselves. If asked, most team members would admit we often come up short of our aspired plans and goals, but as our history has shown, in aggregate we typically make good progress.

I would characterize our 60-month plan as a medium measurement of time. For me, long-term planning is for 2025 and beyond. For example, we don't need international expansion to be successful during the next few years to achieve our goal of 25% year-over-year growth in intrinsic value per share from 2021 to 2025. Instead, our international growth plans will certainly become more important to us in the next 10 to 15 years. With Margi leading the execution of our 60-month plan, I am spending my efforts and energy on the long-term (10 to 20 years), as well as keeping my pulse on our culture, and monitoring our daily and monthly progress.

Maximizing value creation for our shareholders is not our motivation; helping pet owners' budget and care for their pets is what gets us out of bed. Living up to our mission in a way that is aligned with veterinarians and their staff, our Territory Partners, Trupanion team members, industry partners and shareholders, is how we assess our character. Value creation for our shareholders is what gives us permission to continue to drive towards our destination.

Kuyashii,



**Darryl Rawlings**
Founder & Chief Executive Officer

## END NOTES

This letter and other publicly available reports include certain non-GAAP financial measures. These non-GAAP financial measures may not provide information that is directly comparable to that provided by other companies in its industry as other companies in its industry may calculate or use non-GAAP financial measures differently. In addition, there are limitations in using non-GAAP financial measures because the non-GAAP financial measures are not prepared in accordance with GAAP, may be different from non-GAAP financial measures used by other companies and exclude expenses that may have a material impact on Trupanion's reported financial results. The presentation and utilization of non-GAAP financial measures is not meant to be considered in isolation or as a substitute for the directly comparable financial measures prepared in accordance with GAAP. Trupanion urges its investors to review the reconciliation of its non-GAAP financial measures to the most directly comparable GAAP financial measures in its consolidated financial statements, and not to rely on any single financial or operating measure to evaluate its business. These reconciliations are included within our Supplemental Financial Information provided on Trupanion's Investor Relations website.

Our internal rate of return is calculated assuming the new subscription pets we enroll during the period will behave like an average subscription pet. Cash outflows from an average pet include average pet acquisition cost for the applicable period. Cash outflows also include a monthly capital charge, which we estimate as 1% of the monthly average revenue per pet for the four quarters preceding the period end date. Cash inflows from an average pet are calculated based on subscription revenue less cost of revenue from our subscription business segment for the 12 months prior to the period end date excluding stock-based compensation expense related to cost of revenue from our subscription business segment, sign-up fee revenue and the change in deferred revenue, minus fixed expenses related to our subscription business, which are the prorata portion of general and administrative and technology and development expenses, less stock-based compensation, based on revenues. Further details on the calculation for 2021 are included within our Supplemental Financial Information provided on Trupanion's Investor Relations website.

Because of varying available valuation methodologies, subjective assumptions and the variety of equity instruments that can impact a company's non-cash expenses, Trupanion believes that providing various non-GAAP financial measures that exclude stock-based compensation expense and depreciation and amortization expense allows for more meaningful comparisons between its operating results from period to period. Trupanion offsets new pet acquisition expense with sign-up fee revenue in the calculation of net acquisition cost because it collects sign-up fee revenue from new members at the time of enrollment and considers it to be an offset to a portion of Trupanion's new pet acquistion expenses. Trupanion believes this allows it to calculate and present financial measures in a consistent manner across periods. Trupanion's management believes that the non-GAAP financial measures and the related financial measures derived from them are important tools for financial and operational decision-making and for evaluating operating results over different periods of time.

## DISCLAIMER

This letter contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, and section 27A of the Securities Act of 1933, as amended (Securities Act). All statements contained in this letter other than statements of historical fact, including statements regarding lifetime values of a pet, discounted cash flows and our intrinsic value model, our 60-month plan, our capital allocation strategies, future results of operations and financial position (including ARPU, AOM, AOI, IRR, PAC, new pets enrolled, retention and churn, active hospitals, international expansion, veterinary invoices, and variable and fixed expenses) our business strategy and plans and our objectives for future operations. In particular, this letter extensively discusses our internal discounted cash flow model, and you should regard substantially all parts of this discussion as forward-looking statements. In addition, the are forward-looking statements. The words “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “model,” “plan,” “potentially,” “predict,” “project,” “target,” “will,” “would,” and similar expressions that convey uncertainty of future events or outcomes, are intended to identify forward-looking statements.

These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including risks relating to:

- our net losses since inception, our ability to maintain revenue growth, maintain profitability, obtain returns on our investments in pet acquisition, and other financial risks;
- our ability to attract online visitors, grow or member base, and maintain retention rates;
- our ability to maintain relationships with Territory Partners, veterinarians and strategic partners;
- our ability to remain competitive and maintain brand recognition;
- our ability to scale our infrastructure, manage our growth, budget for veterinary invoice expenses, and other business risks;
- our other business;
- security breaches, payment processing, and related technology and intellectual property matters;
- compliance with risk-based capital and other regulations;
- litigation or regulatory proceedings;
- dependence on key personnel;
- compliance with covenants in our credit agreement;
- international operations, including exchange rates;
- investments or acquisitions, owning an office building, and other strategic matters;
- tax, accounting and general economic matters;
- being a public company; and
- ownership of our common stock; and
- those described under the heading “Risk Factors” in our Annual Report on Form 10-K and other filings we make from time to time with the Securities and Exchange Commission.

Moreover, we operate in a very competitive and rapidly changing environment, and new risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we make. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this letter may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

You should not rely on forward-looking statements as predictions or guarantees of future events. Although we believe that the assumptions and expectations reflected in the forward-looking statements are reasonable based on our historical experience, these assumptions and expectations involve significant judgment and uncertainty, and in some cases these assumptions and expectations (and therefore the judgment and uncertainty) have been projected over an extended period of time. Future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements may not be achieved or occur. We undertake no obligation to update publicly any forward-looking statements for any reason, except as required by law.

2021

# Form 10-K

# UNITED STATES
# SECURITIES AND EXCHANGE COMMISSION

**Washington, D.C. 20549**

# FORM 10-K

**(Mark One)**

**☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

**For the fiscal year ended December 31, 2021**

**or**

**☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

**For the transition period from ____ to ____**

**Commission File Number: 001-36537**

# TRUPANION, INC.

(Exact name of registrant as specified in its charter)

| | |
|---|---|
| **Delaware** | **83-0480694** |
| (State or other jurisdiction of incorporation or organization) | (I.R.S. Employer Identification Number) |

**6100 4th Avenue S, Suite 200**
**Seattle, Washington 98108**

**(855) 727 - 9079**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

**Securities registered pursuant to Section 12(b) of the Act:**

| Title of Each Class | Trading Symbol | Name of Exchange on Which Registered |
|---|---|---|
| Common stock, $0.00001 par value per share | TRUP | The NASDAQ Stock Market LLC |

**Securities registered pursuant to Section 12(g) of the Act:** None.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. ☒ Yes ☐ No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. ☐ Yes ☒ No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. ☒Yes ☐ No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). ☒ Yes ☐ No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

| | | | |
|---|---|---|---|
| Large accelerated filer | ☒ | Accelerated filer | ☐ |
| Non-accelerated filer | ☐ | Smaller reporting company | ☐ |
| | | Emerging growth company | ☐ |

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). ☐ Yes ☒ No

The aggregate market value of the registrant's common stock held by non-affiliates as of June 30, 2021, the last business day of the registrant's most recently completed second fiscal quarter, was approximately $3,594,506,127 using the closing price on that day of $115.10.

As of February 10, 2022, there were approximately 40,505,310 shares of the registrant's common stock outstanding.

***DOCUMENTS INCORPORATED BY REFERENCE*** Part III incorporates certain information by reference from the definitive proxy statement to be filed by the registrant in connection with the 2022 Annual Meeting of Stockholders (Proxy Statement). The Proxy Statement will be filed by the registrant with the Securities and Exchange Commission pursuant to Regulation 14A not later than 120 days after the end of the registrant's fiscal year ended December 31, 2021.

**TRUPANION, INC.**
**Annual Report on Form 10-K**
**For the Fiscal Year Ended December 31, 2021**
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**Note About Forward-Looking Statements**

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended (Exchange Act), and Section 27A of the Securities Act of 1933, as amended (Securities Act). All statements contained in this Annual Report on Form 10-K other than statements of historical fact, including statements regarding our future results of operations and financial position, our business strategy and plans and our objectives for future operations, are forward-looking statements. The words “believe,” “may,” “will,” “potentially,” “estimate,” “target,” “continue,” “anticipate,” “intend,” “could,” “would,” “project,” “plan” and “expect,” and similar expressions that convey uncertainty of future events or outcomes, are intended to identify forward-looking statements.

These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described in Part I. Item 1A. “Risk Factors” and elsewhere in this Annual Report on Form 10-K. Moreover, we operate in a very competitive and rapidly changing environment, and new risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this Annual Report on Form 10-K may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

You should not rely on forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur. We undertake no obligation to update publicly any forward-looking statements for any reason, except as required by law.

Unless otherwise stated or the context otherwise indicates, references to “we,” “us,” “our” and similar references refer to Trupanion, Inc. and its subsidiaries taken as a whole.

## PART I

## Item 1. Business

### Our Mission

Our mission is to help loving, responsible pet owners budget and care for their pets.

### Company Overview

We provide medical insurance for cats and dogs throughout the United States, Canada, Puerto Rico, and Australia. Our data-driven, vertically-integrated approach enables us to provide pet owners with products that offer what we believe is the highest value medical insurance, priced specifically for each pet's unique characteristics and coverage level.

We operate in two business segments: subscription business and other business. We generate revenue in our subscription business segment primarily by subscription fees from our "Trupanion" branded products. We operate our subscription business segment similar to other subscription-based businesses, with a focus on achieving a target margin prior to our pet acquisition expense and acquiring as many pets as possible at our targeted average estimated internal rate of return.

Our other business segment is comprised of revenue from other product offerings that generally have a business-to-business relationship and different margin profiles than our subscription segment, including revenue from writing policies on behalf of third parties and revenue from other products and software solutions.

### Our Business

It is very difficult for pet owners to budget for veterinary expenses when their pets become sick or injured. Pet owners do not know whether their pet's health will be "average," "lucky," or "unlucky." Over the life of a pet, veterinary expense for a lucky vs. unlucky pet can vary from $500 to more than $50,000. Even if a pet ends up being "average" over its life, the timing of accidents or illnesses may not align with the owner's budgeting approach. Further, many pet owners do not know how to budget for the "average" cost of medical care for their pets. Average veterinary expenses often greatly exceed the expectations of the pet owner and vary dramatically based on a multitude of factors, including the availability of care by region and the types of treatments advisable for specific pet breeds. Consequently, self-insuring is not an effective solution for many individual pet owners.

Our monthly subscription products, priced specifically for each pet's unique characteristics, help pet owners budget for unforeseen medical expenses. Our core "Trupanion" product was designed by veterinarians to enable them to practice best medicine – thus recommending the optimal treatment for the pet. High quality medical insurance for pets prevents decisions being made due to financial constraints and ensures the best care for the pet. As a result, we believe our Trupanion product enables veterinarians to establish stronger ties and better alignment with their clients. Trupanion members tend to visit their veterinarian more frequently and spend more money on the best course of treatment for their pet. This results in better health outcomes for pets, which we believe creates a flywheel effect that has been the key driver of growth for our subscription business.

Our subscription business's cost-plus model is designed to spread the risk evenly within each category of pets so our members can budget for unexpected veterinary costs. We have been collecting comprehensive pet health data for over 20 years. We believe our data and approach to pricing is unmatched and provides us with a greater understanding of anticipated veterinary costs. We leverage this to price our subscription plan for each pet based on their specific circumstances such as breed, age (at enrollment), geography, and desired deductible or co-payment so that, in aggregate, the amounts paid by owners of lucky pets helps to cover the veterinary costs incurred by unlucky pets. We believe our actuarial team, working with our granular data, is able to price our subscription plan much more accurately than other players in the industry, enabling us to provide our members with the highest value proposition.

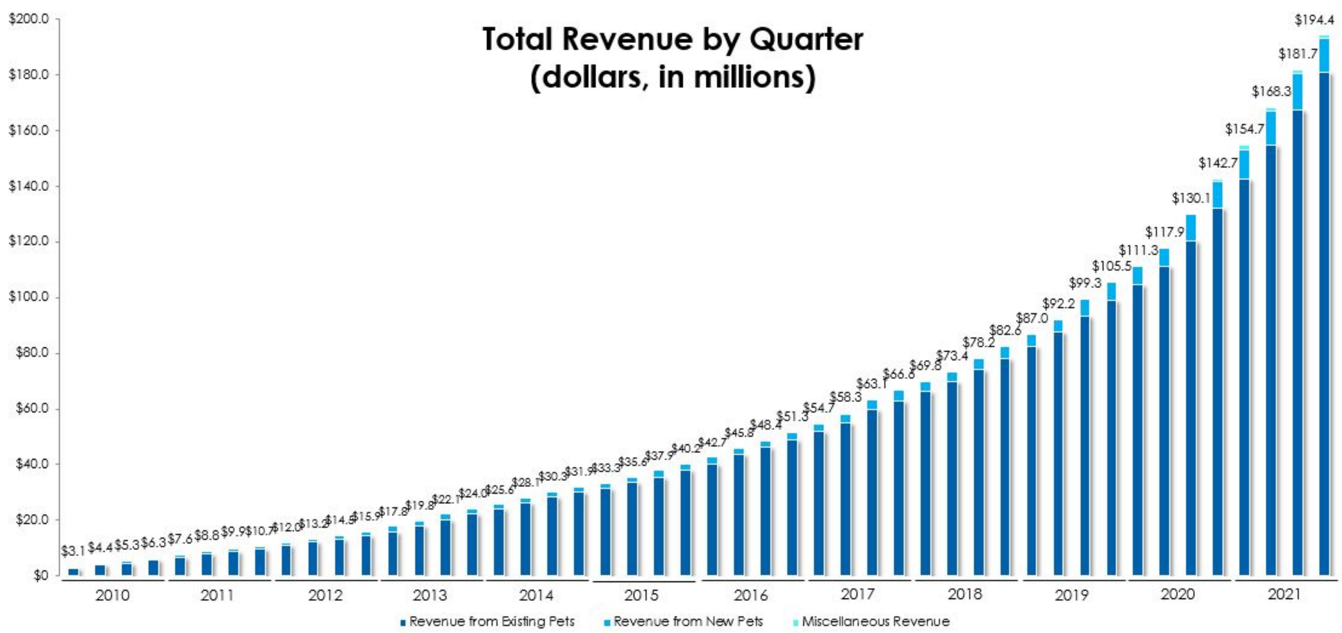
Our core "Trupanion" product also provides a differentiated experience to our members, including the use of our proprietary, patented software that is designed to communicate directly with a veterinary hospital's practice management software. Using our software, veterinary hospitals can receive payment from us directly for approved invoices in seconds, with their clients (our members) only paying their deductible or co-payment of covered treatments. We believe this unique solution, which is offered free to veterinarians and pet owners, transforms the insurance experience.

Due to our focus on providing a superior value proposition and member experience, our members have been extremely loyal. Since 2010, we have a 98.6% average monthly retention rate in our subscription business. Our growing and loyal membership base provides us with highly predictable and recurring revenue.

Our other business segment is comprised of other product offerings that generally have a business-to-business relationship and different margin profiles than our subscription segment. These include providing pet insurance policies on behalf of the Veteran Affairs program, employer sponsored programs, and writing policies on behalf of third parties. Additionally, our other business segment includes the sale of software solutions. This segment provides us with data as well as generates profits that we can invest in growing Trupanion.

Our target market is large and under-penetrated. According to Insurance Information Institute and Canadian Animal Health Institute, there are approximately 200 million household dogs and cats in the United States and Canada. North American Pet Health Insurance Association estimates that the penetration rate for medical insurance for cats and dogs in North America is approximately one to two percent. We believe that over the long-term, the North American penetration rate can reach levels comparable to the U.K., where, according to Global Market Insights, approximately one in four cats and dogs has medical insurance.

Our total enrolled pets grew from 31,207 pets on January 1, 2010 to 1,176,778 pets on December 31, 2021, which represents a compound annual growth rate of 35%. As a result, our revenue has grown from $19.1 million in 2010 to $699.0 million in 2021.




**Our Strategy**

We are focused on attracting and retaining members by providing a best-in-class value and member experience. In particular, we are focused on the following:

***Increasing the leads from veterinary hospitals.*** We intend to increase the number of veterinary hospitals that help their clients learn about high quality medical insurance, and to increase the rate at which active veterinary hospitals refer leads to us by leveraging our Territory Partners.

***Increasing the number of referrals from members.*** We believe that it is critical to our long-term success that existing members add a pet or refer their friends and family to Trupanion. As such, we focus on improving the member experience, including increasing the percentage of claims that are processed rapidly at checkout and paid directly to veterinarians through our patented, proprietary software.

***Improving conversion.*** We are investing to increase the rate at which we convert pet owners receiving quotes for our subscription plan into enrolled members.

***Improving retention, particularly in the first year of enrollment.*** Member retention is a key part of our strategy. Historically, members in their first year of membership have the lowest retention rate. We are investing in the education process and improving initial customer communication and experiences in order to increase our retention rates.

***Automating the payment of veterinary invoices.*** We use machine learning to leverage data so we can automate the payment of veterinary invoices. We intend to increase the percentage of veterinary invoices paid without human intervention with the goal of ensuring that we can process veterinary invoices in seconds and do so without reducing the quality of our decision making on a case-by-case basis.

***Exploring other member acquisition channels.*** We regularly evaluate new member acquisition channels. We intend to pursue those new channels that we believe could, over time, deliver our desired return on investment.

***Aligning with strategic partners.*** We seek partnerships with players who are leaders in their field, have long-term alignment, and recognize the value of our brand and expertise.

***Expanding internationally.*** While we are primarily focused on capturing the large opportunity in the U.S. and Canadian markets, we also operate in the Australian market through a joint-venture, and we continue to explore other international expansion opportunities.

***Expanding our product offering.*** We intend to introduce additional monthly subscription products, maintaining what we believe to be the highest value pet medical insurance, but with varying levels of coverage.

***Pursuing other revenue opportunities.*** We intend to continue to pursue opportunities to provide pet owners with complementary products and services. For example, we have invested in a pet food initiative to explore whether pets on a calorie-controlled, high-quality diet have improved health outcomes that can justify a decrease in the cost of their medical insurance. In addition, within our other business segment, our wholly-owned insurance subsidiary, American Pet Insurance Company, has partnered with unaffiliated general agents offering pet insurance products since 2012. We also continue to expand our other business segment by selling software solutions to third parties.

**Sales and Marketing (New Pet Acquisition)**

We generate leads through a diverse set of member acquisition channels, which we then convert into members primarily through our contact center, website and other direct-to-consumer activities. These channels primarily include leads from third-parties such as veterinarians, strategic partners and referrals from existing members.

We build awareness of our core Trupanion product predominately through the veterinary community, engaging our team of “Territory Partners."  Our Territory Partners are independent contractors who market our product and are paid fees based on activity in their regions. Their role is to create meaningful, long-term relationships with veterinarians and to educate those veterinarians about the benefits of high quality medical insurance. We believe this structure aligns our interests and provides a platform that we can leverage over time. Our Territory Partner approach is unique and unmatched in our industry.  We believe that it would be extremely difficult, costly and time consuming for a competitor to replicate.

**Competition**

We compete primarily with pet owners who choose to self-fund their veterinary costs, mainly via credit cards, as well as new and existing pet insurance brands. The vast majority of pet owners in the United States and Canada do not currently have medical insurance for their pets and there is very little movement from one insurance company to another due to pre-existing conditions. As a result, we are focused primarily on expanding the overall size of the market by providing pet owners with the highest value proposition, the broadest coverage, and 24/7 service to our members. We view our primary competitive challenge as educating pet owners on why Trupanion is a better alternative to self-insuring.

We have been competing against at least 20 brands at any given time in our operating history. In our experience, competing pet insurance companies generally fall into one of two segments: (a) traditional providers with low target price points and narrow coverage that is unlikely to cover things most likely to go wrong, like congenital and hereditary conditions, and (b) higher-value providers that provide some form of an annual plan designed to increase the cost of the plan as the pet ages.

We believe that we have competitive advantages that position us favorably. These include:

- broader coverage and a superior value proposition due, in part, to our vertically integrated structure that reduces frictional costs,
- a unique member acquisition strategy that leverages the relationships our Territory Partners have developed in the veterinary community,
- a proprietary database containing over 20 years of comprehensive pet health data enabling us to be more precise in our pricing and pet acquisition expense, and
- our patented, proprietary software which allows us to pay veterinary invoices directly at time of treatment.

## Intellectual Property

We rely on federal, state, common law, and international rights, as well as contractual restrictions, to protect our intellectual property. We control access to our proprietary technology, software, and documentation by entering into confidentiality and invention assignment agreements with our employees and partners, and confidentiality and, in some cases, exclusive agreements with third parties, such as service providers, vendors, individuals and entities that may be exploring a business relationship with us. We also rely on a combination of intellectual property rights, including trade secrets, patents, copyrights, trademarks, and domain names to establish and protect our intellectual property. We seek to protect our proprietary position by filing patent applications in the United States and in jurisdictions outside of the United States related to our technology, inventions, and improvements that are important to our business. We hold two U.S. utility patents and one U.S. design patent related to our proprietary software, and we have multiple additional patent applications pending in the United States and in other jurisdictions. We additionally rely on data and market exclusivity, and patent term extensions when available. Our ability to protect and enforce our intellectual property rights is subject to risk and our failure to do so may adversely impact our business.

## Human Capital Resources

### *Our Team*

We are a mission driven organization with a diverse team united by a shared passion for pets. Our team members are our greatest asset, and we focus on attracting great people to our team and offering high-quality experiences to all team members.

As of December 31, 2021, we employed 1,131 people across the U.S., Canada and the U.K. Our team is further supported by 161 field sales Territory Partner business owners and their associates who represent Trupanion. We also contract with team members in the Philippines through a third-party service provider, and we operate in Australia through a joint venture.

Our team is increasingly global with team members working in our Seattle headquarters, Manchester England office, and virtually across the U.S., Canada, and U.K. Our Seattle headquarters office is pet friendly.

### *Benefits*

We offer each team member the same benefits, regardless of role or level in the organization. We also recognize the importance of family and design our benefits plans to support the physical, financial, and emotional wellbeing of team members and their families.

The benefits available to all team members regardless of role include:

- ***Childcare & Support for Parents*** – We understand the importance of family and offer benefits to support working parents. Most notably, we offer onsite childcare at our Seattle headquarters. Trupanion pays 100% of the tuition costs for one child per Trupanion team member, when space is available.
- ***Resources for Wellbeing*** – We offer a variety of benefits to support wellness at and away from work, including free access to our onsite gym and an Employee Assistance Program for confidential support to navigate life's challenges.
- ***Sabbatical*** - For every five consecutive years of service at Trupanion, team members are eligible for a paid five-week sabbatical.
- ***Paid Volunteer Time*** – The TruGiving Volunteer Program offers one paid work day per year to volunteer with an organization of each team member's choice.
- ***Paid Time Off*** – At least four weeks of paid time off is granted to team members each year in January, and increases with tenure.
- ***Medical Insurance for You*** – Trupanion pays 100% of the premiums for team members' medical, dental, and vision coverage and offers options to enroll eligible family members.
- ***Medical Insurance for Your Pet*** – Team members have the option to enroll one dog or cat in 100% company paid Trupanion medical insurance at the highest coverage level we offer.
- ***Flexible Spending Dollars*** – Team members receive flexible spending dollars each year on benefits of their choice, including contributions to dependent premiums, fitness and nutrition, childcare, and personal development.
- ***Leave of Absence & Salary Continuation*** – We provide all team members that are too ill or injured to work with access to time off through leave of absence at a reduced percentage of their salary through our disability pay programs.
- ***Severance and Change in Control Policy*** – We have a Severance and Change in Control policy that applies equally to all team members, regardless of their role at Trupanion.

### *Diversity, Equity, Inclusion, and Belonging*

We believe that diversity, equity, inclusion, and belonging (DEIB) is critical to supporting our fellow team members and enhancing our ability to fulfill our mission and achieve our goals. We strive to foster an environment where diversity of people with different perspectives and backgrounds can thrive. A core tenet of Trupanion is that we offer a work experience that applies equally to all team members, regardless of role, as noted for example with respect to our Benefits offerings. This approach extends throughout the way we work together; for example, team members that come into any of our offices work in an open environment where the size of working space is the same for everyone regardless of role or seniority.

We have multiple employee-led resource groups that celebrate aspects of our team's diversity and help foster a welcoming and safe space for support, education, professional development, and networking.

We have a large representation of women at Trupanion including over 65% of leadership positions. As part of our strategic plan, we have also set a goal to increase the representation of underrepresented groups on our teams beginning with underrepresented races and ethnicities. To achieve this goal we are taking specific actions to hire, retain, and develop people from underrepresented races and ethnicities, and further a culture of inclusion at Trupanion. For example, among other steps we have taken, we have expanded the number of employee resource groups, are developing a DEIB curriculum that will be required for all team members, continue to develop accessibility enhancements to both our physical and digital spaces, and are setting department-level representation goals linked to executives' compensation. Our 2022 overall new hire representation goals were recently publicly shared in our Corporate Social Responsibility report.

Trupanion is committed to paying equitably for equal work, regardless of gender or race/ethnicity, and conducts pay equity analyses as part of our efforts in furtherance of this commitment.

### *Career Development*

At Trupanion we are committed to helping everyone grow and thrive along with the company. We are proud to continually see about 20% of our team members transition to new roles within the company each year. Team members have access to ongoing development designed to help them succeed in their roles today, develop skills for the future, and build a career at Trupanion.

A sampling of our development opportunities include:

- TruUniversity (TruU) – All team members participate in TruU company orientation to learn about our history, culture, product, business model, and operations.
- Mentorship – Our TruMentor program creates connection across departments, so team members can learn from and support each other in their development.
- Professional skills – Our continuing education course catalogue includes a wide variety of topics related to our business, the animal health industry, and professional skills.
- Leadership Development – Our Leadership Unleashed curriculum offers specific leadership development programs both for new managers leading for the first time and for more experienced leaders leading teams of other leaders.

### *Safety*

We are proud of our response to the COVID-19 pandemic. We were one of the first Seattle-area public companies to transition to fully virtual work, doing so before it was required. Since then we have kept our culture alive with more frequent all hands meetings and office hours with leadership, and converted many of our office events, like the annual Pet Pageant, to virtual formats. We also offer complimentary COVID testing available 24/7 at our Seattle office for team members and their loved ones.

## Regulation

### *United States Regulations*

U.S. federal law and the laws and regulations of each United States state, territory and possession apply to companies licensed to transact insurance business in these jurisdictions. While our insurance subsidiary and underwriter, American Pet Insurance Company (APIC), is domiciled in New York State and its primary regulator is, therefore, the New York Department of Financial Services (NY DFS), APIC is also currently licensed to do business in all 50 states, Puerto Rico and the District of Columbia. As such, APIC is also subject to comprehensive regulation and supervision under laws and regulations of each U.S. state, territory, and possession.

Because APIC is domiciled in New York, APIC is subject to laws governing insurance holding companies in New York. These laws, among other things, require that we file periodic information reports with the NY DFS, including information concerning our capital structure, ownership, financial condition and general business operations; limit our ability to enter into transactions between APIC and our other affiliated entities; restrict the ability of any one person to acquire certain levels of our voting securities without prior regulatory approval; and restrict APIC's ability to pay dividends to its holding company parent.

Other state regulators also have broad authority to perform on-site market conduct examinations of our management and operations, marketing and sales, underwriting, customer service, claims handling and licensing. Regulators may perform market conduct examinations by visiting our facilities for a period of time to identify potential regulatory violations, discuss and correct identified violations, or to obtain a better understanding of how we operate in the marketplace. Further, U.S. state insurance laws and regulations require APIC to file financial statements with state insurance regulators in each state where it is licensed and its operations and accounts are subject to examination at any time. APIC prepares statutory financial statements in accordance with accounting practices and procedures prescribed or permitted by these regulators. The National Association of Insurance Commissioners (NAIC) has approved a series of uniform statutory accounting principles (SAP) that have been adopted, in some cases with minor modifications, by all state insurance regulators. As a basis of accounting, SAP was developed to monitor and regulate the solvency of insurance companies. When developing SAP, insurance regulators were primarily concerned with assuring an insurer's ability to pay all its current and future obligations to policyholders. As a result, statutory accounting focuses on conservatively valuing the assets and liabilities of insurers, generally in accordance with standards specified by the insurer's state of domicile. The financial statements included in this document are prepared in accordance with U.S. generally accepted accounting principles. The values for assets, liabilities and equity reflected in these financial statements are usually different from those reflected in financial statements prepared under SAP.

In 2021, we established two new wholly-owned insurance subsidiaries, ZPIC Insurance Company (ZPIC) and QPIC Insurance Company (QPIC), domiciled in Missouri and Nebraska, respectively. We have funded required statutory capital to these new subsidiaries, however, neither subsidiary has begun underwriting insurance policies.

U.S. federal law generally does not directly regulate the insurance industry. However, from time to time, various federal regulatory and legislative changes have been proposed. Among the proposals that have in the past been, or are at present may be under consideration, are the possible introduction of federal regulation in addition to, or in lieu of, the current system of state regulation of insurers.

In July 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) established a Federal Insurance Office within the U.S. Department of the Treasury. The Federal Insurance Office initially was charged with monitoring all aspects of the insurance industry (with exceptions for certain types of insurance), gathering data and conducting a study on methods to modernize and improve the insurance regulatory system in the United States. It is not possible to predict whether, in what form or in what jurisdictions any of these proposals might be adopted, or the effect federal involvement in insurance will have, if any, on us.

***Industry Regulations***

The NAIC adopted risk-based capital requirements for life, health and property and casualty insurance companies. APIC is subject to these risk-based capital requirements that require us to maintain certain levels of surplus, specifically $116.0 million as of December 31, 2021, to support our overall business operations in consideration of our size and risk profile. If we fail to maintain the amount of risk-based capital required, we will be subject to additional regulatory oversight. To comply with these regulations, we may be required to maintain capital that we would otherwise invest in our growth and operations. Refer to Item 1A. "Risk Factors" for additional details of these requirements.

Further, NAIC developed a set of financial relationships or tests known as the Insurance Regulatory Information System, or IRIS, to assist state regulators in monitoring the financial condition of U.S. insurance companies. As of December 31, 2021, APIC had four IRIS ratios outside the usual range, relating to net premiums written to surplus, change in net premiums written, change in policyholders' surplus, and investment yield. While a ratio outside the usual range is not considered a failing result, regulators may investigate or monitor an insurance company if its IRIS ratios fall outside the prescribed usual range. ZPIC and QPIC will be subject to similar regulations after they begin underwriting insurance policies.

***Other Jurisdictions Regulations***

In Canada, our insurance is written by an unaffiliated Canadian-licensed insurer, Omega General Insurance Company (Omega). Under the terms of our agreements with Omega, we retain any financial risk associated with our Canadian business. Omega's Canadian insurance operations are supervised and regulated by Canadian federal, provincial and territorial governments and Omega is a fully licensed insurer in all of the Canadian provinces and territories in which we do business. In addition, we are required to fund a Canadian trust account in accordance with Canadian regulations. As of December 31, 2021, the account held CAD $7.7 million.

We have a segregated cell business called Wyndham Segregated Account AX (WICL), located in Bermuda. WICL is regulated by the Bermuda Monetary Authority (BMA). Insurance companies with a presence in Bermuda are subject to solvency and liquidity standards, certain restrictions on the declaration and payment of dividends and distributions, certain restrictions on the reduction of statutory capital, and auditing and reporting requirements. In addition, BMA has the authority to supervise and, in certain circumstances, investigate and intervene in the affairs of insurance companies. Most significantly, Bermudan law restricts WICL’s ability to declare or pay dividends and the value of WICL’s assets must remain greater than the aggregate of its liabilities, issued share capital, and share premium accounts.

**Corporate Information**

We were founded in Canada in 2000 as Vetinsurance Ltd. In 2006, we effected a business reorganization whereby Vetinsurance Ltd. became a consolidated subsidiary of Vetinsurance International, Inc., a Delaware corporation. In 2007, we began doing business as Trupanion. In 2013, we formally changed our name to Trupanion, Inc. Our principal executive offices are located at 6100 4th Avenue South, Seattle, Washington 98108, and our telephone number is (855) 727-9079. Our website address is www.trupanion.com. Information contained on, or that can be accessed through, our website is not incorporated by reference, and you should not consider information on our website to be part of this Annual Report on Form 10-K.

**Available Information**

We are required to file annual, quarterly and other reports, proxy statements and other information with the Securities and Exchange Commission (SEC) under the Exchange Act. We also make available, free of charge on the investor relations portion of our website at investors.trupanion.com, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after they are filed electronically with the SEC. The SEC also maintains an Internet website at www.sec.gov where you can obtain our SEC filings. You can also obtain paper copies of these reports, without charge, by contacting Investor Relations at InvestorRelations@Trupanion.com.

Investors and others should note that we may announce material financial information to our investors using our investor relations website, SEC filings, our annual stockholder meeting, press releases, public conference calls, investor conferences, presentations and webcasts. We use these channels, as well as social media, to communicate with our members and the public about our company, our services and other issues. It is possible that the information we post on these channels, such as social media, could be deemed to be material information.

## Item 1A. Risk Factors

***Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below, together with all of the other information in this report, including our consolidated financial statements and related notes, as well as in our other filings with the SEC, in evaluating our business and before investing in our common stock. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties that are not expressly stated, that we are unaware of, or that we currently believe are not material, may also become important factors that affect us. If any of the following risks occur, our business, operating results, financial condition and prospects could be materially harmed. In that event, the price of our common stock could decline, and you could lose part or all of your investment.***

### Summary of Material Risk Factors

Our business is subject to numerous risks and uncertainties of which you should be aware. Among others, these risks relate to:

- Our results of operations may be adversely affected by the ongoing COVID-19 pandemic and future variants of the virus;
- We have incurred significant net losses since inception and may not be able to maintain profitability or our rate of revenue growth in the future;
- Our ability to grow and retain our member base, including uncertainties in the assumptions we use to determine our new pet acquisition spend, variable costs of attracting new members from internet searches and from leads generated from Territory Partners, veterinarians and other third parties;
- We rely heavily on our Territory Partners and engage them as independent contractors rather than employees;
- The actual levels of our veterinary invoice expense (which may increase with use of our patented software for direct payment of invoices) and our ability to timely and accurately process valid invoices and to identify improper invoices;
- We are required to maintain certain levels of surplus capital under applicable insurance regulations;
- We face a number of competitive challenges and our business and operating results could suffer if we are unable to maintain and enhance our brand;
- We may not be able to maintain and scale our infrastructure, to invest in or acquire businesses, products or technologies, or otherwise manage our growth;
- Changes in legal, judicial, social and other environmental conditions could result in unexpected claim and coverage liability;
- We rely on key personnel, strategic partners and a Canadian insurance company for our Canadian operations and we may not be able to maintain these relationships;
- Fluctuations in foreign exchange rates, other issues relating to expanding our operations internationally, and general changes in the economy can all cause our operating results to vary;
- We may not be successful in our efforts to establish multiple insurance subsidiaries;
- We may not be able to maintain effective internal controls and security measures;
- Risks and uncertainties related to our acceptance of automatic fund transfers and credit card and debit card payments;
- We have limited experience owning an office building;
- We may not be able to protect our intellectual property (IP), avoid violating IP rights of others, or maintain relationships with third parties providing necessary IP and technology to us;
- The outcome of litigation or regulatory proceedings may restrict our ability to conduct our business;
- We may not be able to utilize net operating loss carryforwards and our tax liabilities could increase beyond our expectations;
- We are required to comply with numerous laws and regulations applicable to our business, including state, federal and foreign laws relating to insurance, privacy, the internet, email and texting, and accounting matters; and
- The value of our common stock may decline, including as a result of missed earnings guidance, inadequate analyst coverage, trading volatility, lack of dividends, concentrated ownership, and anti-takeover provisions in our governing documents.

### Risks Related to Our Business and Industry

***Our results of operations may be adversely impacted by the COVID-19 pandemic.***

The global spread of the COVID-19 pandemic, including the spread of recent variants, and related containment efforts have created significant economic disruption. While, to date, the pandemic has not had a material adverse impact on our business, it could impact our growth rates and our volume of claims in the future.

- The economic impact on consumers resulting from the COVID-19 pandemic, including the spread of recent variants, and related public health measures may result in decreased new enrollments in our subscription and increased cancellations, as consumers may shift their spending in response to economic uncertainty. Such a shift could materially adversely affect us if we are unable to adjust our products to match consumer needs.
- Governmental lockdowns, restrictions or new regulations have and could in the future impact the ability of our Territory Partners to conduct face-to-face visits with veterinarians and their staff. The extent and/or duration of these restrictions and limitations could impact our ability to promote and support our subscription through the veterinary channel.
- While we have not seen definitive evidence, some veterinarians have reported that pets may contract COVID-19. The extent to which COVID-19 may be communicable among humans, dogs and cats and its health impact on pets is somewhat uncertain, and an increase in COVID-19 among pets may cause our veterinary invoice expense to increase.
- While we are not currently experiencing any meaningful decreases in veterinary invoice expenses, several insurance companies within the property and casualty insurance industry have provided refunds to policyholders in light of reduced claims trends they are experiencing, and it is possible that state insurance regulators may require us to provide refunds or otherwise change our behavior.
- The duration of the pandemic, whether it may recur, and its other long-term impacts are highly uncertain and cannot be predicted. These risks and uncertainties make it challenging to manage our growth, maintain business relationships, price our subscription plans and otherwise plan for our business.

Beginning in spring 2020, in accordance with local and state directives, we shifted our operations from our corporate office facility located in Seattle, Washington and substantially all of our personnel began working from home. As COVID-19 related restrictions eased and more people received vaccinations, we began the process of transitioning those personnel who are comfortable working in an office setting back to our corporate office facility but a significant number of our personnel continue to work from home. While we learned that we can work very effectively in a fully-remote environment, the partial return to in-office work and the potential transition to permanent remote working arrangements for some employees may result in increased costs, decreased efficiency, deterioration of corporate culture, greater exposure to cybersecurity threats, or other operational risks. Similarly, many of our Territory Partners, our vendors, the businesses for which we write policies in our other business segment, and our strategic partners may continue to work from home, and many veterinary hospitals are working at reduced staffing levels and hours of operation.

In addition, our management team has spent, and will likely continue to spend, significant time, attention and resources monitoring the COVID-19 pandemic and associated global economic uncertainty and seeking to manage its effects on our business and workforce. Our efforts to re-open our corporate office facility safely may also expose our employees and other third parties to health risks and us to associated liability, and they will involve additional financial burdens.

The impacts of COVID-19 and related economic conditions on our results remain highly uncertain and in many ways outside of our control. The scope, duration and magnitude of the direct and indirect effects of COVID-19 are evolving rapidly and in ways that are difficult, if possible, to anticipate.

***We have incurred significant cumulative net losses since our inception and may not be able to maintain profitability in the future.***

We have incurred significant cumulative net losses since our inception. We incurred net losses of $35.5 million and $5.8 million in the years ended December 31, 2021 and 2020, respectively, and as of December 31, 2021, we had an accumulated deficit of $126.9 million. We have funded our operations through equity financings, borrowings under a revolving line of credit and term loans and, since 2016, positive cash flows from operations. Our ability to achieve and maintain profitability will depend, in significant part, on obtaining new members, retaining our existing members, maintaining relationships with our strategic partners, and ensuring that our expenses, including new pet acquisition expense, do not exceed our revenue. We expect to make significant expenditures and investments in new pet acquisition and product initiatives and these expenditures may not result in additional growth. Our recent growth in revenue and membership may not be sustainable or may decrease, and we may not generate sufficient revenue to maintain profitability. Additionally, we budget for our expenses based, in significant part, on our estimates of future revenue and many of these expenses are fixed in the short term. As a result, we may be unable to adjust our spending in a timely manner if our revenue falls short of our estimates. Accordingly, any significant shortfall of revenue in relation to our estimates could have an immediate negative effect on our financial results.

***We may not maintain our current rate of revenue growth.***

Our revenue has increased quickly and substantially in recent periods. We believe that our continued revenue growth will depend on, among other factors, our ability to:

- improve our market penetration through cost-efficient and effective pet acquisition programs to attract new members;
- convert leads into enrollments;
- maintain high retention rates;
- increase the lifetime value per pet;
- maintain positive relationships with veterinarians and other lead sources;
- maintain positive relationships with and increase the number and efficiency of Territory Partners;
- create and maintain positive relationships with strategic partners, particularly partners who present us with new sales channels and those who create software solutions for veterinary practices;
- continue to offer products with a superior value with competitive features and rates;
- price our subscriptions in relation to actual operating expenses and achieve required regulatory approval for pricing changes;
- recruit, integrate and retain skilled, qualified and experienced sales department professionals who can demonstrate our value proposition to new and existing members;
- provide our members with superior member service, including timely and efficient payment of veterinary invoices, and by recruiting, integrating and retaining skilled and experienced personnel who can efficiently review veterinary invoices and process payments;
- generate new and maintain existing relationships and programs in our other business segment;
- react to existing and new competitors;
- protect and defend our critical intellectual property;
- increase awareness of and positive associations with our brand;
- react to unexpected developments and general macroeconomic conditions, including pandemics and related economic impacts; and
- successfully respond to and comply with regulations affecting our business and defend or prosecute any litigation.

You should not rely on our historical rate of revenue growth as an indication of our future performance.

***We base our decisions regarding new pet acquisition expenditures primarily on the projected internal rate of return on marketing spend. Our estimates and assumptions may not accurately reflect our future results - we may overspend on new pet acquisition, and we may not be able to recover our pet acquisition costs or generate profits from these investments.***

We have made and plan to continue to make significant investments to grow our member base. We spent $69.5 million new pet acquisition expense to acquire new members for the year ended December 31, 2021. Our average pet acquisition cost and the number of new pets we enroll depends on a number of factors and assumptions, including the effectiveness of our sales execution and marketing initiatives, changes in costs of media, the mix of our pet acquisition expenditures and the competitive environment. Our average pet acquisition cost has increased over time and has significantly varied in the past. In the future, our average pet acquisition cost may continue to rise and significantly vary period to period based upon specific marketing initiatives. We also regularly test new member acquisition channels and marketing initiatives, which often are more expensive than our traditional marketing channels and generally increase our average acquisition costs.

In addition, we base our decisions regarding our new pet acquisition expenditures primarily on our internal rate of return generated on an average pet. This analysis depends substantially on estimates and assumptions based on our historical experience with pets enrolled in earlier periods, including our key operating metrics. If our estimates and assumptions regarding our internal rate of return and the lifetime value of the pets that we project to acquire and our related decisions regarding investments in new pet acquisition prove incorrect, or if our calculation of internal rate of return and lifetime value of the pets that we project to acquire differs significantly from that of pets acquired in prior periods, we may be unable to recover our new pet acquisition expenses or generate profits from our investment in acquiring new members. Moreover, if our new pet acquisition expenses increase or we invest in member acquisition channels that do not ultimately result in the expected number of new member enrollments, the return on our investment may be lower than we anticipate irrespective of the lifetime value of the pets that we project to acquire as a result of the new members. If we cannot generate profits from this investment, we may need to alter our growth strategy, and our growth rate and operating results may be adversely affected.

***We depend in part on Internet search engines to attract potential new members to visit our website. If Internet search engines' methodologies are modified or our search result page rankings decline for other reasons, our new member growth could decline, and our business and operating results could be harmed.***

We derive a significant amount of traffic to our website from consumers who search for pet medical insurance through Internet search engines, such as Google, Bing and Yahoo!. A critical factor in attracting consumers searching for pet medical insurance on the Internet to our website is whether we are prominently displayed in response to an Internet search relating to pet insurance. Algorithmic search result listings are determined and displayed in accordance with a set of formulas or algorithms developed by the particular Internet search engine, which may change from time to time. If we are listed less prominently in, or removed altogether from, search result listings for any reason, the traffic to our websites would decline and we may not be able to replace this traffic, which in turn would harm our business, operating results and financial condition. If we decide to attempt to replace this traffic, we may be required to increase our pet acquisition expenditures, including by utilizing paid search advertising. Certain of our competitors have spent additional funds to promote their products in search results over us. If we decide to respond by purchasing search advertising, our pet acquisition costs would increase which may harm our business, operating results and financial condition.

***If we are unable to grow our member base and maintain high member retention rates, our growth prospects and revenue will be adversely affected.***

Our ability to grow our business depends on retaining and expanding our member base. For the year ended December 31, 2021, we generated 71.0% of our revenue from subscriptions. In order to continue to increase our membership, we must continue to convince prospective members of the benefits of pet insurance in general and our subscription in particular. To maintain our existing member base, we need to continue to reinforce the value of our subscription.

We utilize Territory Partners, who are paid fees based on enrollments in their regions, to communicate the benefits of medical insurance to veterinarians through, prior to the COVID-19 pandemic, in-person visits and more recently, through a hybrid of remote and in-person communications. Veterinarians then educate pet owners, who visit our website or call our contact center to learn more about these benefits, and potentially become members. We also invest in other third-party and direct to consumer member acquisition channels, though we have limited experience with some of them. We plan to expand the number of our Territory Partners and other lead-generation sources and to engage in other marketing activities, including direct to consumer advertising and increasing our social media footprint, which are likely to increase our acquisition costs. In addition, these plans may face unexpected delays, costs or other challenges, such as decreased ability of Territory Partners to conduct in-person visits with veterinarians.

We seek to convert consumers who visit our website and call our contact center into members. The rate at which we convert these visitors into members is a significant factor in the growth of our member base. A number of factors have influenced, and could in the future influence, the conversion rates for any given period, some of which are outside of our control. These factors include:

- the competitiveness of our subscription, including its perceived value, simplicity, and fairness;
- as we add more products, consumer confusion;
- changes in consumer shopping behaviors due to circumstances outside of our control, such as economic conditions, the COVID-19 pandemic and containment efforts, and consumers' ability or willingness to pay for our product;
- regulatory requirements, including those that make the experience on our website cumbersome or difficult to navigate or that hinder our ability to speak with potential members quickly and in a way that is conducive to conversion;
- system failures or interruptions in our website or contact center; and
- changes in the mix of consumers who learn about us through various member acquisition channels.

We have made and plan to continue to make substantial investments in features and functionality for our website and training and staffing for our contact center that are designed to generate traffic, increase member engagement and improve member service. These activities do not directly generate revenue, however, and we may never realize any benefit from these investments. If the expenses that we incur in connection with these activities do not result in sufficient growth in members to offset the cost, our business, operating results and financial condition will be adversely affected.

We have historically experienced high average monthly retention rates. For example, our average monthly retention rate between 2010 and 2021 was 98.6%. We expect to continue to make significant expenditures relating to the retention of existing members, including an increase in the number of inside account managers and development and implementation of new technology platforms designed to encourage retention of these members.

If we do not retain our existing members or if our marketing initiatives do not result in enrolling more pets or result in enrolling pets that inherently have a lower retention rate, we may not be able to maintain our retention and new pet acquisition rates. Members we obtain through aggressive promotions or other channels that involve relatively less meaningful contact between us and the member are more likely to terminate their subscription. In the past, we have experienced reduced retention rates during periods of rapid member growth, as our retention rate generally has been lower during the first year of member enrollment. Members may choose to terminate their subscription for a variety of reasons, including perceived or actual lack of value, delays or other unsatisfactory experiences in how we review and process veterinary invoice payments, unsatisfactory member service, an economic downturn, increased subscription fees, loss of a pet, a more attractive offer from a competitor, changes in our subscription or other reasons, including reasons that are outside of our control. Our cost of acquiring a new member is substantially greater than the cost involved in maintaining our relationship with an existing member. If we are not able to successfully retain existing members and limit terminations, our revenue and operating margins will be adversely impacted and our business, operating results and financial condition would be harmed.

***We rely significantly on Territory Partners, veterinarians and other third parties, including strategic partners, to generate leads.***

In order for us to implement our business strategy and grow our revenue, we must effectively maintain and increase the number and quality of our relationships with Territory Partners, veterinarians, existing members, complementary online and other businesses, animal shelters, breeders and veterinary affiliates, including veterinarian purchasing groups and associations and other referral sources, and continue to scale and improve our processes, programs and procedures that support them. Those processes, programs and procedures could become increasingly complex and difficult to manage as we grow.

Veterinary leads represent our largest member acquisition channel. We spend significant time and resources attracting qualified Territory Partners and providing them with current information about our business and they, in turn, communicate the benefits of medical insurance for pets to veterinarians. Our relationship with our Territory Partners may be terminated at any time (for instance, if they feel unsupported or undervalued by us), and, if terminated, we may not recoup the costs associated with educating them about our subscription or be able to maintain any relationships they may have developed with veterinarians within their territories. Sometimes a single relationship may be used to cover multiple territories so that a terminated relationship with a Territory Partner could significantly affect our company. Further, if we experience an increase in the rate at which Territory Partner relationships are terminated, we may not develop or maintain relationships with veterinarians as quickly as we have in the past or need to in order to implement our business strategy and our growth and financial performance could be adversely affected.

Our ability to generate leads through veterinary hospitals could be negatively impacted if our policy is perceived to be inadequate, unreliable, cumbersome or otherwise does not provide sufficient value, or if our process for paying veterinary invoices is unsatisfactory to the veterinarians and their clients.

If we fail to establish or are unable to maintain our existing member acquisition channels and/or continue to add new member acquisition channels, if the cost of our existing sources increases or does not scale as we anticipate, or if we are unable to continue to use any existing channels or programs in any jurisdiction, including our exam day offer program, our member levels and pet acquisition expenses may be adversely affected.

***Territory Partners are independent contractors and, as such, may pose additional risks to our business.***

Territory Partners are independent contractors and, accordingly, we do not directly provide the same direction, motivation and oversight over Territory Partners as we otherwise could if Territory Partners were our own employees. Further, Territory Partners may themselves employ or engage others; we refer to these partners and their associates, collectively, as our Territory Partners. We do not control a Territory Partner's employment or engagement of others, and it is possible that the actions of their employees and/or contractors could create threatened or actual legal proceedings against us. Moreover, Territory Partners may not require, or applicable law may not permit that employees or other service providers engaged by Territory Partners be subject to non-compete obligations and these employees and service providers may provide services to our competitors.

Territory Partners may decide not to participate in our marketing initiatives and/or training opportunities, accept our introduction of new solutions or comply with our policies and procedures applicable to them, any of which may adversely affect our ability to develop relationships with veterinarians and grow our membership. Our sole recourse against Territory Partners who fail to perform is to terminate their contract, which could also trigger contractually obligated termination payments or result in disputes, including threatened or actual legal or regulatory proceedings.

We believe that Territory Partners are not and should not be classified as employees under existing interpretations of the applicable laws of the jurisdictions in which we operate. We do not pay or withhold any employment tax with respect to or on behalf of Territory Partners or extend any benefits to them that we generally extend to our employees, and we otherwise treat Territory Partners as independent contractors. Applicable authorities or the Territory Partners have in the past questioned and may in the future challenge this classification. Further, the applicable laws or regulations, including tax laws or interpretations, may change. If it were determined that we had misclassified any of our Territory Partners, we may be subjected to penalties and/or be required to pay withholding taxes, extend employee benefits, provide compensation for unpaid overtime, or otherwise incur substantially greater expenses with respect to Territory Partners. In addition, the costs associated with defending, settling, or resolving pending and future lawsuits (including demands for arbitration) relating to the independent contractor status of Territory Partners could be material to our business.

Any of the foregoing circumstances could have a material adverse impact on our operating results and financial condition.

***The prices of our subscriptions are based on assumptions and estimates. If our actual experience differs from the assumptions and estimates used in pricing our subscriptions or if we are unable to obtain any necessary regulatory approval for our pricing, our revenue and financial condition could be adversely affected.***

The pricing of our subscriptions reflects amounts we expect to pay for a pet's medical care and we derive these prices from assumptions that we make based on our analytics platform. Our analytics platform draws upon pet data we collect and we use this data to price our policy in response to a number of factors, including a pet's species, breed, age, gender and location. Factors related to pet location include the current and assumed changes in the cost and availability of veterinary technology and treatments and local veterinary hospital preferences. Some data that feeds into our analytics platform is provided by third-party sources and these sources may limit or prevent us from accessing the data. Additionally, the assumptions we make about breeds and other factors in pricing may prove to be inaccurate and, accordingly, these pricing analytics may not accurately reflect the expense that we will ultimately incur. Furthermore, if any of our competitors develop similar or better data systems, adopt similar or better underwriting criteria and pricing models or receive our data, our competitive advantage could decline or be lost.

The prices of our subscriptions also reflect assumptions and estimates regarding our own operating costs and expenses. We monitor and manage our pricing and overall sales mix to achieve our target returns. If the actual costs, including veterinary invoice expenses, operating costs and expenses within anticipated pricing allowances, are greater than our assumptions and estimates such that the premiums we collect are insufficient to cover these expenses, then our profitability could be adversely affected and our revenue may be insufficient to maintain profitability. Conversely, if our pricing assumptions differ from actual results such that we overprice risks, our competitiveness and growth prospects could be adversely affected.

In addition, many states have adopted laws or are considering proposed legislation that, among other things, limit the ability of insurance companies to effect rate increases or to cancel, reduce or not renew existing policies, and many state regulators have the power to reduce, or to disallow increases in premium rates. Most states require licensure and regulatory approval prior to marketing new insurance products. Our practice has been to regularly reevaluate the price of our subscriptions, with any pricing changes implemented at least annually, subject to the review and approval of applicable state regulators, who may reduce or disallow our pricing changes. Such review has often in the past resulted, and may in the future result, in delayed implementation of pricing changes and prevent us from making changes we believe are necessary to achieve our targeted payout ratio, which could adversely affect our operating results and financial condition. If external factors caused veterinary invoice expenses to significantly decrease, the review and approval of our proposed pricing may be impacted. In addition, we may be prevented by regulators from limiting significant pricing changes, requiring us to raise rates more quickly than we otherwise may desire. This could damage our reputation with our members and reduce our retention rates, which could significantly damage our brand, result in the loss of expected revenue and otherwise harm our business, operating results and financial condition.

***Our actual veterinary invoice expense may exceed our current reserve established for veterinary invoices and may adversely affect our operating results and financial condition.***

We maintain a recorded reserve for veterinary invoices that is based on our best estimates of the amount of veterinary invoices we expect to pay, inclusive of an estimate for veterinary invoices we have not yet received, after considering internal factors, including data from our proprietary data analytics platform, experience with similar cases, actual veterinary invoices paid, historical trends involving veterinary invoice payment patterns, patterns of receipt of veterinary invoices, seasonality, pending levels of unpaid veterinary invoices, veterinary invoice processing programs and contractual terms. We may also consider external factors, including changes in the law, court decisions, changes to regulatory requirements and economic conditions. Because reserves are estimates of veterinary invoices that have been incurred but are not yet submitted to us, setting appropriate reserves is an inherently uncertain and complex process that involves significant subjective judgment. Further, we do not transfer or cede our risk as an insurer and, therefore, we maintain more risk than we would if we purchased reinsurance.

Rising costs of veterinary care and the increasing availability and usage of more expensive, technologically advanced medical treatments may increase the amounts of veterinary invoices we receive. Increases in the number of veterinary invoices we receive could arise from unexpected events that are inherently difficult to predict, such as a pandemic that spreads through the pet population, tainted pet food or supplies or an unusually high number of serious injuries or illnesses. We may experience volatility in the number of veterinary invoices we receive from time to time, and short-term trends may not continue over the longer term. The number of veterinary invoices may be affected by the level of care and attentiveness an owner provides to the pet, the pet's breed and age (at enrollment) and other factors outside of our control, as well as fluctuations in member retention rates and by new member initiatives that encourage an increase in veterinary invoices and other new member acquisition activities.

The ultimate cost of paying veterinary invoices and the related administration may vary materially from recorded reserves, and such variance may result in adjustments to the reserve for veterinary invoices, which could have a material effect on our operating results and resources available for acquiring additional members.

***If more veterinary hospitals install and use our patented proprietary software, the number or amounts of veterinary invoices we receive is likely to increase.***

Our patented proprietary software is designed to integrate directly with most software systems used by veterinary hospitals and allow us to receive and pay veterinarian invoices directly. We believe that it is critical to our long-term success to improve the member experience so we encourage veterinary hospitals to install and use our software. We have found that installation and use of our software by a veterinary hospital could increase the number of invoices we receive from that practice. As more veterinary hospitals install our software, we expect the number or amounts of veterinary invoices to increase and result in an increase in our cost of revenue, which may have a material adverse effect on our financial condition.

***Our use of capital may be constrained by risk-based capital regulations or contractual obligations.***

Our insurance subsidiaries are subject to risk-based capital regulations that require us to maintain certain levels of surplus to support our overall business operations in consideration of our size and risk profile. We have in the past and may in the future fail to maintain the amount of risk-based capital required to avoid additional regulatory oversight, which was $116.0 million as of December 31, 2021. We are also subject to a contractual obligation related to our reinsurance agreement with Omega, who writes our policies in Canada. Under this agreement, we are required to fund a Canadian trust account in accordance with Canadian regulations. As of December 31, 2021, the account held CAD $7.7 million.

To comply with these regulations and contractual obligations, we may be required to maintain capital that we would otherwise invest in our growth and operations, which may require us to modify our operating plan or marketing initiatives, delay the implementation of new solutions or development of new technologies, decrease the rate at which we hire additional personnel and enter into relationships with Territory Partners, incur indebtedness or pursue equity or debt financings or otherwise modify our business operations, any of which could have a material adverse effect on our operating results and financial condition.

***Our success depends on our ability to review, process, and pay veterinary invoices timely and accurately.***

We believe member satisfaction depends on our ability to accurately evaluate and pay veterinary invoices in a timely manner. Many factors can affect our ability to do this, including the training, experience and skill of our personnel, our ability to reduce the number of payment requests made for services not included in our subscription, effectiveness of management, our ability to develop or select and implement appropriate procedures, supporting technologies and systems, changes in our policy and veterinarian compliance with our protocols and procedures. Our failure to pay veterinary invoices, accurately and in a timely manner, or to deploy resources appropriately, could result in unanticipated costs to us, lead to material litigation, undermine member goodwill and our reputation, and impair our brand image and, as a result, materially and adversely affect our competitiveness, financial results, prospects and liquidity.

***We may not identify fraudulent or improperly inflated veterinary invoices.***

It is possible that a member, or a third-party could submit a veterinary invoice which we would then pay that appears authentic but in fact does not reflect services provided or products purchased for which the member paid. It is also possible that veterinarians will charge insured customers higher amounts than they would charge their non-insured clients for the same service or product. Such activity could lead to unanticipated costs to us and/or to time and expense to recover such costs. They could also lead to strained relationships with veterinarians and/or members, and could adversely affect our competitiveness, financial results and liquidity.

***We are and will continue to be faced with many competitive challenges, any of which could adversely affect our prospects, operating results and financial condition.***

We compete with pet owners that self-finance unexpected veterinary invoices with savings or credit, as well as traditional "pet insurance" providers and relatively new entrants into our market. The vast majority of pet owners in the United States and Canada do not currently have medical insurance for their pets. We are focused primarily on expanding our share of the overall market, and we view our primary competitive challenge as educating pet owners on why our subscription is a better alternative to self-financing.

Additionally, there are traditional insurance companies that provide pet insurance products, either as a stand-alone product or along with a broad range of other insurance products, such as wellness. In addition, new entrants backed by large insurance companies, such as Marsh, Nationwide, and Geico, have attempted to enter the pet insurance market in the past and may do so again in the future. Further, traditional "pet insurance" providers may consolidate or take other actions to mimic the efficiencies from our vertically-integrated structure or create other operational efficiencies, which could lead to increased competition.

Some of our current and potential competitors have longer operating histories, larger customer bases, greater brand recognition and significantly greater financial, technical, marketing and other resources than we do. Some of our competitors may be able to undertake more extensive marketing initiatives for their brands and services, devote more resources to website and systems development and make offers that are more attractive to potential employees, referral sources and third-party service providers.

To compete effectively, we believe we will need to continue to invest significant resources in pet acquisition, in improving our member service levels, in the online experience and functionalities of our website and in other technologies and infrastructure. Failure to compete effectively against our current or future competitors could result in loss of current or potential members, which could adversely affect our pricing, lower our revenue, prevent us from maintaining profitability and diminish our brand strength.

***If we are unable to maintain and enhance our brand recognition and reputation, our business and operating results will be harmed.***

We believe that maintaining and enhancing our brand recognition and reputation is critical to our relationships with existing members, Territory Partners, veterinarians and others, and to our ability to attract new members, new Territory Partners, and additional supportive veterinarians. We also believe that the importance of our brand recognition and reputation will continue to increase as competition in our market continues to develop and mature. Our success in this area will depend on a wide range of factors, some of which are out of our control, including the following:

- the efficacy and viability of our pet acquisition programs;
- the perceived value of our subscription;
- the quality of service provided, including the fairness, ease and timeliness of reviewing and paying veterinary invoices;
- actions of our competitors, Territory Partners, veterinarians and others;
- positive or negative publicity, including regulatory pronouncements and material on the Internet or social media;
- regulatory and other government-related developments; and
- litigation-related developments.

The promotion of our brand will require us to make substantial investments, and we anticipate that, as our market becomes increasingly competitive, these branding initiatives may become increasingly difficult and expensive. For instance, we have found that search engine optimization costs have increased as competitors have spent additional funds to promote their products in search results over us. Our brand promotion activities may not be successful or yield increased revenue, and to the extent that these activities result in increased revenue, the increased revenue may not offset the expenses we incur and our operating results could be harmed. If we do not successfully maintain and enhance our brand, our business may not grow and could be adversely affected, which would harm our business, operating results and financial condition.

Furthermore, negative publicity, whether or not justified, relating to events or activities attributed to us, our employees, our strategic partners, our affiliates, or others associated with any of these parties, may tarnish our reputation and reduce the value of our brands. Damage to our reputation and loss of brand equity may reduce demand for our services and have an adverse effect on our business, operating results, and financial condition. Moreover, any attempts to rebuild our reputation and restore the value of our brands may be costly and time consuming, and such efforts may not ultimately be successful.

***Our business depends on our ability to maintain and scale the infrastructure necessary to operate our technology platform and could be adversely affected by a system failure.***

Our business depends on our ability to maintain and scale the infrastructure necessary to operate our technology platform, which includes our analytics and pricing engine, systems for managing veterinary invoice payments, customer relationship management system, billing system, contact center phone system and website. We use these technology frameworks to price our subscriptions, enroll members, engage with current members and pay veterinary invoices. Our members review and purchase subscriptions through our website and contact center, and for those veterinary hospitals who have installed our patented proprietary software, we receive and pay veterinarian invoices directly through our software. Our reputation and ability to acquire, retain and serve our members depends on the reliable performance of our technology platform and the underlying network systems and infrastructure, and on providing best-in-class member service, including through our contact center and website. As our member base continues to grow, the amount of information collected and stored on the systems and infrastructure supporting our technology platform will continue to grow, and we expect to require an increasing amount of network capacity, computing power and information technology personnel to develop and maintain our technology platform and service our departments involved in member interaction.

We have made, and expect to continue to make, substantial investments in equipment and related network infrastructure to handle the operational demands on our technology platform, including increasing data collection, software development, traffic on our website and the volume of calls at our contact center. The operation of the systems and infrastructure supporting our technology platform is expensive and complex and could experience operational failures. In the event that our data collection, member base or amount of traffic on these systems grows more quickly than anticipated, we may be required to incur significant additional costs to increase the capacity in our systems. Further, our development and implementation activities may not be successful, may not be well-received by veterinarians or by new or existing members, particularly if they are costly, cumbersome or unreliable, and we may incur delays or cost overruns or elect to curtail our currently planned expenditures related to them. Even if our system improvements are well-received, they may be or become obsolete due to technological reasons or the availability of alternative solutions in the marketplace. If new solutions and enhancements are not successful on a long-term basis, we may not realize benefits from these investments, and our business and financial condition could be adversely affected.

In addition, any system failure that causes an interruption in or decreases the responsiveness of our services could impair our revenue-generating capabilities, harm our business and operating results and damage our reputation. In addition, any loss or mishandling of data could result in breach of confidence, competitive disadvantage or loss of members, and subject us to potential liability. Any failure of the systems and infrastructure that we rely on could negatively impact our enrollments as well as our relationship with members. If we do not maintain or expand the systems and infrastructure underlying our technology platform successfully, or if we experience operational failures, our reputation could be harmed and we could lose current and potential members, which could harm our operating results and financial condition.

***If we fail to effectively manage our growth, our business, operating results and financial condition may suffer.***

We have recently experienced, and expect to continue to experience, significant growth, which has placed, and may continue to place, significant demands on our management and our operational and financial systems and infrastructure. We expect that our growth strategy will require us to commit substantial financial, operational and technical resources and this commitment may also result in increased costs (such as member acquisition costs or costs associated with increases in the number or amounts of veterinary invoices received) generated by our business, which could prevent us from remaining profitable and could impair our ability to compete effectively for business. If we do not effectively manage growth at any time, our financial condition could be harmed and the quality of our services could suffer.

In order to successfully expand our business, we need to hire, integrate and retain highly skilled and motivated employees and continue to improve our existing systems for operational and financial management. These improvements could require significant capital expenditures and place increasing demands on our management. If we do not successfully implement improvements in these areas, our business, operating results and financial condition will be harmed.

***Emerging claim and coverage issues may adversely affect our business.***

As industry practices and legal, judicial, social and other environmental conditions change, unexpected and unintended issues related to claims and coverage may emerge, including new or expanded theories of liability. These or other changes could impose new financial obligations on us by extending coverage beyond our underwriting intent or otherwise require us to make unplanned modifications to the products and services that we provide, or cause the delay or cancellation of products and services that we provide. In some instances, these changes may not become apparent until sometime after we have issued subscriptions that are affected by the changes. As a result, the full extent of liability under our subscriptions may not be known for many years after the subscription begins.

***Our operating results may vary, which could make period-to-period comparisons less meaningful, and make our future results difficult to predict.***

We may experience fluctuations in our revenue, expenses and operating results in future periods, particularly as the COVID-19 pandemic evolves. Our operating results may fluctuate in the future as a result of a number of factors, many of which are beyond our control. These fluctuations may make comparing our operating results on a period-to-period basis less meaningful and make our future results difficult to predict. You should not rely on our past results as an indication of our future performance. In addition, if revenue levels do not meet our expectations, our operating results and ability to execute on our business plan are likely to be harmed.

Seasonal or periodic variations in the behavior of our members also may cause fluctuations in our financial results. Enrollment in our subscription tends to be discretionary in nature and may be sporadic, reflecting overall economic conditions, budgeting constraints, pet-buying patterns and a variety of other factors, many of which are outside our control. For example, we have experienced some effects of seasonal trends in visits to veterinarians in the fourth quarter and in the beginning of the first quarter of each year in connection with the traditional holiday season. While we believe seasonal trends have affected and will continue to affect our quarterly results, our growth may have overshadowed these effects to date. We believe that our business will continue to be subject to seasonality in the future, which may result in fluctuations in our financial results.

Due to these and other factors, our financial results for any quarterly or annual period may not meet our expectations or the expectations of investors or analysts that follow our stock and may not be meaningful indications of our future performance.

***Mergers or other strategic transactions involving our competitors could weaken our competitive position, which could adversely affect our ability to compete effectively and harm our results of operations.***

Our industry is highly fragmented, and we believe it is likely that some of our existing competitors will consolidate or be acquired. In addition, some of our competitors may enter into new alliances with each other or may establish or strengthen cooperative relationships with systems integrators, third-party consulting firms or other parties. Any such consolidation, acquisition, alliance or cooperative relationship could adversely affect our ability to compete effectively and lead to pricing pressure and our loss of market share and could result in a competitor with greater financial, technical, marketing, service and other resources, all of which could harm our business, financial condition, cash flows and results of operations.

***Changes in the economy may affect consumer spending on our subscription and this may negatively impact our business, operating results and financial condition.***

Our business may be affected by changes in the economic environment. Medical insurance for cats and dogs is a discretionary purchase, and members may reduce or eliminate their discretionary spending during an economic downturn, resulting in an increase in terminations and a reduction in the number of new member enrollments. We may experience a material increase in terminations or a material reduction in our member retention rate in the future, especially in the event of a prolonged recessionary period or a downturn in economic conditions. Conversely, consumers may have more income to pay veterinary costs out-of-pocket and less desire to purchase our subscription during a period of economic growth. In addition, media prices may increase during a period of economic growth, which could increase our new pet acquisition expenses. As a result, our business, operating results and financial condition may be significantly affected by changes in the economic environment.

***We depend on key personnel to operate our business and, if we are unable to retain, attract and integrate qualified personnel, our ability to develop and successfully grow our business could be harmed.***

Our success depends to a significant extent on the continued services of our current management team, including Darryl Rawlings, our founder and Chief Executive Officer. The loss of Mr. Rawlings or several other key executives or employees within a short time frame could have a material adverse effect on our business. We employ all of our employees, including executive officers and key employees on an at-will basis, and their employment can be terminated by us or them at any time, for any reason and without notice, subject, in certain cases, to severance payment rights. In order to retain valuable employees, in addition to salary and cash incentives, we have provided stock options and restricted stock that vest over time and may in the future grant equity awards tied to company performance. The value to employees of stock options and restricted stock that vest over time will be significantly affected by movements in our stock price that are beyond our control and may at any time be insufficient to maintain their retention benefit or counteract offers from other companies. We would be adversely affected if we fail to adequately plan for the succession of our senior management and other key employees. Additionally, if we were to lose a large percentage of our current employees in a relatively short time period, or our employees were to engage in a work stoppage or unionize, we may be unable to hire and train new employees quickly enough to prevent disruptions in our operations, which may result in the loss of members, Territory Partners or referral sources.

Our success also depends on our ability to attract, retain and motivate additional skilled management personnel. We plan to continue to expand our work force, which we believe will enhance our business and operating results. We believe that there is significant competition for qualified personnel with the skills and knowledge that we require. Many of the other companies with which we compete for qualified personnel have greater financial and other resources than we do. New hires require significant training and, in most cases, take significant time before they achieve full productivity. New employees may not become as productive as we expect, and we may be unable to hire or retain sufficient numbers of qualified individuals.

***We may continue to create, invest in or acquire businesses, products and technologies, which could divert our management's attention, result in additional dilution to our stockholders, otherwise disrupt our operations or harm our operating results.***

We have in the past created, invested in or acquired complementary businesses, products, technologies and new lines of business, and we may continue to do so in the future. Our ability to successfully evaluate and manage investment opportunities, or make and integrate acquisitions or products, is unproven. For example, we have invested in a pet food initiative, and we believe that pet food may be an important part of our offerings over the long term. We do not have experience manufacturing, selling, or distributing food products and pet food manufacturing facilities and pet food products are subject to many laws and regulations administered by the United States Department of Agriculture, the Federal Food and Drug Administration, the Occupational Safety and Health Administration, and other federal, state, local, and foreign governmental agencies relating to the production, packaging, labelling, storage, distribution, quality, and safety of food products and the health and safety of employees. We have also recently acquired technology intended to enable us to improve our back-end software and facilitate certain expansion efforts, but technology integration is complicated, expensive and time consuming, and it may not result in us realizing the intended benefits from the acquisition.

The pursuit of potential new products, investments or acquisitions may divert the attention of management and cause us to incur various expenses in identifying, investigating and pursuing suitable opportunities, whether or not they are consummated. Further, even if we successfully invest in or acquire additional businesses or technologies, we may not achieve the anticipated benefits from the transaction. The investment or acquisition may also expose us to additional risks, including from unknowingly inheriting liabilities that are not adequately covered by indemnities. Acquisitions or investments could also result in dilutive issuances of equity securities or the incurrence of debt, which could adversely affect our operating results.

If we do not spend our development budget efficiently or effectively on commercially successful and innovative offerings and products, we may not realize the expected benefits of our strategy. Further, our development efforts with respect to new products and offerings could distract management from current operations, and will divert capital and other resources from our more established products and offerings. If an investment or acquisition fails to meet our expectations, our business, operating results and financial condition may suffer.

***We may not realize the benefits of our current and planned strategic relationships.***

Our growth strategy includes developing and maintaining strategic relationships with various third parties.  For example, in October 2020, we entered into a Strategic Alliance Agreement and certain related agreements with Aflac Incorporated (Aflac). We generally pursue strategic relationships with industry leaders that may offer us expanded access to segments of the pet insurance market. For these efforts to be successful, we must successfully enter into agreements with these third parties on terms that are attractive to us, and then successfully implement the arrangement, which requires integrating and coordinating their resources and capabilities with our own, which may present challenges relating to technology integration, marketing, regulatory matters, customer support, and other operational matters. We may be unsuccessful in entering into agreements with acceptable partners, negotiating favorable terms in these agreements, or implementing the relationship. In addition, our strategic relationships may require us to agree to exclusivity or other terms that may limit our ability to pursue opportunities we might otherwise pursue.  For example, we have agreed with Aflac not to develop with a third party any worksite employee benefit regarding its pet insurance in the United States or Japan and to work exclusively with Aflac to develop opportunities in Japan's pet insurance marketplace, which may prevent us from pursuing alternative opportunities. In connection with our strategic relationships, we have in the past and may in the future provide equity consideration, impose contractual holding periods for such securities, impose standstill obligations or include other requirements that terminate in the event the strategic relationship ceases, which may have an adverse effect on our stock price and otherwise cause our business to suffer.

Strategic partnerships also involve various risks, depending on their structure, including the following:

- our strategic partners may not be successful in creating leads;
- we may be unable to convert leads from our strategic partners into enrolled pets;
- our strategic partners could terminate their relationships with us;
- our strategic partners may acquire or form alliances with our competitors, thereby reducing their business with us;
- we may not experience a consistent correlation between revenues and expenditures related to the partnership; and
- bad publicity and other issues faced by our strategic partners could negatively impact us.

If we are unsuccessful in our strategic relationships, we may not realize the intended benefits of these relationship, lose the investment we have made in these relationships, face difficulty entering into other relationships, and our business may suffer.

***Our business and financial condition is subject to risks related to our writing of policies for unaffiliated third parties.***

Our other business segment includes revenues and expenses involving contractual relationships with unaffiliated third parties and related marketing to enterprises. We have relatively limited experience in writing policies for unaffiliated third parties. This business is not expected to grow at the same rate as our core business and may decline. Changes to this business may be volatile due to the nature of the relationships. Further, this business historically has had, and we expect it to continue to have, lower margins than our core business. As a result of this line of business, we are subject to additional regulatory requirements and scrutiny, which increase our costs and risks, and may have an adverse effect on our operations. Further, administration of this business and any similar business in the future may divert our time and attention away from our core business, which could adversely affect our operating results in the aggregate.

For example, the pet insurance policies we write for general agents are subject to materially different terms and conditions than our subscription. They are typically annual policies with monthly payment terms, which can result in accounts receivable balances and payment timing patterns we do not experience in our subscription business. The relationships with these general agents may be terminated by either party and, if terminated, would result in a reduction in our revenue to the extent we cannot enter other relationships and generate equivalent revenue with different general agents. For the year ended December 31, 2021, premiums from policies sourced by general agents accounted for 27% of our total revenue, and one general agent sourced members whose premiums accounted for over 10% of our total revenue. Further, the unaffiliated general agents administer these policies and market them to consumers. If the general agents make operating decisions that adversely affect its business or brand, our business or brand could also be adversely affected.

***In Canada, our medical plan is written by Omega General Insurance Company. If Omega were to terminate its underwriting arrangement with us, our business could be adversely affected.***

In Canada, our pet insurance subscription is written by Omega, and we assume all premiums written by Omega and the related veterinary invoice expense through an agency agreement and a fronting and administration agreement. If Omega were to terminate our agreement or be unable to write insurance for regulatory or other reasons, we may have to terminate subscriptions with our existing Canadian members, or suspend member enrollment and renewals in Canada until we enter into a relationship with another third party to write our subscription or we set up an entity able to perform this service, which may take a significant amount of time and require significant expense. We may not be able to enter into a new relationship, and any new relationship would likely be on less favorable terms. Any delay in entry into a new relationship or suspension of member enrollment and renewals could have a material adverse effect on our operating results and financial condition.

***Changes in foreign exchange rates may adversely affect our revenue and operating results.***

We offer our subscription in Canada and in the future may offer it in other countries, which exposes us to the risk of changes in currency exchange rates. For the year ended December 31, 2021, approximately 16% of our total revenue was generated in Canada. Fluctuations in the relative strength of the US dollar has in the past and could in the future adversely affect our revenue and operating results.

***We are expanding our operations internationally, and we may therefore become subject to a number of risks associated with international expansion and operations.***

As part of our growth plan, we have explored, and expect to continue to explore, opportunities to expand our operations internationally. For instance, we entered the Australian market through a joint venture and we are actively exploring entering other countries. We have limited history of marketing, selling, administrating and supporting our subscription for consumers outside of the United States, Canada, and Puerto Rico. In general, international sales and operations may be subject to a number of risks, including the following:

- regulatory rules and practices, foreign exchange controls, tariffs, tax laws and treaties that are different than those we operate under currently;
- the costs and resources required to modify our subscription appropriately to suit the needs and expectations of residents and veterinarians in such foreign countries;
- our data analytics platform may have limited applicability in foreign countries, which may impact our ability to develop adequate underwriting criteria and accurately price subscriptions in such countries;
- increased expenses incurred in establishing and maintaining office space and equipment for our international operations;
- technological incompatibility between our patented proprietary software and software used by veterinarians;
- difficulties in modifying our business model or subscription in a manner suitable for any particular foreign country, including any modifications to our Territory Partner model to the extent we determine that our existing model is not suitable for use in foreign countries;
- our lack of experience in marketing to consumers and veterinarians and online marketing in foreign countries;
- our relative lack of industry connections in many foreign countries;
- difficulties in managing operations due to language barriers, distance and time zone differences, staffing, cultural differences and business infrastructure constraints, including difficulty in obtaining foreign and domestic visas;
- the uncertainty of protection for intellectual property rights in some countries; and
- general economic and political conditions in these foreign markets.

These and other factors could harm our ability to gain future international revenue and, consequently, materially impact our business and operating results. The expansion of our existing international operations and entry into additional international markets will require significant management attention and financial resources, detracting from management attention and financial resources otherwise available to our existing business. Our failure to successfully manage our international operations and the associated risks effectively could limit the future growth of our business and could have an adverse effect on our operating results and financial condition.

***Our decision to set up multiple insurance subsidiaries may complicate our business and harm our results of operations.***

Currently, APIC, our wholly-owned subsidiary, underwrites memberships for our U.S. subscription products, and Omega, a third party, underwrites memberships for our Canadian subscription products. We have set up two new wholly-owned insurance companies in the U.S. and are in the process of setting up an additional insurance company in Canada and in the future we may decide to set up and operate additional wholly-owned insurance companies in the U.S., Canada or a different country. The pursuit of acquiring or forming a new insurance subsidiary may divert the attention of management and cause us to incur various expenses in identifying, investigating and pursuing suitable opportunities, whether or not the formation or acquisition is completed. Further, even if we are successful in forming or acquiring a new insurance subsidiary we may not achieve the anticipated benefits. In addition, we may require additional capital to meet our risk-based capital requirements for the new insurance subsidiaries and will be subject to additional regulatory scrutiny in the jurisdiction of incorporation and any additional jurisdictions the insurance subsidiary operates. Failure to comply with laws, regulations and guidelines applicable to a new insurance subsidiary could result in significant liability, result in the loss of revenue and otherwise harm our business, operating results and financial condition.

***If we are unable to maintain effective internal control over financial reporting in the future, investors may lose confidence in the accuracy and completeness of our financial reports and the market price of our common stock may be negatively affected.***

Section 404 of the Sarbanes-Oxley Act of 2002 (the Sarbanes-Oxley Act) requires that we evaluate and determine the effectiveness of our internal control over financial reporting and provide a management report on the internal control over financial reporting, which must be attested to by our independent registered public accounting firm.

We may not detect errors on a timely basis and our financial statements may be materially misstated. We have had in the past, and may have in the future, material weaknesses and significant deficiencies in our internal control over financial reporting. If we or our independent registered public accounting firm identify future material weaknesses in our internal control over financial reporting, we are unable to comply with the requirements of Section 404 in a timely manner, we are unable to assert that our internal control over financial reporting is effective or our independent registered public accounting firm is unable to express an opinion as to the effectiveness of our internal control over financial reporting, investors may lose confidence in the accuracy and completeness of our financial reports and the market price of our common stock could be negatively affected. We could also become subject to investigations by the stock exchange on which our securities are listed, the SEC or other regulatory authorities, which could require additional financial and management resources.

***If our security measures are breached and unauthorized access is obtained to our data, including our members' data, we may lose our competitive advantage, our systems may be perceived as not being secure and we may incur third-party liability.***

Our data repository contains proprietary information that we believe gives us a competitive advantage, including data on veterinary invoices received and other data with respect to members, Territory Partners, veterinarians and other third parties. We also collect and utilize demographic and other information from and about our members when they visit our website, call our contact center and apply for enrollment. Further, we use tracking technologies, including "cookies," to help us manage and track our members' interactions and deliver relevant advice and advertising. Security breaches could expose us to a risk of loss of our data and/or disclosure of this data, either publicly or to a third party who could use the information to gain a competitive advantage. Because techniques used to obtain unauthorized access or to sabotage systems change frequently and generally are not recognized until launched against a target, we may be unable to anticipate these techniques or implement adequate preventative measures. In the event of a loss of our systems or data, we could experience increased costs, delays, legal liability and reputational harm, which in turn may harm our financial condition, damage our brand and result in the loss of members. Such a disclosure also could lead to litigation and possible liability.

In the course of operating our business, we store and/or transmit our members' confidential information, including credit card and bank account numbers and other private information. Because the methods used to obtain unauthorized access to private information change frequently and may be difficult to detect for long periods of time, security breaches would expose us to a risk of loss of this information, litigation and possible liability. Our payment services are similarly susceptible to credit card and other payment fraud schemes, including unauthorized use of credit cards, debit cards or bank account information, identity theft or merchant fraud.

If our security measures are breached as a result of third-party action, employee error, malfeasance or otherwise, and, as a result, someone obtains unauthorized access to our data, including data of our members, our reputation may be damaged, our business may suffer and we could incur significant liability. Because techniques used to obtain unauthorized access or to sabotage systems change frequently and generally are not recognized until launched against a target, we may be unable to anticipate these techniques or implement adequate preventative measures. If an actual or perceived breach of our security occurs, the public perception of the effectiveness of our security measures could be harmed.

In addition, cyber-attacks or acts of terrorism could cause disruptions in our business or the economy as a whole. Our servers and systems may also be vulnerable to computer viruses, break-ins and similar disruptions from unauthorized tampering with our computer systems, which could lead to interruptions, delays, loss of critical data or the unauthorized disclosure of confidential member data. We currently have limited disaster recovery capability, and our business interruption insurance may be insufficient to compensate us for losses that may occur. Such disruptions could negatively impact our ability to run our business, which could have an adverse effect on our operating results and financial condition.

***We are subject to a number of risks related to accepting automatic fund transfers and credit card and debit card payments.***

We accept payments of subscription fees from our members through automatic fund transfers and credit and debit card transactions. For credit and debit card payments, we pay interchange and other fees, which may increase over time. An increase in the number of members who utilize credit and debit cards to pay their subscription fees or related credit and debit card fees would reduce our margins and could require us to increase subscription fees, which could cause us to lose members and revenue, or suffer an increase in our operating expenses, either of which could adversely affect our operating results.

If we, or any of our processing vendors or banks have problems with our billing software, or if the billing software malfunctions, it could have an adverse effect on our member satisfaction and could cause one or more of the major credit card companies or banks to disallow our continued use of their payment products. In addition, if our billing software fails to work properly and, as a result, we do not automatically charge our members' credit cards on a timely basis or at all, or a bank withdraws the incorrect amount or fails to timely transfer the correct amount to us, we could lose revenue and harm our member experience, which could adversely affect our business and operating results. Moreover, a vendor could fail to process payments, or could process payments in the wrong amounts, which could result in us failing to collect premiums, could result in increased cancellations and could adversely affect our reputation.

We are also subject to payment card association operating rules, certification requirements and rules governing electronic funds transfers, including the Payment Card Industry Data Security Standard (PCI DSS), a security standard applicable to companies that collect, store or transmit certain data regarding credit and debit cards, holders and transactions. Although we are currently compliant with PCI DSS, in the past we were not, and in the future we may not be, fully or materially compliant with PCI DSS, or other payment card operating rules. Any failure to comply with the PCI DSS in the future may violate payment card association operating rules, federal and state laws and regulations, and the terms of our contracts with payment processors and merchant banks. Such failure to comply may subject us to fines, penalties, damages and civil liability, and may result in the loss of our ability to accept credit and debit card payments. In addition, there is no guarantee that PCI DSS compliance will prevent illegal or improper use of our payment systems or the theft, loss or misuse of data pertaining to credit and debit cards, credit and debit card holders and credit and debit card transactions.

If we fail to adequately control fraudulent credit card transactions, we may face civil liability, diminished public perception of our security measures and significantly higher credit card-related costs, each of which could adversely affect our business, operating results and financial condition.

If we are unable to maintain our chargeback rate at acceptable levels, our credit card fees for chargeback transactions, or our fees for many or all categories of credit and debit card transactions, credit card companies and debit card issuers may increase our fees or terminate their relationship with us. Any increases in our credit card and debit card fees could adversely affect our operating results, particularly if we elect not to raise our subscription fees. The termination of our ability to process payments on any major credit or debit card would significantly impair our ability to operate our business.

***We have limited experience owning an office building and may face unexpected costs.***

In August 2018, we purchased our home office building. Prior to this purchase, we had no experience owning an office building. It is difficult to predict all costs associated with maintaining the building and ensuring it is suitable for our use and that of other tenants and maintain compliance with all environmental and other regulations applicable to ownership of real estate. It is possible that the other current tenants in the building may cease to rent space in the building, which would decrease rental income we expect to receive from them. Tenants may also negotiate tenant improvements, requiring capital expenditures that may adversely impact our financial position. In addition, we may identify structural defects or other conditions, or we may determine that remodeling or renovations are necessary given our business operations and objectives. Managing tenants, maintaining the building, and otherwise facing the costs and responsibilities of being the owner of a building may be a distraction from our core business and cause our performance to suffer.

***Failure to adequately protect our intellectual property could substantially harm our business and operating results.***

We rely on a combination of intellectual property rights, including trade secrets, patents, copyrights, trademarks and domain names, as well as contractual restrictions, to establish and protect our patented proprietary software and our intellectual property. Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to copy our digital content, pricing analytics, technology, software, branding and functionality, or obtain and use information that we consider proprietary. Moreover, policing our proprietary rights is difficult and may not always be effective. If we continue to expand internationally, we may need to enforce our rights under the laws of countries that do not protect proprietary rights to as great an extent as do the laws of the United States, which may be expensive and divert management's attention away from other operations.

Our proprietary software is protected by patents. These patents may not be sufficient to maintain effective product exclusivity because patent rights are limited in time and do not always provide effective protection. Furthermore, our efforts to enforce or protect our patent rights may be ineffective, could result in substantial costs and diversion of resources, could result in the invalidation of our patent rights, and could substantially harm our operating results. Even where our patents rights are enforced, legal remedies available for harm caused to us by infringing products may be inadequate to make us whole. Further, our successful assertion of our patent against one competing product is not necessarily predictive of our future success or failure in asserting the same patent against a second competing product. In addition, patents have a limited lifespan. In the United States, the natural expiration of a patent is generally 20 years after it is filed. Various extensions may be available. However, the life of a patent, and the protection it affords, is limited. Once the patent life has expired for our software, our competitors will be able to use our patented technology.

We seek to control access to our proprietary technology, software and documentation by entering into confidentiality and invention assignment agreements with our employees and partners, confidentiality agreements or license agreements with third parties, such as service providers, vendors, individuals and entities that may be exploring a business relationship with us, and terms of use with third parties, such as veterinary hospitals desiring to use our technology, software and documentation. These agreements may not prevent disclosure of intellectual property, trade secrets and/or other confidential information, and may not provide an adequate remedy in the event of misappropriation of trade secrets or any unauthorized disclosure of trade secrets and other confidential information. In addition, others may independently discover trade secrets and confidential information and, in such cases, we may not be able to assert any trade secret rights against such parties. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our intellectual property rights and related confidentiality, license and nondisclosure provisions, and failure to obtain or maintain trade secret protection, or our competitors being able to obtain our trade secrets or to independently develop technology similar to ours or competing technologies, could adversely affect our competitive business position.

Litigation or proceedings before the U.S. Patent and Trademark Office or other governmental authorities and administrative bodies in the United States and abroad may be necessary in the future to enforce our intellectual property rights, to protect our domain names and to determine the validity and scope of the proprietary rights of others. Our efforts to enforce or protect our proprietary rights may be ineffective, could result in substantial costs and diversion of resources and could substantially harm our operating results.

***Assertions by third parties of infringement or other violation by us of their intellectual property rights could result in significant costs and substantially harm our business and operating results.***

Third parties have in the past and may in the future claim that our services or technologies, including our proprietary software, infringe or otherwise violate their intellectual property rights. We may be subject to legal proceedings and claims, including claims of alleged infringement by us of the intellectual property rights of third parties. Any dispute or litigation regarding intellectual property could be expensive and time consuming, regardless of the merits of any claim, and could divert our management and key personnel from our operations.

If we were to discover or be notified that our services or our proprietary software potentially infringe or otherwise violate the intellectual property rights of others, we may need to obtain licenses from these parties in order to avoid infringement. We may not be able to obtain the necessary licenses on acceptable terms, or at all, and any such license may substantially restrict our use of the intellectual property. Moreover, if we are sued for infringement and lose the lawsuit, we could be required to pay substantial damages or be enjoined from offering the infringing services. Any of the foregoing could cause us to incur significant costs and prevent us from selling or properly administering subscriptions or performing under our other contractual relationships.

***The outcome of litigation or regulatory proceedings could subject us to significant monetary damages, restrict our ability to conduct our business, harm our reputation and otherwise negatively impact our business.***

From time to time, we have been, and in the future may become, subject to litigation, claims and regulatory proceedings and inquiries, including market conduct examinations and investigations by state insurance regulatory agencies and threatened or filed lawsuits by, among others, government agencies, employees, competitors, current or former members, or business partners.

We cannot predict the outcome of these actions or proceedings, and the cost of defending such actions or proceedings could be material. Further, defending such actions or proceedings could divert our management and key personnel from our business operations. If we are found liable in any action or proceeding, we may have to pay substantial damages or fines, which may have a material adverse effect on our business, operating results, financial condition and prospects. More critically, an adverse result from a proceeding could require us to change the way we conduct our business, including our marketing and promotional practices, and such a result may have a greater adverse effect on our business than monetary damages or fines. There may also be negative publicity associated with litigation or regulatory proceedings that could harm our reputation or decrease acceptance of our services. These claims may be costly to defend and may result in assessment of damages, adverse tax consequences and harm to our reputation.

***We may have additional tax liabilities.***

We are subject to income tax, premium tax, transaction tax and other taxes in the U.S. and foreign jurisdictions. Judgment is required in determining our provision for income taxes, premium tax, transaction tax and other taxes. In the ordinary course of our business, there are many transactions and calculations where the ultimate tax determination is uncertain. Further, we often make elections for tax purposes which may ultimately not be upheld. Although we believe our tax estimates are reasonable, the final determination of tax audits and any related litigation in the jurisdictions where we are subject to taxation could be materially different from our historical income tax provisions and accruals. The results of an audit or litigation could have a material effect on our consolidated financial statements in the period or periods in which that determination is made.

***Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited.***

As of December 31, 2021, we had U.S. federal net operating loss carryforwards of approximately $218.3 million that will begin to expire in 2026. Under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended (the Code), if a corporation undergoes an "ownership change," the corporation's ability to use its pre-change net operating loss carryforwards and other pre-change tax attributes, such as research tax credits, to offset its post-change income taxes may be limited. In general, an "ownership change" occurs if there is a cumulative change in our ownership by "5-percent stockholders" that exceeds 50 percentage points over a rolling three-year period. Similar rules may apply under state tax laws. Pursuant to Sections 382 and 383 of the Code, annual use of our net operating loss carryforwards and credit carryforwards may be limited by previous and future ownership changes.

## Risks Related to Compliance with Laws and Regulations

***We may not maintain the amount of risk-based capital required to avoid additional regulatory oversight, which may adversely affect our ability to operate our business.***

Memberships in our U.S. subscription product are currently underwritten by APIC. APIC is an insurance company domiciled in the state of New York and licensed by the New York Department of Financial Services (NY DFS). Regulators in the states in which we do business impose risk-based capital requirements on APIC that generally are approved by the National Association of Insurance Commissioners (NAIC) to ensure APIC maintains reasonably appropriate levels of surplus to protect our members against adverse developments in APIC's financial circumstances, taking into account the risk characteristics of our assets, liabilities and certain other items. Generally, state insurance regulators will compare, on an annual basis as of December 31 or more often as deemed necessary, an insurer's total adjusted capital and surplus to assess an insurer's capital adequacy. If an insurer's risk-based capital falls below a specific threshold, the regulator may take action, which can range from directing an insurer to propose a plan to increase its capital to an acceptable level to placing the insurer under regulatory control.

Applicable regulations regarding risk-based capital may change, and/or the NY DFS may increase APIC's required levels of risk-based capital in the future. Regardless, we anticipate that we will need to maintain greater amounts of risk-based capital if our pet enrollment continues to grow. Additionally, a reduction in our risk-based capital may result in a breach of various contractual relationships, including, for example, with the unaffiliated general agents for which we write pet insurance policies, which may give such parties the ability to cancel their contracts with us and/or sue us for damages related to our risk-based capital levels, which could have a material adverse effect on our financial condition.

***We may require additional capital to meet our risk-based capital requirements, pursue our business objectives and respond to business opportunities, challenges or unforeseen circumstances. If capital is not available to us at any time, our business, operating results and financial condition may be harmed.***

We may require additional capital to meet our risk-based capital requirements, operate or expand our business or respond to unforeseen circumstances. Additional funds may not be available when we need them, on terms that are acceptable to us, or at all. For instance, our arrangement with Aflac requires that, before we issue or sell equity to another investor, we are required to provide Aflac an opportunity to purchase equity allowing them to maintain their ownership percentage. This requirement may introduce delays or prevent us from raising funds through the issuance of securities. If we raise additional funds through the issuance of equity or convertible securities, the percentage ownership of holders of our common stock could be significantly diluted and these newly issued securities may have rights, preferences or privileges senior to those of holders of our common stock. Further, volatility in the credit or equity markets may have an adverse effect on our ability to obtain debt or equity financing or the cost of such financing. Similarly, our access to funds may be impaired if regulatory authorities or rating agencies take negative actions against us. If a combination of these factors were to occur, our internal sources of liquidity may prove to be insufficient and, in such case, we may not be able to successfully obtain additional financing on favorable terms. If funds are unavailable to us on reasonable terms when we need them, we may be unable to meet our risk-based capital requirements, train and support our employees, support Territory Partners, maintain the competitiveness of our technology, pursue business opportunities, service our existing debt, pay veterinary invoices or acquire new members, any of which could have an adverse effect on our business, operating results and financial condition.

***Our business is heavily regulated, and if we fail to comply with the numerous applicable laws and regulations our business and operating results could be harmed.***

The sale of medical insurance for cats and dogs, which is considered a type of property and casualty insurance in most jurisdictions, is heavily regulated by federal, state, provincial and territorial governments in each jurisdiction in which we operate. In the United States, state insurance regulators are charged with protecting policyholders and have broad regulatory, supervisory and administrative powers over our business practices. Because we do business in all 50 states, the District of Columbia, all Canadian provinces and territories, and Puerto Rico, compliance with insurance-related laws, rules and regulations is difficult and imposes significant costs on our business. Each jurisdiction's insurance department typically has the power, among other things, to:

- grant and revoke licenses to transact insurance business;
- conduct inquiries into the insurance-related activities and conduct of agents and agencies and others in the sales, marketing and promotional channels;
- require and regulate disclosure in connection with the sale and solicitation of insurance policies;
- authorize how, by which personnel and under what circumstances insurance premiums can be quoted and published and an insurance policy sold;
- regulate how sales incentives may be structured;
- regulate the content of insurance-related advertisements, including web pages, and other marketing practices;
- approve policy forms, require specific benefits and benefit levels;
- regulate premium rates;
- impose fines and other penalties; and
- impose continuing education requirements.

While the U.S. federal government does not directly regulate the insurance industry, federal legislation and administrative policies can also affect us. Congress and various federal agencies periodically discuss proposals that would provide for federal oversight of insurance companies. We cannot predict whether any such laws will be enacted or the effect that such laws would have on our business. We also do business in all ten provinces and three territories of Canada. The provincial and territorial insurance regulators have the power to regulate the market conduct of insurers and insurance intermediaries, and the licensing and supervision of insurance agents, and brokers, along with enforcement rights, including the right to assess administrative monetary penalties in certain provinces.

Insurance companies are also regulated at the federal level in Canada, and the Insurance Companies Act prohibits a foreign entity from insuring risks in Canada unless it is authorized by an Order made by the Superintendent of Financial Institutions (Canada) permitting it to do so.

Due to the complexity, periodic modification and differing interpretations of insurance laws and regulations, we have not always been, and we may not always be, in compliance with them. A regulator's interpretation of existing laws or regulations may change without notice. Failure to comply with insurance laws, regulations and guidelines or other laws and regulations applicable to our business could result in significant liability, additional department of insurance licensing requirements, the revocation of licenses in a particular jurisdiction or our inability to sell subscriptions, which could significantly increase our operating expenses, result in the loss of our revenue and otherwise harm our business, operating results and financial condition.

Moreover, because adverse regulatory actions in one jurisdiction must be reported to other jurisdictions, an adverse regulatory action in one jurisdiction could result in penalties and adversely affect our license status or reputation in other jurisdictions. Even if the allegations in any regulatory or other action against us ultimately are determined to be unfounded, we could incur significant time and expense defending against the allegations, and any related negative publicity could harm consumer and third-party confidence in us, which could significantly damage our brand.

In addition, we have received, and may in the future receive, inquiries from regulators regarding our marketing and business practices. These inquires may include investigations regarding a number of our business practices, including the manner in which we market and sell subscriptions, the manner in which we write policies for any unaffiliated general agent, and whether any amounts we pay to hospitals or hospital groups is appropriate. Any modification of our marketing or business practices in response to regulatory inquiries could harm our business, operating results or financial condition and lead to reputational harm.

***States may adopt new laws that may adversely affect our operating results and financial condition.***

The NAIC may draft model laws that focus on medical insurance for pets. States may enact new laws to adopt what the NAIC drafts, or a state may enact its own new laws or regulations that could affect our industry. Many states have considered and may continue to consider proposed legislation that could significantly affect our operations, including, for example, our ability to effect rate increases, to cancel or not issue existing policies, or how to market our product. Implementing changes in order to comply with new laws or regulations could also be time-consuming and costly.

***We may not receive approval for changes to an existing product, for a proposed new product or for pricing changes, or we may not receive such approvals in a timely manner.***

Most states require licensure and regulatory approval prior to marketing new insurance products or changing premiums for existing products. From time to time, we seek to make updates to our existing subscription product. We may also introduce new products that make changes that are more extensive to the product approved in a state. With respect to pricing, our practice has been to regularly reevaluate the price of our subscriptions, with any pricing changes implemented at least annually, subject to the review and approval of the state regulators, who may reduce or disallow our pricing changes. Such review has often in the past resulted, and may in the future result, in delayed implementation of pricing changes and prevent us from making changes we believe are necessary to achieve our targeted payout ratio, which could adversely affect our operating results and financial condition. A delayed approval may require us to have larger rate increases in subsequent periods. This could damage our reputation with our members and reduce our retention rates, which could significantly damage our brand, result in the loss of expected revenue and otherwise harm our business, operating results and financial condition.

***We may be affected by mandatory participation in plans that could result in contributions from insurance subsidiaries we own.***

Certain states have enacted laws that require a property-casualty insurer, which includes a pet insurance company, conducting business in that state to participate in assigned risk plans, reinsurance facilities, joint underwriting associations (JUAs), Fair Access to Insurance Requirements (FAIR) plans and wind pools. In these markets, if the state reinsurance facilities, wind pools, FAIR plans or JUAs recognize a financial deficit, they may in turn have the ability to assess participating insurers, adversely affecting our operating results and financial condition if we are a part of such state reinsurance facilities, wind pools, FAIR plans or JUAs. Additionally, certain states require insurers to participate in guaranty funds for impaired or insolvent insurance companies. These funds periodically assess losses against all insurance companies doing business in the state. Our operating results and financial condition could be adversely affected by any of these factors.

***Regulations that require individuals or entities that sell medical insurance for cats and dogs or process claims to be licensed may be interpreted to apply to our business more broadly than we expect them to, which could require us to modify our business practices, create liabilities, damage our reputation, and harm our business.***

Insurance regulations generally require that each individual who sells, solicits or negotiates insurance on our behalf must maintain a valid license in the jurisdiction in which the activity occurs. Regulations also generally prohibit paying an insurance commission to an unlicensed person or entity. Regulations may also require certain individuals who process claims to be licensed. These requirements are subject to a variety of interpretations between jurisdictions. We may not interpret and apply the requirements in the same manner as all applicable regulators, and, even if we have, the requirements or regulatory interpretations of those requirements may change. Regulators have in the past and/or may in the future determine that certain of our personnel or third parties were performing licensable activities without the required license, including for example a veterinary hospital employee. If such persons were not in fact licensed in any such jurisdiction, we could become subject to conviction for an offense or the imposition of an administrative penalty, and liable for significant penalties. Regulators may also deem payments we make to an unlicensed entity or person to be improper. We would also likely be required to modify our business practices and/or pet acquisition programs, or license the affected individuals, which may be impractical or costly and time-consuming to implement. Any modification of our business or marketing practices in response to regulatory licensing requirements could harm our business, operating results or financial condition.

***We are subject to numerous laws and regulations, and compliance with one law or regulation may result in non-compliance with another.***

We are subject to numerous laws and regulations that are administered and enforced by a number of different governmental authorities, each of which exercises a degree of interpretive latitude, including, in the United States, state insurance regulators, state securities administrators, state attorneys general and federal agencies including the SEC, Internal Revenue Service and the U.S. Department of Justice. Consequently, we are subject to the risk that compliance with any particular regulator's or enforcement authority's interpretation of a legal issue may not result in compliance with another's interpretation of the same issue, particularly when compliance is judged in hindsight. In addition, there is risk that laws and regulations or any particular regulator's or enforcement authority's interpretation of a legal issue may change over time to our detriment, or that changes in the overall legal environment may, even absent any particular regulator's or enforcement authority's interpretation of a legal issue changing, cause us to change our views regarding the actions we need to take from a legal risk management perspective, thus necessitating changes to our practices that may, in some cases, increase our costs and limit our ability to grow or to improve the profitability of our business. Further, in some cases, these laws and regulations are designed to protect or benefit the interests of a specific constituency rather than a range of constituencies. For example, state insurance laws and regulations generally are intended to protect or benefit purchasers or users of insurance products, not holders of securities, which generally is the jurisdiction of the SEC. In many respects, these laws and regulations limit our ability to grow or to improve the profitability of our business.

***Failure to comply with federal, state and provincial laws and regulations relating to privacy and security of personal information, and civil liabilities relating to breaches of privacy and security of personal information, could create liabilities for us, damage our reputation and harm our business.***

A variety of U.S. and Canadian federal, state and provincial laws and regulations govern the collection, use, retention, sharing and security of personal information. Claims or allegations that we have violated applicable laws or regulations related to privacy and data security could in the future result in negative publicity and a loss of confidence in us by our members and our participating service providers, and may subject us to fines by credit card companies and the loss of our ability to accept credit and debit card payments. In addition, we have posted privacy policies and practices concerning the collection, use and disclosure of member data on our website. Several Internet companies have incurred penalties for failing to abide by the representations made in their privacy policies and practices. In addition, our use and retention of personal information could lead to civil liability exposure in the event of any disclosure of such information due to hacking, viruses, inadvertent action or other use or disclosure. Several companies have been subject to civil actions, including class actions, relating to this exposure.

We have incurred, and will continue to incur, expenses to comply with privacy and security standards and protocols for personal information imposed by law, regulation, self-regulatory bodies, industry standards and contractual obligations. Such laws, standards and regulations, however, are evolving and subject to potentially differing interpretations, and federal, state and provincial legislative and regulatory bodies may expand current or enact new laws or regulations regarding privacy matters. We are unable to predict what additional legislation, standards or regulation in the area of privacy and security of personal information could be enacted or its effect on our operations and business.

***Law and regulations of the Internet, email and texting could adversely affect our business.***

Many laws governing general commerce on the Internet remain unsettled and it may take years to fully determine whether and how existing laws such as those governing insurance, intellectual property, privacy and taxation apply to the Internet. In addition, the growth and development of the market for electronic commerce and Internet-related pet insurance advertisements and transactions may prompt calls for more stringent consumer protection laws that may impose additional burdens on companies conducting business and selling subscriptions over the Internet. Any new laws or regulations or new interpretations of existing laws or regulations relating to the Internet could harm our business and we could be forced to incur substantial costs in order to comply with them, which would harm our business, operating results and financial condition.

Additionally, we use phone solicitation, email and texting to market our services to potential members and/or as a means of communicating with our existing members. The laws and regulations governing the use of phone solicitation, email and texting continue to evolve, and the growth and development of the market for commerce over the Internet may lead to the adoption of additional legislation. Failure to comply with existing or new laws regarding phone solicitation, text or electronic communications with members could lead to significant damages. We have incurred, and will continue to incur, expenses in our efforts to comply with electronic messaging laws. If new laws or regulations are adopted, or existing laws and regulations are interpreted, to impose additional restrictions on our ability to send email to our members or potential members, we may not be able to communicate with them in a cost-effective manner. In addition to legal restrictions on the use of email for commercial purposes, Internet and email service providers and others attempt to block the transmission of unsolicited email, commonly known as "spam." Many service providers have relationships with organizations whose purpose it is to detect and notify the Internet and email service providers of entities that the organization believes are sending unsolicited email. If an Internet or email service provider identifies messaging and email from us as "spam" as a result of reports from these organizations or otherwise, we could be placed on a restricted list that will block our emails to members or potential members. If we are restricted or unable to communicate by phone, text or email with our members and potential members as a result of legislation, blockage or otherwise, our business, operating results and financial condition would be harmed.

***Applicable insurance laws regarding the change in control of our company may impede potential acquisitions that our stockholders might consider to be desirable.***

We are subject to statutes and regulations of the state of New York that generally require that any person or entity desiring to acquire direct or indirect control of APIC obtain prior regulatory approval. These laws may discourage potential acquisition proposals and may delay, deter or prevent a change in control of our company, including through transactions, and in particular unsolicited transactions, that some of our stockholders might consider to be desirable. Similar laws or regulations may also apply in other states in which we may operate.

***Our segregated account in Bermuda, WICL segregated account AX, could be adversely impacted by regulatory compliance of an unaffiliated third party.***

Wyndham Insurance Company (SAC) Limited (WICL) is a class 3 insurer regulated by the Bermuda Monetary Authority (BMA). WICL's ability to continue operations and pay dividends could impact the ability of our segregated account to do the same. WICL's failure to meet regulatory requirements set forth by the BMA could result in our inability to transact business with WICL segregated account AX. Further, WICL could be limited from allowing dividends to be paid out of segregated account AX in the event of adverse regulatory actions.

***Our accounting is becoming more complex, and relies upon estimates or judgments relating to our critical accounting policies. If our accounting is erroneous or based on assumptions that change or prove to be incorrect, our operating results could fall below the expectations of securities analysts and investors, resulting in a decline in our stock price.***

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes, and also to comply with many complex requirements and standards. We devote substantial resources to compliance with accounting requirements and we base our estimates on our best judgment, historical experience, information derived from third parties, and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets, liabilities, equity, revenue and expenses that are not readily apparent from other sources. However, various factors are causing our accounting to become complex, such as our recent building acquisition, our investments in strategic opportunities and our test expansion into foreign markets. Ongoing evolution of our business, further international expansion, and entry into complementary businesses such as pet food, may compound these complexities. Our operating results may be adversely affected if we make accounting errors or our judgments prove to be wrong, assumptions change or actual circumstances differ from those in our assumptions, which could cause our operating results to fall below the expectations of securities analysts and investors or guidance we may have provided, resulting in a decline in our stock price and potential legal claims. Significant judgments, assumptions and estimates used in preparing our consolidated financial statements include those related to revenue recognition, reserve for veterinary invoices, business combinations, and income taxes.

**Risks Related to Ownership of Our Common Stock**

***Our actual operating results may differ significantly from our guidance.***

From time to time we have released, and may continue to release, guidance in our quarterly earnings conference call, quarterly earnings releases, or otherwise, regarding our future performance that represents our management's estimates as of the date of release. This guidance, which includes forward-looking statements, has been and will be based on projections prepared by our management. These projections are not prepared with a view toward compliance with published guidelines of the American Institute of Certified Public Accountants, and neither our independent registered public accounting firm nor any other independent expert or outside party compiles or examines the projections. Accordingly, no such person expresses any opinion or any other form of assurance with respect to the projections. In addition, we have recently provided information regarding how we think about the drivers of and our method of calculating our intrinsic value, including related statements regarding discounted cash flows and underlying assumptions (such as pet enrollment, revenue per pet, lifetime values of a pet, pet acquisition costs, and other costs and expenses).

These statements are based upon a number of assumptions and estimates that, while presented with numerical specificity, are inherently subject to significant business, economic and competitive risks and uncertainties, many of which are beyond our control, including those described in these "Risk Factors" and elsewhere in this report. We intend to state possible outcomes as high and low ranges which are intended to provide a sensitivity analysis as variables are changed but are not intended to imply that actual results could not fall outside of the suggested ranges.

The principal reason that we release guidance and other information regarding our view of the drivers and calculation method of our intrinsic value is to provide a basis for our management to discuss our business and outlook with analysts and investors.

Guidance is necessarily speculative in nature, and it can be expected that some or all of the assumptions underlying these statements will not materialize or will vary significantly from actual results. Accordingly, these statements are only estimates of what management believes is reasonable as of the date of release. Actual results may vary and the variations may be material. In light of the foregoing, investors are urged not to rely upon our guidance or other information regarding our view of the drivers and calculation method of our intrinsic value in making an investment decision regarding our common stock. In addition, we do not accept any responsibility for any projections or reports published by any such third parties, and we urge you not to place undue reliance on those statements.

Any failure to successfully implement our operating strategy or the occurrence of any of the events or circumstances set forth in this report could result in the actual operating results being different from our guidance, and the differences may be adverse and material.

***Future securities issuances could result in significant dilution to our stockholders and impair the market price of our common stock.***

Future issuances of shares of our common stock, or the perception that these sales may occur, could depress the market price of our common stock and result in dilution to existing holders of our common stock. Acquisitions, strategic investments, partnerships, or alliances could also result in dilutive issuances of equity securities. In addition, we may issue options, restricted stock units, or other stock-based awards to those providing services to us, and to the extent outstanding or future options are exercised or restricted stock units or other stock-based awards are settled for shares of our common stock, there will be further dilution. The amount of dilution could be substantial depending upon the size of the issuances or exercises. Furthermore, we may issue additional equity securities that could have rights senior to those of our common stock, such as pursuant to the "blank check" preferred stock contained in our certificate of incorporation. As a result, purchasers of our common stock bear the risk that future issuances of debt or equity securities may reduce the value of and dilute their ownership interest.

***If securities or industry analysts do not publish research, or publish inaccurate or unfavorable research, about our business, our stock price and trading volume could decline.***

The trading market for our common stock depends in part on the research and reports that securities or industry analysts publish about us or our business. If one or more of the securities or industry analysts who publish research about us or our business downgrade our stock or publish inaccurate or unfavorable evaluations of our company or our stock, the price of our stock could decline. If one or more of these analysts cease coverage of our company, our stock may lose visibility in the market, which in turn could cause our stock price to decline.

***The market price of our common stock has been and is likely to continue to be volatile, and you may be unable to sell your shares at or above the price at which you purchased them.***

The market price of our common stock has been and is likely to continue to fluctuate widely. Factors affecting the market price of our common stock include:

- variations in our operating results, earnings per share, cash flows from operating activities, and key operating metrics, and how those results compare to analyst expectations;
- forward-looking guidance that we provide to the public and industry and financial analysts related to future revenue and profitability, and any change in that guidance or our failure to achieve the results reflected in that guidance;
- the net increases in the number of members, either independently or as compared with published expectations of industry, financial or other analysts that cover our company;
- announcements of changes to our subscription, strategic alliances, acquisitions or significant agreements by us or by our competitors;
- recruitment or departure of key personnel;
- recent private sale of our securities to Aflac;
- the economy as a whole and market conditions in our industry;
- trading activity by a limited number of stockholders who together beneficially own a majority of our outstanding common stock;
- the number of shares of our stock trading on a regular basis; and
- any other factors discussed in these risk factors.

In addition, if the market for stock in our industry or the stock market in general experiences uneven investor confidence, the market price of our common stock could decline for reasons unrelated to our business, operating results or financial condition. Some companies that have experienced volatility in the trading price of their stock have been the subject of securities class action litigation. If we are the subject of such litigation, it could result in substantial costs and a diversion of our management's attention and resources.

***We do not intend to pay dividends on our common stock and, therefore, any returns will be limited to the value of our stock.***

We have never declared or paid any cash dividends on our common stock. Other than potential repurchases of our common stock, we currently intend to retain all available funds and any future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. APIC's ability to pay dividends is limited by New York state insurance laws, and WICL Segregated Account AX's ability to pay dividends is limited by our agreements with WICL as well as WICL's regulatory requirements. Any return to stockholders will therefore be limited to the increase, if any, of our stock price.

***Our directors and principal stockholders own a significant percentage of our stock and will be able to exert significant control over matters subject to stockholder approval.***

Our directors, five percent or greater stockholders and their respective affiliates beneficially hold a significant amount of our outstanding voting stock. Therefore, these stockholders have the ability to influence us through this ownership position. These stockholders may be able to determine all matters requiring stockholder approval. For example, these stockholders may be able to control elections of directors, amendments of our organizational documents, or approval of any merger, sale of assets, or other major corporate transaction. This may prevent or discourage unsolicited acquisition proposals or offers for our common stock that you or other stockholders may feel are in your or their best interest as one of our stockholders.

***Provisions in our restated certificate of incorporation, restated bylaws and Delaware law might discourage, delay or prevent a change in control of our company or changes in our management and, therefore, depress the market price of our common stock.***

Our restated certificate of incorporation and restated bylaws contain provisions that could depress the market price of our common stock by acting to discourage, delay or prevent a change in control of our company or changes in our management that the stockholders of our company may deem advantageous. These provisions, among other things:

- establish a classified board of directors so that not all members of our board are elected at one time;
- permit only the board of directors to establish the number of directors and fill vacancies on the board;
- provide that directors may only be removed "for cause" and only with the approval of two-thirds of our stockholders;
- require super-majority voting to amend some provisions in our restated certificate of incorporation and restated bylaws;
- authorize the issuance of "blank check" preferred stock that our board could use to implement a stockholder rights plan (also known as a "poison pill");
- eliminate the ability of our stockholders to call special meetings of stockholders;
- prohibit stockholder action by written consent, which requires all stockholder actions to be taken at a meeting of our stockholders;
- prohibit cumulative voting; and
- establish advance notice requirements for nominations for election to our board or for proposing matters that can be acted upon by stockholders at annual stockholder meetings.

In addition, Section 203 of the Delaware General Corporation Law may discourage, delay or prevent a change in control of our company. Section 203 imposes certain restrictions on mergers, business combinations and other transactions between us and holders of 15% or more of our common stock.

We have an Employee Severance and Change in Control Plan that applies to each employee of our company. This plan provides certain benefits to our employees in the event there is a change in control of our company and an employee is terminated under certain conditions. Potential acquirers may determine that the possible payments under this plan make an acquisition of our company unattractive.

## Item 1B. Unresolved Staff Comments

None.

## Item 2. Properties

Our principal executive offices are located at 6100 4th Avenue South, Seattle, Washington. We purchased the building in August 2018 and occupy 120,124 square feet.

## Item 3. Legal Proceedings

Information with respect to this item may be found in Note 9 of Item 8, “Financial Statements and Supplementary Data”, under the caption, “Legal Proceedings” which information is incorporated herein by reference.

## Item 4. Mine Safety Disclosures

Not applicable.

## PART II

### Item 5. Market for Registrant's Common Equity, Related Stockholder Matters, and Issuer Purchases of Equity Securities

#### Market for our Common Stock

Our common stock began trading on the New York Stock Exchange (NYSE) under the symbol "TRUP" on July 18, 2014. Prior to that time, there was no public market for our common stock. On June 17, 2016, we voluntarily transferred the listing of our common stock from the NYSE to the NASDAQ Global Market of the NASDAQ Stock Market LLC (NASDAQ) where our common stock continues to be traded under the symbol "TRUP".

#### Dividend Policy

We have never declared or paid cash dividends on our common stock. Other than potential repurchases of our common stock, we currently intend to retain all available funds and any future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. Any further determination to pay dividends on our common stock will be at the discretion of our board of directors, subject to applicable laws, and will depend on our financial condition, results of operations, capital requirements, general business conditions and other factors that our board of directors considers relevant.

#### Holders of Record

As of February 10, 2022, there were 29 registered stockholders of record of our common stock. The actual number of stockholders is greater than this number of record holders, and includes stockholders who are beneficial owners, whose shares are held of record by banks, brokers, and other financial institutions.

#### Securities Authorized for Issuance under Equity Compensation Plans

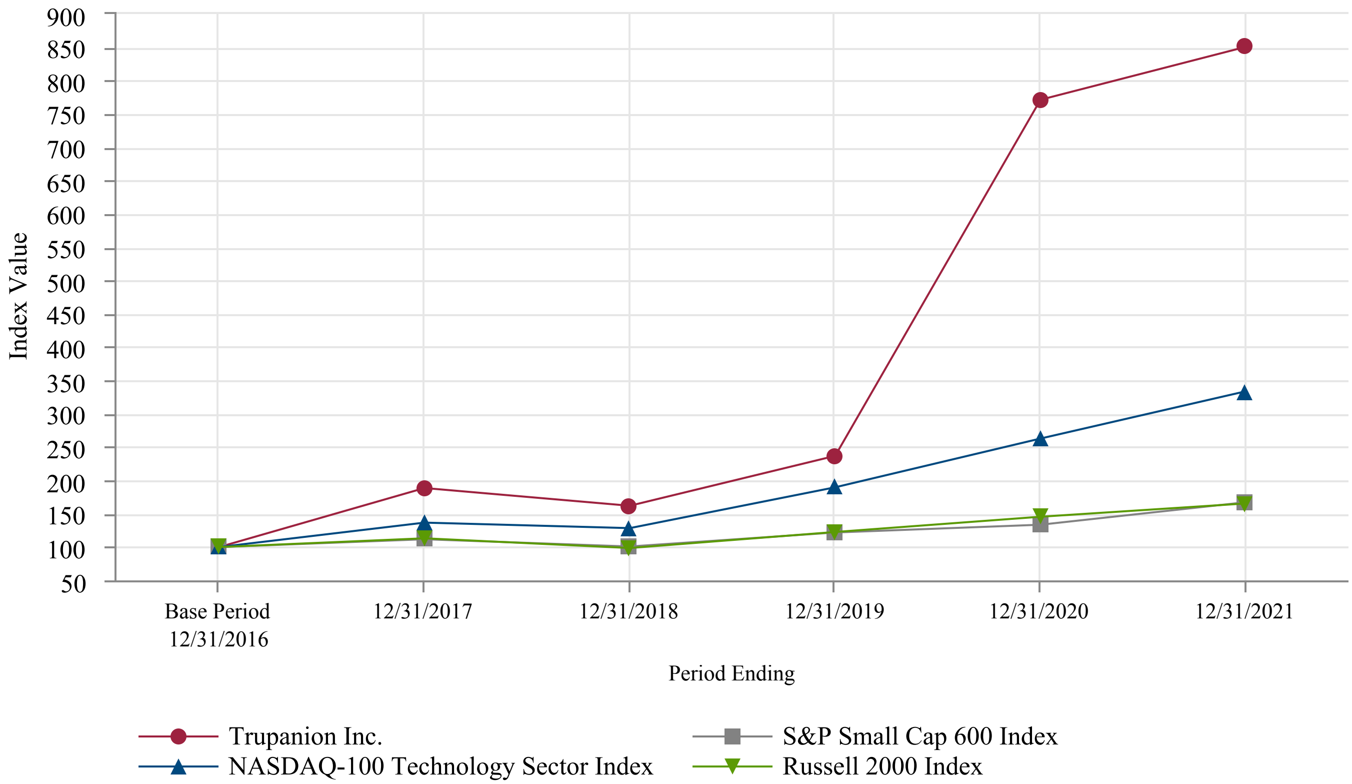
The information called for by this item is incorporated by reference to our Proxy Statement for the Annual Meeting of Stockholders to be held in 2022. See Part III, Item 12 "Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters."

**Stock Performance Graph**

The following shall not be deemed “filed” for purposes of Section 18 of the Exchange Act, or incorporated by reference into any of our other filings under the Exchange Act or the Securities Act, except to the extent we specifically incorporate it by reference into such filing.

This chart compares the stockholder return on an investment of $100 over the five years from December 31, 2016 through December 31, 2021 for (1) our common stock, (2) the S&P Small Cap 600 Index, (3) the NASDAQ-100 Technology Sector Index, and (4) the Russell 2000 Index. All values assume the reinvestment of any dividends; however, no dividends have been declared on our common stock to date. The stockholder return on the following graph is not necessarily indicative of future performance.

**Comparison of Cumulative Total Return**
**Among Trupanion, S&P Small Cap 600 Index, NASDAQ-100 Technology Sector Index, and Russell 2000 Index**




| | 12/31/2016 | 12/31/2017 | 12/31/2018 | 12/31/2019 | 12/31/2020 | 12/31/2021 |
|---|---|---|---|---|---|---|
| Trupanion Inc. | $ 100.00 | $ 188.60 | $ 161.98 | $ 236.86 | $ 771.33 | $ 850.71 |
| S&P Small Cap 600 Index | $ 100.00 | $ 111.73 | $ 100.83 | $ 121.87 | $ 133.53 | $ 167.28 |
| NASDAQ-100 Technology Sector Index | $ 100.00 | $ 136.68 | $ 128.42 | $ 189.69 | $ 262.87 | $ 333.79 |
| Russell 2000 Index | $ 100.00 | $ 113.14 | $ 98.58 | $ 122.62 | $ 145.52 | $ 165.45 |

### Item 6. Selected Financial Data

The selected statements of operations, balance sheet, and other data presented below should be read with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes included elsewhere in this report. The selected statements of operations and balance sheet data are derived from our audited consolidated financial statements included elsewhere in this report and our previously audited financial statements that are not included herein. Our historical results are not necessarily indicative of the results to be expected in any future period.

| | Year Ended December 31, | | | | |
|---|---|---|---|---|---|
| | 2021 | 2020 | 2019 | 2018 | 2017 |
| | | | (in thousands) | | |
| **Consolidated statements of operations data:** | | | | | |
| Revenue: | | | | | |
| Subscription business | $ 494,862 | $ 387,732 | $ 321,163 | $ 263,738 | $ 218,354 |
| Other business | 204,129 | 114,296 | 62,773 | 40,218 | 24,313 |
| Total revenue | 698,991 | 502,028 | 383,936 | 303,956 | 242,667 |
| Cost of revenue: | | | | | |
| Subscription business(1) | 407,664 | 314,875 | 262,139 | 215,992 | 176,883 |
| Other business | 186,981 | 105,252 | 56,873 | 36,598 | 22,734 |
| Total cost of revenue | 594,645 | 420,127 | 319,012 | 252,590 | 199,617 |
| Operating expenses: | | | | | |
| Technology and development(1) | 16,866 | 9,947 | 7,025 | 5,796 | 6,226 |
| General and administrative(1) | 31,893 | 21,847 | 18,384 | 17,104 | 16,130 |
| New pet acquisition expense(1) | 78,647 | 47,837 | 35,451 | 24,999 | 19,104 |
| Depreciation and amortization | 11,965 | 7,071 | 5,632 | 4,512 | 4,232 |
| Total operating expenses | 139,371 | 86,702 | 66,492 | 52,411 | 45,692 |
| Loss from investment in joint venture | (171) | (126) | (352) | — | — |
| Operating loss | (35,196) | (4,927) | (1,920) | (1,045) | (2,642) |
| Interest expense | 10 | 1,381 | 1,349 | 1,198 | 533 |
| Other expense (income), net | 14 | (581) | (1,629) | (1,309) | (1,244) |
| Loss before income taxes | (35,220) | (5,727) | (1,640) | (934) | (1,931) |
| Income tax expense (benefit) | 310 | 113 | 169 | (7) | (428) |
| Net loss | $ (35,530) | $ (5,840) | $ (1,809) | $ (927) | $ (1,503) |

(1) Includes stock-based compensation expense as follows:

| | Year Ended December 31, | | | | |
|---|---|---|---|---|---|
| | 2021 | 2020 | 2019 | 2018 | 2017 |
| | | | (in thousands) | | |
| Cost of revenue | $ 7,148 | $ 1,586 | $ 1,050 | $ 927 | $ 594 |
| Technology and development | 3,056 | 3,795 | 364 | 209 | 216 |
| General and administrative | 8,862 | 2,773 | 3,312 | 2,304 | 1,887 |
| New pet acquisition expense | 9,160 | 758 | 2,120 | 1,335 | 722 |
| Total stock-based compensation expense | $ 28,226 | $ 8,912 | $ 6,846 | $ 4,775 | $ 3,419 |

| | December 31, | | | | |
|---|---|---|---|---|---|
| | 2021 | 2020 | 2019 | 2018 | 2017 |
| | (in thousands) | | | | |
| **Consolidated balance sheet data:** | | | | | |
| Cash and cash equivalents | $ 87,400 | $ 139,878 | $ 29,168 | $ 26,552 | $ 25,706 |
| Short-term investments | 126,012 | 89,862 | 69,732 | 54,559 | 37,590 |
| Working capital | 167,258 | 186,628 | 67,196 | 54,773 | 40,692 |
| Total assets | 562,582 | 498,250 | 257,200 | 207,510 | 105,859 |
| Current and long-term debt | — | — | 26,086 | 12,862 | 9,324 |
| Total liabilities | 230,382 | 158,311 | 120,440 | 78,337 | 57,425 |
| Common stock and additional paid-in capital | 466,792 | 439,007 | 232,731 | 219,838 | 134,511 |
| Accumulated deficit | (126,890) | (91,360) | (85,520) | (83,711) | (82,784) |
| Total stockholders' equity | 332,200 | 339,939 | 136,760 | 129,173 | 48,434 |

| | Year Ended December 31, | | | | |
|---|---|---|---|---|---|
| | 2021 | 2020 | 2019 | 2018 | 2017 |
| **Other operational data(1):** | | | | | |
| Total Business: | | | | | |
| Total pets enrolled (at period end) | 1,176,778 | 862,928 | 646,728 | 521,326 | 423,194 |
| Subscription Business: | | | | | |
| Total subscription pets enrolled | 704,333 | 577,957 | 494,026 | 430,770 | 371,683 |
| Monthly average revenue per pet | $ 63.56 | $ 60.37 | $ 57.52 | $ 54.34 | $ 52.07 |
| Lifetime value of a pet, including fixed expenses | $ 717 | $ 653 | $ 523 | $ 449 | $ 409 |
| Average pet acquisition cost (PAC)(2) | $ 287 | $ 247 | $ 212 | $ 164 | $ 152 |
| Average monthly retention | 98.74 % | 98.71 % | 98.58 % | 98.60 % | 98.63 % |

(1) For more information about how we calculate total pets enrolled, total subscription pets enrolled, monthly average revenue per pet, lifetime value of a pet, including fixed expenses, average pet acquisition cost and average monthly retention, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Key Operating Metrics."

(2) Average pet acquisition cost is calculated in part based on net acquisition cost, a non-GAAP financial measure. For more information about net acquisition cost and a reconciliation of new pet acquisition expense to net acquisition cost, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Non-GAAP Financial Measures."

## Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

*Please read the following discussion and analysis of our financial condition and results of operations together with our consolidated financial statements and related notes included under Part II, Item 8 of this Annual Report on Form 10-K.*

*This section of this Form 10-K generally discusses 2021 and 2020 items and year-to-year comparisons between 2021 and 2020. Discussions of 2019 items and year-to-year comparisons between 2020 and 2019 that are not included in this Form 10-K can be found in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II, Item 7 of the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2020.*

### Overview

We provide medical insurance for cats and dogs throughout the United States, Canada, Puerto Rico, and Australia. Our data-driven, vertically-integrated approach enables us to provide pet owners with products that offer what we believe is the highest value medical insurance, priced specifically for each pet's unique characteristics and coverage level. Our growing and loyal membership base provides us with highly predictable and recurring revenue. We operate our subscription business segment similar to other subscription-based businesses, with a focus on achieving a target margin prior to our pet acquisition expense and acquiring as many pets as possible at our targeted average estimated internal rate of return.

We operate in two business segments: subscription business and other business. We generate revenue in our subscription business segment primarily by subscription fees from our "Trupanion" branded products. Fees are paid at the beginning of each subscription period, which automatically renews on a monthly basis. We generate revenue in our other business segment primarily by writing policies on behalf of third parties. We do not undertake the marketing efforts for these policies and have a business-to-business relationship with these third parties. Our other business segment also includes revenue from other products and software solutions that have a different margin profile from our subscription business.

We generate leads for our subscription business segment from a diverse set of member acquisition channels, which we then convert into members through our contact center, website and other direct-to-consumer activities. These channels include leads from third-parties such as veterinarians and referrals from existing members. Veterinary hospitals represent our largest referral source. We engage our "Territory Partners" to have face-to-face visits with veterinarians and their staff. Territory Partners are dedicated to cultivating direct veterinary relationships and building awareness of the benefits of high quality medical insurance to veterinarians and their clients. Veterinarians then educate pet owners, who visit our website or call our contact center to learn more about, and potentially enroll in, Trupanion. We also receive a significant number of new leads from existing members adding pets and referring their friends and family members. Our direct-to-consumer acquisition channels serve as important resources for pet owner education and drive new member leads and conversion. We monitor average pet acquisition cost to evaluate the efficiency in acquiring new members and measure effectiveness based on our targeted return on investment.

### Our Response to the COVID-19 Pandemic

We have not experienced a material adverse impact on our business due to COVID-19, but we continue to monitor conditions closely and adapt our operations to meet federal, state and local guidance. Our focus remains on promoting employee health and safety, serving our members and ensuring business continuity. Our Seattle headquarters is now open for those who want to work in that office, in compliance with applicable regulations and guidance.

The impacts of COVID-19 and related economic conditions on our results are highly uncertain and in many ways outside of our control. The scope, duration and magnitude of the direct and indirect effects of COVID-19 are evolving rapidly and in ways that are difficult, if possible, to anticipate. For additional details, see the section titled "Risk Factors."

### Key Operating Metrics

The following tables set forth total pets enrolled and key operating metrics for our subscription business for the years ended December 31, 2021, 2020 and 2019, and for each of the last eight fiscal quarters.

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2021 | 2020 | 2019 |
| Total Business: | | | |
| Total pets enrolled (at period end) | 1,176,778 | 862,928 | 646,728 |
| Subscription Business: | | | |
| Total subscription pets enrolled (at period end) | 704,333 | 577,957 | 494,026 |
| Monthly average revenue per pet | $ 63.56 | $ 60.37 | $ 57.52 |
| Lifetime value of a pet, including fixed expenses | $ 717 | $ 653 | $ 523 |
| Average pet acquisition cost (PAC) | $ 287 | $ 247 | $ 212 |
| Average monthly retention | 98.74 % | 98.71 % | 98.58 % |

| | Three Months Ended | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Dec. 31, 2021 | Sept. 30, 2021 | Jun. 30, 2021 | Mar. 31, 2021 | Dec. 31, 2020 | Sept. 30, 2020 | Jun. 30, 2020 | Mar. 31, 2020 |
| Total Business: | | | | | | | | |
| Total pets enrolled (at period end) | 1,176,778 | 1,104,376 | 1,024,226 | 943,854 | 862,928 | 804,251 | 744,727 | 687,435 |
| Subscription Business: | | | | | | | | |
| Total subscription pets enrolled (at period end) | 704,333 | 676,463 | 643,395 | 609,835 | 577,957 | 552,909 | 529,400 | 508,480 |
| Monthly average revenue per pet | $63.89 | $63.60 | $63.69 | $62.97 | $62.03 | $60.87 | $59.40 | $58.96 |
| Lifetime value of a pet, including fixed expenses | $ 717 | $ 697 | $ 681 | $ 684 | $ 653 | $ 615 | $ 597 | $ 535 |
| Average pet acquisition cost (PAC) | $ 306 | $ 280 | $ 284 | $ 279 | $ 272 | $ 261 | $ 199 | $ 247 |
| Average monthly retention | 98.74 % | 98.72 % | 98.72 % | 98.73 % | 98.71 % | 98.69 % | 98.66 % | 98.59 % |

***Total pets enrolled.*** Total pets enrolled reflects the number of subscription pets or pets enrolled in one of the insurance products offered in our other business segment at the end of each period presented. We monitor total pets enrolled because it provides an indication of the growth of our consolidated business.

***Total subscription pets enrolled.*** Total subscription pets enrolled reflects the number of pets in active memberships at the end of each period presented. We monitor total subscription pets enrolled because it provides an indication of the growth of our subscription business.

***Monthly average revenue per pet.*** Monthly average revenue per pet is calculated as amounts billed in a given period for subscriptions divided by the total number of subscription pet months in the period. Total subscription pet months in a period represents the sum of all subscription pets enrolled for each month during the period. We monitor monthly average revenue per pet because it is an indicator of the per pet unit economics of our subscription business.

***Lifetime value of a pet, including fixed expenses.*** Lifetime value of a pet, including fixed expenses, is calculated based on subscription revenue less cost of revenue from our subscription business segment for the 12 months prior to the period end date excluding stock-based compensation expense related to cost of revenue from our subscription business segment, sign-up fee revenue and the change in deferred revenue between periods. This amount is also reduced by the fixed expenses related to our subscription business, which are the pro-rata portion of general and administrative and technology and development expenses, less stock-based compensation, based on revenues. This amount, on a per pet basis, is multiplied by the implied average subscriber life in months. Implied average subscriber life in months is calculated as the quotient obtained by dividing one by one minus the average monthly retention rate. We monitor lifetime value of a pet, including fixed expenses, to estimate the value we might expect from new pets over their implied average subscriber life in months, if they behave like the average pet in that respective period. When evaluating the amount of pet acquisition expenses we may want to incur to attract new pet enrollments, we refer to the lifetime value of a pet, including fixed expenses, as well as our estimated internal rate of return calculation for an average pet, which also includes an estimated surplus capital charge, to inform the amount of acquisition spend in relation to the estimated payback period.

***Average pet acquisition cost.*** Average pet acquisition cost (PAC) is calculated as net acquisition cost divided by the total number of new subscription pets enrolled in that period. Net acquisition cost, a non-GAAP financial measure, is calculated in a reporting period as new pet acquisition expense, excluding stock-based compensation expense and other business segment expense, offset by sign-up fee revenue. We exclude stock-based compensation expense because the amount varies from period to period based on number of awards issued and market-based valuation inputs. We offset sign-up fee revenue because it is a one-time charge to new members collected at the time of enrollment used to partially offset initial setup costs, which are included in new pet acquisition expenses. We exclude other business segment pet acquisition expense because that does not relate to subscription enrollments. We monitor average pet acquisition cost to evaluate the efficiency in acquiring new members and measure effectiveness based on our targeted return on investment.

***Average monthly retention.*** Average monthly retention is measured as the monthly retention rate of enrolled subscription pets for each applicable period averaged over the 12 months prior to the period end date. As such, our average monthly retention rate as of December 31, 2021 is an average of each month’s retention from January 1, 2021 through December 31, 2021. We calculate monthly retention as the number of pets that remain after subtracting all pets that cancel during a month, including pets that enroll and cancel within that month, divided by the total pets enrolled at the beginning of that month. We monitor average monthly retention because it provides a measure of member satisfaction and allows us to calculate the implied average subscriber life in months.

**Non-GAAP Financial Measures**

In addition to our results determined in accordance with U.S. GAAP, we believe the following non-GAAP financial measures are useful in evaluating our operating performance. We use the following non-GAAP financial information to evaluate our ongoing operations and for internal planning and forecasting purposes. We believe that these non-GAAP financial measures, when taken collectively, may be helpful to investors because it provides consistency and comparability with past financial performance. However, non-GAAP financial information is presented for supplemental informational purposes only, has limitations as an analytical tool, and should not be considered in isolation, or as a substitute for, the directly comparable financial measures prepared in accordance with GAAP.

We calculate these non-GAAP financial measures by excluding certain non-cash or non-recurring expenses. We exclude business combination transaction cost as it is non-recurring and not indicative of our operating performance. We exclude stock-based compensation as it is non-cash in nature. Although stock-based compensation expenses are expected to remain recurring expenses for the foreseeable future, we believe excluding them allows investors to make meaningful comparisons between our recurring core business operating results and those of other companies. We define non-GAAP development expenses as operating expenses incurred to develop new products and offerings that are pre-revenue. We define non-GAAP fixed expenses as the total of Technology and Development expense and General and Administrative expense, less stock-based compensation expense, business combination transaction cost, and non-GAAP development expenses.

The following tables present the reconciliation of our non-GAAP financial measures from corresponding GAAP measures for the periods presented:

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2021 | 2020 | 2019 |
| Veterinary invoice expense | $ 486,062 | $ 351,124 | $ 270,947 |
| Less: | | | |
| Stock-based compensation expense | (4,538) | (1,118) | (697) |
| Other business cost of paying veterinary invoices | (129,614) | (72,119) | (38,532) |
| **Subscription cost of paying veterinary invoices (non-GAAP)** | $ 351,910 | $ 277,887 | $ 231,718 |
| % of subscription revenue | 71.1 % | 71.7 % | 72.1 % |
| | | | |
| Other cost of revenue | $ 108,583 | $ 69,003 | $ 48,065 |
| Less: | | | |
| Stock-based compensation expense | (2,610) | (468) | (353) |
| Other business variable expenses | (57,367) | (33,133) | (18,341) |
| **Subscription variable expenses (non-GAAP)** | $ 48,606 | $ 35,402 | $ 29,371 |
| % of subscription revenue | 9.8 % | 9.1 % | 9.1 % |
| | | | |
| Technology and development expense | $ 16,866 | $ 9,947 | $ 7,025 |
| General and administrative expense | 31,893 | 21,847 | 18,384 |
| Less: | | | |
| Stock-based compensation expense | (11,918) | (4,553) | (3,676) |
| Business combination transaction costs | (82) | (522) | — |
| Development expenses (non-GAAP) | (3,719) | (339) | — |
| **Fixed expenses (non-GAAP)** | $ 33,040 | $ 26,380 | $ 21,733 |
| % of total revenue | 4.7 % | 5.3 % | 5.7 % |
| | | | |
| New pet acquisition expense | $ 78,647 | $ 47,837 | $ 35,451 |
| Less: | | | |
| Stock-based compensation expense | (9,160) | (2,773) | (2,120) |
| Other business pet acquisition expense | (499) | (820) | (414) |
| **Subscription acquisition cost (non-GAAP)** | $ 68,988 | $ 44,244 | $ 32,917 |
| % of subscription revenue | 13.9 % | 11.4 % | 10.2 % |
| | | | |
| Technology and development expense | $ 16,866 | $ 9,947 | $ 7,025 |
| General and administrative expense | 31,893 | 21,847 | 18,384 |
| Less: | | | |
| Stock-based compensation expense | (11,918) | (4,553) | (3,676) |
| Business combination transaction costs | (82) | (522) | — |
| Fixed expenses (non-GAAP) | (33,040) | (26,380) | (21,733) |
| **Development expenses (non-GAAP)** | $ 3,719 | $ 339 | $ — |
| % of total revenue | 0.5 % | 0.1 % | — % |

| | Three Months Ended | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **Dec. 31, 2021** | **Sept. 30, 2021** | **Jun. 30, 2021** | **Mar. 31, 2021** | **Dec. 31, 2020** | **Sept. 30, 2020** | **Jun. 30, 2020** | **Mar. 31, 2020** |
| Veterinary invoice expense | $132,852 | $125,058 | $118,282 | $109,870 | $98,169 | $91,266 | $82,049 | $79,640 |
| Less: | | | | | | | | |
| Stock-based compensation expense | (798) | (769) | (672) | (2,299) | (358) | (337) | (245) | (178) |
| Other business cost of paying veterinary invoices | (38,009) | (34,432) | (31,029) | (26,144) | (22,254) | (19,394) | (16,019) | (14,452) |
| **Subscription cost of paying veterinary invoices (non-GAAP)** | $94,045 | $89,857 | $86,581 | $81,427 | $75,557 | $71,535 | $65,785 | $65,010 |
| % of subscription revenue | 70.1 % | 70.7 % | 71.9 % | 71.9 % | 71.0 % | 72.0 % | 71.2 % | 72.6 % |
| | | | | | | | | |
| Other cost of revenue | $30,992 | $28,443 | $25,433 | $23,715 | $20,925 | $18,265 | $16,004 | $13,809 |
| Less: | | | | | | | | |
| Stock-based compensation expense | (581) | (542) | (552) | (935) | (168) | (111) | (99) | (90) |
| Other business variable expenses | (17,208) | (15,315) | (12,940) | (11,904) | (11,079) | (9,039) | (7,440) | (5,575) |
| **Subscription variable expenses (non-GAAP)** | $13,203 | $12,586 | $11,941 | $10,876 | $9,678 | $9,115 | $8,465 | $8,144 |
| % of subscription revenue | 9.8 % | 9.9 % | 9.9 % | 9.6 % | 9.1 % | 9.2 % | 9.2 % | 9.1 % |
| | | | | | | | | |
| Technology and development expense | $4,665 | $4,391 | $4,079 | $3,731 | $3,108 | $2,426 | $2,293 | $2,120 |
| General and administrative expense | 8,996 | 8,246 | 7,435 | 7,216 | 6,502 | 5,412 | 5,073 | 4,860 |
| Less: | | | | | | | | |
| Stock-based compensation expense | (3,293) | (3,020) | (3,122) | (2,483) | (1,275) | (1,241) | (1,208) | (829) |
| Business combination transaction costs | — | — | — | (82) | (522) | — | — | — |
| Development expenses (non-GAAP) | (858) | (919) | (1,121) | (821) | (339) | — | — | — |
| **Fixed expenses (non-GAAP)** | $9,510 | $8,698 | $7,271 | $7,561 | $7,474 | $6,597 | $6,158 | $6,151 |
| % of total revenue | 4.9 % | 4.8 % | 4.3 % | 4.9 % | 5.2 % | 5.1 % | 5.2 % | 5.5 % |
| | | | | | | | | |
| New pet acquisition expense | $19,845 | $19,708 | $19,390 | $19,704 | $14,809 | $13,344 | $9,242 | $10,442 |
| Less: | | | | | | | | |
| Stock-based compensation expense | (2,136) | (2,112) | (2,181) | (2,731) | (801) | (741) | (675) | (556) |
| Other business pet acquisition expense | (76) | (134) | (118) | (171) | (201) | (265) | (191) | (163) |
| **Subscription acquisition cost (non-GAAP)** | $17,633 | $17,462 | $17,091 | $16,802 | $13,807 | $12,338 | $8,376 | $9,723 |
| % of subscription revenue | 13.1 % | 13.7 % | 14.2 % | 14.8 % | 13.0 % | 12.4 % | 9.1 % | 10.9 % |
| | | | | | | | | |
| Technology and development expense | $4,665 | $4,391 | $4,079 | $3,731 | $3,108 | $2,426 | $2,293 | $2,120 |
| General and administrative expense | 8,996 | 8,246 | 7,435 | 7,216 | 6,502 | 5,412 | 5,073 | 4,860 |
| Less: | | | | | | | | |
| Stock-based compensation expense | (3,293) | (3,020) | (3,122) | (2,483) | (1,275) | (1,241) | (1,208) | (829) |
| Business combination transaction costs | — | — | — | (82) | (522) | — | — | — |
| Fixed expenses (non-GAAP) | (9,510) | (8,698) | (7,271) | (7,561) | (7,474) | (6,597) | (6,158) | (6,151) |
| **Development expenses (non-GAAP)** | $ 858 | $ 919 | $1,121 | $ 821 | $ 339 | $ — | $ — | $ — |
| % of total revenue | 0.4 % | 0.5 % | 0.7 % | 0.5 % | 0.2 % | — % | — % | — % |

When determining our PAC, we calculate net acquisition cost for a more comparable metric across periods. Net acquisition cost, a non-GAAP financial measure, is calculated in a reporting period as GAAP new pet acquisition expense, excluding stock-based compensation expense and other business segment expense, offset by sign-up fee revenue. We exclude stock-based compensation expense because the amount varies from period to period based on the number of awards issued and market-based valuation inputs. We offset sign-up fee revenue because it is a one-time charge to new members collected at the time of enrollment used to partially offset initial setup costs, which are included in new pet acquisition expenses. We exclude other business segment pet acquisition expense because it does not relate to subscription enrollments.

The following tables reconcile GAAP new pet acquisition expense to non-GAAP net acquisition cost (in thousands) for the years ended December 31, 2021, 2020, and 2019, and for each of the last eight fiscal quarters:

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2021 | 2020 | 2019 |
| New pet acquisition expense | $ 78,647 | $ 47,837 | $ 35,451 |
| Net of sign-up fee revenue | (4,954) | (3,292) | (2,957) |
| Excluding: | | | |
| Stock-based compensation expense | (9,160) | (2,773) | (2,120) |
| Other business segment pet acquisition expense | (499) | (820) | (414) |
| Net acquisition cost | $ 64,034 | $ 40,952 | $ 29,960 |

| | Three Months Ended | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Dec. 31, 2021 | Sept. 30, 2021 | Jun. 30, 2021 | Mar. 31, 2021 | Dec. 31, 2020 | Sept. 30, 2020 | Jun. 30, 2020 | Mar. 31, 2020 |
| New pet acquisition expense | $ 19,845 | $ 19,708 | $ 19,390 | $ 19,704 | $ 14,809 | $ 13,344 | $ 9,242 | $ 10,442 |
| Net of sign-up fee revenue | (1,162) | (1,268) | (1,260) | (1,264) | (919) | (827) | (781) | (765) |
| Excluding: | | | | | | | | |
| Stock-based compensation expense | (2,136) | (2,112) | (2,181) | (2,731) | (801) | (741) | (675) | (556) |
| Other business segment pet acquisition expense | (76) | (134) | (118) | (171) | (201) | (265) | (191) | (163) |
| Net acquisition cost | $ 16,471 | $ 16,194 | $ 15,831 | $ 15,538 | $ 12,888 | $ 11,511 | $ 7,595 | $ 8,958 |

## Components of Operating Results

### *General*

We operate in two business segments: subscription business and other business. Our subscription business segment primarily relates to subscription fees from our "Trupanion" branded products. Our other business segment includes revenue from other product offerings that generally have a business-to-business relationship and different margin profiles than our subscription segment, including revenue from writing policies on behalf of third parties and revenue from other products and software solutions.

### *Revenue*

We generate revenue in our subscription business segment primarily from subscription fees for our pet medical insurance. Fees are paid at the beginning of each subscription period, which automatically renews on a monthly basis. In most cases, our members authorize us to directly charge their credit card, debit card or bank account through automatic funds transfer. Subscription revenue is recognized on a pro rata basis over the monthly enrollment term. Membership may be canceled at any time without penalty, and we issue a refund for the unused portion of the canceled membership.

We generate revenue in our other business segment primarily from writing policies on behalf of third parties where we do not undertake the direct consumer marketing. This segment also includes revenue from other products and software solutions that have a different margin profile from our subscription business.

### *Cost of Revenue*

Cost of revenue in each of our segments is comprised of the following:

#### *Veterinary invoice expense*

Veterinary invoice expense includes our costs to review veterinary invoices, administer the payments, and provide member services, and other operating expenses directly or indirectly related to this process. We also accrue for veterinary invoices that have been incurred but not yet received. This also includes amounts paid by unaffiliated general agents, and an estimate of amounts incurred and not yet paid for our other business segment.

#### *Other cost of revenue*

Other cost of revenue for the subscription business segment includes direct and indirect member service expenses, Territory Partner renewal fees, credit card transaction fees and premium tax expenses. Other cost of revenue for the other business segment includes the commissions we pay to unaffiliated general agents, costs to administer the programs in the other business segment and premium taxes on the sales in this segment.

### *Operating Expenses*

Our operating expenses are classified into four categories: technology and development, general and administrative, new pet acquisition expense, and depreciation and amortization. For each category, excluding depreciation and amortization, the largest component is personnel costs, which include salaries, employee benefit costs, bonuses and stock-based compensation expense.

#### *Technology and development*

Technology and development expenses primarily consist of personnel costs and related expenses for our technology staff, which includes information technology development and infrastructure support, including third-party services. It also includes expenses associated with development of new products and offerings.

#### *General and administrative*

General and administrative expenses consist primarily of personnel costs and related expenses for our finance, actuarial, human resources, regulatory, legal and general management functions, as well as facilities and professional services.

#### *New pet acquisition expense*

New pet acquisition expenses primarily consist of costs, including employee compensation, to educate veterinarians and consumers about the benefits of Trupanion, to generate leads and to convert leads into enrolled pets, as well as print, online and promotional advertising costs. New pet acquisition expense was previously termed “sales and marketing” on the consolidated statement of operations. This update represents a change in name only. It does not denote a change in method of accounting.

#### *Depreciation and amortization*

Depreciation and amortization expenses consist of depreciation of property, equipment, and software developed for internal use, as well as amortization of finite-lived intangible assets.

### *Gain (loss) from investment in joint venture*

Gain (loss) from investment in joint venture consists of the share of income and losses from our equity method investment in a joint venture, as well as income and expenses associated with administrative services provided to the joint venture.

### *Stock-based compensation*

Stock-based compensation is included in the cost and expense line items above. Stock-based compensation will vary depending on corporate performance pursuant to our pre-approved equity incentive plan. For example, when we have delivered strong performance, stock-based compensation may increase as a result of incentive-based awards under our equity incentive plan.

## Factors Affecting Our Performance

***Average monthly retention.*** Our performance depends on our ability to continue to retain our existing and newly enrolled pets and is impacted by our ability to provide a best-in-class value and member experience. Our ability to retain enrolled pets depends on a number of factors, including the actual and perceived value of our services and the quality of our member experience, the ease and transparency of the process for reviewing and paying veterinary invoices for our members, and the competitive environment. In addition, other initiatives across our business may temporarily impact retention and make it difficult for us to improve or maintain this metric. For example, if the number of new pets enrolled increases at a faster rate than our historical experience, our average monthly retention rate could be adversely impacted, as our retention rate is generally lower during the first year of member enrollment.

***Investment in pet acquisition.*** We have made and plan to continue to make significant investments to grow our member base. Our net acquisition cost and the number of new members we enroll depends on a number of factors, including the amount we elect to invest in pet acquisition activities in any particular period in the aggregate and by channel, the frequency of existing members adding a pet or referring their friends or family, the effectiveness of our sales execution and marketing initiatives, changes in costs of media, the mix of our pet acquisition expenditures and the competitive environment. Our average pet acquisition cost has in the past significantly varied, and in the future may significantly vary, from period to period based upon specific marketing initiatives and estimated rates of return on pet acquisition spend. We also regularly test new member acquisition channels and marketing initiatives, which may be more expensive than our traditional marketing channels and may increase our average acquisition costs. We continually assess our pet acquisition activities by monitoring the estimated return on PAC spend both on a detailed level by acquisition channel and in the aggregate.

***Timing of initiatives.*** Over time we plan to implement new initiatives to improve our member experience, make modifications to our subscription plan, introduce new coverage plans, pursue pet food or other adjacent opportunities, improve our technology, increase the number of veterinary hospitals using our direct pay software, and find other ways to maintain a strong value proposition for our members. These initiatives will sometimes be accompanied by price adjustments, in order to compensate for an increase in benefits received by our members. The implementation of such initiatives may not always coincide with the timing of price adjustments, resulting in fluctuations in revenue and profitability in our subscription business segment.

***Geographic mix of sales.*** The relative mix of our business between the United States and Canada impacts the monthly average revenue per pet we receive. Prices for our plan in Canada are generally higher than in the United States (in local currencies), which is consistent with the relative cost of veterinary care in each country. As our mix of business between the United States and Canada changes, our metrics, such as our monthly average revenue per pet, and our exposure to foreign exchange fluctuations will be impacted. Any expansion into other international markets could have similar effects.

***Other business segment.*** Our other business segment primarily includes other product offerings that generally have a business-to-business relationship. These products have been in the past, and may be in the future, materially different from our subscription segment. Our relationships in our other business segment are generally subject to termination provisions and are non-exclusive. Accordingly, we cannot control the volume of business, even if a contract is not terminated. Loss of an entire program via contract termination could result in the associated policies and revenue being lost over a period of 12 to 18 months, which could have a material impact on our results of operations. We may enter into additional relationships in the future to the extent we believe they will be profitable to us, which could also impact our operating results.

**Results of Operations**

The following tables set forth our results of operations for the periods presented both in absolute dollars and as a percentage of total revenue for those periods. The period-to-period comparison of financial results is not necessarily indicative of future results.

| | Year Ended December 31, 2021 | 2020 | 2019 |
|---|---|---|---|
| | (in thousands) | | |
| Revenue: | | | |
| Subscription business | $ 494,862 | $ 387,732 | $ 321,163 |
| Other business | 204,129 | 114,296 | 62,773 |
| Total revenue | 698,991 | 502,028 | 383,936 |
| Cost of revenue: | | | |
| Subscription business(1) | 407,664 | 314,875 | 262,139 |
| Other business | 186,981 | 105,252 | 56,873 |
| Total cost of revenue | 594,645 | 420,127 | 319,012 |
| Operating expenses: | | | |
| Technology and development(1) | 16,866 | 9,947 | 7,025 |
| General and administrative(1) | 31,893 | 21,847 | 18,384 |
| New pet acquisition expense(1) | 78,647 | 47,837 | 35,451 |
| Depreciation and amortization | 11,965 | 7,071 | 5,632 |
| Total operating expenses | 139,371 | 86,702 | 66,492 |
| Loss from investment in joint venture | (171) | (126) | (352) |
| Operating loss | (35,196) | (4,927) | (1,920) |
| Interest expense | 10 | 1,381 | 1,349 |
| Other expense (income), net | 14 | (581) | (1,629) |
| Loss before income taxes | (35,220) | (5,727) | (1,640) |
| Income tax expense | 310 | 113 | 169 |
| Net loss | $ (35,530) | $ (5,840) | $ (1,809) |

(1) Includes stock-based compensation expense as follows:

| | Year Ended December 31, 2021 | 2020 | 2019 |
|---|---|---|---|
| | (in thousands) | | |
| Cost of revenue | $ 7,148 | $ 1,586 | $ 1,050 |
| Technology and development | 3,056 | 758 | 364 |
| General and administrative | 8,862 | 3,795 | 3,312 |
| New pet acquisition expense | 9,160 | 2,773 | 2,120 |
| Total stock-based compensation expense | $ 28,226 | $ 8,912 | $ 6,846 |

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2021 | 2020 | 2019 |
| | (as a percentage of revenue) | | |
| Revenue | 100 % | 100 % | 100 % |
| Cost of revenue | 85 | 84 | 83 |
| Operating expenses: | | | |
| Technology and development | 2 | 2 | 2 |
| General and administrative | 5 | 4 | 5 |
| New pet acquisition expense | 11 | 10 | 9 |
| Depreciation and amortization | 2 | 1 | 1 |
| Total operating expenses | 20 | 17 | 17 |
| Loss from investment in joint venture | — | — | — |
| Operating loss | (5) | (1) | (1) |
| Interest expense | — | — | — |
| Other expense (income), net | — | — | — |
| Loss before income taxes | (5) | (1) | — |
| Income tax expense | — | — | — |
| Net loss | (5)% | (1)% | — % |

| Stock-based compensation expense: | Year Ended December 31, | | |
|---|---|---|---|
| | 2021 | 2020 | 2019 |
| | (as a percentage of revenue) | | |
| Cost of revenue | 1 % | — % | — % |
| Technology and development | 1 | 1 | 1 |
| General and administrative | — | — | — |
| New pet acquisition expense | 1 | 1 | 1 |
| Total stock-based compensation expense | 4 % | 2 % | 2 % |

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2021 | 2020 | 2019 |
| | (as a percentage of subscription revenue) | | |
| Subscription business revenue | 100 % | 100 % | 100 % |
| Subscription business cost of revenue | 82 | 81 | 82 |

**Comparison of the years ended December 31, 2021, 2020, and 2019**

***Revenue***

| | Year Ended December 31, | | | % Change | |
|---|---|---|---|---|---|
| | 2021 | 2020 | 2019 | 2021 vs. 2020 | 2020 vs. 2019 |
| | (in thousands, except percentages, pet and per pet data) | | | | |
| **Revenue:** | | | | | |
| Subscription business | $ 494,862 | $ 387,732 | $ 321,163 | 28% | 21% |
| Other business | 204,129 | 114,296 | 62,773 | 79 | 82 |
| Total revenue | $ 698,991 | $ 502,028 | $ 383,936 | 39 | 31 |
| | | | | | |
| **Percentage of Revenue by Segment:** | | | | | |
| Subscription business | 71 % | 77 % | 84 % | | |
| Other business | 29 | 23 | 16 | | |
| Total revenue | 100 % | 100 % | 100 % | | |
| | | | | | |
| Total pets enrolled (at period end) | 1,176,778 | 862,928 | 646,728 | 36 | 33 |
| Total subscription pets enrolled (at period end) | 704,333 | 577,957 | 494,026 | 22 | 17 |
| Monthly average revenue per pet | $ 63.56 | $ 60.37 | $ 57.52 | 5 | 5 |
| Average monthly retention | 98.74 % | 98.71 % | 98.58 % | | |

***Year ended December 31, 2021 compared to year ended December 31, 2020.*** Total revenue increased by $197.0 million to $699.0 million for the year ended December 31, 2021, or 39%. Revenue from our subscription business segment increased by $107.1 million to $494.9 million for the year ended December 31, 2021, or 28%. This increase was primarily due to a 22% increase in total subscription pets enrolled as of December 31, 2021 compared to December 31, 2020 and increased average revenue per pet of 5% for the same period. Increases in pricing were due to the increased cost and utilization of veterinary care. Revenue from our other business segment increased by $89.8 million to $204.1 million for the year ended December 31, 2021, or 79%, primarily due to a 66% increase in enrolled pets in this segment.

***Cost of Revenue***

| | Year Ended December 31, | | | % Change | |
|---|---|---|---|---|---|
| | 2021 | 2020 | 2019 | 2021 vs. 2020 | 2020 vs. 2019 |
| | (in thousands, except percentages, pet and per pet data) | | | | |
| **Cost of Revenue:** | | | | | |
| Subscription business: | | | | | |
| Veterinary invoice expense | $ 356,448 | $ 279,005 | $ 232,415 | 28% | 20% |
| Other cost of revenue | 51,216 | 35,870 | 29,724 | 43 | 21 |
| Total cost of revenue | 407,664 | 314,875 | 262,139 | 29 | 20 |
| Other business: | | | | | |
| Veterinary invoice expense | 129,614 | 72,119 | 38,532 | 80 | 87 |
| Other cost of revenue | 57,367 | 33,133 | 18,341 | 73 | 81 |
| Total cost of revenue | 186,981 | 105,252 | 56,873 | 78 | 85 |
| | | | | | |
| **Percentage of Revenue by Segment:** | | | | | |
| Subscription business: | | | | | |
| Veterinary invoice expense | 72 % | 72 % | 72 % | | |
| Other cost of revenue | 10 | 9 | 9 | | |
| Total cost of revenue | 82 | 81 | 82 | | |
| Other business: | | | | | |
| Veterinary invoice expense | 63 | 63 | 61 | | |
| Other cost of revenue | 28 | 29 | 29 | | |
| Total cost of revenue | 92 | 92 | 91 | | |
| | | | | | |
| Total pets enrolled (at period end) | 1,176,778 | 862,928 | 646,728 | 36 | 33 |
| Total subscription pets enrolled (at period end) | 704,333 | 577,957 | 494,026 | 22 | 17 |
| Monthly average revenue per pet | $ 63.56 | $ 60.37 | $ 57.52 | 5 | 5 |

***Year ended December 31, 2021 compared to year ended December 31, 2020.*** Cost of revenue for our subscription business segment was $407.7 million, or 82% of revenue, for the year ended December 31, 2021, compared to $314.9 million, or 81%, of revenue for the year ended December 31, 2020. This increase of 29% in subscription cost of revenue was primarily the result of a 22% increase in subscription pets enrolled and an increase of 5% in veterinary invoice expense per pet due to increases in the cost and utilization of veterinary care. Additionally, stock-based compensation expense increased $5.6 million during the period due to new performance grants in the first quarter of this year, including the full impact of one-time team grants in the first quarter of $2.3 million. Cost of revenue for our other business segment increased by $81.7 million, or 78%, to $187.0 million for the year ended December 31, 2021, primarily due to the increase in enrolled pets in this segment.

***Technology and Development Expenses***

| | Year Ended December 31, | | | % Change | |
|---|---|---|---|---|---|
| | 2021 | 2020 | 2019 | 2021 vs. 2020 | 2020 vs. 2019 |
| | (in thousands, except percentages) | | | | |
| Technology and development | $ 16,866 | $ 9,947 | $ 7,025 | 70% | 42% |
| Percentage of total revenue | 2 % | 2 % | 2 % | | |

***Year ended December 31, 2021 compared to year ended December 31, 2020.*** Technology and development expenses increased by $6.9 million, or 70%, to $16.9 million for the year ended December 31, 2021. Technology expense increased by $3.9 million year over year, primarily due to $2.3 million of increased stock-based compensation during the period due to new performance grants in the first quarter of this year, as well as $1.6 million increase in general technology expense to support the business growth.

Development expense associated with developing new products and offerings was $3.7 million, or 0.5% of our total revenue, for the twelve months ended December 31, 2021. It increased by $3.0 million year over year, as a result of expenditures and investment in several pre-revenue initiatives.

Excluding stock-based compensation, technology and development expenses in total remained consistent at approximately 2% as a percentage of revenue year over year.

***General and Administrative Expenses***

| | Year Ended December 31, | | | % Change | |
|---|---|---|---|---|---|
| | 2021 | 2020 | 2019 | 2021 vs. 2020 | 2020 vs. 2019 |
| | (in thousands, except percentages) | | | | |
| General and administrative | $ 31,893 | $ 21,847 | $ 18,384 | 46% | 19% |
| Percentage of total revenue | 5 % | 4 % | 5 % | | |

***Year ended December 31, 2021 compared to year ended December 31, 2020.*** General and administrative expenses increased by $10.1 million, or 46%, to $31.9 million for the year ended December 31, 2021. The increase in expense was primarily due to a $5.1 million increase in stock-based compensation, a $2.6 million increase in compensation expense related primarily to increased headcount, a $1.2 million increase in facilities-related expenses, and a $1.0 million increase in legal, tax and other professional service fees. Excluding stock-based compensation, general and administrative expenses were 3.3% of revenue, compared to 3.6% of revenue in the prior year.

***New Pet Acquisition Expense***

| | Year Ended December 31, | | | % Change | |
|---|---|---|---|---|---|
| | 2021 | 2020 | 2019 | 2021 vs. 2020 | 2020 vs. 2019 |
| | (in thousands, except pet and per pet data) | | | | |
| New pet acquisition expense | $ 78,647 | $ 47,837 | $ 35,451 | 64% | 35% |
| Percentage of total revenue | 11 % | 10 % | 9 % | | |
| **Subscription Business:** | | | | | |
| Total subscription pets enrolled (at period end) | 704,333 | 577,957 | 494,026 | 22 | 17 |
| Average pet acquisition cost (PAC) | $ 287 | $ 247 | $ 212 | 16 | 17 |

***Year ended December 31, 2021 compared to year ended December 31, 2020.*** New pet acquisition expense increased by $30.8 million, or 64%, to $78.6 million, for the year ended December 31, 2021. The increase was primarily attributable to a $13.7 million increase in expenses to generate leads and increase conversion rates and a $10.3 million increase in compensation expenses primarily related to headcount increases. Additionally, stock-based compensation expense increased $6.4 million during the period due to new performance grants in the first quarter of this year.

***Depreciation and Amortization***

| | Year Ended December 31, | | | % Change | |
|---|---|---|---|---|---|
| | 2021 | 2020 | 2019 | 2021 vs. 2020 | 2020 vs. 2019 |
| | (in thousands, except percentages) | | | | |
| Depreciation and amortization | $ 11,965 | $ 7,071 | $ 5,632 | 69% | 26% |
| Percentage of total revenue | 2 % | 1 % | 1 % | | |

Depreciation and amortization expenses have been reclassified as a separate line item in the consolidated statement of operations since 2020 and prior period amounts have been reclassified from their original presentation to conform to the current period presentation. We elected to present depreciation and amortization expenses as a separate line to better align with management's view of our operating results.

***Year ended December 31, 2021 compared to year ended December 31, 2020.*** Depreciation and amortization expense increased by $4.9 million, or 69%, to $12.0 million for the year ended December 31, 2021. The increase was primarily due to a $4.1 million incremental amortization in 2021 as a result of acquired intangible assets in the fourth quarter of 2020, as well as increased depreciation in line with business growth.

***Stock-Based Compensation***

***Year ended December 31, 2021 compared to year ended December 31, 2020.*** Stock-based compensation is included in the cost and expense line items in the consolidated statements of operations, discussed above. Stock-based compensation expense in total was $28.2 million for the year ended December 31, 2021, up from $8.9 million in the prior year period. The amount of stock-based compensation recognized largely reflects the timing and vesting of our annual performance grants, including grants in the first quarter of this year for the strong 2020 performance, calculated according to our equity incentive plan.

### Quarterly Results of Operations

The following tables contain selected quarterly financial information for the years ended December 31, 2021 and 2020. The unaudited quarterly information has been prepared on a basis consistent with the audited consolidated financial statements and includes all adjustments that we consider necessary for a fair presentation of the information shown. These quarterly operating results for any fiscal quarter are not necessarily indicative of the operating results for any full fiscal year or future period.

| **Consolidated Statements of Operations Data:** | **Three Months Ended** | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **Dec. 31, 2021** | **Sept. 30, 2021** | **Jun. 30, 2021** | **Mar. 31, 2021** | **Dec. 31, 2020** | **Sept. 30, 2020** | **Jun. 30, 2020** | **Mar. 31, 2020** |
| | **(in thousands)** | | | | | | | |
| Revenue: | | | | | | | | |
| Subscription business | $ 134,120 | $ 127,077 | $ 120,373 | $ 113,292 | $ 106,416 | $ 99,379 | $ 92,453 | $ 89,484 |
| Other business | 60,259 | 54,590 | 47,887 | 41,393 | 36,271 | 30,741 | 25,467 | 21,817 |
| Total revenue | 194,379 | 181,667 | 168,260 | 154,685 | 142,687 | 130,120 | 117,920 | 111,301 |
| Cost of revenue: | | | | | | | | |
| Subscription business(1) | 108,627 | 103,754 | 99,746 | 95,537 | 85,761 | 81,098 | 74,594 | 73,422 |
| Other business | 55,217 | 49,747 | 43,969 | 38,048 | 33,333 | 28,433 | 23,459 | 20,027 |
| Total cost of revenue | 163,844 | 153,501 | 143,715 | 133,585 | 119,094 | 109,531 | 98,053 | 93,449 |
| Operating expenses: | | | | | | | | |
| Technology and development(1) | 4,665 | 4,391 | 4,079 | 3,731 | 3,108 | 2,426 | 2,293 | 2,120 |
| General and administrative(1) | 8,996 | 8,246 | 7,435 | 7,216 | 6,502 | 5,412 | 5,073 | 4,860 |
| New pet acquisition expense(1) | 19,845 | 19,708 | 19,390 | 19,704 | 14,809 | 13,344 | 9,242 | 10,442 |
| Depreciation and amortization | 2,770 | 2,944 | 3,158 | 3,093 | 2,301 | 1,666 | 1,723 | 1,381 |
| Total operating expenses | 36,276 | 35,289 | 34,062 | 33,744 | 26,720 | 22,848 | 18,331 | 18,803 |
| Gain (loss) from investment in joint venture | (22) | (69) | 5 | (85) | (42) | 2 | (27) | (59) |
| Operating income (loss) | (5,763) | (7,192) | (9,512) | (12,729) | (3,169) | (2,257) | 1,509 | (1,010) |
| Interest expense | 9 | — | 3 | (2) | 337 | 324 | 341 | 379 |
| Other expense (income), net | 236 | (61) | (99) | (62) | (48) | (49) | (202) | (282) |
| Income (loss) before income taxes | (6,008) | (7,131) | (9,416) | (12,665) | (3,458) | (2,532) | 1,370 | (1,107) |
| Income tax expense (benefit) | 1,034 | (312) | (195) | (217) | 44 | 26 | 17 | 26 |
| Net income (loss) | $ (7,042) | $ (6,819) | $ (9,221) | $ (12,448) | $ (3,502) | $ (2,558) | $ 1,353 | $ (1,133) |

(1) Includes stock-based compensation expense as follows (in thousands):

| | **Three Months Ended** | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **Dec. 31, 2021** | **Sept. 30, 2021** | **Jun. 30, 2021** | **Mar. 31, 2021** | **Dec. 31, 2020** | **Sept. 30, 2020** | **Jun. 30, 2020** | **Mar. 31, 2020** |
| | **(in thousands)** | | | | | | | |
| Cost of revenue | $ 1,379 | $ 1,311 | $ 1,224 | $ 3,234 | $ 526 | $ 448 | $ 344 | $ 268 |
| Technology and development | 843 | 749 | 800 | 664 | 392 | 133 | 133 | 100 |
| General and administrative | 2,450 | 2,271 | 2,322 | 1,819 | 883 | 1,108 | 1,075 | 729 |
| New pet acquisition expense | 2,136 | 2,112 | 2,181 | 2,731 | 801 | 741 | 675 | 556 |
| Total stock-based compensation expense | $ 6,808 | $ 6,443 | $ 6,527 | $ 8,448 | $ 2,602 | $ 2,430 | $ 2,227 | $ 1,653 |

| | Three Months Ended | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Dec. 31, 2021 | Sept. 30, 2021 | Jun. 30, 2021 | Mar. 31, 2021 | Dec. 31, 2020 | Sept. 30, 2020 | Jun. 30, 2020 | Mar. 31, 2020 |
| **Other Financial and Operational Data:** | | | | | | | | |
| Total Business: | | | | | | | | |
| Total pets enrolled (at period end) | 1,176,778 | 1,104,376 | 1,024,226 | 943,854 | 862,928 | 804,251 | 744,727 | 687,435 |
| Subscription Business: | | | | | | | | |
| Total subscription pets enrolled (at period end) | 704,333 | 676,463 | 643,395 | 609,835 | 577,957 | 552,909 | 529,400 | 508,480 |
| Monthly average revenue per pet | $ 63.89 | $ 63.6 | $ 63.69 | $ 62.97 | $ 62.03 | $ 60.87 | $ 59.40 | $ 58.96 |
| Lifetime value of a pet, including fixed expenses | $ 717 | $ 697 | $ 681 | $ 684 | $ 653 | $ 615 | $ 597 | $ 535 |
| Average pet acquisition cost (PAC) | $ 306 | $ 280 | $ 284 | $ 279 | $ 272 | $ 261 | $ 199 | $ 247 |
| Average monthly retention | 98.74 % | 98.72 % | 98.72 % | 98.73 % | 98.71 % | 98.69 % | 98.66 % | 98.59 % |

| | Three Months Ended | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Dec. 31, 2021 | Sept. 30, 2021 | Jun. 30, 2021 | Mar. 31, 2021 | Dec. 31, 2020 | Sept. 30, 2020 | Jun. 30, 2020 | Mar. 31, 2020 |
| | (as a percentage of revenue) | | | | | | | |
| Revenue | 100 % | 100 % | 100 % | 100 % | 100 % | 100 % | 100 % | 100 % |
| Cost of revenue | 84 | 84 | 85 | 86 | 83 | 84 | 83 | 84 |
| Operating expenses: | | | | | | | | |
| Technology and development | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| General and administrative | 5 | 5 | 4 | 7 | 5 | 4 | 4 | 4 |
| New pet acquisition expense | 10 | 11 | 12 | 13 | 10 | 10 | 8 | 8 |
| Depreciation and amortization | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 1 |
| Total operating expenses | 19 | 19 | 20 | 22 | 19 | 18 | 16 | 17 |
| Gain (loss) from investment in joint venture | — | — | — | — | — | — | — | — |
| Operating income (loss) | (3) | (4) | (6) | (8) | (2) | (2) | 1 | (3) |
| Interest expense | — | — | — | — | — | — | — | — |
| Other expense (income), net | — | — | — | — | — | — | — | — |
| Income (loss) before income taxes | (3) | (4) | (6) | (8) | (2) | (2) | 1 | (1) |
| Income tax expense (benefit) | 1 | — | — | — | — | — | — | — |
| Net income (loss) | (4)% | (4)% | (5)% | (8)% | (2)% | (2)% | 1 % | (1)% |

| | Three Months Ended | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Dec. 31, 2021 | Sept. 30, 2021 | Jun. 30, 2021 | Mar. 31, 2021 | Dec. 31, 2020 | Sept. 30, 2020 | Jun. 30, 2020 | Mar. 31, 2020 |
| | (as a percentage of subscription revenue) | | | | | | | |
| Subscription business revenue | 100 % | 100 % | 100 % | 100 % | 100 % | 100 % | 100 % | 100 % |
| Subscription business cost of revenue | 81 | 82 | 83 | 84 | 81 | 82 | 81 | 82 |

## Liquidity and Capital Resources

The following table summarizes our cash flows for the periods indicated (in thousands):

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2021 | 2020 | 2019 |
| Net cash provided by operating activities | $ 7,458 | $ 21,544 | $ 16,157 |
| Net cash used in investing activities | (51,913) | (76,747) | (28,008) |
| Net cash (used in) provided by financing activities | (1,125) | 170,848 | 14,044 |
| Effect of exchange rates on cash and cash equivalents | 252 | (16) | 423 |
| Net change in cash, cash equivalents, and restricted cash | $ (45,328) | $ 115,629 | $ 2,616 |

As of December 31, 2021, we had $213.4 million in cash, cash equivalents and short-term investments. Most of the assets in our insurance subsidiaries are subject to certain capital and dividend rules and regulations prescribed by jurisdictions in which they are authorized to operate. As of December 31, 2021, total assets and liabilities held outside of our insurance entities were $210.8 million and $31.6 million, respectively, including $8.0 million of cash and cash equivalents that were segregated from other operating funds and held in trust for the payment of veterinary invoices on behalf of our insurance subsidiaries. For further information, refer to "—Regulation".

Our primary sources of liquidity are our existing cash, cash equivalents, and short-term investments, as well as cash provided by operations. We believe these sources are sufficient to fund our operations and capital requirements for the next 12 months. As we continue to grow and consider strategic opportunities, however, we may explore additional financing to fund our operations and growth or to meet capital requirements. Financing could include equity, equity-linked, or debt financing. Additional financing may not be available to us on acceptable terms, or at all.

Our primary requirements for liquidity are paying veterinary invoices, funding operations and capital requirements, investing in new member acquisition, and investing in enhancements to our member experience. In December 2020, we elected to terminate our line of credit facility and repaid all then outstanding obligations. We have certain contractual obligations in the normal course of business, including obligations and commitments relating to non-cancellable vendor purchase agreements, as well as future payments of veterinary invoice claims. Refer to Note 10, Reserve for Veterinary Invoices, included in Item 8 of Part II of this 10-K, for further details on anticipated cash outflows.

In April 2021, our board of directors approved a share repurchase program, pursuant to which the Company may, between May 2021 and May 2026, repurchase outstanding shares of our common stock. While our board of directors has approved the program, any repurchase will be subject to quarterly assessments based on parameters we set. We cannot predict the timing or extent of any repurchases of shares of common stock, as such repurchases will depend on a number of factors, some of which are beyond our control. These include uses of capital in a given quarter, available cash, our stock price relative to our estimated intrinsic value, and general market conditions. We have not repurchased any shares under this program.

*Operating Cash Flows*

We derive operating cash flows primarily from the sale of our subscription plans, which is used to pay veterinary invoices and other cost of revenue. Additionally, cash is used to support the growth of our business by reinvesting to acquire new pet enrollments and to fund projects that improve our members' experience. Net cash provided by operating activities was $7.5 million for the year ended December 31, 2021, compared to $21.5 million net cash provided by operating activities for the year ended December 31, 2020. The change was primarily driven by increased pet acquisition spend during the current period to drive new pet enrollments and future growth, faster payment of veterinary invoices as a result of increased utilization of claims automation, as well as timing differences between collections from members and payments of veterinary invoices and payments to vendors. Changes in accounts receivable and deferred revenue were primarily related to annual policies with monthly payment terms within our other business segment.

*Investing Cash Flows*

Net cash used in investing activities was $51.9 million for the year ended December 31, 2021, primarily related to net purchase of investments to increase our statutory capital, as well as purchases of property, equipment and intangible assets, primarily related to development of internal use software focused on new product initiatives and member experience improvements.

*Financing Cash Flows*

Net cash used in financing activities was $1.1 million for the year ended December 31, 2021, compared to $170.8 million net cash provided by financing activities in the prior year. In October 2020, we entered into a Strategic Alliance Agreement, Shareholder Agreement, and a Stock Purchase Agreement with Aflac Incorporated (Aflac). To drive long-term alignment, Aflac invested $200.0 million cash in exchange for 3,636,364 newly issued shares of our common stock at a price of $55 per share, subject to a minimum holding period of three years. The financing cash flow change year over year was primarily due to net proceeds of $192.3 million received from the sale of common stock to Aflac, partially offset by repayment and termination of the line of credit facility in 2020.

**Critical Accounting Policies and Significant Estimates**

Our discussion and analysis of our financial condition and results of operations is based upon our consolidated financial statements, which have been prepared in accordance with GAAP. The preparation of these consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities as of the date of the consolidated financial statements, as well as the reported revenue and expenses during the reporting periods.

Critical accounting policies and estimates are those that we consider the most important to the portrayal of our financial condition and results of operations because they require our most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. Generally, we base our estimates on historical experience and on various other factors that we believe to be reasonable under the circumstances. Actual results may differ from these estimates.

***Reserve for Veterinary Invoices***

We use the paid loss development method (chain-ladder method) to estimate reserves for veterinary invoices for our subscription and for the majority of our other business segment. Paid loss development factors are estimated based on historical paid loss triangles. The reserve represents our estimate of the future amount we will pay for veterinary invoices that are dated as of, or prior to, our balance sheet date. The reserve also includes our estimate of related internal processing costs. To determine the accrual, we make assumptions based on our historical experience, including the number of veterinary invoices we expect to receive, the average cost of those veterinary invoices, the length of time between the date of the veterinary invoice and the date we receive it, and our expected cost to process and administer the payments. As of each balance sheet date, we reevaluate our reserve and may adjust the estimate for new information.

As of December 31, 2021, our reserve for veterinary invoices was $39.7 million, consisting of $37.3 million for the amount we expect to pay in the future for veterinary invoices dated between January 1, 2021 and December 31, 2021, inclusive of related processing costs, and a reserve of $2.4 million for invoices dated prior to January 1, 2021. We believe the reserve amount as of December 31, 2021 is adequate, and we do not believe that there are any reasonably likely changes in the facts or circumstances underlying key assumptions that would result in the reserve balance being insufficient in an amount that would have a material impact on our reported results, financial position or liquidity. The ultimate liability, however, may be in excess of or less than the amount we have reserved.

For the year ended December 31, 2021, we paid $24.9 million for veterinary invoices dated on or before December 31, 2020, including related processing costs. Our reserve estimate for these expenses was $28.9 million as of December 31, 2020. As of December 31, 2021, we reevaluated the remaining reserve for those periods prior to December 31, 2020 and recorded an adjustment to our income statement to decrease it by $1.6 million.

***Accounting for Business Acquisition***

As discussed in Item 8, Note 3—Business Combination, we acquired 100% of the equity of Aquarium Software Limited (Aquarium) for total consideration of approximately $48.3 million in net cash on October 30, 2020. Accounting for this business acquisition requires us to make certain estimates and assumptions, especially at the acquisition date with respect to tangible and intangible assets acquired and liabilities assumed. We used our best estimates and assumptions to accurately assign fair value to the tangible and intangible assets acquired and liabilities assumed at the acquisition date as well as the useful lives of those acquired intangible assets. We used a discounted cash flow model to measure the acquired intangible assets. The key assumptions used to estimate the fair value of the intangible assets included discount rates and certain assumptions that form the basis of the forecasted results. These key assumptions are forward looking and could be affected by future economic and market conditions. Unanticipated events and circumstances may occur that may affect the accuracy or validity of such assumptions, estimates or actual results.

### *Income Taxes*

We determine our deferred tax assets and liabilities based on the differences between the financial reporting and tax basis of assets and liabilities. The deferred tax assets and liabilities are measured using the enacted tax rates that will be in effect when the differences are expected to reverse. A valuation allowance is recorded when it is more likely than not that the deferred tax asset will not be recovered. We apply judgment in the determination of the consolidated financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. Although we believe our assumptions, judgments and estimates are reasonable, changes in tax laws or our interpretation of tax laws and the resolution of any tax audits could significantly impact the amounts provided for income taxes in our consolidated financial statements.

## Item 7A. Quantitative and Qualitative Disclosures About Market Risks

We are exposed to market risks in the ordinary course of business, primarily related to interest rate sensitivities and foreign currency exchange risk.

### *Interest Rate Risk*

We may be exposed to interest rate risk as a result of our debt and our investment activities. We elected to terminate our line of credit facility in December 2020 and repaid all of the outstanding obligations. The primary objective of our investment activities is to maintain principal and the majority of our investments are short-term in nature. A 10% change in market interest rates would not be expected to have a material impact on our consolidated financial condition or results of operations.

### *Foreign Currency Exchange Risk*

We generate approximately 16% of our revenue in Canada. As our operations in Canada or the United States grow on an absolute basis and/or relative to one another, our results of operations and cash flows will be subject to fluctuations due to changes in foreign currency exchange rates. A 10% change in the Canadian currency exchange rate could have a material impact on our consolidated financial condition or results of operations. A hypothetical change of this magnitude would have increased or decreased our total revenues by approximately $11.3 million, total expenses by approximately $4.2 million, and have a net impact of $7.1 million of income or loss for the year ended December 31, 2021. To date, we have not entered into any material foreign currency hedging contracts although we may do so in the future.

## Item 8. Financial Statements and Supplementary Data

**Trupanion, Inc.**
**Index to Consolidated Financial Statements**

## Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Trupanion, Inc.

### Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Trupanion, Inc. (the Company) as of December 31, 2021 and 2020, the related consolidated statements of operations, comprehensive loss, changes in stockholders' equity and cash flows for each of the three years in the period ended December 31, 2021, and the related notes and the financial statement schedule listed in the Index at Item 15(a) (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated February 17, 2022 expressed an unqualified opinion thereon.

### Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

### Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the account or disclosures to which it relates.

### Reserve for Veterinary Invoices

| | |
|---|---|
| *Description of the Matter* | The Company's reserve for veterinary invoices totaled $39.7 million as of December 31, 2021. As discussed in Note 1 to the financial statements, the Company's reserve for veterinary invoices is based on an actuarial analysis of the Company's historical experience including the number of veterinary invoices it expects to receive, the average cost of those veterinary invoices, the length of time between the date of the veterinary invoice and the date the Company receives the veterinary invoice, the members' chosen deductibles and the Company's expected cost to process and administer payments.<br><br>Auditing the Company's reserve for veterinary invoices is complex due to the sensitivity of the estimated reserve to management assumptions including frequency and severity of loss and development factors applied to paid and reported invoices. |
| *How We Addressed the Matter in Our Audit* | We evaluated the design and tested the operating effectiveness of controls over the reserve for veterinary invoices process, including controls over the completeness and accuracy of the data used in management's actuarial projections and the review and approval processes that management has in place for the methods and assumptions used by management's actuaries in estimating the reserves.<br><br>To evaluate the reserve for veterinary invoices, our audit procedures included, among others, testing the completeness and accuracy of the underlying invoice data and related contracts. We involved our actuarial specialists to assist in our evaluation of management's methodologies and assumptions used in the calculation of the reserve and compared the Company's recorded reserve to a range of reasonable estimates developed independently by our actuarial specialists. |

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2012.

Seattle, Washington
February 17, 2022

**Trupanion, Inc.**
**Consolidated Statements of Operations**
**(in thousands, except per share data)**

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2021 | 2020 | 2019 |
| Revenue | $ 698,991 | $ 502,028 | $ 383,936 |
| Cost of revenue: | | | |
| Veterinary invoice expense(1) | 486,062 | 351,124 | 270,947 |
| Other cost of revenue(1) | 108,583 | 69,003 | 48,065 |
| Total cost of revenue | 594,645 | 420,127 | 319,012 |
| Operating expenses: | | | |
| Technology and development(1) | 16,866 | 9,947 | 7,025 |
| General and administrative(1) | 31,893 | 21,847 | 18,384 |
| New pet acquisition expense(1) | 78,647 | 47,837 | 35,451 |
| Depreciation and amortization | 11,965 | 7,071 | 5,632 |
| Total operating expenses | 139,371 | 86,702 | 66,492 |
| Loss from investment in joint venture | (171) | (126) | (352) |
| Operating loss | (35,196) | (4,927) | (1,920) |
| Interest expense | 10 | 1,381 | 1,349 |
| Other expense (income), net | 14 | (581) | (1,629) |
| Loss before income taxes | (35,220) | (5,727) | (1,640) |
| Income tax expense | 310 | 113 | 169 |
| Net loss | $ (35,530) | $ (5,840) | $ (1,809) |
| | | | |
| Net loss per share: | | | |
| Basic and diluted | $ (0.89) | $ (0.16) | $ (0.05) |
| Weighted average shares of common stock outstanding: | | | |
| Basic and diluted | 40,137,505 | 35,858,869 | 34,645,345 |

(1)Includes stock-based compensation expense as follows:

| | | | |
|---|---|---|---|
| Veterinary invoice expense | 4,538 | 1,118 | 697 |
| Other cost of revenue | 2,610 | 468 | 353 |
| Technology and development | 3,056 | 758 | 364 |
| General and administrative | 8,862 | 3,795 | 3,312 |
| New pet acquisition expense | 9,160 | 2,773 | 2,120 |

**Trupanion, Inc.**
**Consolidated Statements of Comprehensive Loss**
**(in thousands)**

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2021 | 2020 | 2019 |
| Net loss | $ (35,530) | $ (5,840) | $ (1,809) |
| Other comprehensive income (loss): | | | |
| Foreign currency translation adjustments | (496) | 2,496 | 359 |
| Net unrealized gain on available-for-sale debt securities | 502 | 325 | 644 |
| Other comprehensive income, net of taxes | 6 | 2,821 | 1,003 |
| Comprehensive loss | $ (35,524) | $ (3,019) | $ (806) |

**Trupanion, Inc.**
**Consolidated Balance Sheets**
**(in thousands, except share data)**

| | December 31, | |
|---|---|---|
| | 2021 | 2020 |
| **Assets** | | |
| Current assets: | | |
| Cash and cash equivalents | $ 87,400 | $ 139,878 |
| Short-term investments | 126,012 | 89,862 |
| Accounts and other receivables, net of allowance for doubtful accounts of $342 and $271 | 165,217 | 99,065 |
| Prepaid expenses and other assets | 12,325 | 8,222 |
| Total current assets | 390,954 | 337,027 |
| Restricted cash | 13,469 | 6,319 |
| Long-term investments, at fair value | 7,061 | 5,566 |
| Property and equipment, net | 77,950 | 72,602 |
| Intangible assets, net | 22,663 | 27,134 |
| Other long-term assets | 17,776 | 16,557 |
| Goodwill | 32,709 | 33,045 |
| Total assets | $ 562,582 | $ 498,250 |
| **Liabilities and stockholders' equity** | | |
| Current liabilities: | | |
| Accounts payable | $ 8,952 | $ 6,059 |
| Accrued liabilities and other current liabilities | 28,162 | 22,864 |
| Reserve for veterinary invoices | 39,671 | 28,929 |
| Deferred revenue | 146,911 | 92,547 |
| Total current liabilities | 223,696 | 150,399 |
| Deferred tax liabilities | 2,827 | 4,705 |
| Other liabilities | 3,859 | 3,207 |
| Total liabilities | 230,382 | 158,311 |
| Stockholders' equity: | | |
| Common stock: $0.00001 par value per share, 100,000,000 shares authorized; 41,408,350 and 40,475,185 shares issued and outstanding at December 31, 2021; 40,383,972 and 39,450,807 shares issued and outstanding at December 31, 2020 | — | — |
| Preferred stock: $0.00001 par value per share, 10,000,000 shares authorized; no shares issued and outstanding | — | — |
| Additional paid-in capital | 466,792 | 439,007 |
| Accumulated other comprehensive income (loss) | 3,077 | 3,071 |
| Accumulated deficit | (126,890) | (91,360) |
| Treasury stock, at cost: 933,165 shares at December 31, 2021 and 2020 | (10,779) | (10,779) |
| Total stockholders' equity | 332,200 | 339,939 |
| Total liabilities and stockholders' equity | $ 562,582 | $ 498,250 |

**Trupanion, Inc.**
**Consolidated Statements of Stockholders' Equity**
**(in thousands, except share amounts)**

| | Common Stock | | Additional Paid-in Capital | Accumulated Deficit | Accumulated Other Comprehensive Income (Loss) | Treasury Stock | Total Stockholders' Equity |
|---|---|---|---|---|---|---|---|
| | Shares | Amount | | | | | |
| **Balance at January 1, 2019** | 34,025,136 | $ — | $ 219,838 | $ (83,711) | $ (753) | $ (6,201) | $ 129,173 |
| Exercise of warrants, net | 306,120 | — | 4,800 | — | — | (4,500) | 300 |
| Issuance of common stock in connection with the Company's equity award programs, net of tax withholdings | 615,761 | — | 1,043 | — | — | — | 1,043 |
| Stock-based compensation expense | — | — | 7,050 | — | — | — | 7,050 |
| Other comprehensive income | — | — | — | — | 1,003 | — | 1,003 |
| Net loss | — | — | — | (1,809) | — | — | (1,809) |
| **Balance at December 31, 2019** | 34,947,017 | — | 232,731 | (85,520) | 250 | (10,701) | 136,760 |
| Issuance of common stock from private placement | 3,636,364 | — | 192,265 | — | — | — | 192,265 |
| Issuance of common stock in connection with the Company's equity award programs, net of tax withholdings | 870,726 | — | 4,864 | — | — | — | 4,864 |
| Stock-based compensation expense | — | — | 9,147 | — | — | — | 9,147 |
| Repurchase of common stock | (3,300) | — | — | — | — | (78) | (78) |
| Other comprehensive income | — | — | — | — | 2,821 | — | 2,821 |
| Net loss | — | — | — | (5,840) | — | — | (5,840) |
| **Balance at December 31, 2020** | 39,450,807 | — | 439,007 | (91,360) | 3,071 | (10,779) | 339,939 |
| Issuance of common stock in connection with the Company's equity award programs, net of tax withholdings | 1,024,378 | — | (1,117) | — | — | — | (1,117) |
| Stock-based compensation expense | — | — | 28,902 | — | — | — | 28,902 |
| Other comprehensive income | — | — | — | — | 6 | — | 6 |
| Net loss | — | — | — | (35,530) | — | — | (35,530) |
| **Balance at December 31, 2021** | 40,475,185 | $ — | $ 466,792 | $ (126,890) | $ 3,077 | $ (10,779) | $ 332,200 |

**Trupanion, Inc.**
**Consolidated Statements of Cash Flows**
**(in thousands)**

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2021 | 2020 | 2019 |
| **Operating activities** | | | |
| Net loss | $ (35,530) | $ (5,840) | $ (1,809) |
| Adjustments to reconcile net loss to cash provided by operating activities: | | | |
| Depreciation and amortization | 11,965 | 7,071 | 5,632 |
| Stock-based compensation expense | 28,226 | 8,912 | 6,846 |
| Other, net | (1,927) | 153 | 105 |
| Changes in operating assets and liabilities: | | | |
| Accounts and other receivables | (66,170) | (43,272) | (22,772) |
| Prepaid expenses and other assets | (3,055) | (2,839) | (432) |
| Accounts payable, accrued liabilities, and other liabilities | 8,796 | 9,951 | 4,110 |
| Reserve for veterinary invoices | 10,768 | 7,662 | 5,059 |
| Deferred revenue | 54,385 | 39,746 | 19,418 |
| Net cash provided by operating activities | 7,458 | 21,544 | 16,157 |
| **Investing activities** | | | |
| Purchases of investment securities | (95,672) | (65,286) | (65,506) |
| Maturities of investment securities | 57,869 | 44,066 | 49,762 |
| Cash paid in business acquisition, net of cash acquired | — | (48,133) | — |
| Purchases of other investments | — | — | (4,000) |
| Purchases of property and equipment | (12,355) | (7,451) | (5,373) |
| Other | (1,755) | 57 | (2,891) |
| Net cash used in investing activities | (51,913) | (76,747) | (28,008) |
| **Financing activities** | | | |
| Issuance of common stock, net of offering costs | — | 192,265 | — |
| Proceeds from exercise of stock options | 3,607 | 6,013 | 2,982 |
| Shares withheld to satisfy tax withholding | (4,732) | (1,115) | (1,667) |
| Proceeds from debt financing, net of financing fees | — | 6,213 | 13,167 |
| Repayment of debt financing | — | (32,450) | — |
| Other | — | (78) | (438) |
| Net cash (used in) provided by financing activities | (1,125) | 170,848 | 14,044 |
| Effect of foreign exchange rate changes on cash, cash equivalents, and restricted cash, net | 252 | (16) | 423 |
| Net change in cash, cash equivalents, and restricted cash | (45,328) | 115,629 | 2,616 |
| Cash, cash equivalents, and restricted cash at beginning of period | 146,197 | 30,568 | 27,952 |
| Cash, cash equivalents, and restricted cash at end of period | $ 100,869 | $ 146,197 | $ 30,568 |
| **Supplemental disclosures** | | | |
| Income taxes paid (refund) | $ 282 | $ (31) | $ 158 |
| Interest paid | 16 | 1,363 | 1,188 |
| Noncash investing and financing activities: | | | |
| Issuance of common stock for cashless exercise of warrants | — | — | 4,500 |
| Purchases of property and equipment included in accounts payable and accrued liabilities | 729 | 861 | 485 |
| Acquisition-related contingent consideration recorded as a liability | $ — | $ 162 | $ — |

## 1. Nature of Operations and Summary of Significant Accounting Policies

### *Description of Business*

Trupanion, Inc. (collectively with its wholly-owned subsidiaries, the "Company") provides medical insurance for cats and dogs throughout the United States, Canada, Puerto Rico, and Australia. The Company's data-driven, vertically-integrated approach enables the Company to provide pet owners with products that the Company believes are the highest value medical insurance, priced specifically for each pet's unique characteristics.

### *Basis of Presentation*

The consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP") and include the accounts of the Company and its wholly-owned subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation.

### *Use of Estimates*

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results could differ from such estimates.

### *Reclassifications*

Depreciation and amortization expenses have been reclassified as a separate line item in the consolidated statement of operations since 2020 and prior period amounts have been reclassified from their original presentation to conform to the current period presentation. The Company has elected to present depreciation and amortization expenses as a separate line item to better align with management's view of the Company's operating results.

### *Cash, Cash Equivalents and Restricted Cash*

The Company considers all highly liquid investments with an original maturity of three months or less to be cash equivalents. At times, cash on deposit may be in excess of the applicable federal deposit insurance corporation limits.

The Company considers any cash account that is contractually restricted to withdrawal or use to be restricted cash. The Company is required to maintain certain restricted cash balances to comply with insurance company regulations. As of December 31, 2021, the Company was in compliance with all requirements.

### *Accounts and Other Receivables*

Receivables are comprised of trade receivables and other miscellaneous receivables. Accounts and other receivables are carried at their estimated collectible amounts. Accounts receivable balance is primarily related to the Company's other business segment where the Company generates revenue from underwriting policies through unaffiliated general agents. These policies are typically annual policies, with monthly payment terms through the end of the twelve-month period. The Company had $159.4 million and $94.2 million accounts receivable associated with underwriting these policies as of December 31, 2021 and 2020, respectively.

### *Deferred Acquisition Costs*

The Company incurs certain costs, including premium taxes, fees and enrollment-based bonuses, and referral fees that directly relate to the successful acquisition of new or renewal customer contracts. These costs are deferred and are included in prepaid expenses and other assets on the consolidated balance sheet and amortized over the related policy term to the applicable financial statement line item, either new pet acquisition expense or other cost of revenue. Deferred acquisition costs as of December 31, 2021 and 2020 were $4.3 million and $2.9 million, respectively. Amortized deferred acquisition costs classified within new pet acquisition expense amounted to $4.7 million, $3.2 million, and $2.5 million and amortized deferred acquisition costs classified within other cost of revenue amounted to $30.5 million, $23.2 million, and $19.2 million, for the years ended December 31, 2021, 2020, and 2019, respectively.

### *Investments*

The Company invests in investment grade fixed income securities of varying maturities. Long-term investments are classified as available-for-sale and reported at fair value with unrealized gains and losses included in accumulated other comprehensive loss. Short-term investments are classified as held-to-maturity and reported at amortized cost. Premiums or discounts on fixed income securities are amortized or accreted over the life of the security and included in interest income. There have been no realized gains and losses on sales of fixed income securities.

The Company evaluates whether declines in the fair value of its investments below book value are other-than-temporary. This evaluation includes the Company's ability and intent to hold the security until an expected recovery occurs, the severity and duration of the unrealized loss, as well as all available information relevant to the collectability of the security, including past events, current conditions, and reasonable and supportable forecasts, when developing estimates of cash flows expected to be collected.

### *Fair Value of Financial Instruments*

The Company is required to disclose information on all assets and liabilities reported at fair value that enables an assessment of the inputs used in determining the reported fair values. The fair value hierarchy prioritizes valuation inputs based on the observable nature of those inputs. The fair value hierarchy applies only to the valuation inputs used in determining the reported fair value of the investments and is not a measure of the investment credit quality. The hierarchy defines three levels of valuation inputs:

Level 1 - Quoted prices in active markets for identical assets or liabilities

Level 2 - Inputs other than quoted prices that are observable for the asset or liability, either directly or indirectly

Level 3 - Unobservable inputs that reflect the Company's own assumptions about the assumptions market participants would use in pricing the asset or liability

The Company's financial instruments, in addition to those presented in Note 8, Fair Value, include cash and cash equivalents, accounts receivable, accounts payable, and accrued liabilities. The carrying amounts of accounts receivable, accounts payable, and accrued liabilities approximate fair value because of the short-term nature of these instruments.

### *Property and Equipment*

Property and equipment primarily consists of building, land and land improvements, office equipment, internally-developed software related to the Company’s website, and internal support systems, capitalized during the application development stage of the project. Property and equipment is recorded at cost and depreciated using the straight-line method over the estimated useful life of the respective asset:

| | |
|---|---|
| Land | Not depreciable |
| Land improvements | 10 years |
| Building | 39 years |
| Software | 3 to 5 years |
| Office equipment | 3 to 5 years |

### *Goodwill and Intangible Assets*

Goodwill and indefinite-lived intangible assets are not amortized. The Company reviews these assets for impairment at least annually or if indicators of potential impairment exist. Acquired finite-lived intangibles are amortized on a straight-line basis over the estimated useful lives of the assets.

### *Asset Impairment*

Long-lived assets, including property, equipment, and intangible assets, are reviewed for impairment when events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Should an impairment exist, the impairment loss would be measured as the amount the asset's carrying value exceeds its fair value. The Company has recognized no impairment loss on long-lived assets for the years ended December 31, 2021, 2020, and 2019.

***Reserve for Veterinary Invoices***

Reserve for veterinary invoices is an estimate of the future amount the Company will pay for veterinary invoices that are dated as of, or prior to, its balance sheet date. The reserve also includes the Company's estimate of related internal processing costs. To determine the accrual, the Company makes assumptions based on its historical experience, including the number of veterinary invoices it expects to receive, the average cost of those veterinary invoices, the length of time between the date of the veterinary invoice and the date the Company receives it, the member's chosen deductible, and the Company's expected cost to process and administer the payments. As of each balance sheet date, the Company reevaluates its reserve and may adjust the estimate for new information.

***Deferred Revenue***

Deferred revenue is primarily related to the Company’s other business segment where the Company generates revenue from underwriting policies through unaffiliated general agents. These policies are typically annual policies, with monthly payment terms through the end of the twelve-month period. Deferred revenue also consists of subscription fees received or billed in advance of the subscription services within the Company's subscription business.

***Revenue Recognition***

The Company generates revenue primarily from subscription fees and through underwriting policies for unaffiliated general agents. Revenue is recognized pro-rata over the terms of the customer contracts.

***Veterinary Invoice Expense***

Veterinary invoice expense includes the Company’s costs to review veterinary invoices, administer the payments, and provide member services, and other operating expenses directly or indirectly related to this process. The Company also accrues for veterinary invoices that have been incurred but not yet received or paid. This also includes amounts paid by unaffiliated general agents, and an estimate of amounts incurred and not yet paid for the other business segment.

***Other Cost of Revenue***

Other cost of revenue for the subscription business segment includes direct and indirect member service expenses, Territory Partner renewal fees, credit card transaction fees and premium tax expenses. Other cost of revenue for the other business segment includes the commissions the Company pays to unaffiliated general agents and costs to administer the programs in the other business segment.

***Technology and Development***

Technology and development expenses primarily consist of personnel costs and related expenses for the Company's technology staff, which includes information technology development and infrastructure support and third-party services. It also includes expenses associated with development of new products and offerings.

***General and Administrative***

General and administrative expenses consist primarily of personnel costs and related expenses for the Company’s finance, actuarial, human resources, legal, regulatory, and general management functions, as well as facilities and professional services.

***New Pet Acquisition Expense***

New pet acquisition expense primarily consists of costs, including employee compensation, to educate veterinarians and consumers about the benefits of Trupanion, to generate leads and to convert leads into enrolled pets, as well as print, online and promotional advertising costs. New pet acquisition expense was previously termed “sales and marketing” on the consolidated statement of operations. This update represents a change in name only. It does not denote a change in method of accounting.

***Other Income, Net***

Other income, net, was nil, $0.6 million, and $1.6 million, including interest income of $0.3 million, $0.6 million, and $1.7 million for the years ended December 31, 2021, 2020, and 2019, respectively.

### *Advertising*

Advertising costs are expensed as incurred, with the exception of television advertisements, which are expensed the first time each advertisement is aired. Advertising costs amounted to $23.6 million, $13.4 million and $7.8 million, in the years ended December 31, 2021, 2020 and 2019, respectively.

### *Stock-Based Compensation*

Compensation expense related to stock-based transactions, including employee and non-employee stock option awards, restricted stock awards, and restricted stock units, is measured and recognized in the financial statements based on fair value. The fair value of restricted stock awards and restricted stock units is the common stock price as of the measurement date. The fair value of stock options is estimated on the measurement date using the Black-Scholes option-pricing model that requires management to apply judgment and make estimates, including:

- *Expected volatility* —The Company estimates the expected volatility based on the historical volatility of a representative group of publicly traded companies with similar characteristics to the Company, and its own historical volatility;
- *Expected term for awards granted to employees* —The Company has based its expected term for awards issued to employees on the simplified method, as permitted by the SEC Staff Accounting Bulletin Topic 14, Share-Based Payment;
- *Risk-free interest rate*—The risk-free interest rate is based on the yields of U.S. Treasury securities with maturities similar to the expected term of the options; and
- *Expected dividend yield*—The Company has never declared or paid any cash dividends and does not presently plan to pay cash dividends in the foreseeable future. Consequently, the Company uses an expected dividend yield of zero.

Stock-based compensation expense for stock options, restricted stock awards, and restricted stock units is recognized on a straight-line basis over the requisite service period, which is generally the vesting period of the respective award. The Company recognizes forfeitures when they occur.

### *Income Taxes*

The Company uses the asset and liability approach for accounting and reporting income taxes. Deferred tax assets and liabilities are recognized for future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities, and their respective tax bases, operating loss, and tax credit carryforwards.

Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect of a tax rate change is recognized in the period that includes the enactment date. Valuation allowances are provided for when it is considered more likely than not that deferred tax assets will not be realized.

The Company recognizes the effect of income tax positions only if those positions are more likely than not of being sustained. Recognized income tax positions are measured at the largest amount that is greater than a 50% likelihood of being realized. Penalties and interest are classified as a component of income taxes.

### *Foreign Currency Translation*

The Company’s consolidated financial statements are reported in U.S. dollars. Assets and liabilities denominated in foreign currencies were translated to U.S. dollars, the reporting currency, at the exchange rates in effect on the balance sheet date. Revenue and expenses denominated in foreign currencies were translated to U.S. dollars using a weighted average rate for the relevant reporting period. Cumulative translation adjustments of $(1.6) million, $(2.1) million, and $0.4 million were recorded in accumulated other comprehensive loss as of December 31, 2021, 2020, and 2019, respectively.

### *Insurance Operations*

Effective January 1, 2015, the Company formed a segregated account in Bermuda as part of Wyndham Insurance Company (SAC) Limited (WICL) and entered into a revised fronting and reinsurance arrangement with Omega General Insurance Company (Omega) to include its newly formed segregated account. The Company maintains all risk with the business written in Canada and consolidates the entity in its financial statements. Dividends are allowed subject to the Segregated Accounts Company Act of 2000, which allows for dividends only to the extent that the entity remains solvent and the value of its assets remain greater than the aggregate of its liabilities and its issued share capital and share premium accounts.

For the Company’s Canadian business, all plans are written by Omega and the risk is assumed by the Company through a fronting and reinsurance agreement. Premiums are recognized and earned pro rata over the terms of the related customer contracts. Revenue recognized from the agreement in 2021, 2020, and 2019 was $112.0 million, $81.3 million and $67.5 million, respectively, and deferred revenue relating to this arrangement at December 31, 2021 and 2020 was $4.7 million and $3.6 million, respectively. Reinsurance revenue was 16%, 16%, and 18% of total revenue in 2021, 2020, and 2019, respectively. Cash designated for the purpose of paying claims related to this reinsurance agreement was $7.7 million and $6.5 million at December 31, 2021 and 2020, respectively. In addition, as required by the Office of the Superintendent of Financial institutions regulations related to the Company’s reinsurance agreement with Omega, the Company is required to fund a Canadian Trust account with the greater of CAD $2.0 million or 120% of unearned Canadian premium plus 20% of outstanding Canadian claims, including all incurred but not reported claims. As of December 31, 2021, the account balance was CAD $7.7 million and the Company was in compliance with all requirements.

The Company has not transferred any risk to third-party reinsurers.

***Concentrations of Credit Risk***

Financial instruments, which potentially subject the Company to concentration of credit risk, consist primarily of cash and cash equivalents and investments. The Company manages its risk by investing cash equivalents and investment securities in money market instruments and securities of the U.S. government, U.S. government agencies and high-credit-quality issuers of debt securities.

## 2. Net Loss per Share

Basic net loss per share is computed using the weighted average number of shares of common stock outstanding during the period. Diluted net loss per share is calculated using the weighted average number of shares of common stock plus, when dilutive, potential shares of common stock outstanding using the treasury-stock method. Potential shares of common stock outstanding include stock options, unvested restricted stock awards and restricted stock units.

The following potentially dilutive equity securities were not included in the diluted earnings per share of common stock calculation because they would have had an antidilutive effect:

| | As of December 31, | | |
|---|---|---|---|
| | 2021 | 2020 | 2019 |
| Stock options | 807,205 | 1,459,290 | 2,097,978 |
| Restricted stock awards and restricted stock units | 1,087,627 | 782,755 | 581,943 |

### 3. Business Combination

On October 30, 2020, the Company completed an acquisition of 100% of the equity of Aquarium Software Limited (Aquarium), a U.K.-based insurance software provider, for approximately $48.3 million in net cash. The acquired technology from Aquarium focuses on the pet space and, along with the acquired personnel, is intended to enable the Company to improve its back-end software to help facilitate growth opportunities. The Company incurred $0.5 million acquisition-related costs that were recorded in general and administrative expenses.

The acquisition is recorded using the purchase method of accounting in accordance with ASC 805, *Business Combinations*, which requires that the assets acquired and liabilities assumed to be recorded at their respective fair values at the acquisition date.

The following table summarizes the estimated fair values of the assets acquired and liabilities assumed at the acquisition date (in thousands):

| | October 30, 2020 |
|---|---|
| Current assets, net of cash acquired | $ 1,469 |
| Property and equipment | 171 |
| Amortizable intangible assets | 19,512 |
| Goodwill | 31,352 |
| Other long-term assets | 1,421 |
| Current liabilities | (1,269) |
| Deferred tax liability and other liabilities | (4,361) |
| Total consideration transferred, net of cash acquired | $ 48,295 |

The Company acquired intangible assets which included trade name, developed technologies, and customer relationships. The goodwill recognized is attributable primarily to going concern value such as assembled workforce, future technology development, future customers, and expected synergies from incorporating the operations into Trupanion's portfolio. It has been assigned to the subscription business segment. None of the goodwill associated with this acquisition is expected to be deductible for income tax purposes.

The results of Aquarium's operations have been included in the consolidated financial statements since the acquisition date, but have been immaterial to the Company's consolidated financial statements.

### 4. Property and Equipment, Net

Property and equipment, net consisted of the following (in thousands):

| | December 31, | |
|---|---|---|
| | 2021 | 2020 |
| Land and improvements | $ 15,911 | $ 15,854 |
| Building and improvements | 48,547 | 46,682 |
| Software | 37,984 | 27,707 |
| Office equipment and other | 6,258 | 4,146 |
| Construction in progress | 540 | 2,855 |
| Property and equipment, at cost | 109,240 | 97,244 |
| Less: Accumulated depreciation | (31,290) | (24,642) |
| Property and equipment, net | $ 77,950 | $ 72,602 |

Depreciation expense related to property and equipment was $7.1 million, $5.2 million and $4.7 million for the years ended December 31, 2021, 2020 and 2019, respectively.

**5. Goodwill and Intangible Assets**

Goodwill arises from business acquisitions in which the purchase price exceeds the fair value of tangible and intangible assets acquired less assumed liabilities. As discussed in Note 3—Business Combination, the Company recognized $31.4 million in goodwill on October 30, 2020. The carrying amount of goodwill was $32.7 million and $33.0 million as of December 31, 2021 and 2020, respectively, due to a foreign exchange translation fluctuation of $(0.3) million during the year ended December 31, 2021.

The following table presents the detail of intangible assets other than goodwill for the periods presented (in thousands):

| | Gross Carrying Value | Accumulated Amortization | Net Carrying Value |
|---|---|---|---|
| December 31, 2021: | | | |
| Licenses | $ 4,773 | $ — | $ 4,773 |
| Leases | 2,959 | (2,539) | 420 |
| Trade name | 1,373 | (160) | 1,213 |
| Developed technologies | 11,516 | (2,721) | 8,795 |
| Customer relationships | 7,589 | (1,771) | 5,818 |
| Patents, trademarks, and other | 2,373 | (729) | 1,644 |
| Total Intangibles | $ 30,583 | $ (7,920) | $ 22,663 |
| December 31, 2020: | | | |
| Licenses | $ 4,773 | $ — | $ 4,773 |
| Leases | 2,959 | (2,213) | 746 |
| Trade name | 1,387 | (23) | 1,364 |
| Developed technologies | 11,512 | (352) | 11,160 |
| Customer relationships | 7,667 | (256) | 7,411 |
| Patents, trademarks, and other | 2,037 | (357) | 1,680 |
| Total Intangibles | $ 30,335 | $ (3,201) | $ 27,134 |

The Company acquired an insurance company in 2007, which originally included licenses in 23 states. These licenses were valued at $4.8 million. The Company is currently licensed in all 50 states, the District of Columbia and Puerto Rico. Most licenses are renewed annually upon payment of various fees assessed by the issuing state. Renewal costs are expensed as incurred. This is considered an indefinite-lived intangible asset given the planned renewal of the certificates of authority and applicable licenses for the foreseeable future.

The lease-related intangible assets relate to in-place lease agreements associated with the building acquisition in August 2018 and have a remaining weighted average useful life of 1.4 years. Intangible assets acquired from the Aquarium acquisition included trade name, developed technologies, and customer relationships. These definite-lived intangible assets have a remaining weighted average useful life of 4.1 years. Patents, trademarks, and other intangible assets have a remaining weighted average useful life of 5.0 years.

Amortization expense associated with intangible assets was $4.9 million, $1.9 million, and $0.9 million for the years ended December 31, 2021, 2020, and 2019, respectively.

As of December 31, 2021, expected amortization expense relating to purchased intangible assets for each of the next five years and thereafter is as follows (in thousands):

| | |
|---|---|
| Year ending December 31: | |
| 2022 | $ 4,775 |
| 2023 | 4,411 |
| 2024 | 3,988 |
| 2025 | 3,293 |
| 2026 | 163 |
| Thereafter | 733 |
| Total | $ 17,363 |

## 6. Investments

The amortized cost, gross unrealized holding gains and losses, and estimates of fair value of long-term and short-term investments by major security type and class of security were as follows as of December 31, 2021 and 2020 (in thousands):

| | Amortized Cost | Gross Unrealized Holding Gains | Gross Unrealized Holding Losses | Fair Value |
|---|---|---|---|---|
| As of December 31, 2021 | | | | |
| Long-term investments: | | | | |
| Foreign deposits | $ 6,050 | $ — | $ — | $ 6,050 |
| Municipal bond | 1,000 | 11 | — | 1,011 |
| | $ 7,050 | $ 11 | $ — | $ 7,061 |
| Short-term investments: | | | | |
| U.S. Treasury securities | $ 8,671 | $ — | $ (9) | $ 8,662 |
| Certificates of deposit | 3,295 | — | — | 3,295 |
| U.S. government funds | 114,046 | — | — | 114,046 |
| | $ 126,012 | $ — | $ (9) | $ 126,003 |

| | Amortized Cost | Gross Unrealized Holding Gains | Gross Unrealized Holding Losses | Fair Value |
|---|---|---|---|---|
| As of December 31, 2020 | | | | |
| Long-term investments: | | | | |
| Foreign deposits | $ 4,564 | $ — | $ — | $ 4,564 |
| Municipal bond | 1,000 | 2 | — | 1,002 |
| | $ 5,564 | $ 2 | $ — | $ 5,566 |
| Short-term investments: | | | | |
| U.S. Treasury securities | $ 6,494 | $ — | $ (2) | $ 6,492 |
| Certificates of deposit | 1,696 | — | — | 1,696 |
| U.S. government funds | 81,672 | — | — | 81,672 |
| | $ 89,862 | $ — | $ (2) | $ 89,860 |

Maturities of debt securities classified as available-for-sale were as follows (in thousands):

| | December 31, 2021 | |
|---|---|---|
| | Amortized Cost | Fair Value |
| Available-for-sale: | | |
| Due after one year through five years | $ 7,050 | $ 7,061 |
| | $ 7,050 | $ 7,061 |

The Company does not expect any credit losses from its held-to-maturity investments, considering the composition of the investment portfolio and the credit loss history of these investments. For available-for-sale debt securities, the Company determined that there were no unrealized losses. The Company does not intend to sell, nor is it more likely than not that the Company will be required to sell, the securities prior to maturity or prior to the recovery of the amortized cost basis.

## 7. Other Investments

***Investment in Variable Interest Entity***

The Company has invested $7.0 million in preferred stock of Baystride, Inc., a U.S.-based privately held corporation operating in the pet food industry. The Company does not have power over the activities that most significantly impact the economic performance of the variable interest entity and is, therefore, not the primary beneficiary. The Company has the option to purchase all of the outstanding common shares issued by the variable interest entity in 2023 at an amount approximating its expected fair value. The preferred stock investment in the variable interest entity is accounted for as an available-for-sale debt security, and measured at fair value at each balance sheet date.

Additionally, the Company has extended a $4.1 million revolving line of credit to the variable interest entity to fund its inventory purchases. The Company's investment and amounts loaned under the line of credit are recorded in other long-term assets on its consolidated balance sheet. The outstanding loan balance under the line of credit, including accrued interest, was $4.5 million and $2.8 million as of December 31, 2021 and 2020, respectively. The Company has also entered into a series of agreements to provide ancillary services to, and receive reimbursement from, the variable interest entity at cost. The Company provided $0.9 million and $1.2 million of these services for the years ended December 31, 2021 and 2020, respectively.

***Investment in Joint Venture***

In September 2018, the Company acquired a non-controlling equity interest in a joint venture in Australia, whereby it has committed to licensing certain intellectual property and contributing up to $2.2 million AUD upon the achievement of specific operational milestones over a period of at least four years from the agreement execution date. As of December 31, 2021, the Company has contributed $0.8 million AUD. This equity investment is accounted for using the equity method and is classified in other long-term assets on the Company's consolidated balance sheet. The Company's share of income and losses from this equity method investment is included in gain (loss) from investment in joint venture on its consolidated statement of operations. Also included in this line item are income and expenses associated with administrative services provided to the joint venture.

## 8. Fair Value

***Investments***

The following table summarizes, by major security type, the Company's assets that are measured at fair value on a recurring basis, and placement within the fair value hierarchy (in thousands):

| | As of December 31, 2021 | | | |
|---|---|---|---|---|
| | Fair Value | Level 1 | Level 2 | Level 3 |
| **Assets** | | | | |
| Money market funds | 32,255 | 32,255 | — | — |
| Fixed maturities: | | | | |
| Foreign deposits | 6,050 | 6,050 | — | — |
| Municipal bond | 1,011 | — | 1,011 | — |
| Preferred shares in variable interest entity | 8,442 | — | — | 8,442 |
| Total | $ 47,758 | $ 38,305 | $ 1,011 | $ 8,442 |

| | As of December 31, 2020 | | | |
|---|---|---|---|---|
| | Fair Value | Level 1 | Level 2 | Level 3 |
| **Assets** | | | | |
| Money market funds | 99,054 | 99,054 | — | — |
| Fixed maturities: | | | | |
| Foreign deposits | 4,564 | 4,564 | — | — |
| Municipal bond | 1,002 | — | 1,002 | — |
| Preferred shares in variable interest entity | 7,949 | — | — | 7,949 |
| Total | $ 112,569 | $ 103,618 | $ 1,002 | $ 7,949 |

The Company measures the fair value of money market funds and foreign deposits based on quoted prices in active markets for identical assets. The fair value of the municipal bond is based on either recent trades in inactive markets or quoted market prices of similar instruments and other significant inputs derived from or corroborated by observable market data. Short-term investments are carried at amortized cost and the fair value and changes in unrealized gains (losses) are disclosed in Note 6, Investments. The fair value of these investments is determined in the same manner as for available-for-sale securities and is considered a Level 1 measurement.

The Company's preferred stock investment in the variable interest entity (see Note 7) is accounted for as an available-for-sale debt security, and measured at fair value at each balance sheet date. The estimated fair value of the preferred stock investment is a Level 3 measurement, and is based on certain unobservable inputs such as the value of the underlying enterprise, volatility, time to liquidity, and market interest rates. An increase or decrease in any of these unobservable inputs would result in a change in the fair value measurement. Estimated fair value was $8.4 million and $7.9 million as of December 31, 2021 and 2020, respectively, recorded in other long-term assets on the Company's consolidated balance sheet. The changes in fair value, due entirely to unrealized gains, were $0.5 million and $0.3 million for the years ended December 31, 2021 and 2020, respectively.

***Fair Value Disclosures***

The Company's other long-term assets balance included notes receivable of $7.6 million and $6.1 million as of December 31, 2021 and 2020, respectively, recorded at their estimated collectible amount. The Company estimates that the carrying value of the notes receivable approximates the fair value. The estimated fair value represents a Level 3 measurement within the fair value hierarchy, and is based on market interest rates and the assessed creditworthiness of the third party. There was no significant activity in Level 3 of the hierarchy during the year ended December 31, 2021.

The Company recognizes transfers between levels of the fair value hierarchy on the date of the event or change in circumstances that caused the transfer. There were no transfers between levels for the years ended December 31, 2021 and 2020.

### 9. Commitments and Contingencies

From time to time the Company is or may become subject to various legal proceedings arising in the ordinary course of business, including proceedings against members, other entities or regulatory bodies. Estimated liabilities are recorded when it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated. At this time, the Company does not believe any such matters to be material individually or in the aggregate. These views are subject to change following the outcome of future events or the results of future developments.

### 10. Reserve for Veterinary Invoices

The reserve for veterinary invoices is an estimate of the future amount the Company will pay for veterinary invoices that are dated as of, or prior to, its balance sheet date. The reserve also includes the Company's estimate of related internal processing costs. The reserve estimate involves actuarial projections, and is based on management's assessment of facts and circumstances currently known, and assumptions about anticipated patterns. The Company uses generally accepted actuarial methodologies, such as paid loss development methods, in estimating the amount of the reserve for veterinary invoices. The reserve is made for each of the Company's segments, subscription and other business, and are continually refined as the Company receives and pays veterinary invoices. Changes in management's assumptions and estimates may have a relatively large impact to the reserve and associated expense.

***Reserve for veterinary invoices***

Summarized below are the changes in the total liability for the Company's subscription business segment (in thousands):

| | Year Ended December 31, | | |
|---|---|---|---|
| **Subscription** | **2021** | **2020** | **2019** |
| Reserve at beginning of year | $ 19,925 | $ 15,541 | $ 13,875 |
| Veterinary invoice expense during the period related to: | | | |
| Current year | 357,859 | 278,776 | 231,831 |
| Prior years | (1,411) | 229 | 585 |
| Total veterinary invoice expense | 356,448 | 279,005 | 232,416 |
| Amounts paid during the period related to: | | | |
| Current year | 333,182 | 259,971 | 217,538 |
| Prior years | 16,109 | 13,387 | 12,494 |
| Total paid | 349,291 | 273,358 | 230,032 |
| Non-cash expenses | 4,675 | 1,263 | 718 |
| Reserve at end of period | $ 22,407 | $ 19,925 | $ 15,541 |

The Company's reserve for the subscription business segment increased $2.5 million from $19.9 million at December 31, 2020 to $22.4 million at December 31, 2021. This change was comprised of $356.4 million in expense recorded during the period less $349.3 million in payments of veterinary invoices. This $356.4 million in veterinary invoice expense incurred included a reduction of $1.4 million to the reserves relating to prior years, which was the result of ongoing analysis of recent payment trends. The Company's adjustments to prior year reserves were an increase of $0.2 million and $0.6 million as a result of analysis of payment trends in the years ended December 31, 2020 and 2019, respectively.

Summarized below are the changes in total liability for the Company's other business segment (in thousands):

| Other Business | Year Ended December 31, 2021 | 2020 | 2019 |
|---|---|---|---|
| Reserve at beginning of year | $ 9,004 | $ 5,653 | $ 2,187 |
| Veterinary invoice expense during the period related to: | | | |
| Current year | 129,826 | 72,286 | 38,881 |
| Prior years | (212) | (167) | (350) |
| Total veterinary invoice expense | 129,614 | 72,119 | 38,531 |
| Amounts paid during the period related to: | | | |
| Current year | 112,574 | 63,359 | 33,254 |
| Prior years | 8,780 | 5,409 | 1,811 |
| Total paid | 121,354 | 68,768 | 35,065 |
| Non-cash expenses | — | — | — |
| Reserve at end of period | $ 17,264 | $ 9,004 | $ 5,653 |

The Company’s reserve for the other business segment increased $8.3 million from $9.0 million at December 31, 2020 to $17.3 million at December 31, 2021. This change was comprised of $129.6 million in expense recorded during the period less $121.4 million in payments of veterinary invoices. This $129.6 million in veterinary invoice expense incurred included a reduction of $0.2 million to the reserves relating to prior years, which was the result of ongoing analysis of recent payment trends. The Company's adjustments to decrease prior year reserves were $0.2 million and $0.4 million as a result of analysis of payment trends in each of the years ended December 31, 2020 and 2019, respectively.

***Veterinary invoice expenses***

In the following tables, the cumulative number of veterinary invoices represents the total number received as of December 31, 2021, by year the veterinary invoice relates to, referred to as the year of occurrence. If a pet is injured or becomes ill, multiple trips to the veterinarian may result in several invoices. Each of these veterinary invoices is included in the cumulative number, regardless of whether the veterinary invoice was paid. Information for years 2018 through 2020 is provided as required supplementary information. Amounts in these tables are presented on a constant currency basis to remove the impact of changes in the foreign currency exchange rate on development. The cumulative expenses as of the end of each year are revalued using the currency exchange rate as of December 31, 2021.

The following table summarizes the development of veterinary invoice expense, on a constant currency basis, for the Company's subscription business segment by year of occurrence (in thousands, except for cumulative number of veterinary invoices data):

| | Cumulative veterinary invoice expenses | | | | Reserve | Cumulative number of veterinary invoices |
|---|---|---|---|---|---|---|
| | As of December 31, | | | | As of December 31, | |
| **Subscription** | 2018 | 2019 | 2020 | 2021 | 2021 | 2021 |
| Year of Occurrence | *(unaudited)* | *(unaudited)* | *(unaudited)* | | | |
| 2018 | $ 191,211 | $ 191,696 | $ 191,792 | $ 191,302 | $ — | 886,880 |
| 2019 | | $ 233,629 | $ 234,006 | $ 233,824 | $ 664 | 1,054,693 |
| 2020 | | | $ 281,272 | $ 280,343 | $ 1,741 | 1,179,573 |
| 2021 | | | | $ 356,725 | $ 20,002 | 1,348,961 |
| | | | | $1,062,194 | $ 22,407 | |

The following table summarizes the development of veterinary invoice expense, on a constant currency basis, for the Company's other business segment by year of occurrence (in thousands, except for cumulative number of veterinary invoices data):

| | Cumulative veterinary invoice expenses | | | | Reserve | Cumulative number of veterinary invoices |
|---|---|---|---|---|---|---|
| | As of December 31, | | | | As of December 31, | |
| **Other Business** | 2018 | 2019 | 2020 | 2021 | 2021 | 2021 |
| Year of Occurrence | *(unaudited)* | *(unaudited)* | *(unaudited)* | | | |
| 2018 | $ 23,786 | $ 23,375 | $ 23,470 | $ 23,440 | $ — | 175,091 |
| 2019 | | $ 38,885 | $ 38,610 | $ 38,682 | $ — | 282,499 |
| 2020 | | | $ 72,297 | $ 72,035 | $ 12 | 532,306 |
| 2021 | | | | $ 129,822 | $ 17,252 | 843,354 |
| | | | | $ 263,979 | $ 17,264 | |

***Cumulative paid veterinary invoice expense***

In the following tables, amounts are by the year the veterinary invoice relates to, referred to as the year of occurrence. Amounts in these tables are presented on a constant currency basis to remove the impact of changes in the foreign currency exchange rate. The cumulative amounts paid as of the end of each year are revalued using the currency exchange rate as of December 31, 2021. Information for years 2018 through 2020 is provided as required supplementary information.

The following table summarizes the amounts paid for veterinary invoices, inclusive of related internal processing costs and reported on a constant currency basis, for the subscription segment (in thousands):

| | Year Ended December 31, | | | |
|---|---|---|---|---|
| **Subscription** | 2018 | 2019 | 2020 | 2021 |
| Year of Occurrence | *(unaudited)* | *(unaudited)* | *(unaudited)* | |
| 2018 | $ 178,570 | $ 190,327 | $ 191,090 | $ 191,302 |
| 2019 | | $ 220,013 | $ 232,326 | $ 233,159 |
| 2020 | | | $ 263,729 | $ 278,602 |
| 2021 | | | | $ 336,724 |
| | | | | $ 1,039,787 |
| | | | **Total amounts unpaid and recorded as a liability** | $ 22,407 |

The following table summarizes the amounts paid for veterinary invoices, inclusive of related internal processing costs and reported on a constant currency basis, for the other business segment (in thousands):

| | Year Ended December 31, | | | |
|---|---|---|---|---|
| **Other Business** | 2018 | 2019 | 2020 | 2021 |
| Year of Occurrence | *(unaudited)* | *(unaudited)* | *(unaudited)* | |
| 2018 | $ 21,617 | $ 23,355 | $ 23,425 | $ 23,440 |
| 2019 | | $ 33,258 | $ 38,578 | $ 38,682 |
| 2020 | | | $ 63,371 | $ 72,023 |
| 2021 | | | | $ 112,570 |
| | | | | $ 246,715 |
| | | | **Total amounts unpaid and recorded as a liability** | $ 17,264 |

## 11. Stock-Based Compensation

Stock-based compensation expense includes stock options and restricted stock units granted to employees and other service providers and has been reported in the Company's consolidated statements of operations depending on the function performed by the employee or other service provider. Stock-based compensation expense recognized in each category of the consolidated statements of operations for the years ended December 31, 2021, 2020 and 2019 was as follows (in thousands):

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2021 | 2020 | 2019 |
| Veterinary invoice expense | $ 4,538 | $ 1,118 | $ 697 |
| Other cost of revenue | 2,610 | 468 | 353 |
| Technology and development | 3,056 | 758 | 364 |
| General and administrative | 8,862 | 3,795 | 3,312 |
| New pet acquisition expense | 9,160 | 2,773 | 2,120 |
| Total expensed stock-based compensation | 28,226 | 8,912 | 6,846 |
| Capitalized stock-based compensation | 676 | 235 | 204 |
| Total stock-based compensation | $ 28,902 | $ 9,147 | $ 7,050 |

As of December 31, 2021, the Company had 1,087,627 unvested restricted stock units. Stock-based compensation expenses of $71.6 million related to unvested restricted stock units are expected to be recognized over a weighted average period of approximately 2.8 years.

***Stock Options***

The grant date fair value of stock option awards are estimated on the date of grant using the Black-Scholes option-pricing model. The Company did not grant any new stock options during the years ended December 31, 2021, 2020, and 2019.

The following table presents information regarding stock options granted, exercised and forfeited for the periods presented:

| | Number of Options | Weighted Average Exercise Price per Share | Aggregate Intrinsic Value (in thousands) |
|---|---|---|---|
| Outstanding as of January 1, 2019 | 2,621,503 | $ 9.01 | $ 43,136 |
| Granted | — | — | — |
| Exercised | (510,268) | 5.28 | 13,151 |
| Forfeited | (13,257) | 18.23 | — |
| Outstanding as of December 31, 2019 | 2,097,978 | 9.86 | 57,907 |
| Granted | — | — | — |
| Exercised | (626,554) | 9.54 | 35,696 |
| Forfeited | (12,134) | 17.41 | — |
| Outstanding as of December 31, 2020 | 1,459,290 | 9.93 | 160,200 |
| Granted | — | — | — |
| Exercised | (647,164) | 5.59 | 58,200 |
| Forfeited | (4,921) | 13.66 | — |
| Outstanding as of December 31, 2021 | 807,205 | 13.39 | 95,765 |
| | | | |
| Exercisable at December 31, 2021 | 807,205 | $ 13.39 | $ 95,765 |

As of December 31, 2021, stock options outstanding and stock options exercisable had a weighted average remaining contractual life of 4.2 years.

The fair value of options vested were as follows for the years ended December 31, 2021, 2020, and 2019. The Company didn't grant any stock options in these three years.

| | Weighted Average Grant Date Fair Value per Share | Fair Value of Options Vested (in thousands) |
|---|---|---|
| Year: | | |
| 2019 | $ — | $ 1,591 |
| 2020 | $ — | $ 1,105 |
| 2021 | $ — | $ 313 |

***Restricted Stock Awards and Restricted Stock Units***

The below table summarizes the Company's restricted stock award and restricted stock unit activity for the years ended December 31, 2021, 2020 and 2019:

| | Number of Shares | Weighted Average Grant Date Fair Value per Share |
|---|---|---|
| Unvested shares as of January 1, 2019 | 451,160 | $ 22.16 |
| Granted | 459,523 | 30.03 |
| Vested | (276,184) | 18.20 |
| Forfeited | (52,556) | 29.85 |
| Unvested shares as of December 31, 2019 | 581,943 | 29.56 |
| Granted | 535,184 | 37.60 |
| Vested | (266,640) | 29.77 |
| Forfeited | (67,732) | 31.51 |
| Unvested shares as of December 31, 2020 | 782,755 | 34.81 |
| Granted | 787,730 | 101.32 |
| Vested | (426,725) | 40.10 |
| Forfeited | (56,133) | 72.93 |
| Unvested shares as of December 31, 2021 | 1,087,627 | $ 78.94 |

### 12. Leases

The Company leases certain office space and equipment from third parties and recognizes lease expense on a straight-line basis over the lease term. For operating leases with an initial term of over 12 months, the Company recorded $0.8 million and $0.9 million right-of-use assets and lease liabilities on its consolidated balance sheets, within the other liabilities line item, as of December 31, 2021 and 2020, respectively. Leases with an initial term of 12 months or less are not recorded on its consolidated balance sheets. Rental expense for operating leases was $0.2 million, $0.2 million and $0.4 million for the years ended December 31, 2021, 2020 and 2019, respectively.

The Company also leases a portion of its home office building to third parties and records related rental income within general and administrative expense in the consolidated statements of operations. These leases have remaining lease terms of up to 5 years, some of which give tenants options to terminate the leases early, with termination fees required. The Company recorded rental income of $1.1 million, $1.9 million, and $2.2 million for the years ended December 31, 2021, 2020, and 2019 respectively.

The following table summarizes the Company's future rental payments to be received from non-cancellable leases in place as of December 31, 2021 (in thousands):

| Year ending December 31: | | |
|---|---|---|
| 2022 | $ | 1,173 |
| 2023 | | 669 |
| 2024 | | 163 |
| 2025 | | 168 |
| 2026 | | 100 |
| Thereafter | | — |
| Total rental payments | $ | 2,273 |

### 13. Stockholders’ Equity

***Common Stock and Preferred Stock***

As of December 31, 2021, the Company had 100,000,000 shares of common stock authorized and 40,475,185 shares of common stock outstanding. Holders of common stock are entitled to one vote on each matter properly submitted to the stockholders of the Company except those related to matters concerning possible outstanding preferred stock. At December 31, 2021, the Company had 10,000,000 shares of undesignated preferred stock authorized for future issuance and did not have any outstanding shares of preferred stock. The holders of common stock are also entitled to receive dividends as and when declared by the board of directors of the Company (the Board), whenever funds are legally available. These rights are subordinate to the dividend rights of holders of any senior classes of stock outstanding at the time. The Company does not intend to declare or pay any cash dividends in the foreseeable future.

***Issuance of Common Stock in a Private Placement***

The Company issued 3,636,364 shares of common stock through a private placement in the fourth quarter of 2020 for net proceeds of $192.3 million. The issued shares were subject to a minimum holding period of three years.

***Share Repurchase Program***

In April 2021, the Board approved a share repurchase program, pursuant to which the Company may, between May 2021 and May 2026, repurchase outstanding shares of the Company's common stock. The Company has not repurchased any shares under this program.

## 14. Segments

The Company has two reporting segments: subscription business and other business. The subscription business segment generates revenue primarily from subscription fees related to the Company's "Trupanion" branded products, while the other business segment is comprised of revenue from other product offerings that generally have a business-to-business relationship and a different margin profile than our subscription segment, including revenue from writing policies on behalf of third parties and revenue from other products and software solutions.

The chief operating decision maker reviews revenue and operating income (loss) to evaluate segment performance. Revenue, veterinary invoice expense, other cost of revenue, and new pet acquisition expenses are generally directly attributed to each segment. Other operating expenses, such as technology and development expense, general and administrative expense, and depreciation and amortization, are allocated proportionately based on revenue in each segment. Interest and other expenses and income taxes are not allocated to the segments, nor included in the measure of segment profit or loss. The Company does not analyze discrete segment balance sheet information related to long-term assets.

Operating income (loss) of the Company's segments were as follows (in thousands):

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2021 | 2020 | 2019 |
| Subscription business: | | | |
| Revenue | $ 494,862 | $ 387,732 | $ 321,163 |
| Veterinary invoice expense | 356,448 | 279,005 | 232,415 |
| Other cost of revenue | 51,216 | 35,870 | 29,724 |
| Technology and development | 11,942 | 7,673 | 5,879 |
| General and administrative | 22,579 | 16,866 | 15,397 |
| New pet acquisition expense | 78,148 | 47,017 | 35,037 |
| Depreciation and amortization | 8,494 | 5,451 | 4,725 |
| Subscription business operating loss | (33,965) | (4,150) | (2,014) |
| | | | |
| Other business: | | | |
| Revenue | 204,129 | 114,296 | 62,773 |
| Veterinary invoice expense | 129,614 | 72,119 | 38,532 |
| Other cost of revenue | 57,367 | 33,133 | 18,341 |
| Technology and development | 4,924 | 2,274 | 1,146 |
| General and administrative | 9,314 | 4,981 | 2,987 |
| New pet acquisition expense | 499 | 820 | 414 |
| Depreciation and amortization | 3,471 | 1,620 | 907 |
| Other business operating income (loss) | (1,060) | (651) | 446 |
| Loss from investment in joint venture | (171) | (126) | (352) |
| Total operating loss | $ (35,196) | $ (4,927) | $ (1,920) |

The following table presents the Company's revenue by geographic region of the member (in thousands):

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2021 | 2020 | 2019 |
| United States | $ 580,966 | $ 419,162 | $ 316,138 |
| Canada and other | 118,025 | 82,866 | 67,798 |
| Total revenue | $ 698,991 | $ 502,028 | $ 383,936 |

Substantially all of the Company's long-lived assets were located in the United States as of December 31, 2021 and 2020.

## 15. Dividend Restrictions and Statutory Surplus

The Company’s business operations are conducted through subsidiaries, one of which is an insurance company domiciled in New York, American Pet Insurance Company (APIC), and one of which is a segregated cell business, Wyndham Segregated Account AX, located in Bermuda. In 2021, the Company established two new wholly-owned insurance subsidiaries, ZPIC Insurance Company (ZPIC) and QPIC Insurance Company (QPIC), domiciled in Missouri and Nebraska, respectively. In addition to general state law restrictions on payments of dividends and other distributions to stockholders applicable to all corporations, insurance companies are subject to further regulations that, among other things, may require such companies to maintain certain levels of equity and restrict the amount of dividends and other distributions that may be paid to their parent corporations.

New York law restricts the ability of the Company's insurance subsidiary in New York to pay dividends to its holding company parent. These restrictions are based in part on the prior year’s statutory income and surplus. In general, dividends up to specified levels are considered ordinary and may be paid without prior approval, and dividends in larger amounts, or extraordinary dividends, are subject to approval by the New York State Department of Financial Services, the subsidiary's primary regulator. An extraordinary dividend or distribution is defined as a dividend or distribution that, in the aggregate in any 12-month period, exceeds the lesser of (i) 10% of surplus as of the preceding December 31 or (ii) the insurer’s adjusted net investment income for such 12-month period, not including realized capital gains. Under regulatory requirements at December 31, 2021, the amount of dividends that may be paid by the Company’s insurance subsidiary in New York to the Company without prior approval by regulatory authorities was $0.2 million. This insurance subsidiary did not pay dividends to the Company during the years ended December 31, 2021, 2020, and 2019.

The Company's insurance subsidiary in Bermuda is regulated by the Bermuda Monetary Authority. Under the Bermuda Companies Act of 1981, as amended, a Bermuda company may not declare or pay a dividend or make a distribution out of contributed surplus if there are reasonable grounds for believing that: (a) the company is, or would be after the payment, unable to pay its liabilities as they become due; or (b) the realizable value of the company’s assets would thereby be less than its liabilities. The Segregated Accounts Company Act of 2000 further requires that dividends out of a segregated account can only be paid to the extent that the cell remains solvent. The value of its assets must remain greater than the aggregate of its liabilities, issued share capital, and share premium accounts. Per our contractual agreements with Wyndham Insurance Company (SAC) Limited, the allowable dividend is equivalent to the positive undistributed profit attributable to the shares. This insurance subsidiary paid the Company a dividend of $5.6 million, $4.7 million, and $3.9 million during the years ended December 31, 2021, 2020 and 2019, respectfully.

The statutory net income for 2021, 2020 and 2019 and statutory capital and surplus at December 31, 2021, 2020 and 2019, for the Company’s insurance subsidiary in New York were as follows (in thousands):

| | As of December 31, | | |
|---|---|---|---|
| | 2021 | 2020 | 2019 |
| Statutory net income | $ 24,409 | $ 17,547 | $ 16,311 |
| Statutory capital and surplus | $ 124,189 | $ 93,171 | $ 73,810 |

As of December 31, 2021, the Company’s insurance subsidiary in New York maintained $124.2 million of statutory capital and surplus which was above the required amount of $116.0 million of statutory capital and surplus to avoid additional regulatory oversight.

The Company has funded $7.8 million of statutory capital to ZPIC in 2021, and $7.8 million of statutory capital to QPIC in January 2022. ZPIC and QPIC will each be required to maintain a level of surplus as determined by their respective domiciliary regulators. As of December 31, 2021, neither ZPIC nor QPIC has begun underwriting any insurance policies.

As of December 31, 2021, the Company had $9.2 million on deposit with various states in which it writes policies.

## 16. Income Taxes

Loss before income taxes was as follows for the years ended December 31, 2021, 2020 and 2019 (in thousands):

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2021 | 2020 | 2019 |
| United States | $ (34,052) | $ (5,408) | $ (1,783) |
| Foreign | (1,168) | (319) | 143 |
| | $ (35,220) | $ (5,727) | $ (1,640) |

The components of income tax expense (benefit) were as follows (in thousands):

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2021 | 2020 | 2019 |
| Current: | | | |
| U.S. federal & state | $ 58 | $ 198 | $ 12 |
| Foreign | 2,066 | 45 | 52 |
| | 2,124 | 243 | 64 |
| Deferred: | | | |
| U.S. federal & state | (15) | (9) | 116 |
| Foreign | (1,799) | (121) | (11) |
| | (1,814) | (130) | 105 |
| Income tax expense (benefit) | $ 310 | $ 113 | $ 169 |

A reconciliation of income tax expense at the statutory federal income tax rate and income taxes as reflected in the financial statements is presented below:

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2021 | 2020 | 2019 |
| Federal income taxes at statutory rate | 21.0 % | 21.0 % | 21.0 % |
| U.S. state income taxes | 7.5 | (2.6) | (7.8) |
| Equity compensation | 30.4 | 122.3 | 177.2 |
| Change in valuation allowance | (58.4) | (136.0) | (184.2) |
| Nondeductible fines and settlements | (0.2) | (1.1) | (9.2) |
| Other, net | (1.5) | (3.0) | (16.5) |
| Credits | 0.3 | (2.6) | 9.2 |
| Effective income tax rate | (0.9)% | (2.0)% | (10.3)% |

The principal components of the Company’s deferred tax assets and liabilities were as follows (in thousands):

| | As of December 31, | |
|---|---|---|
| | 2021 | 2020 |
| Deferred tax assets: | | |
| Deferred revenue | $ 6,232 | $ 3,921 |
| Accruals and reserves | 2,294 | 1,822 |
| Net operating loss carryforwards | 52,796 | 37,070 |
| Depreciation and amortization | 833 | 27 |
| Equity compensation | 4,126 | 1,776 |
| Credits | 847 | 697 |
| Other | 381 | 706 |
| Total deferred tax assets | 67,509 | 46,019 |
| Deferred tax liabilities: | | |
| Deferred costs | (887) | (637) |
| Intangible assets | (2,802) | (4,895) |
| Other | (1,817) | (960) |
| Total deferred tax liabilities | (5,506) | (6,492) |
| Total deferred taxes | 62,003 | 39,527 |
| Less deferred tax asset valuation allowance | (64,791) | (44,194) |
| Net deferred tax liability | $ (2,788) | $ (4,667) |

At December 31, 2021, the Company had U.S. federal and state net operating loss carryforwards of $52.8 million (tax-effected) and U.S. federal income tax credits of $0.8 million. Use of carryforwards is limited based on the future income of the Company. The federal net operating loss carryforwards will begin to expire in 2026. Pursuant to Sections 382 and 383 of the Internal Revenue Code, annual use of the Company’s net operating loss carryforwards and credit carryforwards may be limited if the Company experiences an ownership change. As of December 31, 2021, the utilization of approximately $0.5 million of net operating losses are subject to limitation as a result of prior ownership changes; however, subsequent ownership changes may further affect the limitation in future years.

A valuation allowance is required to reduce the deferred tax assets reported if, based on the weight of available evidence, it is more likely than not that some portion or all of the deferred tax assets will not be realized. After consideration of all the evidence, both positive and negative, the Company has recorded a full valuation allowance against its U.S. Federal and the majority of its U.S. State deferred tax assets as of December 31, 2021, 2020, and 2019 because the Company’s management has determined that it is more likely than not that these assets will not be fully realized.

For the year ended December 31, 2021, the Company recognized a net increase of $20.6 million in valuation allowance against its net deferred tax assets associated with U.S. federal and certain state jurisdictions, primarily attributable to current year activity.

The Company is open to examination by the U.S. federal tax jurisdiction for the years ended December 31, 2018 through 2021, and is also open to examination for 2006 and forward with respect to net operating loss carryforwards generated and carried forward from those years in the United States. The Company is subject to taxation in various states, as well as in Canada, Ireland, and the United Kingdom, and may be subject to audit or examination by the relevant authorities in respect to those particular jurisdictions primarily for 2017 and thereafter.

For the year ended December 31, 2021, the Company intends to invest substantially all of its foreign subsidiary earnings, as well as its capital in its foreign subsidiaries, indefinitely outside of the U.S. in those jurisdictions in which it would incur significant, additional costs upon repatriation of such amounts. A deferred tax liability related to taxes due upon repatriation to the U.S. has not been recorded.

The Company is booking Global Intangible Low-Taxed Income ("GILTI") on a current basis and is not booking deferred taxes related to GILTI.

The Company accounts for uncertain tax positions based on a two-step process of evaluating recognition and measurement criteria. The first step assesses whether the tax position is more likely than not to be sustained upon examination by the taxing authority, including resolution of any appeals or litigation, on the basis of the technical merits of the position. If the tax position meets the more-likely-than-not criteria, the portion of the tax benefit greater than 50% likely to be realized upon settlement with the relevant taxing authority is recognized in the financial statements. No significant changes in uncertain tax positions are expected in the next twelve months.

A reconciliation of the beginning and ending amount of gross unrecognized tax benefits is as follows (in thousands):

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2021 | 2020 | 2019 |
| Balance, beginning of year | $ 133 | $ 113 | $ 89 |
| Increases (decreases) to tax positions related to prior periods | — | 15 | 19 |
| Increases to tax positions related to the current year | 5 | 5 | 5 |
| Balance, end of year | $ 138 | $ 133 | $ 113 |

## 17. Employee Benefits

The Company has a 401(k) plan for its U.S. employees. The plan allows employees to contribute a percentage of their pretax earnings annually, subject to limitations imposed by the Internal Revenue Service. The plan also allows the Company to make a matching contribution, subject to certain limitations. To date, the Company has made no contributions to the 401(k) plan.

## 18. Related Parties

In August 2018, the Company invested $0.3 million in a limited liability entity in exchange for a 17.5% ownership interest. The investee is considered to be a related party, as the Company has the ability to exercise significant influence over the investee. In February 2020, the Company entered into a service agreement with the investee, under which the Company incurred $2.7 million of expenses for consulting services provided by the investee related to pet acquisition during the years ended December 31, 2021 and 2020, recorded as new pet acquisition expense on the Company's consolidated statement of operations.

## Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

## Item 9A. Controls and Procedures

***Evaluation of Disclosure Controls and Procedures***

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a- 15(e) and 15d- 15(e) under the Exchange Act), as of the end of the period covered by this Annual Report on Form 10-K. Based on such evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that as of such date, our disclosure controls and procedures were effective.

***Management's Report on Internal Control over Financial Reporting***

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined under Rule 13a-15(f) and 15d-15(f) under the Exchange Act. Management has assessed the effectiveness of its internal control over financial reporting as of December 31, 2021 based on the criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework). As a result of this assessment, management concluded that, as of December 31, 2021, its internal control over financial reporting was effective in providing reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles. Ernst & Young has independently assessed the effectiveness of the Company's internal control over financial reporting and its report is included below.

***Changes in Internal Control***

There were no changes in our internal control over financial reporting identified in management's evaluation pursuant to Rules 13a-15(d) or 15d-15(d) of the Exchange Act during the period covered by this Annual Report on Form 10-K that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

***Limitations on Effectiveness of Controls and Procedures***

In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply judgment in evaluating the benefits of possible controls and procedures relative to their costs.

**Report of Independent Registered Public Accounting Firm**

To the Stockholders and the Board of Directors of Trupanion, Inc.

**Opinion on Internal Control Over Financial Reporting**

We have audited Trupanion, Inc.'s internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Trupanion, Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2021 and 2020, the related consolidated statements of operations, comprehensive loss, changes in stockholders' equity and cash flows for each of the three years in the period ended December 31, 2021, and the related notes and the financial statement schedule listed in the Index at Item 15(a) and our report dated February 17, 2022 expressed an unqualified opinion thereon.

**Basis for Opinion**

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

**Definition and Limitations of Internal Control Over Financial Reporting**

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young LLP

Seattle, Washington

February 17, 2022

## Item 9B. Other Information

None.

## Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

# PART III

## Item 10. Directors, Executive Officers and Corporate Governance

Information required by this item is incorporated herein by reference to our Proxy Statement with respect to our 2022 Annual Meeting of Stockholders to be filed with the SEC within 120 days of the end of the fiscal year covered by this Annual Report.

## Item 11. Executive Compensation

Information required by this item is incorporated herein by reference to our Proxy Statement with respect to our 2022 Annual Meeting of Stockholders to be filed with the SEC within 120 days of the end of the fiscal year covered by this Annual Report.

## Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Information required by this item is incorporated herein by reference to our Proxy Statement with respect to our 2022 Annual Meeting of Stockholders to be filed with the SEC within 120 days of the end of the fiscal year covered by this Annual Report.

## Item 13. Certain Relationships and Related Transactions and Director Independence

Information required by this item is incorporated herein by reference to our Proxy Statement with respect to our 2022 Annual Meeting of Stockholders to be filed with the SEC within 120 days of the end of the fiscal year covered by this Annual Report.

## Item 14. Principal Accountant Fees and Services

Information required by this item is incorporated herein by reference to our Proxy Statement with respect to our 2022 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year covered by this Annual Report.

## PART IV

### Item 15. Exhibits, Financial Statement Schedules

(a)(1) Financial Statements

We have filed the financial statements listed in the Index to Financial Statements as a part of this Annual Report on Form 10-K.

(a)(2) Financial Statement Schedules

Schedule I Condensed Financial Information of Registrant

No other financial statement schedules have been provided because the information called for is not required or is shown either in the financial statements or notes thereto.

(a)(3) Exhibits

The following exhibits are filed as part of this Annual Report on Form 10-K or are incorporated herein by reference.

| Exhibit Number | Exhibit Description | Incorporated by Reference Form | File No. | Exhibit | Exhibit Filing Date | Filed/ Furnished Herewith |
|---|---|---|---|---|---|---|
| 3.1 | Restated Certificate of Incorporation of the Registrant. | 10-Q | 001-36537 | 3.1 | 8/28/2014 | |
| 3.2 | Certificate of Amendment to the Restated Certificate of Incorporation of the Registrant. | 8-K | 001-36537 | 3.1 | 6/3/2016 | |
| 3.3 | Amended and Restated Bylaws of the Registrant. | 10-K | 001-36537 | 3.3 | 2/12/2021 | |
| 4.1 | Description of Capital Stock | 10-K | 001-36537 | 4.1 | 2/14/2020 | |
| 4.2 | Form of Common Stock Certificate. | S-1 | 333-196814 | 4.1 | 6/16/2014 | |
| 10.1+ | Form of Indemnity Agreement. | S-1 | 333-196814 | 10.1 | 6/16/2014 | |
| 10.2+ | 2007 Equity Compensation Plan and forms of stock option agreements and exercise notices, restricted stock notice agreement and restricted stock agreement thereunder. | S-1 | 333-196814 | 10.2 | 6/16/2014 | |
| 10.3+ | 2014 Equity Incentive Plan and forms of stock option award agreement, restricted stock agreement and restricted stock unit award agreement thereunder. | S-1 | 333-196814 | 10.3 | 6/16/2014 | |
| 10.4+ | 2014 Employee Stock Purchase Plan. | S-1 | 333-196814 | 10.4 | 6/16/2014 | |
| 10.5† | Agency Agreement between Omega General Insurance Company and Trupanion Brokers Ontario, Inc., effective January 1, 2015. | 10-K | 001-36537 | 10.13 | 2/24/2015 | |
| 10.6† | Fronting and Administration Agreement between Wyndham Insurance Company (SAC) Limited and Omega General Insurance Company, effective January 1, 2015. | 10-K | 001-36537 | 10.14 | 2/24/2015 | |
| 10.7† | Quota Share Reinsurance Agreement between Wyndham Insurance Company (SAC) Limited and Omega General Insurance Company, effective January 1, 2015. | 10-K | 001-36537 | 10.15 | 2/24/2015 | |
| 10.8 | Quota Share Reinsurance Agreement between Wyndham Insurance Company (SAC) Limited and Omega General Insurance Company, effective July 1, 2020. | 10-K | 001-36537 | 10.23 | 2/14/2020 | |
| 10.9 | Quota Share Reinsurance Agreement between Wyndham Insurance Company (SAC) Limited and Omega General Insurance Company, effective January 1, 2021. | 10-K | 001-36537 | 10.16 | 2/12/2021 | |
| 10.10 | Quota Share Reinsurance Agreement between Wyndham Insurance Company (SAC) Limited and Omega General Insurance Company, effective January 1, 2022. | | | | | X |

| | | | | | | |
|---|---|---|---|---|---|---|
| 10.11+ | Compensation Program for Non-Employee Directors of Trupanion, Inc, as amended on January 29, 2021. | 10-K | 001-36537 | 10.17 | 2/12/2021 | |
| 10.12+ | Compensation Clawback Policy, effective February 11, 2019. | 10-K | 001-36537 | 10.21 | 2/14/2019 | |
| 10.13+ | Trupanion, Inc. Employee Severance and Change in Control Plan effective January 29, 2021. | 8-K | 001-36537 | 10.1 | 2/4/2021 | |
| 10.14 | Stock Purchase Agreement, dated as of October 26, 2020 by and between Trupanion, Inc. and Aflac Incorporated. | 8-K | 001-36537 | 10.1 | 10/29/2020 | |
| 10.15 | Strategic Alliance Agreement, dated as of October 26, 2020 by and between Trupanion, Inc. and Aflac Incorporated. | 8-K | 001-36537 | 10.2 | 10/29/2020 | |
| 10.16 | Shareholder Agreement, dated as of October 26, 2020 by and between Trupanion, Inc. and Aflac Incorporated. | 8-K | 001-36537 | 10.3 | 10/29/2020 | |
| 21.1 | Subsidiaries of the Registrant. | | | | | X |
| 23.1 | Consent of independent registered public accounting firm. | | | | | X |
| 24.1 | Power of Attorney (reference is made to the signature page hereto). | | | | | X |
| 31.1 | Certification of Principal Executive Officer, pursuant to Rule 13a-14(a)/15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. | | | | | X |
| 31.2 | Certification of Principal Financial Officer, pursuant to Rule 13a-14(a)/15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. | | | | | X |
| 32.1* | Certification of Chief Executive Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. | | | | | X |
| 32.2* | Certification of Chief Financial Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. | | | | | X |
| 101.INS | XBRL Instance Document - the instance does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document. | | | | | X |
| 101.SCH | Inline XBRL Taxonomy Extension Schema Document. | | | | | X |
| 101.CAL | Inline XBRL Taxonomy Extension Calculation Linkbase Document. | | | | | X |
| 101.DEF | Inline XBRL Taxonomy Extension Definition Linkbase Document. | | | | | X |
| 101.LAB | Inline XBRL Taxonomy Extension Labels Linkbase Document. | | | | | X |
| 101.PRE | Inline XBRL Taxonomy Extension Presentation Linkbase Document. | | | | | X |
| 104 | Cover Page Interactive Data File (formatted in Inline XBRL and contained in Exhibit 101) | | | | | X |

\+ Indicates a management contract or compensatory plan or arrangement.

† Registrant has omitted portions of the referenced exhibit pursuant to a request for confidential treatment under Rule 24b-2 promulgated under the Exchange Act. The omitted portions of this exhibit have been filed separately with the SEC.

* This certification is deemed not filed for purpose of section 18 of the Exchange Act or otherwise subject to the liability of that section, nor shall it be deemed incorporated by reference into any filing under the Securities Act or the Exchange Act.

## Item 16. Form 10-K Summary

None.

## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Seattle, state of Washington, on this 17th day of February, 2022.

**TRUPANION, INC.**

By: /s/ Darryl Rawlings

Darryl Rawlings
*Chief Executive Officer*

## POWER OF ATTORNEY

*KNOW ALL PERSONS BY THESE PRESENTS*, that each person whose signature appears below hereby constitutes and appoints Darryl Rawlings, Gavin Friedman and Drew Wolff, and each of them, as his or her true and lawful attorneys-in-fact, proxies and agents, each with full power of substitution, for him or her in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact, proxies and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully for all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact, proxies and agents, or their or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

| | |
|---|---|
| Date: February 17, 2022 | /s/ Darryl Rawlings |
| | Darryl Rawlings<br>Chief Executive Officer<br>*(Principal Executive Officer)* |
| Date: February 17, 2022 | /s/ Drew Wolff |
| | Drew Wolff<br>Chief Financial Officer<br>*(Principal Financial and Accounting Officer)* |
| Date: February 17, 2022 | /s/ Murray Low |
| | Murray Low<br>Chairman of the Board of Directors |
| Date: February 17, 2022 | /s/ Jacqueline Davidson |
| | Jacqueline Davidson<br>Director |
| Date: February 17, 2022 | /s/ Michael Doak |
| | Michael Doak<br>Director |
| Date: February 17, 2022 | /s/ Eric Johnson |
| | Eric Johnson<br>Director |
| Date: February 17, 2022 | /s/ Dan Levitan |
| | Dan Levitan<br>Director |
| Date: February 17, 2022 | /s/ Howard Rubin |
| | Howard Rubin<br>Director |
| Date: February 17, 2022 | /s/ Zay Satchu |
| | Zay Satchu<br>Director |

## Schedule I - Condensed Financial Information of Registrant

**Trupanion, Inc.**
**Condensed Statements of Operations and Comprehensive Loss**
(Parent Company Only, in thousands)

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2021 | 2020 | 2019 |
| Expenses: | | | |
| Veterinary invoice expense | $ 4,538 | $ 1,118 | $ 697 |
| Other cost of revenue | 2,610 | 468 | 353 |
| Technology and development | 3,130 | 1,087 | 904 |
| General and administrative | 11,714 | 7,055 | 5,944 |
| New pet acquisition expense | 9,177 | 2,799 | 2,137 |
| Depreciation and amortization | 473 | 328 | 211 |
| Total expenses | 31,642 | 12,855 | 10,246 |
| Loss from investment in joint venture | (33) | (108) | (205) |
| Operating loss | (31,675) | (12,963) | (10,451) |
| Interest expense | (2) | 1,361 | 1,327 |
| Other income, net | (5,755) | (4,845) | (4,156) |
| Loss before equity in undistributed earnings of subsidiaries | (25,918) | (9,479) | (7,622) |
| Income tax benefit | 12,272 | 8,460 | 5,423 |
| Equity (loss) in undistributed earnings of subsidiaries | (21,884) | (4,821) | 390 |
| Net loss | $ (35,530) | $ (5,840) | $ (1,809) |
| Other comprehensive income, net of taxes: | | | |
| Other comprehensive income of subsidiaries | 6 | 2,821 | 1,003 |
| Other comprehensive income | 6 | 2,821 | 1,003 |
| Comprehensive loss | $ (35,524) | $ (3,019) | $ (806) |

**Trupanion, Inc.**
**Condensed Balance Sheets**
**(Parent Company Only)**
(In thousands, except share data)

| | December 31, | |
|---|---|---|
| | 2021 | 2020 |
| **Assets** | | |
| Current assets: | | |
| Cash and cash equivalents | $ 33,957 | $ 101,131 |
| Accounts and other receivables | 5,452 | 3,983 |
| Prepaid expenses and other assets | 591 | 463 |
| Total current assets | 40,000 | 105,577 |
| Restricted cash | 13,469 | 6,319 |
| Property and equipment, net | 904 | 680 |
| Intangible assets, net | 5,620 | 5,478 |
| Other long-term assets | 16,519 | 14,378 |
| Advances to and investments in subsidiaries | 257,197 | 209,031 |
| Total assets | $ 333,709 | $ 341,463 |
| **Liabilities and stockholders' equity** | | |
| Current liabilities: | | |
| Accounts payable, accrued liabilities, and other current liabilities | $ 254 | $ 253 |
| Total current liabilities | 254 | 253 |
| Deferred tax liabilities | 1,094 | 1,109 |
| Other liabilities | 162 | 162 |
| Total liabilities | 1,510 | 1,524 |
| Stockholders' equity: | | |
| Common stock: $0.00001 par value per share, 100,000,000 shares authorized; 41,408,350 and 40,475,185 shares issued and outstanding at December 31, 2021; 40,383,972 and 39,450,807 shares issued and outstanding at December 31, 2020 | — | — |
| Preferred stock: $0.00001 par value per share, 10,000,000 shares authorized; no shares issued and outstanding | — | — |
| Additional paid-in capital | 466,792 | 439,007 |
| Accumulated other comprehensive income (loss) | 3,077 | 3,071 |
| Accumulated deficit | (126,890) | (91,360) |
| Treasury stock, at cost: 933,165 shares at December 31, 2021 and 2020 | (10,779) | (10,779) |
| Total stockholders' equity | 332,200 | 339,939 |
| Total liabilities and stockholders' equity | $ 333,710 | $ 341,463 |

**Trupanion, Inc.**
**Condensed Statements of Cash Flows**
(Parent Company Only, in thousands)

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2021 | 2020 | 2019 |
| **Operating activities** | | | |
| Net loss | $ (35,530) | $ (5,840) | $ (1,809) |
| Adjustments to reconcile net loss to cash provided by (used in) operating activities: | | | |
| (Income) loss attributable to investments in subsidiaries | 17,501 | 170 | (4,312) |
| Depreciation and amortization | 473 | 328 | 211 |
| Stock-based compensation expense | 28,226 | 8,912 | 6,846 |
| Other, net | (161) | 240 | 48 |
| Changes in operating assets and liabilities | (1,219) | (1,142) | (601) |
| Net cash provided by operating activities | 9,290 | 2,668 | 383 |
| **Investing activities** | | | |
| Cash paid in business acquisition, net of cash acquired | — | (48,133) | — |
| Purchases of property and equipment | (280) | (341) | (728) |
| Advances to and investments in subsidiaries | (71,721) | (24,885) | (11,931) |
| Dividends from subsidiaries | 5,567 | 4,651 | 3,922 |
| Other investments | (1,755) | — | (7,019) |
| Net cash used in investing activities | (68,189) | (68,708) | (15,756) |
| **Financing activities** | | | |
| Issuance of common stock, net of offering costs | — | 192,265 | — |
| Proceeds from exercise of stock options | 3,607 | 6,013 | 2,982 |
| Taxes paid related to net share settlement of equity awards | (4,732) | (1,115) | (1,667) |
| Proceeds from debt financing, net of financing fees | — | 6,213 | 13,167 |
| Repayments of debt financing | — | (32,450) | — |
| Other financing | — | (78) | — |
| Net cash (used in) provided by financing activities | (1,125) | 170,848 | 14,482 |
| Net change in cash, cash equivalents, and restricted cash | (60,024) | 104,808 | (891) |
| Cash, cash equivalents, and restricted cash at beginning of period | 107,450 | 2,642 | 3,533 |
| Cash, cash equivalents, and restricted cash at end of period | $ 47,426 | $ 107,450 | $ 2,642 |

## 1. Organization and Presentation

The accompanying condensed financial statements present the financial position, results of operations and cash flows for Trupanion, Inc. These condensed unconsolidated financial statements should be read in conjunction with the consolidated financial statements of Trupanion, Inc. and its subsidiaries and the notes thereto (the Consolidated Financial Statements). Investments in subsidiaries are accounted for using the equity method of accounting. Trupanion, Inc. received cash dividends from a subsidiary of $5.6 million, $4.7 million and $3.9 million for the years ended December 31, 2021, 2020 and 2019, respectively. These cash dividends were recorded within Trupanion, Inc.'s other income and were eliminated within the consolidated financial statements of Trupanion, Inc.

Additional information about Trupanion, Inc.’s accounting policies pertaining to intangible assets, commitments and contingencies, stock-based compensation, stockholders’ equity, and income taxes are set forth in Notes 5, 9, 11, 13, and 16, respectively, to the Consolidated Financial Statements.

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