



EC2204 Financial Accounting for Economists

Project Report

O Hung Lung (A0184304L)

Tan Yong-Jia Naaman (A0205299X)

Wang Kexin (A0205324U)

Introduction

eHealth Inc. is a US online health insurance broker of Medicare, individuals, families and small businesses products for insurance carriers. It derives 90% of its revenue from commission paid by insurance carriers with 80% coming from the sale of Medicare plans. Since the adoption of ASC 606 in 2018 - a new accounting framework for revenue recognition - eHealth's Medicare commission revenue has surged oddly by 28% in 2018 and 105% in 2019. To uncover the underlying reasons and examine its business in detail, we perform a SWOT analysis with comparisons to GoHealth and SelectQuote (Appendix A).

Strengths

eHealth's core business is in providing consumers with a seamless platform for finding, evaluating and purchasing Medicare-related insurance products. To this end, they have three key strengths that put them in a favourable position in the market:

1. They have competitive marketing capabilities in lead generation.

eHealth generates around 60% of their leads through a combination of television and direct mail, 20% via online channels and the remaining from other business partners such as pharmacy chains. [1] These percentages reflect that eHealth possesses a good mix of advertising channels, which may be an advantage as the Medicare-eligible population becomes increasingly tech-savvy and do research on insurance purchases online. [2]

In fact, their presence online is the strongest among multiple lead generators in terms of website engagement numbers: eHealth's e-commerce platform has the highest total visits, pages per visit and traffic generated from online searches. (Fig. 1) [3] eHealth can leverage its wide reach of customers to increase sales, as shown by their competitive sales (Fig. 2)

2. Their one-stop e-commerce platform provides an incomparable user experience to stand out from the industry

As of 2018, there are 931 health insurance carriers in the US [4] offering an unmanageable number of choices. Medicare application is also complicated and varies widely by states. As a result, consumers typically face a tedious process of bouncing between websites to compare plans and complete transactions and filling up application forms.

In comparison, eHealth's e-commerce platforms are uniquely designed to provide consumers with tools to seamlessly analyse, compare and purchase a variety of health insurance products on a *single* platform – regardless of which carriers offer them. This provides customers with a streamlined e-commerce experience, as a unique differentiating factor to capture Medicare consumers as recommended by an Accenture survey. [5] (Please refer to Appendix B for a detailed description of the unique features of eHealth's website, including their proprietary application tools and digital data interface.) Their website has also been recognised by prominent entities, having received Kiplinger's "Best Insurance Site" award every year since 2006. [6] It is also their fastest growing channel for memberships, representing 27% of total enrolments in 2019, compared to 11% in 2017. [7]

3. Their position in their unique market is relatively secure due to high regulatory barriers to entry.

Regulatory barriers include the need to record and retain all customer interactions for at least a decade and get approval from the Centers for Medicare & Medicaid Services (CMS) for every aspect of marketing. [8] This is not only technologically challenging but extremely time consuming.

Additionally, carriers are extremely careful with working with new brokers – including potential entrants. This is because brokers do not have direct communication with CMS but have health insurance carriers endorse them instead. Should brokers violate any rules, these carriers face significant penalties. A case in point of this caution was the fact that it took UnitedHealth (one of eHealth's partners) almost two years to audit eHealth's compliance with CMS regulations and endorse eHealth to work in the Medicare market. [9] This makes it challenging for new entrants to acquire the partners they need to offer a sufficiently diverse selection of insurance products, and especially to a point where they can compete with eHealth with over 170 partners. Amazon has reportedly shown interest in entering the insurance e-commerce industry [10] – but even a strong player like them would likely face an uphill task. Therefore, with significant regulatory barriers and eHealth's competitive capabilities, it would not be easy for a potential entrant to compete with eHealth.

Weaknesses

Our analysis suggests that the core weaknesses of eHealth are their unprofitable business model and weak liquidity position. We believe that they have masked this unprofitability with aggressive accounting practices and only maintained a positive net cash flow through equity financing.

1. eHealth's business may not be profitable, but this is masked by accounting manipulation

In 2018 and 2019, eHealth has seen a surge in revenue growth by 28% and 105% respectively, together with sharp increases in advertising and customer care expenses. (Fig. 3) Examples of the increase in expenses include growing call centre capacity by 129% [11] and focusing on its television advertising. [12] The jump in expenses is not necessarily bad in itself since revenue skyrocketed. But the customers captured through upscaled marketing are high-churn, making them unprofitable at the current cost of customer acquisition.

eHealth reports churn rates of insurance members in their 1st and 2nd year of joining are 35-36% and 18-19% respectively. [9] This figure is significantly higher than the voluntary churn rates of Medicare Advantage enrollees across the industry, which are estimated to be about 9% [13] (2007-2014) to 13% (2018). [2] (Fig. 4) This figure is also higher than SelectQuote's churn rates, at 28-30% in the first year and mid-teens in the second year. [1]

eHealth's customer acquisition costs are about 615 USD per enrollee [9]. They estimate LTV to be 400 USD in year 1, 300 USD in year 2 and 300 in year 3, assuming member persistence of 3 years – without churn. [9]. However, with the above churn rates, a simple calculation yields a customer LTV of 567 USD (see Appendix C). A loss is made, even assuming zero churn in year 3. If eHealth can retain voluntary switchers, their high churn rates would be less of a concern – except that only 10% of eHealth's enrolments come from the switching of existing members [9].

How then, does eHealth report sky-high revenues? On 15 December 2017, the Financial Accounting Standards Board (FASB) changed the framework for revenue recognition from contracts with customers from ASC 605 to ASC 606. With the adoption of ASC 606, eHealth recognizes commission revenue based on the total estimated lifetime commissions it expects to receive for selling plans. Despite its poor churn rates, eHealth has aggressively taken optimistic assumptions for the member persistence of different Medicare plans in its LTV calculations. [7] (see Appendix D and E for more details) When the actual persistence falls short of the assumption, the current and non-current commission receivables that are recognised based on overly optimistic assumptions will have to be written off. This will lead to a surge in bad debt expenses and abruptly drive down the profit in the write-off year.

2. eHealth has a worrying cash flow and a weak liquidity position

eHealth's cash flow from financing activities has been the only positive cash flow segment in the past 3 years. (Fig. 5) Currently, it appears that eHealth resorts to equity financing to mitigate cash flow issues. In January 2019, eHealth raised US\$126M from the issuance of 2,760,000 shares of common stock - barely offsetting the fall in operating cash outflow from (US\$3.23M) to (US\$71.49M) between 2018 and 2019 to maintain a positive cash flow in 2019. [7] This is likely due to aggressive expenditure by eHealth on what may be an unprofitable business (as elaborated above), lags in cash flow natural to the industry and a larger proportion of revenue accrued in non-current receivable account.

Upon enrolment confirmation, eHealth receives upfront commission followed by recurring payments from partners as the enrollee continues to stay with the policy. Upon re-enrolment, eHealth receives commission revenues again. However, eHealth's expenses associated with its revenues are essentially incurred upfront and commission payments are received later. This natural lag between expense payment and cash collection has weakened its cash flow.

This delay in cash collection from receivable account is further worsened at eHealth because a large portion of their commission revenues is accrued in non-current account under their LTV calculations – with uncertainty of bad debt (see Appendix D and Fig. 6) From another angle, the cash collection issue is also reflected in the sharp reduction in receivables turnover (included both current account receivable and commission receivable) from 20 in 2017 before ASC 606 to 3.4 in 2018 and 3.2 in 2019. (Fig. 7)

Additionally, since the adoption of ASC 606 in 2018, eHealth has ramped up its expenses on marketing and advertising and customer care and enrolment (Fig. 8) to acquire enrollees and boost revenue numbers, further jeopardising their liquidity position. A case in point is that its current ratio has significantly dropped from 2.576 in 2018 to 1.842 in 2019, since expenses are paid upfront or accrued as current liability and most of the commission revenue recognised will not be paid within a year.

Notably, the high churn rates faced by eHealth could severely reduce its current ratio, when some of the current commission receivables become uncollectible and are written off. This is because the assumed commission payment from insurance carriers will not materialise as insurance members end their policy prematurely. We use a sensitivity analysis to illustrate the impact of different extent of write-off on current ratio and eHealth's liquidity position. (Appendix F)

Lastly, eHealth has several maturing liabilities. On 17 September 2018, eHealth secured a loan of US\$40M from Royal Bank of Canada (RBC). On 20 December 2019, eHealth reached a credit facility agreement with RBC to extend the maturity date to 20 December 2022 with an increased borrowing amount from US\$40M to US\$75M. A weak liquidity position raises the question whether eHealth will be able to pay off the loan and other accounts payable in the future.

Opportunities

One of eHealth's core strengths is their unique marketplace e-commerce model that facilitates a seamless online insurance purchase experience. With their online platform and today's economic and social climate, there present three potential opportunities that eHealth could explore.

1. eHealth should continue streamlining front-end search and comparison tools to capture share of the growing market.

The Medicare market is rapidly growing with 10,000 people becoming eligible for Medicare annually [14], with total Medicare spending estimated to grow at 7.1% per annum to 1.4 trillion USD by 2027 [15]. Accenture research suggests that consumers 55 and above are “increasingly expecting and using digital tools for health management activities” (Fig. 9) with this trend likely to continue. It also suggests that the highest drivers of consumer loyalty are the availability of tools to look at details of a plan and make comparisons. [5*] This matches eHealth's findings that the percentage of enrollees using their Medicare Provider Network Look-up and prescription drug comparison tools have increased over the years. [16] (Fig. 10)

To capture the growing market, eHealth should take advantage of the burgeoning demand for digital tools and focus its effort on capturing these users by simplifying the consumer's shopping experience, both online and offline. The benefit of being able to capture market share also reduces costs as they would be able to reduce eHealth's reliance on resources associated with their call centre operations, which they have aggressively expanded in recent years. [11]

2. eHealth should form more strategic partnerships with carriers that offer more value-for-money Medicare products to capture enrolments from ‘switchers’.

Beyond growing share by capturing new members in the Medicare market, eHealth should focus on capturing ‘switchers’ – individuals who voluntarily switch carriers. With Medicare switching rates at about 9-13% [13], estimates put the number of potential enrollees from switching at about 4.3 million per year - compared to 2.4 million *new* eligible members per year. As of 2019, only about 10% of eHealth’s enrolments come from the switching of existing members. [2]

Accenture has highlighted that voluntary switching is primarily driven by carrier plans lacking value for money, with more than 50% claiming that they would not have switched if their current plan offered better pricing. [17] Navigant research has also found a direct correlation between a health plan’s STAR rating and enrolment numbers, with a 1-star improvement increasing enrolment by 8 to 12%. [18] Humana, Aetna and UnitedHealth are eHealth’s biggest carrier partners, representing 60% their revenues. [7] All three largely offer plans with STAR ratings above four. eHealth stands to benefit if it can raise the proportion of its 170 or so carriers that are highly rated to capture growth from switchers.

3. eHealth should focus their marketing efforts on individual insurance segments amidst the Covid-19 pandemic, and possibly expand their health insurance product mix beyond.

Majority of the Americans are under health insurance plans provided by their employers and these subscriptions represent 55.4% of all health insurances as of 2019. [19*] The global economic recession due to Covid-19 pandemic has seen US unemployment skyrocket, with more than 14 million Americans displaced from the economy as of May 2020. Deloitte indicates that up to 79% of these individuals who lost their health insurance coverage from their employers are eligible for enrolment in Medicare Supplement and Individual insurance plans. [19]

However, eHealth has been seeing decreasing enrolment in their individual insurance segments since 2016, with the estimated membership decreasing from 360,634 in 2016 to 32,186 in 2019. While the decrease in memberships were in part due to healthcare reforms of the Trump administration, eHealth has also chosen to focus their marketing efforts on the more profitable Medicare Advantage market – which has a revenue potential of 800 to 1200 USD per member per month. [2]

Given their core strengths in marketing and providing a seamless e-commerce experience in insurance shopping, the Covid-19 pandemic presents itself as a strategic opportunity for eHealth to pivot beyond Medicare related products and re-pivoting towards individual insurance products, especially since there is a demand for contactless modes of transaction. [20]

Threats

1. The re-election of Donald Trump may reduce enrolments for individual and family insurance.

The Affordable Care Act (ACA) was signed into law on 23 March 2010 and has since boosted the enrolment rates in the individual and family health insurance products due to 1) expanded carried by eHealth. [21]

However, the Trump administration has strongly opposed ACA, having eradicated ACA’s individual mandate penalty and currently pushing to make ACA unconstitutional in several Republican states. This has already decreased the enrolments in the individual market by 5% since taking effect in 2019. [22] According think tank Urban Institute, making the bill non-constitutional cut federal spending for subsidies. This is will increase uninsured Americans by 20 million solely in Texas. [23] Thus, if Donald Trump is re-elected, eHealth’s commission revenue from the individual and family sector is likely to decrease due to a fall in enrolments.

2. US-China tensions may threaten eHealth’s operations in China, which are key to their business.

A portion of eHealth’s operations (maintenance and updating of their e-commerce platform and certain tasks within their finance and customer care operations) is based in China. The sustained tensions between the US and China and growing concern over the PRC National Cyber Security Law which requires foreign companies operating in China to provide foreign data to the Chinese government [24], would likely impact these operations. President Donald Trump has previously ordered US firms to “immediately start looking for an alternative to China, including bringing your companies HOME and making your products in the USA.” [25] In fact, US Senator Josh Hawley has introduced the National Security and Personal Data Protection Act, which prohibits US firms from storing data in China. [26] If this bill is passed, eHealth would be required to shift the healthcare data of more than 1.1 million Americans’ [7] away from China. These escalated measures of national security against China may impact more than 26% of eHealth’s operating expenses [7] (Fig. 11), threatening their financial position alongside making them less cost competitive.

Conclusion

eHealth is at some sort of a crossroads. They have strong capabilities in marketing and e-commerce and are positioned well in a market with high growth potential and barriers to entry. However, they are also plagued by an unprofitable business model exacerbated by a weak liquidity position, staved-off only by equity financing. If they can pivot their business towards capturing ‘switchers’, diversify their product mix and capitalise on the opportunity in the e-commerce market that the Covid-19 pandemic provides, they may be able to achieve longer-run financial health. But only if they can navigate the risks to their operations in China and Individual Insurance sections that the US-China tensions and re-election of Donald Trump brings.

Figures

Figure 1: eHealth’s competitive e-commerce platform: eHealth has the strongest online presence relative to its closest competitors GoHealth and SelectQuote, with the highest total visits, pages per visit and traffic generated from online searches.

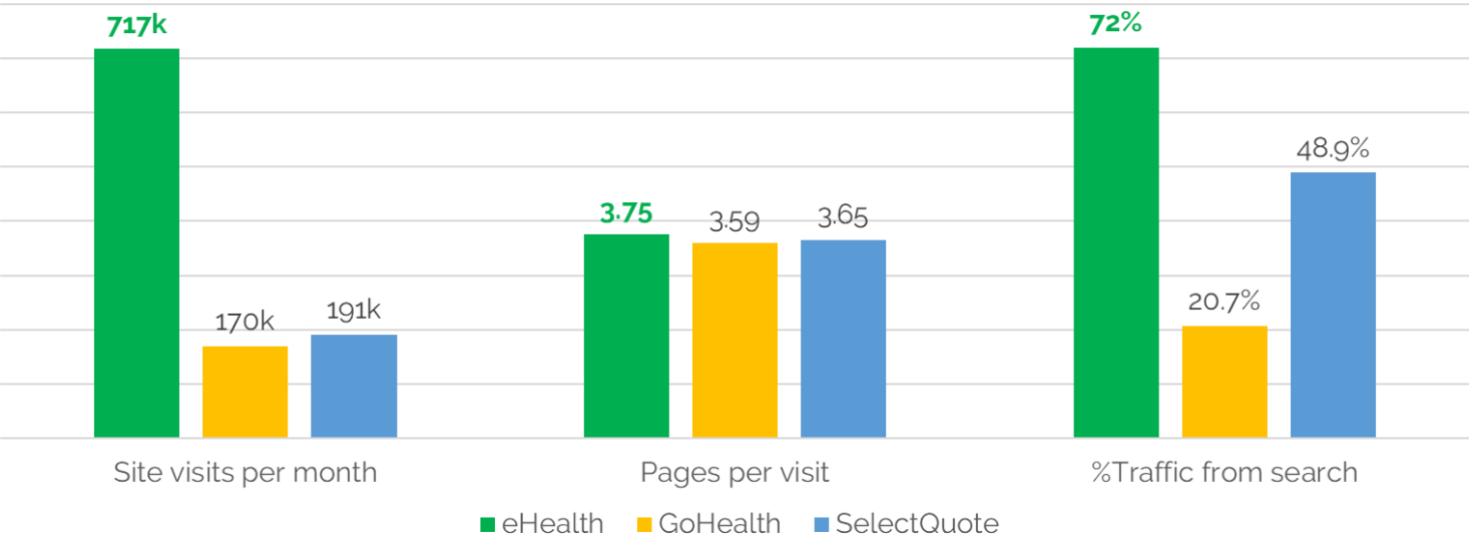


Figure 2: eHealth’s competitive sales numbers: eHealth has the highest memberships and comparable Medicare advantage approvals relative to its competitors.

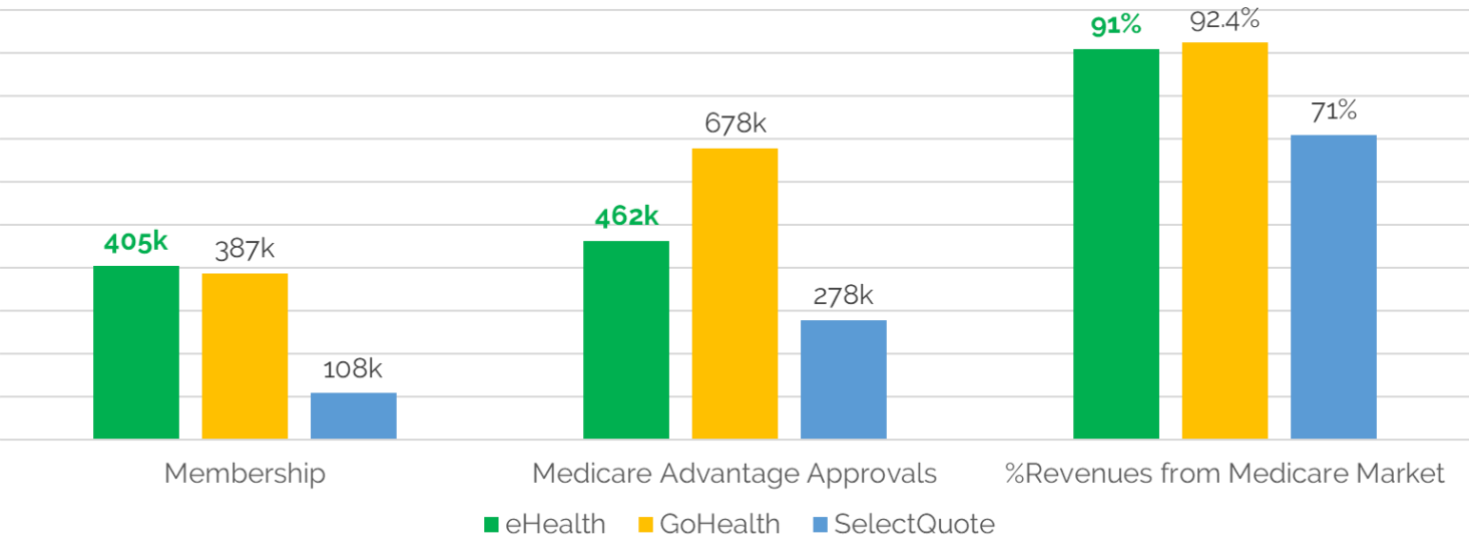


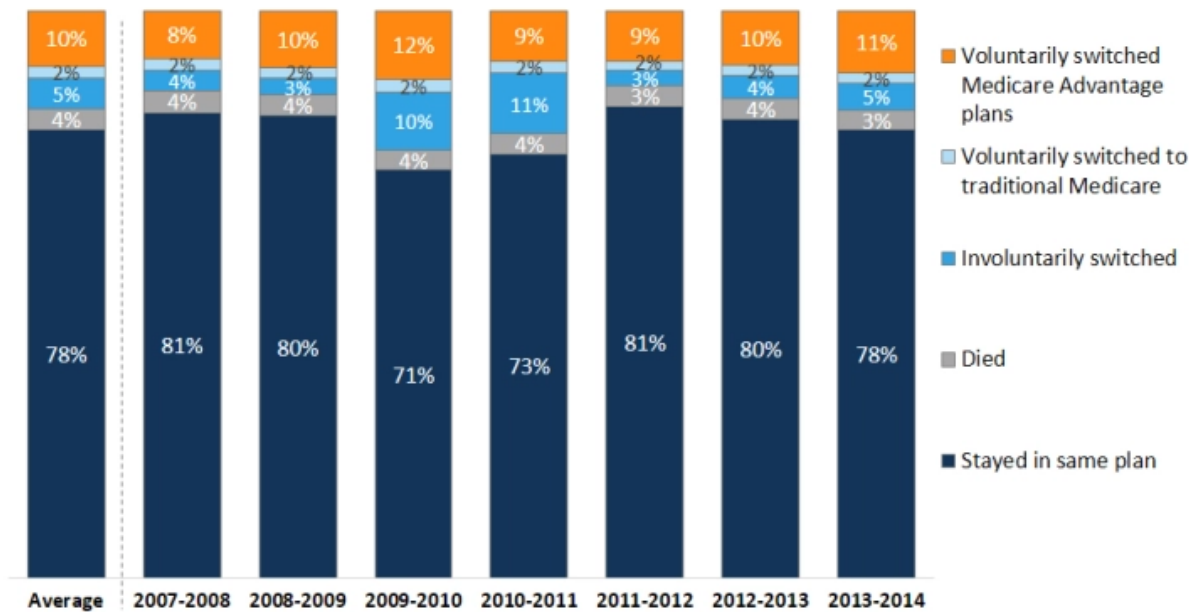
Figure 3: (Top) Demonstrating the surge in advertising and customer expenditure together with revenue upon the adoption of ASC 606 revenue recognition framework. (Bottom) Analysing eHealth’s expenditure segments and its impact on sales growth. The percentage expenditure on advertising is the largest segment, and the segment most positively correlated with year-on-year sales growth. These suggest that eHealth’s growth is largely driven by advertising.



Figure 4: Medicare Advantage voluntary switch rates from 2007 to 2014 are about 9%. This is in stark contrast to eHealth’s 35-36% in year 1 of Medicare Advantage plans. Taken from Kaiser Family Foundation.

On average, 10 percent of Medicare Advantage enrollees voluntarily switched plans each year

Distribution of Medicare Advantage Enrollees, by Switching Status, 2007-2014



NOTES: Excludes enrollees in cost plans, employer group waiver plans, and Special Need Plans (SNPs). Includes only enrollees in Medicare Advantage Prescription Drug plans (MA-PDs). Data not shown for 1-2% of enrollees for whom it is not known whether they changed their coverage voluntarily or involuntarily. Numbers may not sum due to rounding.



Figure 5: eHealth’s cashflow segments in the last 3 years. In the last 3 years, only cashflow from financing activities has been positive, suggesting that eHealth is facing serious cashflow problems and is only staying afloat through equity financing.

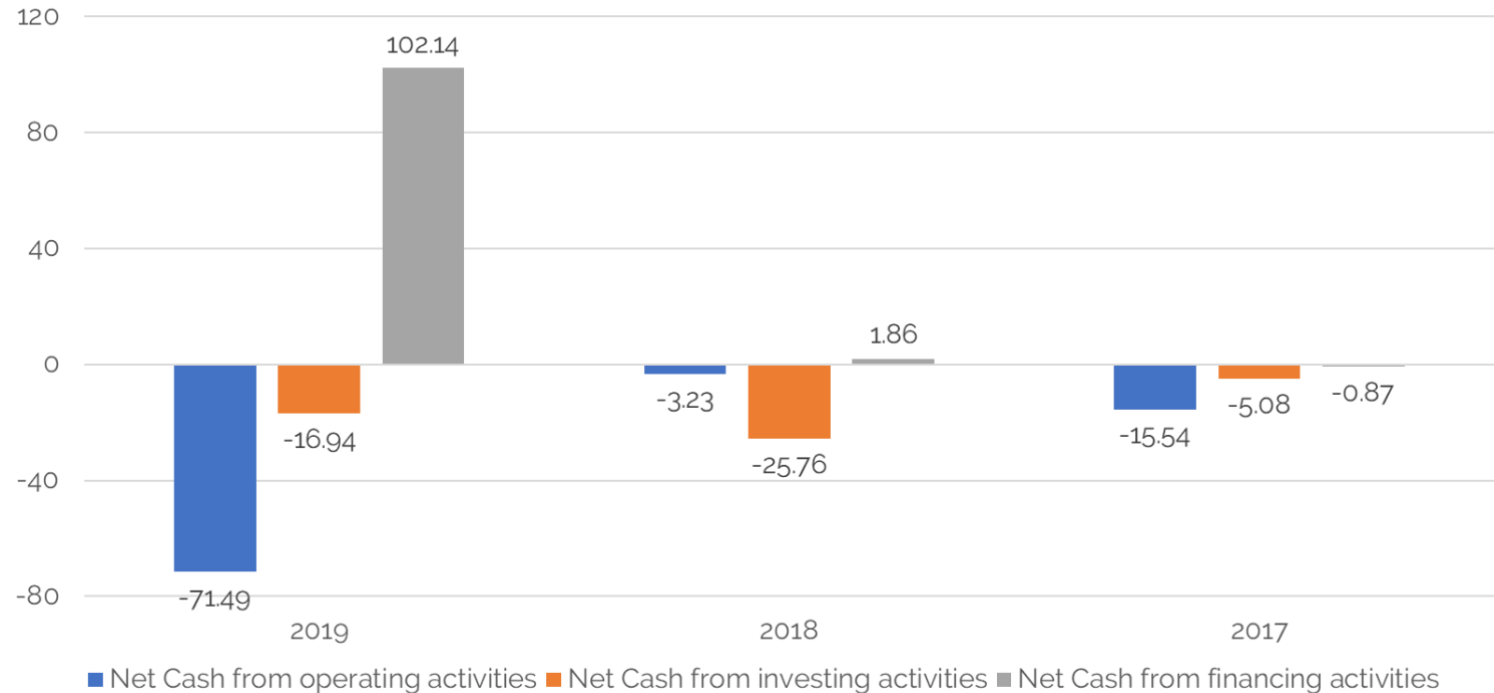


Figure 6: Ever since the adoption of ASC606 in 2018, eHealth recognises ‘commissions revenue’ separately. Most of these revenues are accounted for as non-current receivables.

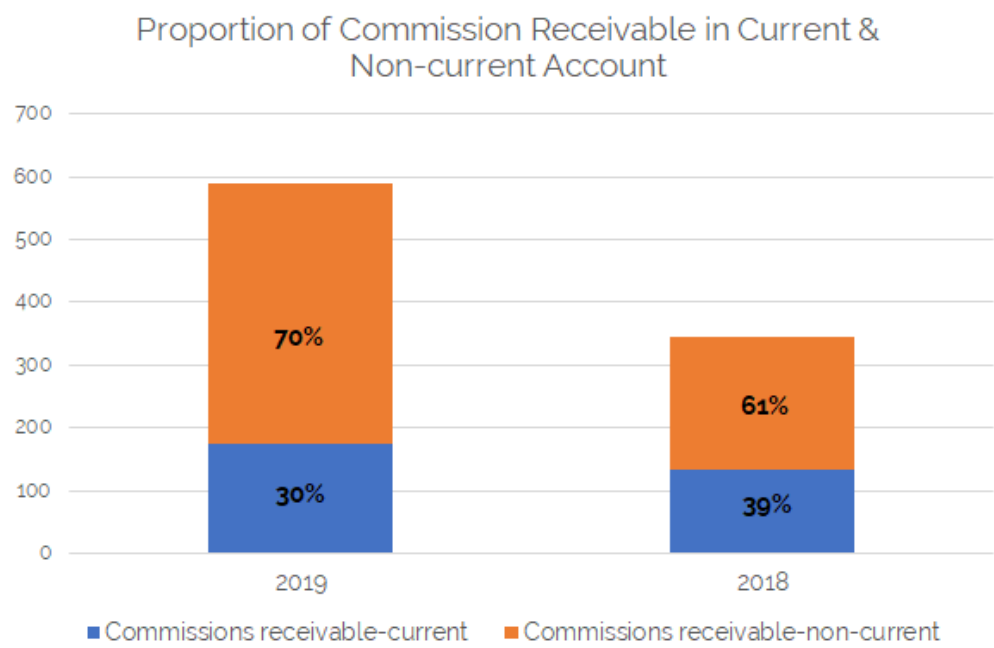


Figure 7: eHealth’s receivables turnover has been consistently falling, likely because an increasing amount of their sales are completed on credit. This brings risks to their liquidity position.



Figure 8: In the last two years – since the adoption of ASC606, eHealth has ramped up their advertising and customer care expenditure significantly, likely in pursuit of growth.

Expenditure by eHealth

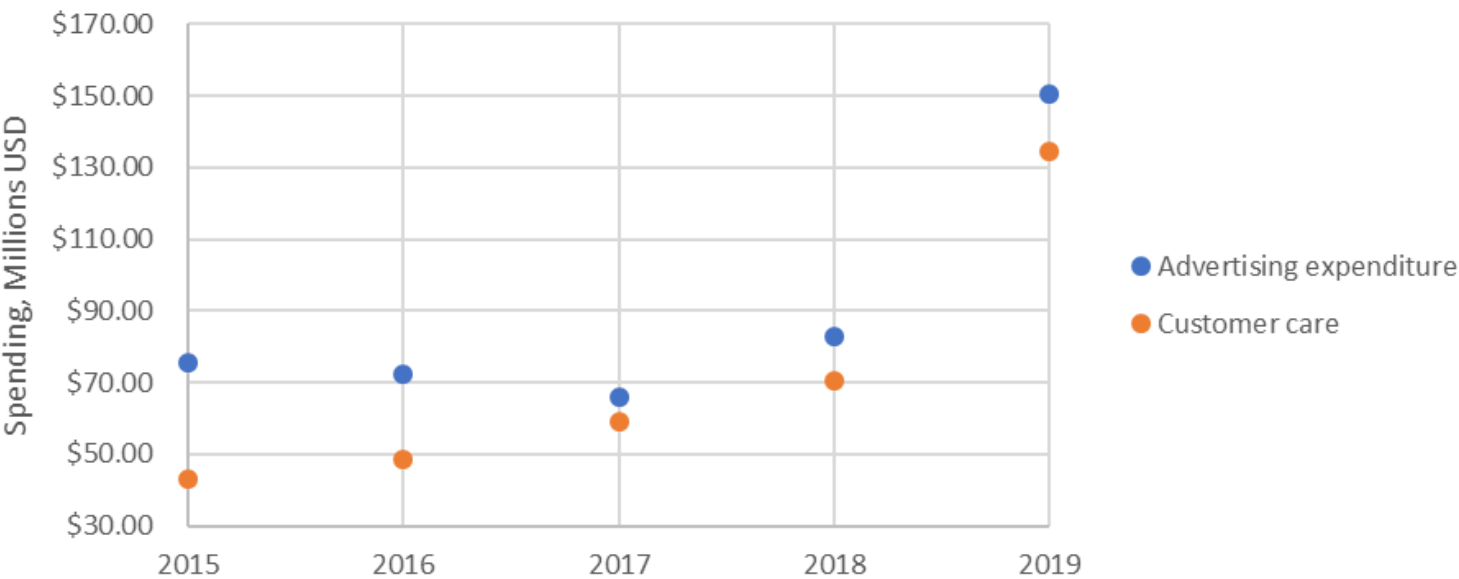
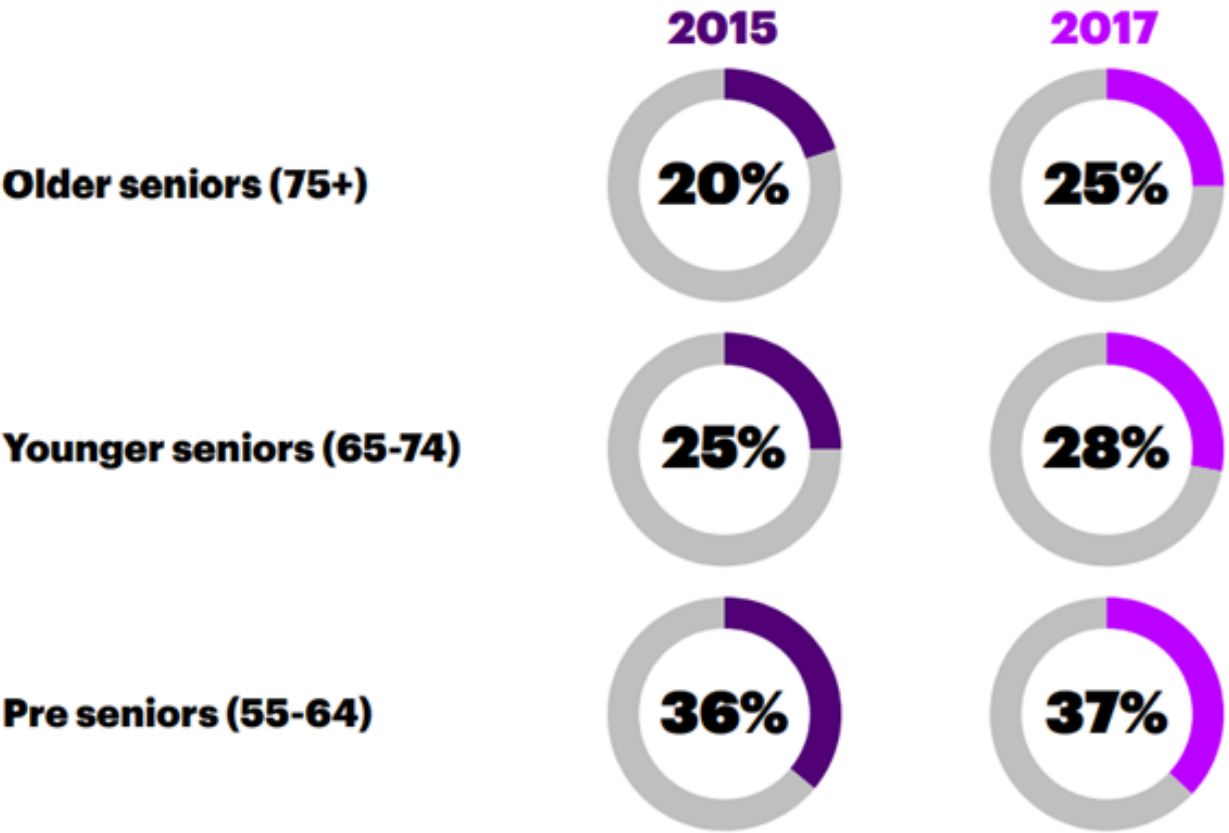


Figure 9: Consumers above 55 are increasingly expecting and using digital tools for health management activities, as illustrated by the increasing percentages across different age groups from 2017 to 2019. Taken from an Accenture report.



Source: Accenture 2017 Consumer Experience Payer Benchmark Survey, Accenture 2015 Health Consumer Survey

Figure 10: eHealth’s website tools usage statistics similarly suggest that enrollees in Medicare Advantage are increasingly tech-savvy. The percentage of enrollees using their Medicare Provider Network Look-up and prescription drug comparison tools have increased over the years.

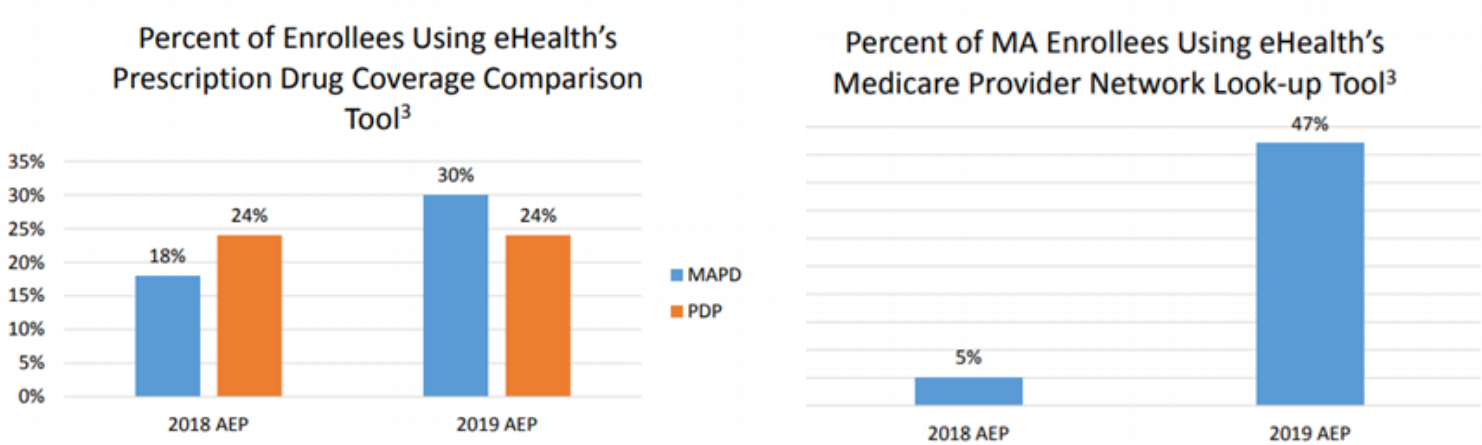
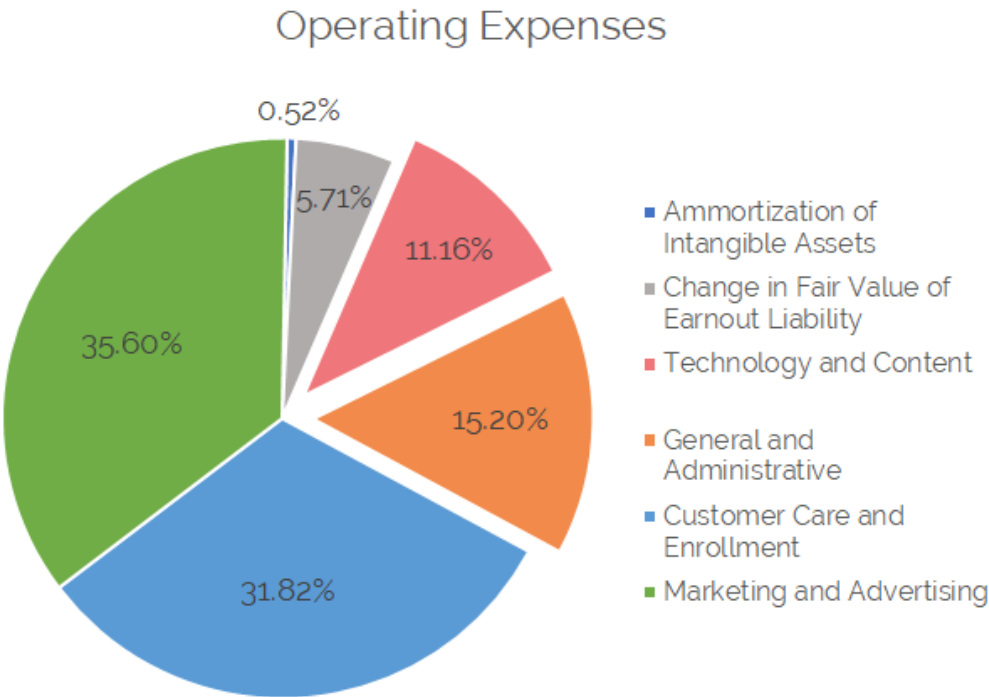


Figure 11: A breakdown of eHealth’s operating expenses. 26% of their operating expenses may be impacted by anti-Chinese regulation, as some of eHealth’s general and administrative and technology content operations are carried out in China.



Appendix A: eHealth's competitors

GoHealth is a US-based health insurance broker. Like eHealth, GoHealth has a strong focus on the Medicare market, with commissions from Medicare plans representing more than 90% of its revenue in 2019. Its main partner carriers are Humana and Anthem which made up 60% of GoHealth's revenue in 2019. Unlike eHealth, GoHealth does not depend on external agents to handle the surge in enrolments during the annual AEP and instead depend mostly on their internal agents instead.

What sets GoHealth apart from other brokers is its technology driven business model which utilises algorithms and machine learning tools to market, generate lead scores and in identifying the best insurance plans for consumers. In particular, when consumers engage with GoHealth, GoHealth uses the consumer's information to predict an aggregate commission that the consumer will generate. This value determines the cluster the consumer is directed to, and each cluster is serviced by agents depending on their proficiency. After which, machine learning is used to evaluate the consumer's profile, to generate the most suited plan.. While GoHealth has an online enrolment site, most of its enrolments are still partly assisted by agents and the online platform is the main purpose of the online platform is to direct potential customers to human agents. [1]

Overall, GoHealth is gaining a greater share in the Medicare market while enjoying growth in revenue and has recently raised around \$914 million in capital during its initial public offering. [27]

SelectQuote is also an insurance broker but unlike eHealth and GoHealth, offers life insurance and auto insurance plans in addition to health insurance plans. Commissions from Medicare makes up 70% of SelectQuote's revenue while 20% is from life insurance. In the market of health insurance, SelectQuote's main partners are Humana, UnitedHealthcare, and Aetna.

Unlike GoHealth and eHealth, SelectQuote does not have an online platform and only takes in customers through phone calls as the management has deemed it more efficient to have an agent to walk through the enrolment process. [1]

Appendix B: Detailed description of the differentiating features on eHealth's e-commerce website

eHealth's website has two notable features that no close competitor has.

They have developed a proprietary application tool that helps to capture each insurance carrier's unique rules and build an online application in an XML format automatically. [7] This offers a significant improvement over the traditional paper-intensive process or a tedious re-filling of online forms when one chooses to apply for insurance or switch carriers.

Further, a combination of developing a digital data interface and having built strategic relationships with major carriers like Aetna, Humana and UnitedHealthcare have allowed eHealth to have back-end office integration with insurance carriers. This means that customers can obtain real-time updates from the carrier, submit and receive documents directly and stay up to date with the latest products available all from eHealth's website.

Aside from these unique capabilities, their platform is competitive against other websites for insurance plan comparison, given that they have the largest selection of health insurance products online in the US with over 10,000 plans from over 170 companies. [28]

Appendix C: Calculating adjusted LTV (lifetime value) of eHealth, taking churn rates into account

eHealth estimates LTV per customer to be 400 USD in year 1, 300 USD in years 2 and 3, but they assume member persistence of 3 years – which means that they do not consider churn in their revenue calculations.

Taking 36% churn rate in year 1 and 19% churn rate in year 2, and 0% churn rate in year 3:

We have a 3-year LTV of $(1-0.36) \times \$400 + (1-0.36)(1-0.19) \times (\$300 + \$300) = \567 . This is less than the customer acquisition cost of \$615 per enrollee.

Appendix D: Brief explanation of ASC 605 & ASC 606 framework for revenue recognition and eHealth’s assumptions in revenue calculations

On 15 December 2017, the Financial Accounting Standards Board (FASB) changed the framework for revenue recognition from contracts with customers from ASC 605 to ASC 606. [7] The key difference between ASC 605 and ASC 606 is that ASC 605’s revenue recognition focuses on the transfer of rewards while ASC 606’s revenue recognition focuses on the transfer of control of goods or services. [31]

Upon approval of health insurance application, since “customer can benefit from the goods or service either on its own or together with other resources that are readily available from third parties or from us” [7], the health insurance product is considered “transferred”. Under ASC 606, companies “recognize revenue upon the transfer of promised goods or services to customers in an amount that reflects the consideration the entity expects to be entitled to in exchange for those goods or services.” Thus, eHealth can recognize the total commission revenue it expects to receive for the *entire duration in which the new insurance holders pays premium to the insurance carrier*. In contrast, under ASC 605, eHealth can only recognize commission revenue for *the one period in which the new insurance holders has already paid premium to the insurance carrier*.

Since the adoption of ASC 606 in eHealth, eHealth sets overly optimistic assumptions of member persistence of different Medicare plans as follows [7]:

- Medicare Advantage Plans: 3 years
- Medicare Part D Prescription Drug Plans: 5 years
- Medicare Supplement Plans: 5 years

With the assumptions, eHealth aggressively recognizes commission revenue based on the total estimated lifetime commissions it expects to receive for selling plans after the approval of an insurance application. In particular, a majority of commission revenue is accrued into non-current commission receivable account. (Fig. 7) eHealth continues using these unrealistic assumptions despite high churn rates of insurance holders of 35-36% in their 1st year of enrolment and 18-19% in their 2nd year of enrolment.[9]

Appendix E: Possible causes of eHealth’s high churn rates

The main cause of eHealth’s high churn rate is due to rapid disenrollment, where subscribers disenroll within 3 months of becoming a member. This is often due to agents who are unfamiliar with all the packages available, pushing for enrollees to purchase the wrong package. These agents are either new to the job or are external brokers sourced from third-party agents to handle the increase in enrolments during the Annual Enrolment Period (AEP) for Medicare. It is estimated that during this peak period in 2020, the external agents employed by eHealth represented almost 69% of its agents, compared to 50% in 2019. [29]

However, eHealth has historically only been monitoring the churn rate of its internal brokers, instead of external brokers which make up most of its agents. [29] Hence, much of eHealth’s increasing churn rate could be attributed to their increase in sourcing for external agents. CEO Scott Flanders has admitted that the company had failed to identify the cause of this problem and are now working towards improving their retention rates. [30]

With recognizing the flaws in their operations, eHealth has set up a 3-pronged approach to improve its retention ratio. By hiring more internal agents, linking internal agents’ compensation with their rapid disenrollment rate and setting up a team focused on ensuring retention members. [29] It is highly likely that these initiatives would make a positive impact on eHealth’s churn rate as seen by results in similar initiatives. eHealth’s competitor, SelectQuote has long set-up a retention team and has been charting much lower churn rates and a similar initiative to align brokers’ compensation to approved members saw an increase in approved -to -submitted policies. [29] Hence, with eHealth actively employing these measures, it is likely that they would see a gradual improvement in overall churn rates.

Appendix F: Sensitivity analysis of eHealth's current ratio for different extent of write-offs of its current commission receivables

Method

Step 1: Find Adjusted Current Asset.

Adjusted Current Asset (% Current Commission Receivable Written Off):	2019	2018	2017	2016	2015
10%	190.693	142.749	Nil	Nil	Nil
20%	173.241	129.330	Nil	Nil	Nil
30%	155.788	115.911	Nil	Nil	Nil
40%	138.336	102.492	Nil	Nil	Nil
50%	120.883	89.073	Nil	Nil	Nil
60%	103.430	75.654	Nil	Nil	Nil
70%	85.978	62.235	Nil	Nil	Nil
80%	68.525	48.816	Nil	Nil	Nil

*

Formula: Adjusted Current Asset = Current Asset - (Current Commission Receivables × the adjusted percentage)

Essentially, adjusted current asset is the current asset of the particular year from which a portion of current commission receivables is subtracted due to being written off when they become uncollectible.

Step 2: Find the adjusted current ratios under different extent of write-off

Ratio	Scenario (% Current Commission Receivable Written Off)	2019	2018	2017	2016	2015
Current Ratio	0%	1.842	2.576	2.065	2.727	2.428
	10%	1.688	2.355	Nil	Nil	Nil
	20%	1.533	2.133	Nil	Nil	Nil
	30%	1.379	1.912	Nil	Nil	Nil
	40%	1.224	1.691	Nil	Nil	Nil
	50%	1.070	1.469	Nil	Nil	Nil
	60%	0.915	1.248	Nil	Nil	Nil
	70%	0.761	1.027	Nil	Nil	Nil
	80%	0.606	0.805	Nil	Nil	Nil

*

Formula: Adjusted Current Ratio = Adjusted Current Asset/Current Liability

Interpretation

As the churn rate of the insurance members in their first year is 35%-36%, it is reasonable to look at 30% of write-off of current commission receivable to gain some insights into how write-offs will affect current ratio. As shown in the spreadsheet in Step 2, when there is a 30% of write-off, current ratio will drop by 0.463 from 1.842 to 1.379 in 2019. For 2018, it will drop by 0.664 from 2.576 to 1.912. For both years, the percentage drop will be around 25%**. The percentage drop in current ratio is approximately the same as the percentage of write-off. The main point we seek to make here is that the risk of write-off of current commission receivable, which is likely to happen due to eHealth's aggressive revenue recognition, will create unignorable extra burden on its liquidity position.

Note:

*Since between 2015 and 2017 there were no commission receivable data available in financial reports, no scenario analysis is performed for 2015, 2016 and 2017.

** $(1.379/1.842)-1 \approx -25.1357\%$ for 2019; $(1.912/2.576)-1 \approx -25.7764\%$ for 2018

Ratio	Scenario (% Current Commission Receivable Written Off)	2019	% Drop	2018	% Drop
Current Ratio	0	1.842		2.576	
	10.00%	1.688	-8.38%	2.355	-8.59%
	20.00%	1.533	-16.77%	2.133	-17.19%
	30.00%	1.379	-25.15%	1.912	-25.78%
	40.00%	1.224	-33.54%	1.691	-34.37%
	50.00%	1.070	-41.92%	1.469	-42.96%
	60.00%	0.915	-50.31%	1.248	-51.56%
	70.00%	0.761	-58.69%	1.027	-60.15%
	80.00%	0.606	-67.08%	0.805	-68.74%

Appendix G: eHealth's financial statements from the last five years

eHealth Inc. Statement of Financial Position Year Ended December 31

Millions USD	2019	2018	2017	2016	2015
Asset					
<u>Current Assets</u>					
Cash and cash equivalents	\$ 23.466	\$ 13.089	\$ 40.293	\$ 61.781	\$ 62.710
Accounts receivable	\$ 2.332	\$ 3.601	\$ 9.894	\$ 9.213	\$ 9.647
Commissions receivable-current	\$ 174.526	\$ 134.190	-	-	-
Prepaid expenses and other current assets	\$ 7.822	\$ 5.288	\$ 4.845	\$ 5.148	\$ 5.185
Total Current Assets	\$ 208.146	\$ 156.168	\$ 55.032	\$ 76.142	\$ 77.542
<u>Non-Current Assets</u>					
Commissions receivable-non-current	\$ 414.696	\$ 211.668	-	-	-
Property and equipment, net	\$ 10.518	\$ 7.684	\$ 4.705	\$ 5.608	\$ 7.364
Operating lease right-of-use assets	\$ 36.621	-	-	-	-
Restricted cash	\$ 3.354	-	-	-	-
Other assets	\$ 18.004	\$ 11.276	\$ 7.317	\$ 4.473	\$ 4.697
Intangible Assets, net	\$ 10.062	\$ 12.249	\$ 7.540	\$ 8.580	\$ 9.620
Goodwill	\$ 40.232	\$ 40.233	\$ 14.096	\$ 14.096	\$ 14.096
Total Non-current Assets	\$ 533.487	\$ 283.110	\$ 33.658	\$ 32.757	\$ 35.777
Total Asset	\$ 741.634	\$ 439.278	\$ 88.690	\$ 108.899	\$ 113.319
Liability					
<u>Current Liabilities</u>					
Account Payable	\$ 24.554	\$ 5.688	\$ 3.246	\$ 5.112	\$ 3.012
Accrued Compensation and Benefits	\$ 29.578	\$ 20.763	\$ 15.498	\$ 10.920	\$ 14.386
Accrued Marketing Expenses	\$ 12.041	\$ 11.013	\$ 4.088	\$ 7.158	\$ 10.698
Earnout Liability - Current	\$ 37.273	\$ 20.730	-	-	-
Lease Liabilities - Current	\$ 4.759	-	-	-	-
Deferred Revenue	\$ 2.570	\$ 0.876	\$ 0.385	\$ 0.959	\$ 0.392
Other Current Liabilities	\$ 2.210	\$ 1.549	\$ 3.430	\$ 3.775	\$ 3.448
Total Current Liabilities	\$ 112.985	\$ 60.619	\$ 26.647	\$ 27.924	\$ 31.936
<u>Non-Current Liabilities</u>					
Debt	-	\$ 5.000	-	-	-
Earnout Liability - non-current	-	\$ 19.270	-	-	-
Deferred Income Taxes - non-current	\$ 64.130	\$ 47.901	-	-	-
Lease Liabilities - non-current	\$ 34.305	-	-	-	-

Other non-current Liabilities	\$ 3.050	\$ 3.339	-	-	-
Total Non-Current Liabilities	\$ 101.485	\$ 75.510	\$ 0.900	\$ 3.374	\$ 4.962
Total Liabilities	\$ 214.470	\$ 136.129	\$ 27.547	\$ 31.298	\$ 36.898
<u>Stockholders' Equity</u>	-	-	-	-	-
Preferred Stock	-	-	-	-	-
Common Stock	\$ 0.035	\$ 0.031	\$ 0.030	\$ 0.029	\$ 0.029
Additional Paid-in Capital	\$ 455.159	\$ 298.024	\$ 281.706	\$ 272.778	\$ 266.699
Treasury Stock	\$ (199.998)	\$ (199.998)	\$ (199.998)	\$ (199.998)	\$ (199.998)
Retained Earnings	\$ 271.852	\$ 204.965	\$ (20.796)	\$ 4.616	\$ 9.498
Accumulated Other Comprehensive Income	\$ 0.116	\$ 0.127	\$ 0.201	\$ 0.176	\$ 0.193
Total Stockholders' Equity	\$ 527.164	\$ 303.149	\$ 61.143	\$ 77.601	\$ 76.421
Total Liabilities and Stockholders' Equity	\$ 741.634	\$ 439.278	\$ 88.690	\$ 108.899	\$ 113.319

eHealth Inc.
Year Ended December 31
Statements of Comprehensive Income

Millions USD	2019	2018	2017	2016	2015
<u>Revenue</u>					
Medicare	\$ 411.21	\$ 192.26	\$ 135.01	-	-
<i>Commission Revenue from Members Approved during the Period</i>	\$ 355.92	\$ 192.38	\$ 134.09	-	-
<i>Net Commission Revenue from Members Approved in Prior Periods</i>	\$ 55.29	\$ (0.12)	\$ 0.92	-	-
Individual, Family and Small business	\$ 55.47	\$ 34.95	\$ 41.87	-	-
<i>Commission Revenue from Members Approved during the Period</i>	\$ 22.61	\$ 24.08	\$ 29.77	-	-
<i>Net Commission Revenue from Members Approved in Prior Periods</i>	\$ 32.85	\$ 10.87	\$ 12.11	-	-
Total Commission Revenue	\$ 466.68	\$ 227.21	\$ 176.88	\$ 177.23	\$ 184.93
Medicare	\$ 35.37	\$ 18.31	\$ 7.44	-	-
Individual, Family and Small business	\$ 3.77	\$ 5.87	\$ 6.39	-	-
Total Other Revenue	\$ 39.53	\$ 24.18	\$ 13.82	\$ 16.09	\$ 18.41
Total Revenue	\$ 506.20	\$ 251.40	\$ 190.71	\$ 193.32	\$ 203.35
<u>Operating Costs and Expenses</u>					
Marketing and advertising	\$ 150.25	\$ 82.94	\$ 65.87	\$ 72.21	\$ 75.57
Customer care and enrolment	\$ 134.30	\$ 70.55	\$ 59.18	\$ 48.72	\$ 43.16
Technology and content	\$ 47.09	\$ 31.97	\$ 32.89	\$ 32.75	\$ 36.35
General and administrative	\$ 64.15	\$ 45.83	\$ 39.97	\$ 35.22	\$ 30.24
Acquisition costs	-	\$ 0.08	\$ 0.62	-	-
Change in fair value of earnout liability	\$ 24.08	\$ 12.30	-	-	-
Restructuring	-	\$ 1.87	-	\$ (0.30)	\$ 4.54
Amortisation of intangible assets	\$ 2.19	\$ 2.09	\$ 1.04	\$ 1.04	\$ 1.15
Total Operating Expense	\$ 424.79	\$ 248.84	\$ 200.16	\$ 190.50	\$ 195.19
Operating Profit	\$ 81.41	\$ 2.55	\$ (9.45)	\$ 1.96	\$ 6.21
<u>Pre-tax income</u>					
Other Non-operating income (expense)	\$ 2.09	\$ 0.76	\$ 1.18	\$ 1.15	\$ 1.29
Pre-tax income	\$ 83.50	\$ 3.31	\$ (8.27)	\$ 3.11	\$ 7.49
<u>Income after taxes</u>					
Income Taxes (benefit)	\$ 16.61	\$ 3.07	\$ (33.70)	\$ 3.67	\$ 7.71
Income after taxes	\$ 66.89	\$ 0.24	\$ 25.43	\$ (0.56)	\$ (0.21)
Net Income (Loss)	\$ 66.89	\$ 0.24	\$ 25.43	\$ (0.56)	\$ (0.21)

eHealth Inc.
Statements of Cash Flows
Year Ended December 31

Millions USD	2019	2018	2017
<u>Operating activities</u>			
Net Income	\$ 66.8870	\$ 0.2410	\$ 25.4260
<i>Adjustments to reconcile net income to net cash used in operating activities:</i>			
Depreciation and amortization	\$ 2.9830	\$ 2.4790	\$ 2.8370
Amortization of internally developed software	\$ 3.8210	\$ 2.2010	\$ 1.4640
Amortization of intangible assets	\$ 2.1870	\$ 2.0910	\$ 1.0400
Stock-based compensation expense	\$ 22.5700	\$ 12.5400	\$ 9.6940
Deferred income taxes	\$ 16.1970	\$ 2.8120	\$ (30.3410)
Change in fair value of earnout liability	\$ 2.4070	\$ 12.3000	\$ - .00
Other non-cash items	\$ (0.7550)	\$ 0.6750	\$ (0.1010)
<i>Changes in operating assets and liabilities:</i>			
Accounts receivable	\$ 1.2700	\$ (2.1270)	\$ 0.4730
Commissions receivable	\$ (243.3640)	\$ (50.9670)	\$ (21.6400)
Prepaid expenses and other assets	\$ (0.4660)	\$ 0.2320	\$ (1.9330)
Accounts payable	\$ 19.6940	\$ 1.4140	\$ (1.8660)
Accrued compensation and benefits	\$ 8.8140	\$ 5.1330	\$ 4.5780
Accrued marketing expenses	\$ 1.0280	\$ 6.3200	\$ (3.3650)
Deferred revenue	\$ 1.6940	\$ 0.4910	\$ (0.4660)
Accrued restructuring charges	\$ - .00	\$ - .00	\$ - .00
Accrued expenses and other liabilities	\$ 1.8690	\$ 0.9350	\$ (1.3410)
Net cash used in operating activities	\$ (71.4920)	\$ (3.2300)	\$ (15.5410)
<u>Investing activities</u>			
Capitalized internal-use software and website development costs	\$ (10.2310)	\$ (6.2940)	\$ (3.2100)
Purchases of property and equipment and other assets	\$ (6.6410)	\$ (4.5340)	\$ (1.8680)
Payments for security deposits	\$ (0.0720)	\$ - .00	\$ - .00
Acquisition of business, net of cash acquired	\$ - .00	\$ (14.9290)	\$ - .00
Net cash used in investing activities	\$ (16.9440)	\$ (25.7570)	\$ (5.0780)
<u>Financing activities</u>			
Proceeds from issuance of common stock, net of issuance costs	\$ 126.0510	\$ - .00	\$ - .00
Net proceeds from exercise of common stock options	\$ 5.5350	\$ 2.6880	\$ 1.0370
Repurchase of shares to satisfy employee tax withholding obligations	\$ (14.2810)	\$ (4.5040)	\$ (1.8020)
Proceeds from line of credit	\$ - .00	\$ 5.0000	\$ - .00
Debt issuance costs	\$ (0.5170)	\$ (1.2210)	\$ - .00
Repayment of debt	\$ (5.0000)	\$ - .00	\$ - .00

Acquisition-related contingent payments	\$ (9.5420)	\$ - .00	\$ - .00
Principal payments in connection with leases	\$ (0.1050)	\$ (0.1030)	\$ (0.1050)
Net cash provided by (used in) financing activities	\$ 102.1410	\$ 1.8600	\$ (0.8700)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	\$ 0.0260	\$ (0.0770)	\$ 0.0010
Net increase (decrease) in cash, cash equivalents and restricted cash	\$ 13.7310	\$ (27.2040)	\$ (21.4880)
Cash, cash equivalents and restricted cash at beginning of period	\$ 13.0890	\$ 40.2930	\$ 61.7810
Cash, cash equivalents and restricted cash at end of period	\$ 26.8200	\$ 13.0890	\$ 40.2930

Appendix H: Calculations and Key Ratios

Receivable Turnover Calculation

	Formula	2019	2018	2017	2016	2015
Adjusted Account Receivable (incl. commission) Millions USD	=current account receivables + current commission receivables	176.858	137.791	9.894	9.213	9.647
Receivables Turnover	=revenue of the current year/((adjusted account receivable of the current year + adjusted account receivable of the previous year)/2)	3.2	3.4	20.0	20.5	42.2

Current Ratio Calculation

Ratio	Formula	2019	2018	2017	2016	2015
Current Ratio	=current assets/current liabilities	1.842	2.576	2.065	2.727	2.428

References

- [1] Singh, Jailendra, Brown, Jermaine, Heussner, Adam. "Recent Noise Around Churn Provides an Attractive Entry Level; Initiate with an Outperform Rating and \$25 TP" Credit Suisse, August 10, 2020. Available from https://research-doc.credit-suisse.com/docView?language=ENG&format=PDF&sourceid=em&document_id=1082829851&serialid=d4QvkqNv5utQKgxkzGxA4t3OYi06MrUmSpe10PG9%2BQQ%3D&cspId=1767352162906095616, accessed November 2, 2020.
- [2] Brown, Scott, Doshi, Mehul, Atkins, Yvena L., & Spolyar, Eleanor. "The Race for Medicare Switchers is On" Accenture, February, 2018. Available from https://www.accenture.com/_acnmedia/pdf-85/accenture-health-race-for-medicare-switchers-is-on.pdf, accessed November 2, 2020.
- [3] SimilarWeb. Available from <https://www.similarweb.com/website/eHealthinsurance.com/?competitors=selectquote.com>, accessed November 2, 2020.
- [4] Insurance Information Institute. "Facts + Statistics: Industry Overview" Available from <https://www.iii.org/fact-statistic/facts-statistics-industry-overview>, accessed November 6, 2020.
- [5] Accenture 2017 Consumer Experience Payer Benchmark Survey
- [6] the Balance, "eHealthinsurance: A Review of the Health Insurance Website" March 31, 2020. Accessed November 2, 2020.
- [7] eHealth, Inc. 2019 Annual Report. Dec. 31, 2019. Available from <https://ir.eHealthinsurance.com/static-files/2734d1ff-1cdc-4cc7-a363-bc044db6d435>, accessed November 2, 2020.
- [8] CMS.gov, "Compliance and Enforcement" Centers for Medicare & Medicaid Services Website, accessed November 2, 2020.
- [9] Singh, Jailendra. "Plenty of Runway for Growth; Management Meeting Takeaways" Credit Suisse, December 16, 2019. Available from https://research-doc.credit-suisse.com/docView?language=ENG&format=PDF&sourceid=em&document_id=1082007151&serialid=juAtOy%2fQFs0%2bYRa9AhfEJtRCprMka24ha5ip9xBR2nw%3d, accessed November 2, 2020.
- [10] CBINSIGHTS, "Amazon In Healthcare: The E-Commerce Giant's Strategy For A \$3 Trillion Market" CBINSIGHTS, Available from <https://www.cbinsights.com/research/report/amazon-transforming-healthcare/>, accessed November 2 2020.
- [11] eHealth, Inc. Q2 2018 Earnings Call. July 26, 2018. Available from <https://ir.eHealthinsurance.com/events/event-details/q2-2018-eHealth-inc-earnings-conference-call>, accessed November 2 2020.
- [12] eHealth, Inc. Q1 2018 Earnings Call. April 26, 2018. Available from <https://ir.eHealthinsurance.com/events/event-details/q1-2018-eHealth-inc-earnings-conference-call>, accessed November 2 2020.
- [13] Jacobson, Gretchen, Neuman, Tricia, Damico, Anthony. "Medicare Advantage Plan Switching: Exception or Norm?" KFF, September 20, 2016. Available from <https://www.kff.org/report-section/medicare-advantage-plan-switching-exception-or-norm-issue-brief/>, accessed on November 2, 2020.
- [14] Healthcare Leadership Council. "Aetna CEO: New Math for Medicare," Healthcare Leadership Council website accessed November 2, 2020.
- [15] Congressional Budget Office. "The Budget and Economic Outlook: 2017 to 2027", January, 2017. Available from <https://www.cbo.gov/publication/52370>, accessed November 2, 2020.
- [16] eHealth Inc., "Medicare Online Enrollment Trends", April, 2019. Available from https://news.eHealthinsurance.com/_ir/68/20192/eHealth%20Report%20-%20Medicare%20Online%20Enrollment%20Trends.pdf, accessed on November 2, 2020.
- [17] Accenture 2018 Health Insurance Shopping and Enrollment Experience Survey
- [18] Navigant, "The Impact of Star Ratings on Rapidly Growing Medicare Advantage Market," February 2018, Available from <https://www.navigant.com/-/media/www/site/insights/healthcare/2018/medicareadvantageanalysis.pdf>, accessed November 2, 2020.
- [19] Deloitte, "2019 Global health care outlook", 2019 Available from <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Life-Sciences-Health-Care/gx-lshc-hc-outlook-2019.pdf>, accessed November 2, 2020.
- [20] Kaesler, Simon, Leo, Matt, Varney, Shannon, Young, Kaitlyn. "How insurance can prepare for the next distribution model", June 12, 2020. Available from <https://www.mckinsey.com/industries/financial-services/our-insights/how-insurance-can-prepare-for-the-next-distribution-model>, accessed November 4, 2020.
- [21] KFF, "Analysis Examines the Affordable Care Act's Impact on Nearly All Americans", September 23, 2020. Available from <https://www.kff.org/health-reform/press-release/analysis-examines-the-affordable-care-acts-impact-on-nearly-all-americans/>, accessed November 2, 2020.

- [22] KFF, “Analysis Examines the Affordable Care Act’s Impact on Nearly All Americans”, September 23, 2020. Available from <https://www.kff.org/health-reform/press-release/analysis-examines-the-affordable-care-acts-impact-on-nearly-all-americans/>, accessed November 2, 2020.
- [23] Holahan, John, Blumberg, J., Linda, Buettgens, Matthew. “The Potential Implications of Texas v. United States: How Would Repeal of the ACA Change the Likelihood That People With Different Characteristics Would Be Uninsured?”, Urban Institute, June 19, 2019. Available from <https://www.urban.org/research/publication/potential-implications-texas-v-united-states-how-would-repeal-aca-change-likelihood-people-different-characteristics-would-be-uninsured>, accessed November 2, 2020.
- [24] White House. United States Strategic Approach to the People’s Republic of China. Available from <https://www.whitehouse.gov/wp-content/uploads/2020/05/U.S.-Strategic-Approach-to-The-Peoples-Republic-of-China-Report-5.20.20.pdf>, accessed November 2, 2020.
- [25] Breuninger, Kevin. “Trump says he’s ordering American companies to immediately start looking for an alternative to China”, CNBC, August 23, 2019. Available from <https://www.cnbc.com/2019/08/23/trump-says-hes-ordering-american-companies-to-immediately-start-looking-for-an-alternative-to-china.html>, accessed November 2, 2020.
- [26] Josh Hawley U.S. Senator for Missouri. Foreign Data Security Bill. Available from <https://www.hawley.senate.gov/sites/default/files/2019-11/National-Security-Personal-Data-Protection-Act-Bill-Text.pdf>, accessed November 2, 2020.
- [27] Spalding, Rebecca. “Online insurance broker GoHealth prices IPO above indicated range” Reuters, July 15, 2020. Available from <https://in.reuters.com/article/us-gohealth-ipo/online-insurance-broker-gohealth-prices-ipo-above-indicated-range-idINKCN24F2ZB>, accessed November 2, 2020.
- [28] eHealth, Inc. “About eHealth” eHealth, Inc. website. Available from <https://www.eHealthinsurance.com/>, accessed November 2, 2020.
- [29] Singh, Jailendra, Brown, Jermaine, Heussner, Adam. “Addressing the Top Ten Questions We Fielded Posts the EHEALTH earnings” Credit Suisse, July 29, 2020. Available from https://research-doc.credit-suisse.com/docView?language=ENG&format=PDF&sourceid=csplusresearchcp&document_id=1082775051&serialid=mdbM0BHPcGE1yaRQ3watEmGd3Hk74TkjV9VtHfg%2ft3g%3d, accessed November 2, 2020.
- [30] Clifford, Tyler. “EHealth CEO buys stock amid short pressure: ‘I couldn’t resist it’” CNBC, August 18, 2020. Available from <https://www.cnbc.com/2020/08/18/eHealth-ceo-buys-stock-amid-short-pressure-i-couldnt-resist-it.html>, accessed November 2, 2020.
- [31] Ellsworth, Chapman. “Common ASC 606 Issues: Industrial Products & Manufacturing Industry” Revenue Hub, April 10, 2018. Available from <https://www.revenuehub.org/common-asc-606-issues-industrial-products-manufacturing-industry/>, accessed November 2, 2020.