

MedConnect Technical Report Spring 2019

"Your health insurance solution. Let us handle it."

Table of Contents



Introduction	3
Voice of the Customer	4
Minimum Viable Product	_ 5
Proof of Concept Prototype	_ 6
Plan Moving Forward	. 7
References	_ 8



Introduction



MedConnect exists as a service to aid in navigating health insurance, as well as healthcare providers. Navigating health insurance can be confusing and time consuming. 200 million people in the US have health insurance through thousands of plans, and while 3 out of 4 people feel confident that they know how their insurance works, only 1 out of five people are able to actually calculate their out of pocket costs [1]. Not only is there a general misunderstanding of insurance coverage, there is supplementary confusion about options for secondary care and choosing a care provider in network. Along with this comes frustration tracking appointments, medications, and copays. This leads to headaches in legal disputes over insurance claims that are drawn-out and unpleasant.

With the percentage of people who are uninsured in Washington State going from 14.5 percent in 2012, to an estimated 7.3 percent in 2015, the opportunity to make way into the industry of health insurance is continuing to grow [7]. Washington State has 7 million health insurance users today, and if our solution could reach just 1 percent of that population, we would be utilized by 70,000 people [6]. One of our competitors in this market space is the Washington State Health Plan Finder which had 210,000 people in Washington enroll in health insurance through their platform [8]. This statistic supports our customer discovery interviews and offers a large population of people who are new to utilizing their insurance and serve as our initial target market.

MedConnect presents a three-tiered solution including a custom software created by our company, user support, and user advocacy components. The software is comprised of a database of personalized cost and insurance coverages that compiles custom medical history for each user. Our database currently includes insurance information for 98% of insurance plans in Washington State. Our users will be able to select their existing insurance plan from our database and software to receive an estimate on their medical appointment co-pay, find available providers in their area, and track appointments, prescriptions, and deductibles.

On-Demand Support consists of a team of resolution advocates. These individuals will provide expert consultation for issues ranging from navigating our website or application, to navigating the users specific care scenario. We will have a 24-hour call center and web chat feature that will allow users to interface with our support staff.

The component of professional User Advocacy is comprised of our team of partner lawyers and industry professionals dedicated to ensuring fair and hassle-free resolution of claims. These individuals can be utilized through our product's premium feature and will be hired to work through a user's specific insurance claim. Insurance claims can take up to 60 days to be received and even longer to be resolved. Our team of lawyers will work to resolve claims quickly and efficiently as we partner with them, and utilize them on retainer. Legal counsel can cost upwards of \$600 per hour, but our premium service includes 2 hours of legal counsel per month for only \$10 per month . Individuals who need more counsel can upgrade their package to include more time on their case.



Voice of the Customer



We have conducted extensive customer interviews to determine our target customer segment and their desired product features. After conducting over 100 customer interviews using an online survey, we determined that our customer segment will initially include people who have changed or acquired insurance within the last two years. One of the most important notes is that the interviewees noted they were interested in tracking their medical history. This will be a feature offered in the free version of our service and will also serve as a strategy to retain our initial customers. Another important note from our interviews was that they have trouble estimating their out of pocket costs when they visit a healthcare provider, so that will also be a feature in our service where we will estimate those costs for our customer so there are no surprises for them and they won't avoid a visit to the doctor because of not knowing. In addition to the support that we offer our customers, one feature that has already been mentioned is legal support for our customers so that they feel they are able to utilize their insurance to its fullest potential. Our team of lawyers will serve as advisers for our customers and their support will be available for \$10 a month for two hours of counsel.



Minimum Viable Product



Once development reaches scale for targeted small group (75-100) testing, we will launch a beta WebApp and invite users identified from customer discovery. The goals of the private beta launch will be are outlined as follows:

- A. Gather data on Provider plans to grow the database
- B. Further define business logic
- C. Establish user experience preferences

Through user interaction with the service, the above will be measured to support continued development. This will be achieved by ensuring the user registration and care scenario simulation functionality is present at go-live.

A. In the process of user registration and account creation a user will need to provide information on their enrolled provider and plan. In the case of pre-cataloged plan data minimal additional information will be needed from the user, which will make up ~25% of beta users.

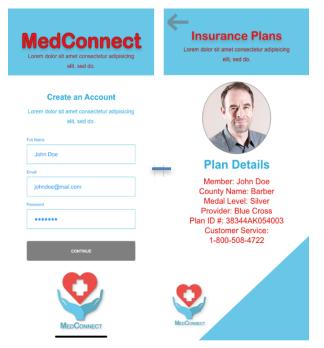
Collecting Name, Date of Birth, Address, Insurance carrier, ID number, and Group number will be sufficient to verify user benefits online, or in the occasional case manually. From the remaining 75% of users we will measure:

- i. Sufficient data capture, > 95%
- ii. Time to verify coverage, < business 24 hours
- iii. Verification method (online, manual)

iv. Plan coverage database integration for care simulation logic, > 99% pass rate

A benefits verification plan will be established and further honed over the initial testing period and beyond.

B. A cornerstone of the service is accurate cost projection for a given care scenario. A user must be able to select from a pre-populated option set of scenarios. If the user's scenario is not present a user can submit a simulation request, to which a simulation response frame of 24 business hours is targeted. The parameters of the scenario are then leveraged to grow simulation capabilities for future users.

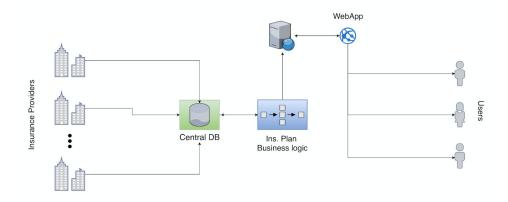


C. Users will be prompted for feedback at regular intervals and on-demand throughout the private beta testing period. A response rate of 80% is targeted. In addition to prompted feedback, analytics will be run on the time spent in a given portion of the user's interaction with the service. There is no targeted time spend, bit will instead be leveraged to make user-centered service adjustments.



Proof of Concept Prototype





System Specifications:

The central themes of development speed, cost-savings, and scalability are realized at each corner of the initial development periods. The CRUD WebApp will be initially deployed to Heroku for cost-savings, and as development grows a cost-benefit analysis for migration to AWS or Azure can be run. A MySQL database will be leveraged for its manageability and ability to scale with the service.

To best compliment the choice of a WebApp interface, the React library is leveraged. Its feature of reusable components allows for rapid UI tweaks and drop-in feature integration, which empowers us to respond to customer feedback in an agile way. Going Full-stack Python will ensure ease of library integration and ramp of development new-hires.



Plan Moving Forward



In 2019, MedConnect is seeking \$1.3 million in grants through SBIR and NIST and \$450,000 in loans from family and friends for the first 2 years of development. These funds will allow us to get through development and into the market by 2020. In order to meet this target deadline there are a few things that we have decided are critical components to our development:

- 1. Continue conducting customer interviews and focus groups of target users aged 35-65 in Washington State from Aril-August 2019
- 2. Continue growth of insurance coverage database for Washington and immediately surrounding states April-December 2019
- 3. Develop backend and establish initial interface of software with the help of our advising team starting August -December 2019
- 4. Launch initial platform January 2020
- 5. Continue growth of legal counsel as well as user advocacy hotline January 2020-2021
- 6. Attract initial customers using a "Pay-per-Click" strategy using Google AdWords campaign [5] and also through medical professional referrals once the application is released in January 2020
- 7. Start development of Version 2 software March 2020



References



- 1. American Institutes for Research. AIR Health Insurance Literacy Survey, 2013. <u>www.air.org</u>
- 2. Medicaid spending in Washington [Internet]. Ballotpedia. [cited 2019 Apr 15]. Available from: <u>https://ballotpedia.org/Medicaid_spending_in_Washington</u>
- 3. "What Is the Exchange?" *Washington Health Benefit Exchange*, <u>www.wahbexchange.org/about-the-exchange/what-is-the-exchange/</u>.
- 4. "Index." *CMS.gov Centers for Medicare & Medicaid Services*, 16 May 2017, <u>www.cms.gov/CCIIO/Programs-and-Initiatives/Health-Insurance-Marketplaces/index.html</u>.
- 5. "How Much Does Google Ads Cost?" *WordStream*, <u>www.wordstream.com/blog/ws/2015/05/21/how-much-does-adwords-cost</u>.
- 6. Park, Joon, et al. "Local & National TV Advertising Costs & How to Advertise 2017." *Fit Small Business*, 21 Feb. 2019, fitsmallbusiness.com/tv-advertising/.
- 7. "Uninsured Rate in Washington State Drops by Half to 7.3 Percent." *Washington State Office of the Insurance Commissioner*, www.insurance.wa.gov/news/uninsured-rate-washington-state-drops-half-73-percent.
- Washington Healthplanfinder Enrolls Record Number of Residents. Washington Health Benefit Exchange.

https://www.wahbexchange.org/washington-healthplanfinder-enrolls-record-number-resident

