

Medication Management Platform for Mobile Devices



Omri Shor
CEO & Co-Founder

About MediSafe

MediSafe is the leading medication management platform – connecting patients and health providers to improve health outcomes and better understand how people take medication. Inspired by the accidental insulin overdose of its co-founders' father, MediSafe's intuitive, singularly designed mobile app – now the most downloaded and highest rated in its category – was first to sync medication reminders between devices of families and caregivers. The MediSafe platform now includes web and SMS sync via branded solutions with pharmaceutical companies, HMOs, pharmacies, electronic medical/health records companies (EMR, EHR) and more. MediSafe also aggregates anonymous patient behavior data for pharmaceutical and healthcare companies, serving as a bridge between patients and health providers, improving health outcomes while benefiting all stakeholders across the healthcare ecosystem. MediSafe's App can be downloaded from both Google Play and iTunes.

Interview conducted by: Lynn Fosse, Senior Editor, CEOCFO Magazine

CEOCFO: Mr. Shor, what is the concept at MediSafe?

Mr. Shor: At MediSafe, we are creating a medication management platform. The platform will have the ability to connect to the healthcare system to receive medication prescriptions that will automatically show in our platform. On the consumer side, we have a series of apps for iPhone, Android, a web app and text that help patients manage their medications correctly by reminding them, keeping a log and sharing with family members.

CEOCFO: There are similar concepts. What do you understand about the whole process that makes MediSafe the best way to go? What have you figured out that maybe perhaps others have not?

Mr. Shor: When we first developed MediSafe, we started understanding how we wanted the interaction between patients and their medications to occur. From the start, we focused on a unique user experience that looks like a pillbox with four quadrants, divided into morning, noon, afternoon and night. It is visual and engaging for patients. On the other hand, we have one very important piece of the puzzle: MediSafe was the first company to help patients engage with their family members. For example, if my wife forgot to take her medication or a vitamin and I am her assigned Med-Friend, I would receive a notification that would urge me to intervene. MediSafe has grown to become a medication management platform that can connect you to your loved ones.

CEOCFO: How would a patient use the platform?

Mr. Shor: Let's assume that the patient is a consumer or any of the other players in the ecosystem. The consumer can download our solution from Google Play or the iTunes App Store and enter their medication. Once downloaded, users are prompted to enter their medications according to name, color, size, and shape. Then, there would be a reminder and we would connect the user to family members. In case of non-consumption, they users' family members would be notified. The next step is actually to connect the user to their healthcare professional. There are some healthcare providers that are beginning to work with us in the next quarter.

CEOCFO: For people who are annoyed at having to take the medications anyway, why are they willing to use the app and enter the fact that they have taken it? What is the psychology behind the plan?

Mr. Shor: Initially, we discussed this issue. Up until now, MediSafe is the number one rated medication management platform on Google Play. We have more than 39,500 people who reviewed us and gave us on average a rating of 4.5 out of 5. MediSafe is a great way to keep track of your medication without having to manually manage a pillbox. This is what people are looking for; they are looking for a solution that can remind them on time in order to help them keep track of their medications. Today, I can tell you that there are at least 950,000 people who are looking for this solution. We believe that many millions are in need of a solution like ours.

CEOCFO: Your website indicates, “By applying technological behavioral tools, MediSafe project learns about patients’ individual barriers to medication compliance within the context of their conditions.” How is this accomplished?

Mr. Shor: Next week, will be a very important week for us. Next week, on September 24th, we will be celebrating the first anniversary of when we received external funding for the company. On September 24, we will launch a new feature. This feature will be the first one that will differentiate MediSafe from any other solutions on the market. We are creating a contextualized personalized feed, and this is technologically quite difficult to do. We understand that the patient is taking glucose, for instance, which is a drug to reduce her blood glucose level, or sugar. When we recognize that medication, we understand that the patient is diabetic, and then we start engaging with them automatically.

We understand that she probably needs a reminder, and we need to connect her to her family and friends. From that, we provide her with positive reinforcement, such as “good job, you are taking your medication 98% on time of the medication that you are supposed to take!” We then provide the user with relevant content. Why are you taking glucose? What is diabetes? Should you exercise? How much should you exercise? What should you eat and what should you not eat? Overall, what we are doing for our users is creating specific and tailored user experience based on algorithms that we have developed. These proprietary algorithms apply different methods of patient engagement in order to see what works for each patient - pushing more of that as opposed to what is not working. You can think of it as somewhere between Facebook (feed) and Google Now (contextual) meeting the healthcare industry.

Overall, what we are doing with our users is creating specific and tailored algorithms that we have developed. These algorithms are proprietary and apply different methods of patient engagement in order to see what works for each patient - pushing more of that as opposed to what is not working. You can think of it as somewhere between Facebook or Google Now meeting the healthcare industry.

“We believe that the healthcare system should be better managed on both the provider and the consumer side. There are two sides to the equation, and they should be synced and connected. One of the biggest common denominators between those two parties is actually the medication, and MediSafe is the company that connects these two parties.” - Omri Shor

CEOCFO: What does a patient need to do to indicate they have taken a medication?

Mr. Shor: When it is time for a patient to take their medication, they see the list of their medications. What we are told from many people, including my father, which I would be happy to tell you about, is that they have all their medication organized next to the app, and then they mark that they took the green one, the orange one and the oval white one. They mark it within MediSafe, so this is one option. The second option is to shake the phone. We call this ‘shake to take’, meaning users can simply shake their mobile device and it registers within the phone that their medication has been consumed. MediSafe is the first company in the industry to release a smart watch solution. When the patient is taking their medication, they have the ability either to mark it on his smart watch or to shake his hand twice to mark his medication as taken.

CEOCFO: Would you tell us about the other stakeholders such as the family, the doctors, and whoever else could be involved?

Mr. Shor: Our story began about two and a half years ago. My father is diabetic and injects insulin five times a day. On a Friday afternoon, he came to me with the simple question, “Did you see me inject my insulin today?” My answer to that was one word: “no.” I meant, no I did not see you dad, but he misinterpreted this as no, as he did not inject it. He went to the bathroom and mistakenly injected a second dose of insulin. We caught it on time and it was our luck because we avoided a fatality. We started thinking about the fact that people do not really have a solution to managing their medications correctly. They do have solutions, but for some reason many people do not download and use them properly. This is the main reason that users have not adopted these solutions because they lack a good user experience. The second question was, “Why do insurance providers, pharma companies, personal physicians or diabetes coaches not have good solutions that they could recommend to them?” This is how we started MediSafe; we wanted to solve our personal problem. The first and most important stakeholder for us is the family member. If my wife does not take her birth control pill, an hour later I am notified about it with three calls to action buttons. The first one is the ability to call her, the second one is to text her, and the third one is to e-mail her. Those notifications are truly helpful for people who take many medications, and it is even more helpful for family members or loved ones who are managing these medications on their behalf.

We have heard from many patients that their family physician or nurse recommended MediSafe to them. We believe that as time passes the solution becomes personalized and even better. It allows the patients to report back to the healthcare system and back to the nurse or physician. We will see more and more healthcare professionals recommending MediSafe to their patients.

CEOCFO: What is the business model?

Mr. Shor: Mismanagement of medication is one of the biggest problems of the healthcare system today. Seven hundred thousand people a year suffer emergencies, and according to the hospital, it is because they do not take their medications correctly. According to a report issued by the U.S. Congress, it costs the U.S. healthcare system \$290 billion a year that they could definitely use to build new hospitals. Pharmaceutical companies, on the other hand, lose potential revenue of hundreds of billions as well due to poor adherence rates. In the strategic lesson, these are the incentives. The way that we do business today is we work with pharmaceutical companies to solve one of the biggest problems of consumption or taking the medication, which is not adhering. They are aware of this problem and they are willing to cooperate with us to make sure that we put MediSafe in the hands of their consumers and help them manage their medications correctly.

CEOCFO: *Is there a particular demographic that tends to use MediSafe more than others?*

Mr. Shor: When we started MediSafe, we thought it would be most popular with individuals in their 50s or 60s. As time passed, we understood that this is not the case. Individuals that are 35 to 55 are the ones that are using the platform the most - with about 60 percent female users. We see the women in the household taking a role of chief medical officers. They usually make sure that their husbands and children are on track with taking their medication properly. Therefore, they are a main demographic for MediSafe's target audience. We also did research on what are the most common conditions for people with MediSafe, and that was fascinating. We have encountered many mental problems, and we saw many pain and anti-inflammatory issues for people who use MediSafe. There are also users suffering from diabetes. On the other hand, many people also use MediSafe for vitamins and supplements, which is opposite from vital health prescriptions.

CEOCFO: *Doctors are becoming more proactive in when you should take your medication and why you should take it at a certain time, which seems to make it more complicated. Do you see that across the board and as a contributing factor to using MediSafe?*

Mr. Shor: I think that the most complicated regiment is actually twice a week. As a certain part of your routine, that is even more complicated. We see many medications today moving from being once a day to once a week. Physicians want to make life easier for their patients, but as consumption has become easier, making sure that you are actually taking it on Sunday mornings or Saturday mornings becomes a real issue. This is where MediSafe is truly helpful to patients. Within MediSafe, we have seen specific self-injection medicine that people need to inject every two weeks. How can someone remember to inject the medication once every two weeks? It is very difficult to remember when you do not have any routine. On the other hand, many mental medications that are taken two or three times a day, pain management is being taken five or six hours, which is again very complicated for people to manage. We deal with all of those conditions, and moving forward we have actually better understanding of how it should be taken. One example I can give you is birth control pills. Just about a month and a half ago, we have launched a new feature that supports birth control pill medications. When users enter the name of the medicine, it gives you choices as to how many days should you take it and then how many days you are not taking it or taking a placebo. This is extremely helpful when someone is taking Yaz, which is the most common birth control pill, and they are told that they can take Yaz 24 plus three or 21 plus seven. Users choose which cycle is appropriate based on their medications. After inputting the correct cycle, MediSafe will remind you when to start and stop taking the pills.

CEOCFO: *Do you anticipate a day when MediSafe will be standard and people will just be automatically using your system?*

Mr. Shor: One example is a very well known CEO in the pharmaceutical industry. I met with him and his management team to introduce MediSafe to them. I showed them how on the pillbox we could put the QR code so that when people scan it, the whole process happens uniformly. It downloads MediSafe and it provides accurate reminders. This person actually put his hands on the table and said this is the future, and in three or four years, every medicine would come with this feature. We should lead the market, and we should be the first to adopt this technology. I definitely agree with him. I believe there will be a day, in three to five years that people will manage their medications using the smartphone, and we hope that MediSafe will be the preferred choice. One example I can give you is that we usually ask people how many phone numbers they remember. Ten years ago, I would remember all of my friends' phone numbers, but today we have delegated all of those numbers to our smartphone, and shared it with Google Contacts and it keeps track of everything. I believe that in the future, that we will not remember to take our medication. We will rely on our smartphone to organize this information and notify us when necessary.

CEOCFO: *Put it all together for our readers. Why pay attention to MediSafe today?*

Mr. Shor: We believe that the healthcare system should be better managed on both the provider and the consumer side. There are two sides to the equation, and they should be synced and connected. One of the biggest common denominators between those two parties is actually the medication, and MediSafe is the company that connects these two parties. We are starting with that in the future, we aim to provide support to whatever our consumers and our customers seek in a product. Eventually, we hope to create a better healthcare system for the benefit of consumers in the healthcare industry and all the other players on the ecosystem.

BIO: Omri 'Bob' Shor is co-founder and CEO of MediSafe, an award winning, data-driven Medication Management Platform, designed to understand the personal causes of non-adherence and to use this information in real time to create better patient engagement and raise medication adherence.

Inspired to create MediSafe with his brother after their diabetic father accidentally double-dosed on insulin, Shor drew on his considerable entrepreneurship experience to successfully develop and bring the product to market in less than one year. MediSafe continues to receive support from the Microsoft Accelerator for Windows Azure, after graduating its inaugural program for early stage, mobile & cloud-based startups.

Previously, Shor served as a marketing and product manager for legal app developer Masadit Software, where he increased the company's roster from eight to 2,000 clients, enabling it to reach sustainable profitability. Prior to that, he managed a department of twenty-five salespeople for Yedioth Ahronoth, Israel's most widely circulated newspaper.

Since 2012, Shor has been a leader of *Entrepreneurs in Jeans*, a Boston-sponsored organization promoting the entrepreneurial scene in his hometown of Haifa, Israel. He has served in the Israel Defense Forces, where he commanded a paratroopers' unit.

Shor received an MBA in Entrepreneurship & Strategy, cum laude, from The College of Management - Academic Studies (COMAS) in Rishon LeZion, Israel. He lives in Haifa with his wife and two children.

MediSafe
Sha'ar Palmer 1, Haifa, Israel
www.MediSafeproject.com