



The Pill Server

Business Plan

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Executive Summary

The Pill Server markets a revolutionary innovative technology that restricts access of prescription pills to the appropriate time and amount for a given dosage. By doing so, the problems of underdosing (taking too little of a dosage) or overdosing (taking too much of a dosage) will be targeted through maintaining constancy of dosage levels at the consumer level.

The company's main objectives are to create a final prototype based on the engineered design schematics created by the group, provide for a testing phase of the product in the market, and collect data on the overdosing and underdosing problems in the community. The company has accomplished, to date, creating a working prototype of the pill dispensary mechanism, interviewing major individuals relating to the product and its functionality, and conducted a feasibility analysis through demonstrating the need for the product in the market and the predicted efficacy of the product in targeting the target issues.

Competition exists in the industry, in the form of new medical pill bottles that offer personalized accessibility. We target this competition through solving the underdosing problem in our product, thereby targeting both major issues in one product. We also offer a new perspective on the problem of overdosing, by not allowing medication to be accessed unless a doctor or medical expert approves of this and transmits his/her approval electronically for the product to dispense extra pills. Finally, we allow for emergency contacts to be loaded to the product, so that people can be alerted if something goes wrong with the dosage, instead of having the first responders be emergency services, which could be problematic should a false alarm go off.

Highlights

The company has, to date, created a working prototype of the pill dispensary mechanism. This will be modified and expanded upon to create a final mechanism, and incorporated into the pill bottle design for the marketable product. The company has interviewed multiple subjects on the issue, including healthcare experts and law enforcement officers who deal with dosage-related illnesses on a continuous basis. Their responses will be incorporated into modifying the design to better suit the needs of the target consumer. Finally, a feasibility analysis and market analysis have been conducted to prove that the product is worthy of entering the market, and that society requires such an innovative outlook on the target issues.

Objectives

We hope to achieve our final prototype by mid-April of 2018, and to test it in the market using a cost-efficient scaled-down survey of efficacy with a sample population during the summer of 2018. Further interviews and analysis of the target issues will be performed by mid-May of 2018, and results will be collated by the end of May of 2018. These will be incorporated into the scheme of the sample survey.

Mission and Vision Statements

Mission: The Pill Server serves to reduce the rate of overdosing and underdosing in the community, through an innovative pill dispenser technology that restricts access of pills to the prescribed amount and maintains constancy of taking dosages, thereby controlling the dosage intake of a consumer.

Vision: The Pill Server will allow for the community to progressively lower the rate of overdosing and underdosing, saving lives, maintaining an effective and efficient healthcare system, and allowing for pharmacological advancements.

Keys to Success

The business is unique with the team being heavily exposed to these issues in the urbanized target community they reside in, and has dealt with these issues at home since the team consists of high schoolers who interact with teenagers suffering from these problems on a personal level. One of the target consumers is teenagers who get access to prescription drugs, the other consumer being elderly patients who need a mental and physical prevention mechanism to control uninhibited access to pills. Using a double-edged sword for solving two problems and targeting two specific yet widespread populations, this business will likely achieve its objectives in a timely manner and enter the market with a full-fledged product within the year of 2018.

Description of Business

The Pill Server uses an innovative pill dispenser technology that restricts access of pills to the prescribed amount and maintains constancy of taking dosages, thereby controlling the dosage intake of a consumer. By doing so, the problems of underdosing (taking too little of a dosage) or overdosing (taking too much of a dosage) will be targeted through maintaining constancy of dosage levels at the consumer level. The Pill Server uses this innovative scheme and fresh perspective on the target issues to create a novel and marketable product.

Ownership and Location

This company will be a partnership between the five members of the executive team. The company will be a distinct legal entity running out of the Engineering and Science University Magnet School, which has access to important technologies and software, such as CAD modeling and 3D printing technologies, that will be vital to creating and designing a novel product with the desired functionality. This accessibility gives us a cutting edge against competitors.

Products and Services

The product to be supplied is the Pill Server, an innovative pill dispenser technology that restricts access of pills to the prescribed amount and maintains constancy of taking dosages, thereby controlling the dosage intake of a consumer. The Pill Server will be marketed as a new computerized and mechanically activated pill bottle, with an in-built dispensary mechanism that controls accessible dosages, and computerized software loaded as an electronic chip to program the desired dosage levels and contact emergency contacts or emergency services if need be. The material for the pill bottle will be the durable and tough Polyethylene Terephthalate polymer, to restrict breaking in to the bottle. Electronic chips and circuitry will be built into the cap of the product, and pills will be loaded into the pill containers, from which the desired number of pills will be removed by the mechanism and placed into the openable access module. These products will be supplied by local online vendors, and manufactured using the technology at our location. Manufacturing will entail cutting the right parts and assembling them together using the appropriate dimensions through the mechanical technologies at our location. The product will be marketed fully electronically using an E-Commerce platform on the company website. Product orders will be shipped through mail carriers, and shipping charges will be expended for by the consumer.

Management

The company will be managed by the executive team, consisting of 5 individuals. The company management will occur for the purpose of maintaining the financial revenue and performing research and development for testing and innovating upon the product idea. The management will oversee the exploration of new design options for the product, and will execute the development of these ideas. The bulk of the management work will oversee the financial aspects of the product and the stream of revenue flow. This will include cost analyses and conducting market analyses through analysis of changes in the scope of the target issues and the extent of the value of the product and its innovations. Small

work will be performed to conduct more research on the scope of the target issues, through extra surveys and research studies diagnosing the efficacy of the product in the market and how to keep the company up to date with the fluctuating statistics of overdosing and underdosing in the community.

Start-Up/Acquisition Summary

The company will start up through the development of the product and performing a full-scale analysis of the product and its worth in the market. These steps have been already performed, and the company has already started up. The start-up included the development of advertisements and promotional material, as well as exposing the community to the company through the development of a sustainable and informative website and through the dissemination of the product and company information through word-of-mouth exposure.

Customers will be acquired through word-of-mouth exposure and through enhanced exposure through the means of various media, including televised news and the spread of advertisements digitally. Customers will be directed to the E-Commerce platform presented on the company website in order to become educated about the product and the target issues it faces, as well as order or perform a trial run with the product. Acquisition will be the hardest part of the company, due to the undervaluation of consumer protections on the drug dosage industry and growing sentiment against the pharmaceutical market industry, encouraging people to blame dosage issues on the pharmacological businesses. Acquisition will be a challenge, but will be combatted through promotions explaining the importance, significance, and novel approaches presented in this product.

Product Development

Design

The design of the product involves a pill bottle with a pill dispensary mechanism outfitted into the cap. With the outer shell made of Polyethylene Terephthalate, a durable and hard plastic to break into, the pill bottle can be cheaply made yet ensure that the structural integrity of the modules is not compromised. Multiple pill modules will exist inside, which contain pills from various prescriptions, each separated from each other through unique modules. When a certain prescription is to be taken, the mechanism will select the appropriate number of pills to be dispensed from the container module into the accessible module. Once dispensed, the accessible module will open for the consumer to take his/her medication. There is a certain time window for these pills to be taken, which is less than an hour, since if people like the elderly do not take essential medications within such a window, then devastating health consequences such as heart attacks, strokes, or even death can occur. By limiting the window through allowing emergency contacts or emergency services to be notified when pills are not taken, underdosing becomes solved. Moreover, overdosing is solved through the inability to access more pills in an efficient and practical manner, especially for individuals who choose to illegally or illicitly abscond with someone else's drugs.

Feasibility Analysis

The Pill Server company is a part of the global healthcare and pharmaceutical industry, as it pertains to pharmaceutical development and doctor distribution of medical prescription drugs, by working against overdosing and underdosing prescription drug medications in the elderly community. This industry is massive, combining numerous different pharmaceutical companies and agencies, the federal government legislation, the FDA, and numerous clinics and medical practices, as evidenced in reputable sources. In addition, with the vast number of people taking prescription drugs, a great deal of them belonging to the elderly demographic, the target population in the industry for this company is large, which suits a rapid growth and development of this company.

Trends within the industry are quick to change and sometimes unpredictable. The overdosing and underdosing problem has been statistically analyzed, and the trends are generally upward in terms of the death rate and medical problems caused by them, though they rapidly fluctuate. Moreover, the elderly population's proportion within the American citizenry is an important factor for the evolution and design of the company. The industry is also quick to adopt new technologies in both prescription drugs, through pharmaceutical and research laboratory innovations on existing medications, and deliver mechanisms, with a rapid adoption of electronic services for medical records and prescription ordering. These trends may prove hard to adapt to, but are vital for the success of the business.

Nevertheless, with the direction of the overdosing and underdosing trends in the current society, it is predictable in finding out what direction the trend progresses, and as long as it exhibits a continuously increasing behavior, the product will gain even more value over time, countering inflation and correlating to the growing consumer base as the worldwide population increases and the number of new prescriptions drugs exponentially grows.

SWOT Analysis

Below is a table depicting the key features from the SWOT Analysis of the Pill Server.

STRENGTHS	WEAKNESS
<ul style="list-style-type: none"> • Simplicity to the technology used in the product • Addresses problem that has been unexplored before • Takes new stance on issue through addition of rapid emergency contacts • Ethical responsible business and socially aware • Unique due to consumer education about true overdose/underdose problem in elderly community • Addresses environmental awareness through biodegradability of plastic PET component 	<ul style="list-style-type: none"> • Technology must be innovated and refined considerably • Consumer education will require a great deal of resources • Marketing will be hard, especially to pharmaceutical industries or doctors and clinics • Company must become more adaptable to the changing features of the nationwide drug dosage dilemma • Company must adapt and refine its strategies as new scientific studies come out • End consumer must become educated about the importance of product
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> • Company market is open year-long and has a strong need for this product • Not only complies with but adds measures to existing governmental regulations and legislation regarding dosage issues • Target market has great need for product • Social changes will not hinder enormity of the problem being addressed • Competitors do not address problem • Many partnerships can be sustained 	<ul style="list-style-type: none"> • Competitors can be formed at a rapid pace, expanding on our base • The severity of the drug dosage problem can dwindle or change unpredictably • Many market developments can be made that cause difficulty for company to adapt • Company must refine the product as new data and studies about the product come out • Technology will require major refinements as the technology used in everyday life improves • American population's proportion of elderly people, the target market, is volatile

PEST Analysis

Below is a table depicting the key features from the PEST Analysis of the Pill Server.

POLITICAL	ECONOMICAL
<ul style="list-style-type: none">Reduces healthcare costsHealthcare initiatives will become alteredImproves environment due to biodegradability of PET componentReduces scope of drug dosage dilemmaLess drug outreach program funding requiredMore focused legislation on drug overdosing in younger population	<ul style="list-style-type: none">Advantageous due to an established year-round marketConsumers are more confident in their medicationConsumers are more confident in their doctors and healthcarePharmaceuticals and doctors are held more accountable for drug dosage errors, and can have monetary repercussionsCan rapidly scaleGovernment grants could scale project
SOCIAL	TECHNOLOGICAL
<ul style="list-style-type: none">Educes public on overdose/underdose problemsSaves considerable numbers of livesResponsibility of drug dosage problems that were correctly prescribed becomes held by devices, not by doctorsInfluence comes primarily from drug legislation and drug dilemmas in the everyday communityTechnology to be implemented is widespread in the current societyEthically beneficial and appropriate	<ul style="list-style-type: none">Build technological awareness in elderly communityAddresses the problem as opposed to simply collecting data on itRapid communication to emergency contacts or servicesRisk of technological malfunction existsMajor innovation potential existsCompetition is manageable, if not able to be cooperated with and built off

Target Population

Target Issue Research

Numerous studies have expounded on the effects of drug dosage problems on human beings. Opioids act as a synthetic painkiller based on the chemical morphine, and on pleasure-inducing hormones called endorphins, short for endogenous morphines. These can be very addictive if not used in moderation, but the aspect of moderation is controversial one, as moderation varies from person to person and can induce psychological consequences of various intensities in different individuals.

Most doctors are not fully educated on how to manage a patient's pain, especially when it is significantly high and requires massive dosages of pain-killer medication. The conflict arises from the humanitarian aspect of reducing pain, and the health-related effect of damaging one's body or effectively killing someone through high dosages of opioid drugs. Most doctors are uncomfortable with the scenario, and do not know exactly how much to prescribe safely for certain situations. This leads to unintentional over-prescriptions that take lives due to a lack in substantial education. This education is not the main cause, though, as the reason for such deficiencies is a lack in research on the matter. Moderation of drugs must be controlled by the amount and frequency of dosages given to individuals, but this cannot be controlled by an individual once he/she has become psychologically or physiologically addicted to the drug. Thus, a product must be designed that targets the dosage issue at the consumer level, where the consumer is fully restricted from accessing an inappropriate number of drugs, and must take them at the appropriate time.

The consequences and effects of drug overdoses are staggering in the local community, state, and throughout the entire nation. CT saw 917 fatal overdoses in 2016, and the rate continues to grow at a near exponential rate with an approximate doubling in the overdose death rate annually. In 2016, CT had a rate of 25 deaths per 100,000 residents, significantly above the national average of 19 deaths per 100,000 residents. In the past year of 2017, death rates had spiked. During the first half of 2017, 20 New Haven residents had opioid overdoses, and 17 of them had died. New Haven now ranks 5th in the state for the overdose rate in terms of the number of people overdosing on drugs.

These deaths occurred from a variety of drugs, including an important and controversial drug called fentanyl. Fentanyl is one of the most conflicted opioid drugs because of its placement as a legal prescription pain-killer drug. Fentanyl-related deaths climbed nationally from 8% in 2010 to 18% in 2015. CT is at the top of this surge in prescription-drug overdose deaths caused by fentanyl. Another major drug whose effects are being learned about is carfentanil, which is stronger than fentanyl by a factor of 100, and caused 4 overdose deaths in New Haven during the first half of the year of 2017. The only drug whose death rate is reducing is oxycodone, whose death rate has reduced by 25% in the past year. Nevertheless, the total cumulative rate increases near exponentially, fueled by these prescription drugs.

Many people are conflicted over the prescription of fentanyl for certain pain-killer needs. In fact, New Haven had sued Purdue Pharma in late 2017 for the increased prescription of fentanyl, through deceptive marketing of opioid pharmaceuticals. Prescription drugs are shown to be taking a significant amount of lives of youth and elderly people, the two most affected populations in the community from prescription drug overdoses. This has come to the point where companies worry about liability issues, and have acted to enforce “pain contracts” or “narcotic substance agreements” that must be signed by patients when requesting opioid medications to act as pain-killer agents. Targeting the elderly population, fentanyl and other synthetic opioid drugs are being overly prescribed for treating pain and inflictions, but it has become increasingly difficult to limit the amount of such drugs being prescribed. New legislation is being passed nationwide and in the local community to act as a hindrance to prescribing such drugs, but such legislative acts are being blocked by significant lobbying on the part of these companies. The only other route is to limit the effect that such high prescriptions have on the people they are given to.

Market Analysis

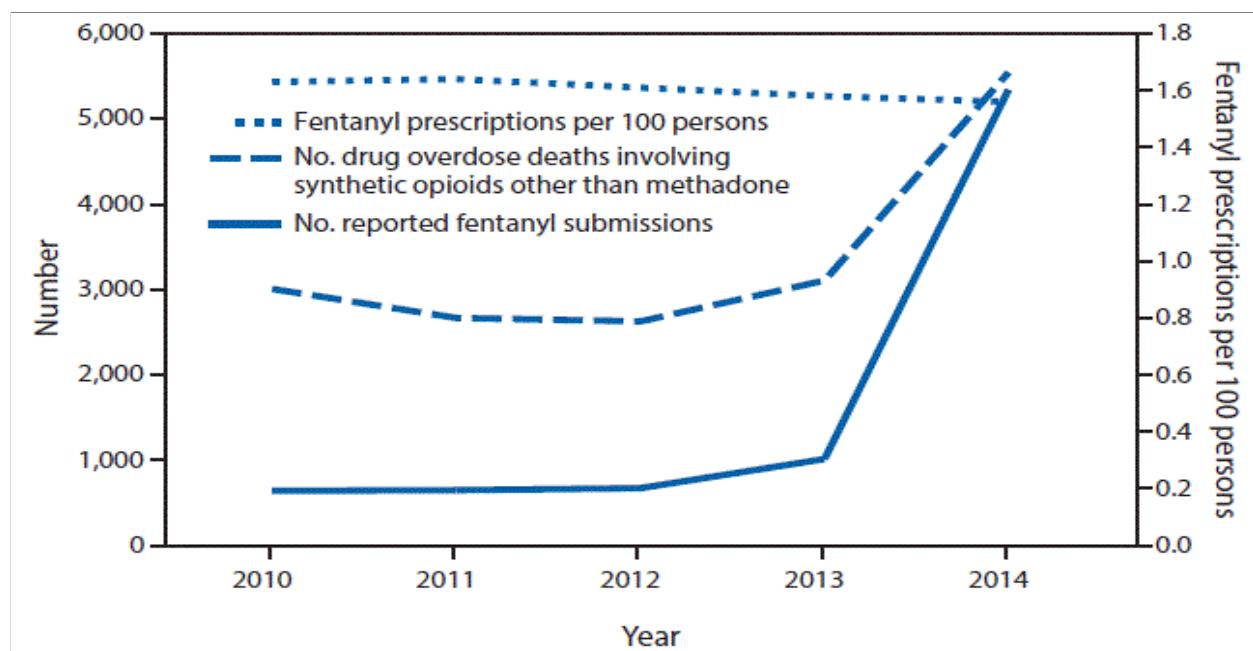
The elderly community is being prescribed at least 5 prescription drugs to be taken daily or more frequently, on average, as cited by many statistical reports and studies. Many of these are opioid drugs, which offer significant pain relief and offer support that mimics natural endorphins in pleasurable sensations. It is no wonder that people, especially elderly individuals, who generally have deteriorating neural systems and conscious decision-making ability, are become addicted to these drugs at an increasing rate. This rate is fueled in two parts: the increased prescription rate, and the increased ability for such drugs to cause addiction. Neither of these afflictions can be prevented by pharmaceutical companies working to gain a profit, but they significantly affect the elderly disproportionately. Fentanyl and other drugs are the most controversial of these reasons, where such chemicals can become attributed to unintentional overdosing without understanding the consequences.

Moreover, underdosing is primarily acting upon the elderly community. Multiple research studies and news reports have concluded that the deaths caused by underdosing are surging at likely a faster rate than overdosing, with a near 50% increase within the first half of 2017. These are also caused by opioid prescription drugs, specifically when such drugs cause mental deterioration to the extent that one cannot consciously identify or recognize the need to take drugs at a specific time. This has been scientifically and statistically shown to be because conscious ability overrides addictive reasoning in the primary wealth of instances, which causes underdosing to be skyrocketing in many cases given the added power of prescription opioid drugs.

In the teenage community, the forgetfulness of elderly people or mental instability of such afflictions is not tremendously existent, so the problem of underdosing is not particularly relevant to address in this community. However, the overdosing problem is major in this community, as access to drugs without understanding the full mental responsibility required in taking such prescription medications promotes ill decision-making, which can be overly dangerous when concerning artificial synthetic chemicals entering the body.

Several studies have approximated the teenage death rate as making up at least 25% of the average death rate from opioid drug dosage afflictions, specifically uncontrolled instability in overdosing. Some experts estimate the death rate of teenagers to constitute a full 50% of the total death rate. Such a small community making up a huge aspect of the overdose death rate shows the consequences of mental disability and immaturity in the decision making required to understand the effects of taking drugs. Opioid control is especially important here, where mental immaturity exists and cognitive reasoning is impaired due to youthfulness.

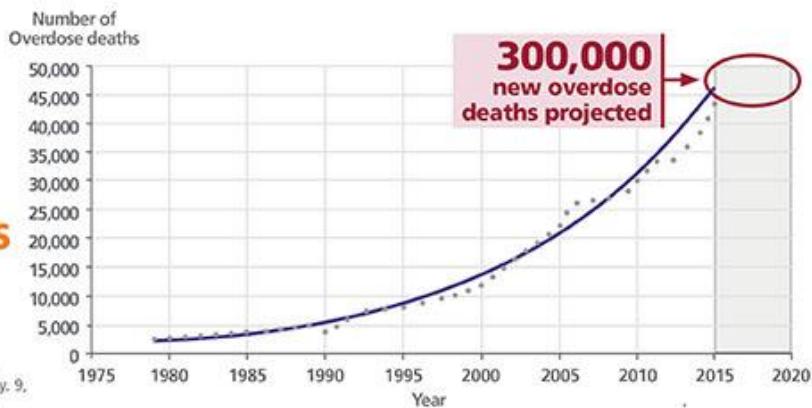
The underlying points discussed here point to the extensive need of consumer education and promoting better behavioral habits in taking drugs, specifically opioid chemicals. Nevertheless, the intervention of the community at the level of access to drugs is an important cause of drug dosage problems, and can help solve or inhibit the growth of these problems. Removing the accessibility of extra medication at any time would solve overdosing, and ensuring the proper amount of medication is taken at any time would inhibit the growth of underdosing in the elderly community, which would perform underdosing without consciously being aware of it occurring or being aware of its consequences.



Above depicts a nationwide statistical study's graphical results of the growth in overdose deaths, specifically targeting the prescription drug fentanyl, which has become overly prescribed and overly overdosed using.

Exponential Growth in Drug Overdose Deaths

Source: bioRxiv. Exponential growth of the USA overdose epidemic. Preprint first posted online May 9, 2017; doi: <http://dx.doi.org/10.1101/134403>. [PDF]

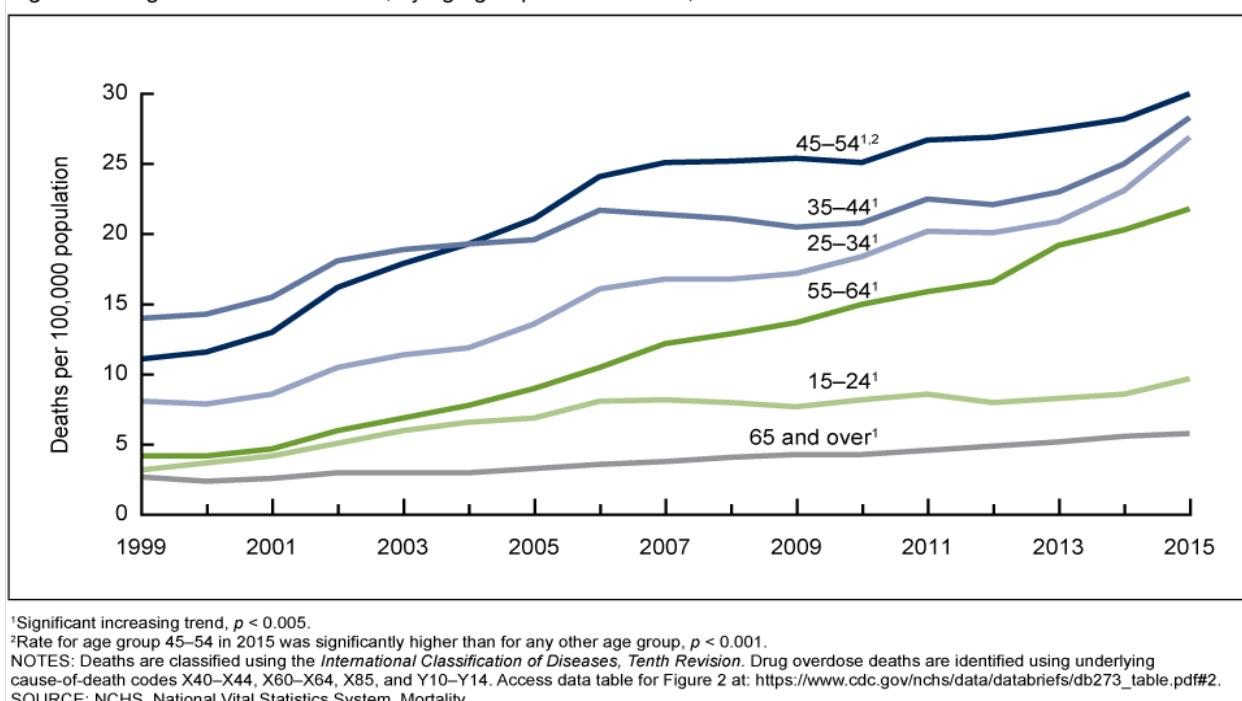


Above depicts a graph of the exponential growth in drug overdose deaths in America over the past several decades, showing the continuously increasing behavior and showing the statistical derivations of the projected overdose deaths in the future. This can be used in the development of the product, and as a marketing technique for consumers to empathize with our cause and feel the need to proactively act to counter this issue through investing in or buying from our company.

Market Segmentation

The market is segmented, as stated above, into two distinct classes. These are the teenage group, which primarily focuses with overdosing and uncontrolled or highly motivated access of medications, and the elderly group, which primarily focuses with underdosing due to a lack of mental acuity preventing one from fully understanding and comprehending when pills were or should be taken, but also concerns itself with overdosing in smaller proportions of the total problem of this community. All other individuals, including younger children, adolescents, and main sequence adults, can benefit from the product, but the target issues are exacerbated in these two specific market populations. Both can be addressed using the same product, but they tackle different issues at the majority of each community's level.

Figure 2. Drug overdose death rates, by age group: United States, 1999–2015



Above depicts a graph that represents the distribution of overdose deaths between the various age groups. Although the target age groups are near the bottom of the distribution when compared to all age groups, it must be noted that the size of these age groups also differs. When accounting for this discrepancy statistically, it turns out that these two age groups have the highest rates of overdosing per their own age group population, when compared to the other age groups in the community,

Marketing

Website Implementation

The website will serve three purposes: to sell the product, to educate the consumer on the target issues, and to host the bulk of marketing and research publication. Selling the product will occur through the E-Commerce platform programmed onto the company website. The purchase process is fully electronic, and purchases will be delivered to consumers through the physical mail, where shipping costs and product fees will be paid for by the consumer. Questions can be directed from consumers to the company email and/or its location.

Consumer education is a major issue for overdosing and underdosing in the teenage and elderly communities, so it is critical that the efficacy of this issue is targeted through the company. The company website will help address this issue through providing extensive resources and offering synopses on the product and how the target issue greatly impacts all communities in current society. Various interactive tools will be used, such as using educational resources for the more mature audience and using games or interactive activities for younger consumers to implement accessibility to.

The bulk of marketing and research publication will occur through the website. Through the research studies, sample surveys, and feasibility analyses of different versions of the product in the market, research will be collected for further development and tailoring of the company to fit the market better. Much of this research, excluding proprietary information, will be publicly available on the website. This will build consumer trust by giving the belief that the company is actively working to combat the target issues and make better versions of the product, and can help with

marketing in thus this way. Marketing will also occur through all advertisements and promotional material being created and accessible from this website. The website, especially this material, will be publicized and exposed to the community for spreading the word about the company and encouraging consumers to visit the company and its novel product, thereby helping with customer acquisition.

Competition

There are multiple competitors in this industry, especially with the development of novel pill dispensary technologies. Many companies are coming out with innovative technologies for pill bottles. Little to none of them, though, address the problem of underdosing as readily as this company does, and by combining underdosing with overdosing into a cumulative yet simple product, there is a selective advantage in favor of the Pill Server.

Competitors include companies like Timer Cap and Adhere Tech, which both attempt to innovate on the pill bottle technology by strengthening the material used for the pill bottle, and implementing a timer on the capsule of the pill bottle so that the consumer is alerted when to take their pills. Other competitors exist in the market offering similar approaches to the issue of overdosing.

However, we have a competitive advantage because of how we approach overdosing. We effectively completely limit access to pills at inappropriate times. By viewing the schemes used by these competitors, consumers are discouraged, not prevented, from taking extra or fewer pills at any time. By offering a preventive mechanism that overrides consumer volition, consumers cannot endanger themselves or people around them simply because it is impractical to take more pills than accessibly permitted.

In addition, underdosing is not solved by any of the competitors. By working to solve this problem and being able to incorporate this solution in harmony with the overdosing solution presented with the Pill Server, our company is selectively better at solving these dosage-related issues in a succinct yet highly functional device.

Pricing

The pricing of the product is determined based on the material and manufacturing costs evaluated for the product, and the analysis of labor and overhead charges. Factoring in a profit margin of approximately 80%, a final pricing quota is producible. The effective prices of the parts are described later in this Business Plan, but the final price comes out to approximately \$50, plus or minus \$5, excluding taxes and shipping. This is a significantly lower price compared to conventional companies marketing similar products, but the price is still significantly profitable for us. This is likely due to the innovative technology and programming algorithms implemented into the product, which save time and money but allow for greater efficiency in the scope of the product's functionality.

Advertising and Promotion

Advertising and promotional materials for the Pill Server company and its product will be primarily operated out of the online website, and disseminated through social media, video content software such as YouTube, and through word-of-mouth dissemination to spread the word about the product and company. During the start-up phase of the company, advisements, infographics, and baseline promotional materials, including digital advertisements, blog posts, and introductions to the team, were created and distributed throughout the local community of the team members and throughout portions of the local target community.

Advertising and promotion are critical to the success of this product and company against competitors and against the pharmaceutical industry. Through the creation of various advertisements and promotional materials in the future,

categorizing and publicizing the work being done in the company to innovate upon the product, the product will gain much more public support and will grow in exposure to the community.

Strategy and Implementation

The strategy of this company is to enter the market with a final prototype, following a comprehensive testing phase. Alongside entrance into the market will be extra research studies and testing statistical surveys to comprehensively determine the efficacy of the product. The product will be implemented through the E-Commerce portion of our website to be marketed, and the company will have its promotional material and advertisements disseminated and implemented through social media primarily during the initial stages, even though the product has already been created and the company has already started up.

Appendix

Product Cost Analysis

Using multiple sources and analysis of the parts, it is justified that the cost of all parts comes out to between \$10 and \$11. Considering manufacturing and labor costs, assuming overhead is reduced due to increased volume, the total cost of manufacturing totals \$16 to \$17, with an upper limit at \$18.50. Gaining at least 60% profit through selling at a \$50 price wholesale, and maintaining purchases without an intermediary since purchases occur directly through the E-Commerce platform, a \$50 sale price at wholesale would be significantly cheaper than conventional products of the same standard are sold at, yet we will still make a considerable profit margin as given by a margin between 64% to 65% based on the calculations performed in the cost and product analyses.

Sales Forecast

Although sales have not begun yet, sales are projected to grow exponentially in the beginning stages of entering the market, assuming that word-of-mouth and promotional exposure occurs proportionate to the number of people aware of the product, and assuming that the rate of drug dosage overdoses and underdoses is evenly distributed throughout the community geographically and socially.

Milestones

The three main objective milestones are to: create a final prototype and marketable design; design the company website and automate all processes to the highest extent, with little to no need for management or oversight; and perform and collect considerable data during the testing phase and in independently-performed research studies scoping the target issues. These three milestones were described above, and were presented as goals using the SMART outline, in order to improve the process of outlining the objectives and demonstrating goal progress using this as a basis.

Miscellaneous Documents

For further information, see the documents uploaded to the website, whose link is given on the title page of this Business Plan. Other business documents, containing confidential proprietary information, are found on the secured drive storage area for the company documents and forms.

Bibliography

Note that both images and statistics/factually-cited information or data in this document are cited from these sources.

1. Altimari, Dave. "Fentanyl Fueling Connecticut's Overdose Crisis." *Hartford Courant*. Hartford Courant, 24 Feb. 2017. Web.
2. Chau, Diane. "Opiates and Elderly: Use and Side Effects." *Clinical Interventions in Aging* Volume 3 (2008): 27378. Web.
3. Drugs.com. "Fentanyl Injection." *Drugs.com*. Drugs.com, 3 Jan. 2018. Web.
4. Esposito, Lisa. "Silent Epidemic: Seniors and Addiction." *U.S. News*. U.S. News, 2 Dec. 2015. Web.
5. Falbo-Sosnovich, Jean. "Heroin, opiate use soars in Valley, Greater New Haven as part of epidemic across Connecticut." *New Haven Register*. Hearst Media Services Connecticut, LLC., 12 May 2014. Web.
6. Goslee, Kaitlin. "News study revealing the opioid crisis impact in northwest CT." *Fox61*. WTIC, 16 Aug. 2017. Web.
7. Harmon, Katherine. "Prescription Drug Deaths Increase Dramatically." *Scientific American*. Scientific American, 6 Apr. 2010. Web.

8. Lowry, Fran. "Prescription Opioid Abuse in the Elderly an Urgent Concern." *Medscape*. WebMD LLC., 13 Dec. 2012. Web.
9. McDonald, Elyse. "CT opioid crisis more deadly than guns, auto accidents combined." *Viewpoints: Perspectives on Connecticut*. CT Mirror, 23 June 2017. Web.
10. MD Magazine. "How Many Pills Do Your Elderly Patients Take Each Day?" *MD Magazine*. MD Magazine, 4 Oct. 2010. Web.
11. National Institute on Drug Abuse. "Opioid Overdose Crisis." *NIDA*. National Institute of Health, Jan. 2018. Web.
12. Newkirk, Vann R. "What Can't Medical Marijuana Do?" *The Atlantic*. The Atlantic Monthly Group, 18 July 2016. Web.
13. Odhayani, Abdulaziz Al et al. "Potentially Inappropriate Medications Prescribed for Elderly Patients through Family Physicians." *Saudi Journal of Biological Sciences* 24.1 (2017): 200-07. Web.
14. Park, Alice. "Narcan Is Now Sold at Walgreens. What's That?" *Time*. Time Inc., 26 Oct. 2017. Web.
15. Pierce, Kent. "Statistics show drug crisis worsening with Connecticut overdoses above national average." *WTNH News 8*. NexStar Broadcasting Inc., 11 Aug. 2017. Web.
16. Psychology Today. "Elderly Persons Disorders Psychiatrists in New Haven, CT." *Psychology Today Treatment Centers*. Sussex Directors, Inc., 2018. Web.
17. ---. "Elderly Persons Disorders Treatment Centers in Connecticut." *Psychology Today Treatment Centers*. Sussex Directors, Inc., 2018. Web.
18. Rondinone, Nicholas. "CDC: Connecticut Second In Percent Increase Of Synthetic Opioid Deaths Rate." *Hartford Courant*. Hartford Courant, 6 Jan. 2017. Web.
19. ---. "Opioid Crisis Continuing As Overdose Deaths Jump 25 Percent In 2016." *Hartford Courant*. Hartford Courant, 23 Feb. 2017. Web.
20. Schott, Paul. "New Haven sues Purdue Pharma, others over opioid crisis." *New Haven Register*. Hearst Media Services Connecticut, LLC., 7 Nov. 2017. Web.
21. Scinto, Rich. "17 New Haven Residents Died Of Overdoses In First Half Of 2017." *Patch.com*. Patch Media, 4 Sept. 2017. Web.
22. ---. "44 New Haven Residents Died of Overdose Deaths in 2016." *Patch.com*. Patch Media, 4 Mar. 2017. Web.
23. ---. "CT On Pace For 1,000+ Overdose Deaths In 2017." *Patch.com*. Patch Media, 28 Aug. 2017. Web.
24. ---. "CT Opioid Crisis 2017: Interactive Map of Deaths by Town." *Patch.com*. Patch Media, 1 Sept. 2017. Web.
25. The Fault Lines Digital Team. "Doctor: Seniors Have 'highest Rate of Drug Overdose Death'." *Al Jazeera America*. Al Jazeera, 26 Aug. 2015. Web.
26. Von Moltke, Lisa L. et al. "Cognitive Toxicity of Drugs Used in the Elderly." *Dialogues in Clinical Neuroscience* 3.3 (2001): 181–190. Print.
27. Walton, Alice G. "Why Fentanyl is So Much More Deadly Than Heroin." *Forbes*. Forbes Media LLC., 24 Jan. 2018. Web.

