

## **SBA InnovateHER Challenge**

**Company Name: WatchRx, Inc.**

**Contact:**

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**Product: WatchRX**

**Place of Incorporation: Acton, Massachusetts**

**Product Description**

WatchRx, Inc. provides a Smartwatch solution with connected eco system for medication adherence and patient self-management of medications for the elderly. WatchRx is an all-in-one device featuring a phone (2G/3G), touchscreen, GPS, Wi-Fi and Bluetooth. The solution consists of a watch for the elderly with their medication information downloaded and a mobile app for family members and caregivers.

**Host Organization: Microsoft Corporation**

**Contact:**

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# Business Plan



**WatchRx, Inc.**

**Jayanthi Narasimhan**

**10 Barker Rd, Acton, MA 01720**

**732-666-2134**

**[jayanthi0307@gmail.com](mailto:jayanthi0307@gmail.com)**

**[www.watchrx.io](http://www.watchrx.io)**

# **Executive Summary**

## **Mission Statement**

WatchRx's vision is to enable aging seniors, mostly women, widowed and living alone, live a healthy independent life by helping them take their meds on time, and to help their caregivers, predominantly women, maintain a balanced life juggling between work life, caregiving, and their own family.

## **Company Information**

WatchRx, Inc. was founded in June 2015 with its primary office located in Acton, Massachusetts. The company founders are Ms. Jayanthi Narasimhan (Chief Executive Officer) and Mr. Arun Buduri. WatchRx is an early stage startup with 75+ years of combined industry experience delivering global award winning products to consumer, telecommunications and enterprise industries. The founders have decades of experience working with top global tech giants and have been involved in many early stage startups. Customer focus and solid execution are core tenets at WatchRx taking products from conception to market. Currently the company is self financed by the founders. The idea was selected in the HealthIT Connections program, a 3 month accelerator program conducted by New Jersey Innovation Institute (NJII). WatchRx has applied for two NIH SBIR phase 1 applications with National Institute of Nursing Research, National Institute of Aging and National Institute of Drug Abuse.

## **Products and Services**

WatchRx is building a watch, that's also a built-in phone and a GPS, to help elderly take their meds on time and live independently in their homes as long as possible. The watch is a first-of-its-kind designed from the ground up for patients with usability challenges taking multiple medications, many of whom have chronic conditions, low vision and cognitive limitations. The device provides trio feedback (audio/visual/haptic) reminder mechanism including name, dosage and an image of the medication on the watch along with voice instructions and alerts their caregivers upon any missed medications. The watch also supports outgoing emergency calls, incoming calls from caregivers (doctors etc..) and GPS tracking/alerts in case they wander away outside their homes. The watch automatically downloads all relevant information from our system and monitors the elderly's engagement and compliance in real-time collecting more than 150 behavioral data points every day. These historical behavioral data points are used by the Predictive Analytics machine learning system to learn the day-to-day behavior and to proactively alert the caregivers in case of any anomaly (such as any impending danger or possibility of missing their meds). The pricing includes a low one-time fee for the watch and an affordable monthly subscription fee for the real-time monitoring, prediction and alerting service.

## **Market Analysis and Target Market**

Aging population (65+) in the US has been growing fast, from 44.7M (14.1%) in 2013 projected to be 20% by 2030. Two-thirds of them suffer from multiple chronic conditions and nearly 6.8M seniors take 10 or more medications daily. Medication adherence has been a huge pain in this age group for several decades, accounting for one-third of all senior hospital admissions and costing the US economy \$290B annually. Just by helping these seniors self-manage their medications can help save \$105B annually. The major reasons for non-adherence include forgetting to take their medications and the complexity of the medication regimen, also the major reasons a senior seeks admission into an Assisted Living.

## Empowering Women in Caregiving

The typical aging care recipient is 69.4 yrs old. A huge majority of them are women, mostly moms (73%), widowed and living alone in their home. 93% of all recipients live in their homes and almost all are covered by Medicare. Women play a mammoth role in caring for aging parents. Nearly 43.5M people care for someone 50+ and nearly half of them care for someone 75+. More than two-thirds of all caregivers are women. In case of aging veterans, 96% of all caregivers are women. Half of all caregivers work full-time. Due to the burden of caregiving, nearly 70% of all women caregivers reported an impact in their careers as they had to rearrange their work schedule, take unpaid leave or quit working totally, and 17% reported physical as well as emotional strain due to caregiving. 75% of these caregivers want technology to help them save time, keep their care recipient safe and be effective in balancing caregiving, work life as well as take care of their own family. Women juggling between caregiving, work life and family causes a staggering annual productivity loss of \$33B. In spite of aging seniors being covered by Medicare, nearly half of all caregivers spend more than \$5,000 and 11% of them spend more than \$20,000 annually.

Some reminder solutions available today, such as mobile apps, smart pill boxes, bottle caps, are quite expensive and either need a smartphone (by the senior) or need to be near the devices to be able to hear the reminders. Smartphone use is less than 10% in 75+ and less than 5% in 80+. A recent study by Brookdale Senior Living on over 400 adults aged 80+ revealed that smartphones and Apple's iWatch are too complex to help them. Our watch's only interface is time with large fonts and no menus, and automatically reminds when it's time to take meds. Caregivers can call the watch directly and stay connected with live updates via our family mobile app.

## Market Traction So Far

|  |  |
|--|--|
| <b>Competitions</b>                        | <b>Finalist</b> - <a href="#">NJTC IoT Conference</a> (May 7, 2015)<br><b>Top 3</b> - <a href="#">Brigham &amp; Women's Hospital Shark Tank Competition</a> (Oct 8, 2015)<br><b>Won</b> - <a href="#">Medstro's MassMEDIC MedTech Showcase</a> (Oct 30, 2015)<br><b>Won</b> - <b>Judges Choice Award</b> at <a href="#">NJIT Capstone Showcase 2015</a> (Nov 30, 2015) |
| <b>Potential Distribution Partnerships</b> | <b>Fortune 100 MNC</b> reached out for a potential distribution as well as angel funding<br><b>Managed Care solutions company</b> - Already working with Top 4 Insurance companies, interested in partnership and distribution<br><b>Top Telco</b> - Partnership discussions ongoing for phone/data service on watch as well as potential distribution                 |
| <b>Hospital Trials</b>                     | <b>Major Cambridge Hospital</b> - (catering to 4000+ seniors) Interested in piloting with 50 or more seniors, and potentially replacing their existing services with the watch   |
| <b>Focus Groups</b>                        | Closely working with <b>Somerville Council On Aging</b> (COA) for past 6 months, conducted several rounds of user interface design and feature discussions.<br>Conducted large focus groups with seniors at two COA cities so far, and lining up 10 other cities   |
| <b>Press Coverage</b>                      | Featured on <b>Front page</b> of <a href="#">Boston Sunday Globe Business</a> on Oct 18, 2015<br>Featured as <a href="#">Top 5 Standout Companies This Year on MedTech Boston</a>  |



## **Company Description**

Digital health is an emerging technology and is increasingly used for improving and monitoring patient health, decreasing healthcare costs and improving US Economy. Digital health is being used in number of ways from maintaining the patient information electronically to collecting vital information automatically before seeing the patient as well as for telemedicine purposes. WatchRx, Inc. is a digital health innovative company focussing on Medication Adherence market among the senior population. The idea was born when the founders were trying to take care of their aging parents and constantly calling them to remind to take medications and checking if they are doing fine.

Medication non-adherence is the major reason for one-third of hospitalization among elders costing US economy \$290B annually. Helping seniors take medications on time and self manage their medications alone could save \$105B annually. Around 67% of the seniors over 65+ years suffer from multiple chronic conditions and take 10 or more medications daily. Major reasons for non-adherence among aging population include forgetting to take medications and the complexity of the medication regimen. WatchRx is building a watch, that's also a phone and a GPS, to help elderly take their medications on time. The WatchRx system is a first-of-its-kind designed from the ground up for patients with usability challenges taking multiple medications, many of whom have chronic conditions, low vision and cognitive limitations. WatchRx is an all-in-one device featuring a phone (2G/3G), touch-screen, GPS, WiFi and Bluetooth. The device provides trio feedback (audio/visual/haptic) reminder mechanism including name, dosage and an image of the medication on the watch along with voice instructions, and alerts the family members or caregivers for missed medications. The family members can send personalized reminders to the watch or call the seniors on the watch.

Family members care for their aging parents and constantly worry if their loved ones have taken their meds, and if they are doing well etc. Our mobile app alerts and notifies family members on any missed medications or if their aging parents are not doing OK. Alerts are also sent if they are idle too long (when movement typically expected) or the watch is not worn for a long time. The seniors feel comfortable that they are just wearing a watch and do not have a social stigma that it is a device monitoring them. The reminders can be customized to their family member's or grand kid's voice.

## **Competitive Advantage**

There are many solutions available today such as smartphone apps, pill boxes and eCaps for medicine bottles. The smartphone usage among seniors over 65 years of age is only around 18% and is less than 10% for seniors 75+, and is almost non-existent among seniors over 80. Other solutions require the patient to be near the pill boxes to hear the reminders and also need either a hub or smartphone to operate. These solutions are also very expensive and difficult to use on a day-to-day basis. Clearly there exists a need for a simple solution that is easy to use, on-the-go and provides dignity and independence. WatchRx fulfills the need for such a solution. We have conducted many focus group discussions with seniors in Councils on Aging in Massachusetts and received excellent feedback from the seniors, most of them loved the watch. We also received great interest from physicians, Assisted Living and hospitals for a potential trials.

## **Target Market**

The initial focus for the product is the consumer market (B2C), especially targeting the caregivers who care for their aging parents. Often times they are constrained by time and live remotely, find it hard to visit or communicate with their parents. Nearly 43.5M caregivers take care of their aging parents and half of them work full time jobs. Often they need to rearrange their schedule or take unpaid leave to visit their parents impacting both their career and family. It will be a great relief for them if someone could send an alert if their parents miss medications or not doing well rather constantly having to follow up with them. More than 22M caregivers care for someone 75+ are in this situation and are very willing (75%) to invest in a device like this at an affordable cost. Initial market validation shows that many people are willing to buy the watch for their parents. Other markets that can be explored are:

- Veteran Affairs
- Substance Abuse patients for personalized treatments
- Phase 3 clinical trials for pharmaceutical companies

The initial product launch will be for the consumer market where people can directly buy the watch. In future channel partners such as pharmacies, physicians and hospitals can be used to reach the end customers.

## Market Analysis

Aging population in US rapidly increasing every year. Almost 10,000 people turn 65 every day and by 2030, almost **20% (71.5M)** of the population will be 65+. Around **67%** of older adults in United States suffer from multiple chronic conditions and 6.8M of them take eight 10 or more medications. Most need help to understand the instructions on the prescription and reminders to take the medications at appropriate time. Medication adherence is key to improve patients' outcomes. Major reasons for seniors to be admitted to Emergency Room or nursing homes are non-adherence to medication, and Adverse Drug Reaction (ADR) to taking wrong medication/dosage. Helping elders self-manage their medications for seniors alone could save billions of dollars (**\$105B**) to health care costs by controlling avoidable hospital visits. Some of the key findings of the medication non-adherence and ADRs in elderly population are:

- 46M people suffer from multiple chronic conditions needing coordinated care
- 30% of the adults are admitted to hospitals due to drug related problems, 11% due to non-adherence and 10 to 17% due to adverse drug reaction
- Hospital readmissions due to medication non-adherence and Adverse Drug reaction alone **costs** the US healthcare system **between \$100 billion and \$289 billion** annually in direct costs.
- Non-adherence causes **30% to 50%** treatment failures and **125,000** deaths annually
- IMS Institute estimated that improving medication adherence alone via self-management could save \$105 billion annually. As per the report there are about 4M ER admissions, 10M hospital admissions and 78M outpatient visits
- For every 100 prescriptions written only about 15 or 20 are refilled as prescribed

Long term service care is provided to elders with multiple chronic conditions or disability and need help with their daily activities including personal, social, illness, medication etc. Some of the statistics associated with long term service care are:

- By 2050, the number of elders who need long term service care (nursing homes, assisted living or independent living) will increase from 13M to 27M.
- Approximately 67% of the elderly who need long term service are aged 65 or older

- Nearly 80% of the elderly who receive some assistance live in private homes or community based settings
- In 2012 total spending on long term service care was about \$219.9B; it is expected to reach \$346B in 2040
- 43.5M people provide care to one or more family members

Given this market size there is huge potential for a solution that improves medication adherence among senior adults. Center for Medicare and Medicaid (CMS) has come up with proposals for measuring adherence and is looking for technology solution to improve adherence and reduce hospital readmission.

## **Market Segment**

WatchRx is focusing on the consumer market where 43.5M caregivers care for their loved ones who are 50+ years. Of these 64% (27.84M) do not live with their care recipients. The typical aging care recipient is 69.4 yrs old. A huge majority of them are women, mostly moms (73%), widowed and living alone in their home. 93% of all recipients live in their homes and almost all are covered by Medicare. Women play a mammoth role in caring for aging parents. Nearly half of all caregivers care for someone 75+. More than two-thirds of all caregivers are women. In case of aging veterans, 96% of all caregivers are women. Half of all caregivers work full-time. Due to the burden of caregiving, nearly 70% of all women caregivers reported an impact in their careers as they had to rearrange their work schedule, take unpaid leave or quit working totally, and 17% reported physical as well as emotional strain due to caregiving. 75% of these caregivers want technology to help them save time, keep their care recipient safe and be effective in balancing caregiving, work life as well as take care of their own family. Women juggling between caregiving, work life and family causes a staggering annual productivity loss of \$33B. In spite of aging seniors being covered by Medicare, nearly half of all caregivers spend more than \$5,000 and 11% of them spend more than \$20,000 annually.

Some reminder solutions available today, such as mobile apps, smart pill boxes, bottle caps, are quite expensive and either need a smartphone (by the senior) or need to be near the devices to be able to hear the reminders. Smartphone use is less than 10% in 75+ and less than 5% in 80+. A recent study by Brookdale Senior Living on over 400 adults aged 80+ revealed that smartphones and Apple's iWatch are too complex to help them. Our watch's only interface is time with large fonts and no menus, and automatically reminds when it's time to take meds. Caregivers can call the watch directly and stay connected with live updates via our family mobile app.

## **Competitive Analysis**

The connected WatchRx watch - The watch, also doubles as a phone, doesn't require any setup by the patient and is completely mobile/on-the-go, meaning it is not confined to the home. The watch automatically downloads the medication regimen from the system and is ready to go. The watch stays connected to the system and removes all complexities with medication schedule and reminds the patient via a trio-feedback mechanism (audio/visual/haptic). The medication reminder on the touch screen shows the image, name, strength and dosage of the medication to be taken, along with voice instructions, and cycles through each medication until all are taken. If a medication reminder is missed, an alert is raised to the caregiver (or the designated person(s)). Other features include reminders for food/water/toilet/movement, self-reporting of any pain levels and a daily "Are you ok today?" check to keep a constant watch on the patient. The watch stays connected to the system and immensely helps

the doctors, nurses, and caregivers monitor the elderly real-time. The watch is also connected to the pharmacy to provide refill and pick up reminders.

There are other solutions today in the market. Here is a competitive analysis based on existing solutions and our advantages:

| Features/solutions                      | WatchRx | SmartPhone Apps | Pill Boxes | eCaps | Sensors and Devices |
|---|---------|-----------------|------------|-------|---------------------|
| Wearable                                | ✓       | ×               | ×          | ×     | ×                   |
| Phone                                   | ✓       | ✓               | ×          | ×     | ×                   |
| GPS                                     | ✓       | ×               | ×          | ×     | ×                   |
| Medication reminders                    | ✓       | ✓               | ✓          | ✓     | ✓                   |
| Audio/Visual/Image with Dosage, Name    | ✓       | ×               | ×          | ×     | ×                   |
| Alerts to Family and Caregivers         | ✓       | ✓               | ×          | ×     | ✓                   |
| Pharmacy Interface                      | ✓       | ×               | ×          | ✓     | ×                   |
| Customizable and personalized treatment | ✓       | ×               | ✓          | ✓     | ×                   |
| Gyroscope                               | ✓       | ×               | ×          | ×     | ×                   |
| Accelerometer                           | ✓       | ×               | ×          | ×     | ×                   |
| Purpose Built                           | ✓       | ×               | ✓          | ✓     | ×                   |
| Affordable Price                        | ✓       | ✓               | ×          | ×     | ×                   |
| Predictive Analytics                    | ✓       | ×               | ×          | ×     | ×                   |

Though there are many smartphone apps for medication adherence, smartphone usage among elders 65+ is only about 18% and after 70, it drops down to 10%. Many of them have difficulties in navigating the apps to select the right app. Besides they need a manual setup and many find it difficult to use. The pill boxes and eCaps require the patient to be near the product in order to hear and also they are difficult to open and use. The pharmacists are some one need to set this up for them. The sensors and devices are very expensive and they need a hub to connect and they are not mobile. Though Apple and Samsung watches are available, they are expensive, need a mobile phone and also navigating the interface is difficult. WatchRx combines many of the features and offers an easy to use solution. With these advantages, we hope to penetrate a majority of the market.



Differentiating features in our solution include

1. Trio feedback reminder mechanism - name, image, dosage and strength with voice instructions
2. Automatic download and updates of medication schedule on the watch
3. Customized reminders per patient needs (pain levels, daily "Are you ok today?", food/movement/water/toilet etc)
4. Phone calls directly on the watch
5. Connected ecosystem involving doctors, caregivers and pharmacies
6. Predictive Analytics System collecting more than 150 data points on seniors behavior based on the engagement of the watch and generating alerts to caregivers on any anomalies detected

## **Market Validation, Focus Groups and Trials**

Over the past 3 months, we have conducted multiple prototype demos, usability studies and interviews with seniors, doctors, providers and caregivers at the following locations and have received valuable feedback on the watch as well as the solution.

1. City of Somerville - Council on Aging
2. City of Belmont - Council On Aging
3. A major hospital in Cambridge area catering to 4000+ seniors
4. Somerville Homeless Coalition
5. Gerontology Center, University of Colorado, Colorado Springs
6. Division of Addiction Psychiatry, Virginia Commonwealth University
7. The Oberon, an Assisted Living facility near Denver, CO
8. Visiting Angels and ComForCare Home Care agencies
9. Geriatrics specialist at Cambridge Health Alliance Hospital

In addition, we exhibited our watch in Massachusetts Council on aging (MCOA) annual conference and received excellent feedback from many of the Council on Aging Directors, AARP and MGH representatives. Many of them have invited us to demo the product in their focus groups and expressed that this watch could be very useful for their seniors to follow the medication regimen.

We have also made a few adjustments to certain features and usability aspects of the watch and the solution based on the feedback. Institutions that are ready to pilot the solution include City of Somerville Council on Aging and Somerville Homeless Coalition. We are also getting ready to conduct trials at Gerontology Center at University of Colorado - Colorado Springs (for elderly patients) and Division of Addiction Psychiatry at Virginia Commonwealth University (for substance abuse patients).

## **Pricing Strategy**

The revenue strategy is a one-time watch cost plus a monthly recurring subscription fee for the service. The monthly subscription covers the alerts, monitoring, mobile app and web dashboards for caregivers, physicians (if required) and family members including software maintenance and customer support.

The pricing strategy for the watch will be two fold: Basic and Advanced. The basic version will include all the medication reminders, communication with caregivers and family members via text and phone, emergency call and reminders for daily activities. The advanced version will include Bluetooth integration with vitals monitors (such as blood glucose, blood pressure, heart rate), GPS tracking and *Tap-to-Track*

system to track OTC medications. The basic watch will be priced at \$99 and the advanced watch will be priced at \$149.

For the monthly subscription service, there are three plans to choose from:

**Plan A:** Basic plan - includes medication reminders, caregiver/family interface for medication alerts and web interface for registration, dashboards and reports, predictive analytics.

**Plan B:** In addition to Basic Plan, it includes GPS tracking, customized reminders for food and other Daily Activities, RUOK and Predictive Engine family member app for medication alerts and self reporting on health.

**Plan C:** In addition to plan B, it includes Bluetooth vitals data collection, and *family connect* - a social media like updates on seniors' health to their loved ones.

The pricing (per patient) for the monthly subscription plans will \$19, \$29 and \$39 for Plan A, B, and C respectively.

## Organization and Management

WatchRx has 75+ years of combined industry experience delivering global award winning high quality products to consumer, telecommunications and enterprise industry. WatchRx founders have launched global award winning products from concept to deployment in consumer products space, embedded and application software. The team has been involved in many early stage startups and has worked on both hardware and software solutions including wireless products and has the right expertise to develop the Smart Watch solution. Customer focus and solid execution are core tenets at WatchRx taking products from conception to market.

## Founding Team

The team consists of the founders with part time engineers developing the product. Jayanthi Narasimhan is the Founder and CEO of the company. A full management team is not yet in place.

### Jayanthi Narasimhan (resume attached)

- Serial Entrepreneur with 25+ years of product development experience in Telecom (access and transport technologies) and Enterprise applications
- Subject Matter Expertise in Embedded and Application Architectures
- Created innovative products to help manage large Telecom Networks
- Expertise in scaling organizations from ground up to 250+ engineers
- Successful team builder and product execution from concept to deployment and customer support
- Global organization management

### Arun Buduri (resume attached)

- Entrepreneur and Startup Advisor with a crucial mix of IoT, Home Automation & Big Data
- 16+ years of Global Product development experience delivering World Class Global Award winning products and launching new business lines in Emerging Markets
- Awards include President's Award, Leadership Award and Outstanding Contribution
- 7 Patent awards, 3 disclosures in process
- ACM ICPC USA South Regional Runner-up and winner of multiple coding hackathon

competitions

## Organization Structure

WatchRx is an early stage start up with three founders on the board. The founders take on multiple roles from developing the product to market validation, setting up trials, marketing and managing the finance.

### **Jayanthi Narasimhan - Founder and CEO**

Jayanthi Narasimhan is the CEO and is in charge of company management, technical direction, finance, market research and marketing.

### **Arun Buduri - Founder**

Arun Buduri is in charge of product development, technical direction, market research and marketing.

As the company grows we intend to hire management personnel for the roles of CFO, COO, Business Development, sales and Customer support.

### **Satyanarayana Choppadhandi - Founder**

Satyanarayana helps in product development.

## Ownership Information

WatchRx, Inc is a C corporation incorporated in Delaware on June 24, 2015 with its corporate office located in Massachusetts at 10 Barker Rd, Acton, MA 01720. Following is the current ownership details:

Name: **Jayanthi Narasimhan**

Ownership: 52% Common stock

Involvement with the company: Founder and Investor, In the company from its first day of operation

Name: **Arun Buduri**

Ownership: 40% Common stock

Involvement with the Company: Founder and Investor, in the company from its first day of operation

Name: **Satyanarayana Choppadhandi**

Ownership: 8% Common stock

Involvement with the Company: Founder & Investor, in the company from its first day of operation

## Board of Directors

**Jayanthi Narasimhan, Arun Buduri, Satyanarayana Choppadhandi**

Currently all three founders are Board of Directors and the company does not have an external board of director or advisors.

## Products and Services

**WatchRx** is offering a **wearable dedicated medication adherence solution** for the elderly with complex medication regimen, low vision and cognitive limitations, combining text messaging, phone calls and real-time bi-directional communication in a single comprehensive device and doesn't rely on

smartphone ownership. The *WatchRx* system is an **all-in-one first-of-its-kind watch** featuring a phone, touch-screen, a global positioning system (GPS), WiFi, Bluetooth, and **works even when outside the home**. The watch provides trio feedback (audio/visual/haptic) medication reminders with medication name, dosage and image with **spoken voice instructions**. The device features a **patent-pending alerting system** for medical staff and family members of non-adherence. The watch will check in daily with an "Are You Ok today?" voice prompt, provide personalized reminders for food, water, movement, and initiates emergency calls by pressing a side button on the watch.

The *WatchRx* system is unique in that it provides a low-cost, comprehensive approach in a single voice-prompting device. This work will customize reminders for weekly pill organizers, and reminders for Activities of Daily Living (ADL), and will demonstrate the feasibility of using the watch as a personalized medication adherence solution for elderly in keeping them engaged in their long-term treatment. We hypothesize that the ease of use of the watch will keep senior adults engaged with their treatments and be more likely to adhere to their complex medication regimen. The watch also monitors the elderly's engagement and compliance in real-time collecting more than 150 behavioral data points every day. These historical behavioral data points are used by the Predictive Analytics machine learning system to learn the day-to-day behavior and to proactively alert the caregivers in case of any anomaly (such as any impending danger or possibility of missing their meds).

The watch does not require any setup by the patient and automatically downloads the medication schedule details from the system. The centralized coordinated care ecosystem connects the seniors with their caregivers and/or family members and sends alerts for missed medications and any inactivity or non engagement of the watch. It also provides a dashboard with the weekly activities log, medication logs and vitals information either on demand or weekly basis. Since the system will be integrated with pharmacies, any refill or pick up reminders can be delivered directly to the watch.

## Product Roadmap

Currently the product is in its 4th prototype stage. The product is being demoed to potential customers and focus groups. Currently development is in progress implementing a predictive analytics engine to predict trends of adherence for the seniors and an alert to the caregiver for timely intervention. We are also in the process of scheduling trials and will be rolling out limited quantities of the product for the trials. The product roadmap is provided below provided additional funding is secured:

- ❖ **May 2015** - Provisional Patent Filed and additional ones in progress
- ❖ **Jan 2016 - Alpha Release**
  - Medication Reminders, RUOK, Predictive Analytics, Caregiver App, Web Front End for Patient Enrollment and Reports
- ❖ **Feb 2016 - May 2016**
  - Watch trials with seniors at hospitals and several Council On Aging locations
- ❖ **Jun 2016 - Release 1**
  - EHR Integration, Automatic Prescription Download
- ❖ **Sep 2016 - Release 2**
  - Customization for Smoking Cessation Intervention
  - Bluetooth Integration - Blood Glucose, Blood Pressure Monitors
- ❖ **Dec 2016 - Release 3**
  - NFC Integration (*Tap-To-Track*) for OTC and As Needed Medications

## Intellectual Property Rights

A provisional patent was filed on May 20, 2015 for a wearable device for medication adherence and coordinated care platform. Additional patents are in the works and will be filed soon.

05/20/2015 - USPTO application # **62164307** "Medication adherence Device and coordinated Care Platform" Inventors: **Jayanthi Narasimhan and Arun Kumar Buduri**

## Marketing and Sales

### Marketing Strategy

Our marketing strategy is to focus on family members who care for their parents. There are 43.5M family members take care of someone who is 50+ years and 47% of them take care of someone who is 75+ years. There is a huge impact to economy (\$33B) due to lost productivity as the caregivers need to take unpaid leave to care for the elderly. We are reaching out to elders and patients via Councils on Aging (349 centers in Massachusetts alone covering 1.5M elders) and homeless coalition centers (including veteran affairs). We are reaching out to the caregivers through channels such as online marketing, physicians, hospitals and assisted living and home care facilities.

We are conducting focus group presentations and demos with Councils on Aging in Massachusetts. We exhibited our product in Massachusetts Councils on Aging conference and received excellent response from many COA directors to conduct focus group demos. We were a finalist in Brigham and Women's Hospital Startup Shark Tank contest that generated lot of interest resulting in a nice press coverage in Boston Sunday Globe Business section. This has generated huge interest from public. We are also winners in MassMedic MedTech Showcase and received a great response in the final pitch on Oct 30th.

We will continue to present our product in various trade shows and contests. We have created website and facebook page for the company and we have developed brochures and flyers to help spread the awareness of the product. We also plan to write blogs and post articles in various social media websites. We plan to conduct specific trials with MCOA and a few assisted living facilities. Once the trials are successful, we will start marketing initially through social media and online marketing. Once we get funded, we can hire full time business development person to carry out consumer marketing strategy.

### Market Traction So Far

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| <b>Hospital Trials</b>                     | <b>Major Cambridge Hospital</b> - (catering to 4000+ seniors) Interested in piloting with 50 or more seniors, and potentially replacing their existing services with the watch   |



|                       |   |
|-----------------------|---|
| <b>Focus Groups</b>   | Closely working with <b>Somerville Council On Aging (COA)</b> for past 6 months, conducted several rounds of user interface design and feature discussions. Conducted large focus groups with seniors at two COA cities so far, and lining up 10 other cities |
| <b>Press Coverage</b> | Featured on <b>Front page</b> of <a href="#">Boston Sunday Globe Business</a> on Oct 18, 2015<br>Featured as <a href="#">Top 5 Standout Companies This Year on MedTech Boston</a>   |

## Sales

Sales has not yet started and we will begin once our trials are completed. We are targeting to be in the consumer market in time for Thanksgiving 2016 for caregivers to be able to gift this to their parents.

## Funding

We are currently self-funded and have applied for two NIH SBIR Phase 1 Grants (\$150k and \$175k). We have received positive feedback on our solution fitting their specific areas of NIH research interests. We are looking for angel/seed funding to take the solution to the next level and conduct medium scale pilots. We've already received great interest in piloting our solution - City of Somerville Council on Aging, Assisted Living facility in Denver CO, and talks are in progress for a potential trial with a major hospital in Cambridge, MA. We have also received requests for potential distribution partnership from a Fortune 100 company in the medication adherence space and also from a managed care solutions company.

We are looking for upto \$1M in funding to cover the costs of the following:

- R&D activities to complete the product to production
- Manufacturing watches for the upcoming trials
- Business development activities including marketing and sales

## Financial Projections

WatchRx is self financed by founders and till date the investors have funded \$32K besides working full time. We are spending more as we need to keep the company operational with minimum funding needed for R&D efforts and marketing. The company is looking to raise funds in the next three months to grow the company to next stage. Initial draft of the financial projection is provided as an attachment.



## APPENDIX

### Product Photos

| Q1 2015   | Q2 2015   | Q3 2015  | Current   |
|---|---|--|---|
| <b>Bluetooth + LEDs</b><br>Weight: 1.59 oz  | <b>Watch + Phone</b><br>Weight: 4 oz  | <b>Watch + Phone</b><br>Weight: 2.65 oz  | <b>Watch + Phone</b><br>Weight: 2 oz  |
|  |  |  |  |

### Patents

05/20/2015 - USPTO application # **62164307** "Medication adherence Device and coordinated Care Platform" Inventors: **Jayanthi Narasimhan** and **Arun Kumar Buduri**

### Management Resumes

Attached.

### Letters of Reference

Attached

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## Press Coverage

**“Startups serve up ways to get patients to take meds” Article in Boston Globe on Oct 16, Innovation economy on Business section**

<http://www.betaboston.com/news/2015/10/16/startups-offer-ways-to-get-patients-to-take-meds/>

**WatchRx** is a watch that helps people manage their medication intake. It is targeted primarily to senior citizens, many of whom are taking multiple medications daily. Because of the daily complexity of the managing this, many seniors forget to take their medications on time.

According to the WatchRx team, many seniors are receiving full or additional care by another person who, in addition to other activities, helps them manage their medication intake. 73% of those seniors are women; additionally a large percent of the people caring for those senior women are their daughters. This is a multi-generational women's issue.

There are many ways to track a schedule of medication intake (on paper, on a cell phone or computer calendar, using an alarm on a phone or clock, etc.). However, the WatchRx method allows for the patient to have the reminder mechanism on them at all times. Additionally, multiple people in different locations to manage and track whether or not someone has taken their medication on time. The watch stores information that can be accessed by someone else online. It even has a way to alert someone if the person wearing the watch has fallen down (based on geolocation tracking). Given the burgeoning population in the U.S. of those aged 65+, and no currently easy or inexpensive mechanism to help them manage their medicine intake, there seems like a great opportunity for this product to help many people – both seniors and those who care for them.

We believe WatchRx is actually priced fairly reasonably (\$99-\$149 for the watch; \$19-\$39 for the monthly service) as it is purpose-built device for medication management, but also is a phone. The watch is being marketed to those who are actually the caregivers; there are currently 43.5 million people caring for those aged 50+ in the U.S. Like many other technology devices, it could be sold direct, through retailers, or a combination of the channels.

We are excited to select WatchRx as the regional winner in the 2016 InnovateHER Challenge. We believe this product will positively impact multi-generational families of women and has the potential to serve a very large market given the demographic trends in the U.S. in the not too distant future.

*Leisler*

## Women Care

43.5M caregivers care for 50+

**68%** overall & **96%** of caregivers of veterans

**69.4 yrs** - Typical care recipient

**Mom** - 73% of parent recipient

**67%** - provide medication support

## Women Strain

**75%** - Want Tech to save time, keep recipient safe and be effective

**70%** - **Career Impacted** - Rearrange work schedule or take unpaid leave

**17%** - Reported physical strain of caregiving