

RADIUS HEALTHCARE BUSINESS CASE

BAHM CASE COMPETITION

Contents

E	recutive summary	2
Pı	roblem Statement & Market Analysis	3
In	nplementation	4
	System	4
	Data	5
	Expected Outcomes	6
	People	6
	Timeline	7
	Scaling	7
	Risk and Potential Barriers	7
Fi	nance	8
	Payment model	8
	Fee scheduling	8
Αį	ppendix	9
	Appendix 1: Radius Healthcare Branding	9
	Appendix 2: Trucking Industry	10
	Appendix 3: Data Collection & Use	11
	Appendix 4: Nursing Compact States	12
	Appendix 5: Interstate Licensure Compact States	13
	Appendix 6: Staffing	14
	Appendix 7: Implementation Timeline	15
	Appendix 8: Top 10 Trucking Companies & Scaling Opportunities	16
	Appendix 9: Proforma	17
	Appendix 10: Fee Schedule	18
Re	eferences	19

Executive summary

Service

Radius Healthcare (Radius) is a telehealth and data company that will provide exceptional quality and convenient care to truck-drivers through a concierge medicine model. Radius is unique in the telehealth market in that it does not require insurance in order to receive care. The company will contract directly with employers and provide a subscription service to the numerous independent contractors or owner operators. Radius Healthcare aims to provide extensive primary care and health maintenance to our members. Our proprietary software will include a chatbot that uses machine learning to allow for convenient checking of symptoms, quicker diagnosing, and coordination of appointments with licensed nurse practitioners and physicians. Other features of the application include personalized prevention and maintenance of conditions by the collection of data from the user's interaction with the application. Members will be incentivized to interact with the app in the form of daily questions. This will enhance our ability to collect vast amounts of data, allowing for stronger training of our machine learning models that will improve the personalization of care.

Target Population

Truck drivers, both long-haul and regional, are considered to be a unique vulnerable population. This patient population is rampant with preexisting conditions, limited access to health benefits, and a lifestyle that has cemented the truck driving profession as one of America's 10 most dangerous occupations. Logistical difficulties and the vast amount of time spent on the road make it hard for these professionals to routinely obtain quality health services.

Business Model

Radius generates revenues through two capitated business models. The first is a direct to employer model, in which Radius works to provide primary and preventative care to businesses employees. This business to business model will require employers to make a base payment to cover the software licensure and management of their employee population. The second is a business to consumer model that offers a subscription service aimed directly at owner-operators or contracted drivers. With these two models, Radius Healthcare is projecting a payback period of approximately four years and an IRR of thirty-one percent.

Future Implications

Radius Healthcare is expected to expand across all 50 states by the end of year 2. Once this is achieved, the business is scalable to other industries, particularly industries that rely on high amounts of travel. Radius could also expand into other occupational areas that have limited access to health care due to professional or geographic barriers. Several examples would include railroad workers, airline pilots or stewardess, contract refinery workers, oil rig workers, and farmers.

Problem Statement & Market Analysis

Technology has fundamentally redesigned healthcare. It will continue to do so and has the potential to improve access to care as telehealth capabilities progressively advance. These advancements in technology will continue to make home-based care more of a reality. Radius Healthcare set out with a mission to use technology to improve access to care for vulnerable populations. When evaluating vulnerable populations, Radius identified commercial truck drivers as a challenging but promising candidate.

There are roughly 7.5 million truck drivers in the United States, many of which are owner-operators²⁹. Meaning they work independently and therefore do not receive benefits through an employer, such as health insurance. While they can buy insurance through organizations such as Owner-Operator Independent Driver Association and National Association of Independent Truckers, the majority remain uninsured¹. Furthermore, it is estimated that only twenty percent of employed drivers receive health insurance through their employer¹. Even employers that do provide health benefits are likely to be self-insured, taking on high amounts of risk for their patient population.

The commercial truck driving population suffers from several issues, such as preexisting conditions and a lifestyle that has cemented the truck driving profession as one of the 10 most dangerous occupations in America ^{1, 2, 4, 5, 9}. Their long hours, lack of exercise, unusual sleep patterns, and diet on the road has led to a very unhealthy population. Seventy percent of truck drivers have at least one serious medical conidtion^{3,4}. This high prevalence of illness coupled with the challenging lifestyle heavily influences insurance premiums. This is perhaps the key reason why employers do not provide insurance and owner-operates do not seek coverage.

The lack of coverage for such a vulnerable population has led to an epidemic in the workforce. Hypertension, diabetes, and sleep apnea run rampant through this population causing even greater health issues^{5,9}. The combination of long hours on the road and a lack of insurance does not encourage drivers to seek treatment or maintenance for their illnesses. Many drivers are not able to preplan primary care visits or make it to urgent care centers due to a lack of time and the logistical difficulties that come with the nature of the job. A recent study found forty-seven percent of those surveyed lack a regular healthcare provider, twenty percent frequent emergency rooms and urgent care centers, thirty-two percent were unable to receive needed healthcare within the last year, and fifty-six percent had difficulty utilizing healthcare services while at home. Much of truck-driver's care ends up being emergent and cost the healthcare system millions of dollars each year⁵. Many of these health issues can be controlled or even prevented with maintenance and monitoring, which is what Radius Healthcare aims to provide.

This population is unique in that, unlike most other vulnerable populations, they have the means to pay. Truck drivers have an average salary of \$59,000 per year, and many long-haul

career truckers make six-figures a year but cannot (or do not) want to afford insurance⁶ (appendix 2).

A market analysis revealed that there is not a direct competitor for the proposed business. There are several large competitors in the telehealth market, including Teledoc, One Medical, and Babylon, but none of these firms currently provide the value that Radius will deliver to our target market. Teledoc is the largest telemedicine platform in the United States, however they require insurance and are primarily emergent care with no follow up option available. One Medical does provide more primary care services; however, they are simply a platform that connects patients with One Medical providers in major metropolitan areas. One Medical also requires patients to access care through their employer. Babylon is a UK based telemedicine application that is most similar to Radius; however, their current offering in the US is severely limited in terms of functionality.

This provides Radius with a unique space to serve a vulnerable population while creating a sustainable business model. Through a concierge medicine model, Radius can provide prevention, maintenance, monitoring, and care to truck-drivers at a low-cost subscription, or through their employer.

Implementation

Radius Healthcare is a unique application and platform that will provide primary and emergent care based on a concierge medicine model using robust data collection, a chat bot with machine learning functionality, and telemedicine capabilities. It will provide quality care and exceptional patient experience through data collection and analytics. Full implementation of Radius Healthcare in all 50 states will take roughly 24 months. As the system is built out and the correct licensed staff is hired to serve the appropriate area, the business will begin to expand and cover more regions. Due to the high volume of trucks going to ports and refineries, we plan on targeting the Gulf States Region (Arkansas, Louisiana, New Mexico, Oklahoma and Texas) first. This implementation section will outline the building and implementation of Radius's system, features, and data. It will also cover the people needed to begin the business, the timeline, how we plan to scale, and potential risk and barriers.

System

One of the main ways that Radius will differentiate itself from competitors is through the use of cutting-edge technology that contributes to the future of interoperability in healthcare. The Radius team diligently worked through the technology stack to ensure that each component is conducive not only to our technological needs but also our strategy. A M.E.A.N. tech stack will be used for the core web application with an Angular framework for the frontend, and node.js with express framework for the backend. The backend will also include a MongoDB database in order to better handle non-relational data. The application will be hosted by AWS serverless services to help scale our consumer usage appropriately. All of these systems were evaluated for safety and privacy based on HIPAA federal and state regulations. Radius will

meet the four major pieces of HIPAA which are privacy, security, enforcement, and breach notification. Radius will have a business associates' agreement with AWS, who will provide HIPAA compliant hosting. Other actions will be taken to meet technical specifications through measures such as encryption of data.

When the user first interacts with the application, they will be asked to complete a short survey to gather initial information and data on their health. This data will be used to build a health profile for each user to aid in diagnosing, recommending care, and educating (e.g., notifications for better lifestyle choices) in the future.

The user interface will be anchored with our proprietary chat bot that will be developed in house by our team of developers. The bot will utilize deep learning and recurrent neural networks to classify user intent and offer robust natural language processing capabilities. Aside from offering a seamless dialogue experience for the user, the chatbot's ultimate purpose is to help diagnose and triage the patient to the appropriate level of care. In order to do this, Radius will utilize a decision tree algorithm that will be able to progressively question the patient until an appropriate classification has been reached. As the patient continues to interact with the app, additional data points will provide subsequent training to the decision tree algorithm's, boosting prediction accuracy. After the user has completed the conversation with the bot, they will be given a recommendation for treatment as well as an option to follow up with one of our advanced practice providers or physicians via teleconference.

Due to the mobile nature of our target demographic, the majority of users will access the application through either a native iOS or native Android app. However, Radius will also offer a patient portal for users to access through an internet browser, as well as a provider facing portal for nurses and physicians to access the EMR and communication capabilities of the platform. We believe that Radius Health will provide the end user value through a convenient way to receive timely and quality medical care.

Data

Radius will differentiate itself by its data analytics capabilities. Data collection will happen through the initial medical history survey, chat bot, the EMR and diagnosis, and primarily the daily questions (appendix 3). Daily questions will consist of four primary questions that are populated based on patient, time of year, and time of month. Based on the answers to these primary questions, the system will ask further digging questions. For example, on the first of every month all members will be asked if they have visited an ER in the last month so we can track ED usage. If they answer yes, they will be prompted to answer more questions about why they went and why didn't they use the app. The system will cut off questions at 5 minutes and redirect the user to either a free text messaging box or phone conversation with a nurse practitioner. Limiting the follow-up questions to 5 minutes will help increase adherence to the application by reducing response burden and provide overall better patient experience.

Data will be used initially to build the systems algorithm. The more data the system receives the more refined it becomes at diagnosing and monitoring the driver's condition. Radius hopes to use this system to better diagnose individuals. As the system becomes better at diagnosing, it will also become better at prevention and maintenance which is the end goal. We want the system to pick up indicators that something could be wrong, or conditions might be changing. This will allow for more effective health management and follow-up care for individual patients. To obtain the data needed, Radius plans to provide incentives for answering daily questions. By completing the daily questions 28 days each month, members will receive money back directly uploaded to the mobile application.

Expected Outcomes

As stated previously, a large portion of the commercial truck driving population suffers from one or more chronic condition.⁵ In order to better manage their conditions, Radius focuses on primary and secondary levels of care. Primary levels of care are established through Radius's ability to improve access to advanced practice providers, physicians, and prescription drugs through convenient audio or video teleconferences. Furthermore, Radius allows the driver to have greater access to their health information, increasing the driver's capability for self-management³³. Features of our application such as the daily questions, chat bot, and user's health profile lead to early identification and diagnoses of new or worsening conditions. With earlier detection, Radius is then able to increase the likelihood of successful intervention through helping the driver obtain the most appropriate form of care. Radius believes that through establishing primary and secondary levels of care, drivers will have an improved patient experience, fewer high acuity interventions, and lower health care spending.

People

This operation will require many people due to state licensing. Radius will primarily employ nurses and nurse practitioners (NP) to deliver cost-effective care. The nurses and NPs will serve as gatekeepers to the doctors. They will take medical questions, monitor the driver's condition, and perform primary follow-ups. Radius will take advantage of the nursing compact (appendix 4) that allows nurses to practice across state lines, eventually incorporating nurses licensed in every state. The number of nurses will depend on the need in each state. We expect states like Texas who has many oil refineries and ports to have a greater need than a smaller state like Missouri. The nurses and NPs will be in a central location at headquarters outside of Nashville, Tennessee to begin in order to work out any possible issues, see opportunities for development, ensure 24-hour care, and have greater control over patient experience and quality.

Radius will have several physicians staffed at headquarters to oversee medical care and the nurses. These doctors will be licensed in multiple states and/or be part of the Interstate Licensure Compact (appendix 5). All states will be covered by a physician in headquarters. While they can provide some coverage for patient calls, their role will primarily be

administrative, reviewing charts, analytics, and overseeing medical staff. Professional Service Agreements (PSA) will be utilized to partner with physicians/physician groups in every state to provide telemedicine video appointments. This will allow for more experienced care when needed. The number will be dependent on the need in the state and compensation will be a flat rate per call. Partnered physicians will have access to the platform and be able to take call and chart from their clinic or home, depending on the state requirements.

Radius will also employ administrative staff. This will include a finance and billing department, software engineers, and analysts, and eventually expand to include physician relation managers and marketing employees. See appendix 6 for greater detail on staffing plans.

Timeline

A full implementation timeline can be found in appendix 7. Radius Health will require 12 months prior to the launch date to build and test the application. On day 1, the company will provide service 2 regions, moving to 3 by the end of year 1. During year 1, with the addition of a physician relation manager, we can expect to find physician partners in the remaining 4 regions, becoming nationwide in 24 months. Once Radius is offered nationwide, year 3 will be spent heavily marketing, getting additional company contracts, and building our presence with owner-operators.

Scaling

Radius has developed a plan to scale to the entire United States by the end of year 2. By scaling to all 50 states, Radius will be able to capture more of the market by offering its services to nationwide trucking companies and more owner-operators. Once Radius is scaled to cover all 50 states, it is easily scalable and accessible to other traveling industries. For example, the application and its features could be beneficial to railroad workers, contract refinery workers, and the airline industry. Moving beyond travelers, rural workers such as farmers and oil rig workers could also benefit from the services Radius will provide because they have limited access to care, especially consistent primary care. Scaling is relatively simple for this business model because there are not physical locations or additional infrastructure needed. The largest factor for scaling is appropriately licensed staff, made easier with the nursing compact, and qualified physician partners. See appendix 8 for the top trucking companies and scaling opportunities.

Risk and Potential Barriers

The largest risk Radius faces is managing the number of virtual teleconferences to PSA physicians. Radius Healthcare will pay partnered physicians \$35 dollars for each teleconference they take, a rate comparable to other telehealth platforms (such as Teledoc). If the number of calls exceeds forecasted projections, the company would increase its expenses leading to lower EBITDA. Furthermore, if Radius Healthcare is not able to successfully treat our members in the most appropriate, cost-effective way, we risk increasing the number of virtual teleconferences.

Thus, diminishing annual EBITDA. The company also assumes the risk associated with delivering medical treatment through employees and our chat bot triage process.

A potential barrier could be the variation and constant changes in regulation at the state level on telemedicine practices. Another potential barrier is changing legislation concerning the practice of medicine across state borders. This could drive us to increase employment which would increase operational costs.

Finance

Payment model

Radius utilizes two separate capitation business models for generating revenue. The first is aimed at selling to other businesses in a direct to employer fashion. This model is priced at a level even with or below the forecasted savings each company will receive from their employee's engagement. The second model is aimed at selling to independent truck drivers in a business to consumer fashion. This model will be in the form of a subscription-based payment. Each driver can opt to pay an annual subscription or a month by month subscription. Radius Healthcare then holds the risk associated with its user's utilizations. The risk is based on reimbursements to our partnering physicians for each virtual teleconference they complete.

Based on conservative estimates, Radius Healthcare will have a payback period of approximately four years, an NPV and IRR at year 5 of \$1,353,336 and 31%, respectively. By year 5, Radius is expecting an EBITDA of \$2,482,993. A copy of the pro-forma with all start-up cost and first 5 years of projected financials can be found in appendix 9.

Fee scheduling

A complete fee schedule can be found in appendix 10. There are two different fee schedules for Radius Healthcare. Employer sponsored Radius will require an initial base payment by the employer which will cover a license fee for our software suite and a management fee for overseeing the health of their employees.

The second fee schedule is based on an individual membership. These memberships are particularly for those independent truck-drivers, owner-operators, and those without employer-sponsored insurance. Both fee schedules can be found in appendix 10.

Appendix

Appendix 1: Radius Healthcare Branding

Primary Logo: used on marketing and once app is opened.



Secondary logos: Will be flipping when the app is opened.







Appendix 2: Trucking Industry



TRUCK DRIVING 7-16, 29

INDUSTRY OVERVIEW

OVERVIEW

Nearly 6% of all the full-time jobs in the country are in the trucking industry. These 7.5 million drivers deliver 70+ percent of all freight worth \$11.7 trillion, while collecting \$726.4 billion in gross revenue. In 2017, that was higher than the GDP of more than 150 nations. The average professional long-haul trucker logs more than 100,000 miles per year. Most grocery stores would run out of food in just 3 days if long-haul truckers stopped driving.

HEALTH FACTORS







LONG HOURS

LACK OF EXERCISE

LACK OF SLEEP







UNHEALTHY

SMOKING

STRESS (MIND AND BODY)

DISEASE PREVELANCE

- OBESITY (86%)
- DIABETES (16%)
- SLEEP APNEA (28%)
- HIGH BLOOD PRESSURE (45%)
 - HEART DISEASE (28.9%) ●

GROWTH

OCCUPATION

Heavy truck operators are expected to grow by 5% from 2018–2028 (BLS).

FREIGHT VOLUME

ATA is expecting freight volume to grow by 2.3% between 2024–2028.

REVENUES

American trucking revenues increased 14% from 2017 to 2018

JOB DEMAND

Experts believe that the trucking industry needs to hire at least 900,000 more people to meet growing demand for truck drivers with continued rise of e-commerce & consumerism.



Appendix 3: Data Collection & Use





Input | Usage | Incentives

INPUT: DAILY QUESTIONS

Notifications will be sent each day to omplete daily questions. Each day will have 4 primary questions, based on day and time of year. From the answers given to the primary questions, the system will ask follow-up questions for better clarity and detail

INPUT: INITIAL SURVEY

The initial user survey will consist of personal questions, demographic questions, past medical history, and lifestyle questions.

INPUT: EHR DATA

When members use the chat bot or have an appointment (with either an NP or Physician), the medical staff will chart symptoms, diagnosis, follow-up, and any instructions in the EHR.

USE: PREVENTION & MAINTANCE

The data collected from daily questions can be used to predict health conditions. this leads to greater prevention and maintenance of users. When the system notices a members health slipping or abnormalities, it can flag the account for review by a nurse assistant or NP.

USE: BETTER DIAGNOSIS

Radius will use this data to better guide diagnosis for physicians and NPs. it will also give better estimates on disease prevelance in the population.

USE: PERSONALIZED CARE

Greater data collection will allow for more personalized care. the continuum of care provided from provider to provider, and the additional information from daily questions will provide unparalleeled personalized care.

COMPANY INCENTIVES

With our data collection capabilities, we can offer companies snapshots of overall company health , prevention, and maintenance efforts. These benefits will translate to their insurance deductables.

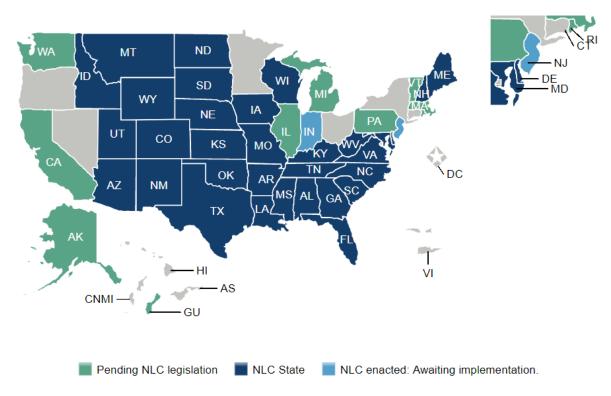
DRIVER INCENTIVES

Drivers will be incentivized to answer questions through cash back. Every month they complete 28 days or more c daily questions, they will receive cash back through the app.

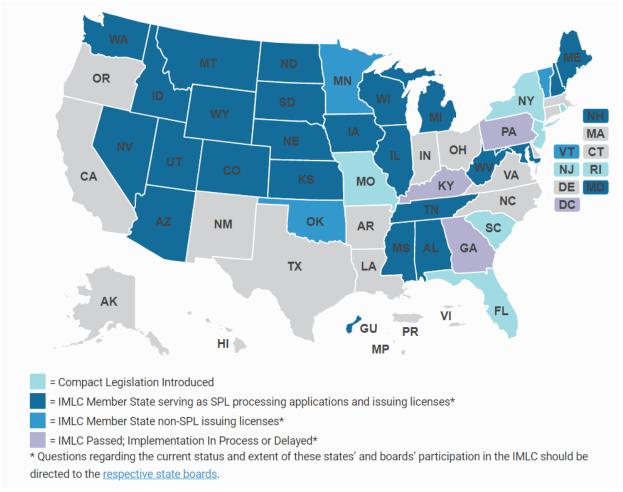
RADIUS HEALTHCARE

Appendix 4: Nursing Compact States

Current NLC States and Status



https://nurse.org/articles/enhanced-compact-multi-state-license-eNLC/



Appendix 5: Interstate Licensure Compact States

https://imlcc.org/

Appendix 6: Staffing

Radius Healthcare Staffing									
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5			
HQ Physicians		2	5	6	8	8			
NPs		7	8	10	15	22			
Nursing Assistants		5	5	8	8	10			
Software Engineers	3	3	3	3	4	4			
Administration		3	4	7	7	10			
	3	20	25	34	42	54			

Notes:						
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
HQ Physicians		Covering 2 Regions	Covering 3 Regions	Covering all states		
NPs		Covering 2 Regions	Covering 3 Regions	Covering all states		
Nursing Assistants		Covering 2 Regions	Covering 3 Regions	Covering all states		
Software Engineers	Freelance engineers	Move to FTEs			Additional FTE for growth	
					in users and scaling	
Administration		1 Billing/Finance	+1 physician	+1 HR FTE		+1 Marketing FTE
		1 physician relation	relation manager	+1 Marketing FTE		+1 Billing/Finance
		manager		+1 Billing/Finance		+1 physician relation
		1 Admin Assistant				manager

Appendix 7: Implementation Timeline

RADIUS HEALTHCARE

- 12 MONTHS

Begin systems development with 3 freelance software engineers.

- 6 MONTHS

Initial company search and contract development.

- 3 MONTHS

Begin recruiting for HQ Find HQ location

-1 MONTH

HQ move-in and equipment purchasing.

GO LIVE DATE

Begining in 2 regions

6 MONTHS

Continue looking for expansion opportunities and other companies.

12 MONTHS

Add an additional region. Begin heavier owner-operator targeting.

24 MONTHS

Full implementation in 50 states Begin heavy marketing efforts Add additional companies and owner-operators

YEAR 5

Begin scaling to other industries

Appendix 8: Top 10 Trucking Companies & Scaling Opportunities

TRUCKING SCALING

13, 25-28, 30-32

SCHNEIDER

Schneider 11,650 truckers



Landstar System
Uses 10,000
Owner-Operators



Walmart 8,600 Drivers



Knight-Swift Transportation 25,000 Employees XPO Logistics 100,00 Employees

FedEx Freight 49,000 Employees

J.B. Hunt Transportation 25,000 Employees

Old Dominion Freight Line 21,300 Employees

Werner Enterprises 13,000 Employees

OTHER SCALING

Railroads

Airlines

Oil Industry

Oil Rigs

Farmers

Railroads: 20, 21, 22

- Yearly revenues of +\$70 Billion
- 180,000 employed (2015)
- More than 100,000 locomotive engineers
- 140,000 miles of tack
- Similar health risks, life style and health status as truckers
- Rail companies generally provide very generous, self funded insurance.
 Orient is ideal to help the company maintain a healthy workforce and keep healthcare cost low.

Appendix 9: Proforma

Pro Forma: Radius Healthcare												
laada												
<u>Inputs</u>				2 724		F C01		44 200		30,000		20.000
B2B Users B2C Users				3,734		5,601 3,000		11,200 8,000		20,000 10,000		30,000
Total Users	-			1,500 5,234	-	8,601	-	19,200	-	30,000	-	12,000 42,000
Total oscis				3,234		0,001		13,200		30,000		42,000
PSA Psycian Calls from H.U.				4,187		6,881		15,360		24,000		33,600
PSA Psycian Calls from N.U.				8,374		13,762		30,720		48,000		67,200
Physicians				2		5		6		8		
NP's				7		8		10		15		2
Nurse assistants				5		5		8		8		1
Developers				3		3		3		4		_
Admin (Billing/finance, Assistant, PRM/marketing, HR)				3		4		7		7		1
Employees				20	_	25		34		42		5-
Expenses	Year ()	Yea	r 1	Year	r 2	Ye	ear 3	Ye	ar 4	Ye	ar 5
Technology												
<u>IDEs</u>												
iOS xCode	\$	99.00		99.00		99.00	\$		\$	99.00		99.00
Android IDE	\$	25.00	\$	-	\$	•	\$	-	\$	-	\$	-
Outsourced Components												
Backend Hosting - AWS	\$	2,400.00	\$	4,800.00	\$	5,760.00	\$	6,912.00	\$	8,294.40	\$	9,953.28
Messaging (secure picture and text) - Cloudimage.io	\$	384.00		384.00		384.00	\$		\$		\$	384.00
Video - Twilio (\$0.03 per user)	\$	672.12	\$	1,344.24	\$	2,016.36	\$	4,032.00	\$	7,200.00	\$	10,800.00
In Have Development (Chaff, C2K a week)												
In-House Development (Staff - \$2K a week) Front-end Dev	\$	96,000.00	\$	111,000.00	\$	114,330.00	\$	117,759.90	\$	121,292.70	¢	124,931.48
Back-end Dev	\$	96,000.00		111,000.00		114,330.00	\$		\$		\$	124,931.48
Integration and Quality Control	\$	96,000.00		111,000.00		114,330.00	\$		\$	121,292.70	\$	124,931.48
Scaling and Deployment Specialist	\$	-	\$	-	\$	•	\$	-	\$	111,000.00	\$	114,330.00
Clinical												
HQ Overhead												
Medical Office Lease (\$17.50/sqft/year)			\$	89,040.00	Ś	89,040.00	\$	89,040.00	\$	89,040.00	\$	89,040.00
Office Supplies (\$17/employee/month)			\$	340.00		425.00						918.00
Workstations (Desktop Setups)			\$	26,000.00	\$	6,000.00	\$	12,000.00	\$	10,000.00	\$	14,000.00
HQ Clinical Staff												
Physicians			\$	400,000.00	\$	1,030,000.00	\$	1,273,080.00	\$	1,748,363.20	\$	1,800,814.10
NP's			\$	700,000.00	\$	824,000.00	\$	1,060,900.00	\$	1,639,090.50	\$	2,476,119.38
Nursing Assistants			\$	250,000.00	\$	257,500.00	\$	424,360.00	\$	437,090.80	\$	562,754.41
DCA Call Charge Fee (High Hillings)			\$	146 552 00	ć	240 929 00	ċ	F27 600 00	ċ	060 000 00	ċ	1 244 000 00
PSA Call Charge Fee (High Utilizers) PSA Call Charge Fee (Normal Utilizers)			\$	146,552.00 293,104.00		240,828.00 481,656.00	\$		\$	960,000.00 1,920,000.00	\$	1,344,000.00 2,688,000.00
Incentive Rebate Legal (including General Liability, Directors and Officers,			\$	471,060.00	Ş	774,090.00	Ş	1,728,000.00	\$	2,700,000.00	Ş	3,780,000.00
and Errors & Omissions Coverage)	\$	100,000.00	\$	100,000.00	\$	100,000.00	\$	100,000.00	\$	100,000.00	\$	100,000.00
Travel Expenses Advertising Expenses			\$	45,000.00	\$	90,000.00		,		135,000.00		225,000.00
Advertising expenses							\$	650,880.00	Ş	756,000.00	Ş	1,026,000.00
Total	\$	391,580.12	ć	2,860,723.24	Ċ	1 211 788 36	¢	7 /51 3// 70	¢	10,986,153.99	ć	14 617 006 60
Total	7	331,360.12	,	2,800,723.24	y	4,244,766.30	ڔ	7,431,344.70	۰	10,560,155.55	ڔ	14,017,000.00
_												
Revenues			Yea	r 1	Year	r 2	Ye	ear 3	Ye	ar 4	Ye	ar 5
B2B Liscense Charges	\$	-	\$	1,112,020.00	\$	1,668,030.00	\$	3,336,000.00	\$	6,600,000.00	\$	9,900,000.00
B2C User Charges	\$	-	\$	900,000.00	\$	1,800,000.00	\$	4,800,000.00	\$	6,000,000.00	\$	7,200,000.00
Total	\$	-	\$	2,012,020.00	\$	3,468,030.00	\$	8,136,000.00	\$	12,600,000.00	\$	17,100,000.00
Margin	Year ()	Yea	r 1	Year	r 2	Ye	ear 3	Ye	ar 4	Ye	ar 5
Net Income	\$	(391,580.12)	\$	(848,703.24)	\$	(776,758.36)	\$	684,655.30	\$	1,613,846.01	\$	2,482,993.40
NPV (Through year 5)		1,353,336.17	Ĺ	(/	Ĺ	, .,,	Ť	,	Ť	,,	-	, . ,
IRR (Through year 5)		31%										

Appendix 10: Fee Schedule

	Liscense & Management Fee	User Subscription Fee
Employer Sponsored Services	Ad hoc calculation based on size of work force and expected savings (e.g. \$500,000 per region + \$30 per user)	N/a
Private Owner/Operator	N/a	\$50 per user

References

- 1. https://www.fueloyal.com/real-price-truck-driver-health-insurance/
- 2. https://blogs.cdc.gov/niosh-science-blog/2015/03/03/truck-driver-health/
- https://truckersfund.org/history/
- 4. https://blogs.cdc.gov/niosh-science-blog/2015/03/03/truck-driver-health/
- 5. https://www.researchgate.net/publication/8227309 Healthcare and the long haul L ong distance truck drivers A medically underserved population
- 6. https://www.indeed.com/career/truck-driver/salaries
- 7. https://www.ooida.com/MediaCenter/trucking-facts.asp
- 8. https://www.truckinginfo.com/153145/health-on-the-highway
- 9. https://www.truckingtruth.com/truckers-forum/Topic-803/Page-1/how-do-otr-truckers-schedule-doctors-appointments
- 10. <u>FMCSA</u>, Regulatory Evaluation of Entry-Level Driver Training Notice of Proposed Rulemaking, Federal Motor Carrier Safety Administration (2016), pg. 53
- 11. <u>Bureau of Transportation Statistics, Transportation Statistics Annual Report 2016,</u> Department of Transportation (2016) pg. 58
- 12. <u>American Trucking Trends 2016, American Trucking Association, http://www.trucking.org/article/ATA-American-Trucking-Trends-2016</u>
- 13. https://markets.businessinsider.com/news/stocks/trucking-industry-facts-us-truckers-2019-5-1028248577#many-experts-think-the-trucking-industry-needs-to-hire-900-000-more-drivers9
- 14. https://www.fmcsa.dot.gov/driver-safety/sleep-apnea/driving-when-you-have-sl
- 15. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4980233/
- 16. https://www.ooida.com/MediaCenter/trucking-facts.asp
- 17. https://www.morethanshipping.com/ata-2019-report-shows-strong-growth-in-trucking-industry-revenues/
- 18. https://driveknight.com/careers/trucking-industry-job-growth-for-2020/
- 19. https://www.bls.gov/opub/mlr/2015/beyond-bls/railroads-old-industry-still-vital-intodays-economy.htm
- 20. https://www.latimes.com/nation/la-me-adv-railroad-medical-standards-20140420-story.html
- 21. https://www.ble-t.org/pr/news/headline.asp?id=57037
- 22. https://nurse.org/articles/enhanced-compact-multi-state-license-eNLC/
- 23. https://imlcc.org/
- 24. https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2010.0768
- 25. http://www.werner.com/content/about/
- 26. https://www.forbes.com/companies/xpo-logistics/#68c81b7e1d96
- 27. https://www.landstar.com/

- 28. https://www.macrotrends.net/stocks/charts/KNX/knight-swift-transportation-holdings/number-of-employees
- 29. http://www.trucking.org/news and Information Reports Industry Data.aspx
- 30. http://investors.fedex.com/financial-information/annual-reports/default.aspx
- 31. https://www.jbhunt.com/company/investor-relations/
- 32. https://ir.odfl.com/annual-reports
- 33. https://www.commonwealthfund.org/publications/newsletter-article/escape-fire-fight-rescue-american-healthcare