

## Harnessing the Awesome Power of Artificial Intelligence to Improve Lives:

### **Well-Beat Israel**

atients suffering from chronic conditions are prescribed an elaborate and sometimes extensive regimen of treatment involving medication, therapies and wellness practices in order to help them make speedy improvement. While many patients adhere to their doctors' advice, there are a great many patients who do not take their care giver's advice, sometimes even without understanding the real reason behind the behavior itself. The reasons for such noncompliance could be many; lack of awareness, lack of understanding, skepticism, distrust, self-image or just plain arrogance. Whatever the reasons, it is the patients that suffer in the end and return for another round of diagnosis and treatment, thereby giving rise to complications that are both unnecessary and completely avoidable.

A company named Well-Beat has come up with an innovative technique to make sure that more chronically ill patients commit to a prescribed course of treatment for a significant improvement in health. Founded in Israel by a group of seasoned executives, Well-Beat harnesses the dynamic capabilities of Artificial Intelligence (AI) and Machine Learning (ML) to discern what drives certain people to act the way they do and how providers can address and harness these drivers. The heart of the solutions provided by the company lies in a thorough understanding of the motivations for behavior.

The company has developed a platform that allows caregivers to figure out the nature of their patients and come up with ways and means of encouraging them towards greater involvement in the recovery. The company's Bar-Pro toolbar assesses various parameters about the patient's profile and displays to the caregiver, at a glance, the patient status, level of readiness for change, appropriate communication style and provides the therapists practical, actionable guidance on how to motivate each patient. By using the recommendation

system, the therapists alter their approach, narrative, and content of communication to suit each patient's profile and actual behavior. The result is a more accurate and personalized therapist-patient dialogue. The recommendations focus on better communications and changing behavior over time without changing the clinical program and without adding human sources.

Additionally, each patient receives direct, personalized digital messages according to his or her profile and conduct. Furthermore, patients who adhere to the regimen are reinforced by messages tailored to their drivers, barriers, etc. to bolster their resolve and the ones who were not following the regimen received tailored messages which stimulate and motivate them into action. Another Well-Beat recommendation engine defines what materials are relevant to each patient according to their mental ability to process the information. Where appropriate, a third recommendation engine is activated which strengthens engagement using digital means used by the healthcare provider, such as BOT. What Well-Beat's path-breaking innovation does, in essence, is to help patients and caregivers identify and surmount the root cause of the patient's reluctance to adhere. The platform nurtures the relationship between care providers and chronically ill patients throughout the course of recovery. This improves the standard of care, patient satisfaction, engagement, and overall adherence.

Analyzing a person's behavior is a daunting challenge. Doing so for hundreds of patients on a regular basis to customize treatments would seem next to impossible. Well-Beat has managed to accomplish what was previously thought to be impossible through various advancements in AI and ML. The company's platform is powered by

a machine learning-based algorithm that accepts behavioral data according to several parameters and churns out tantalizing insights that enable a therapist to determine a patient's deeply held reservations about therapeutic processes, and later on. circumvent them.

What's amazing about Well-Beat's platform is its flexibility and simplicity. The built-in recommendation and talking points system helps the therapists adjust the approach, narrative, and content of communication to suit both the patient's profile and to his or her actual behavior. By doing so, each therapist, regardless of his prior training, can create a conversation that is tailored to each patient and motivates them to action. This helps in building the rapport between a patient and a new therapist, establishing a conducive working relationship.

A vast country like the United States, with a population of about 320 million, has emerged as a promising market for Well-Beat's services. According to some of the latest research, the healthcare industry in the United States, which is one of the most expensive in the world suffers loses that amount to an astounding \$637 billion each year because of the non-adherence of patients. The extent of non-adherence is mindbogglingly high; between fifty and sixty-seven percent. Well-Beat's groundbreaking innovation could go on to save a staggering \$300 billion loss incurred by the US healthcare system, something which is completely avoidable.

Well-Beat has successfully conducted tests of its platform in collaboration with the renowned Sheba Rehabilitation Centre, which happens to be one of Israel's most famous medical institutions and one of the top 10 hospitals in the world. When the platform was utilized to treat recovering patients at the rehabilitation center, it was

observed that their adherence to the prescribed course of treatment shot up by about 225% over a period of four months, without extra personnel or resources. What's more, is that the employees of the Sheba Rehabilitation Centre who participated in the study really loved using the Well-Beat platform. Its interface was well received and therapists who were assigned a new patient on short notice had no trouble catching up to the patient behavior thus far.

The fact that Well-Beat was able to improve the lives of numerous patients with nothing but the integration of Well-Beat's tools into existing systems and procedures stands as a testament to the pioneering vision and dedication of its founders.

Well-Beat was chosen to be part of the Upward Lab at Hartford, USA, that applies Well-Beat technology to the Aged Care sector, through a leading pilot program that maximizes Well-Beat potential to effect real change.

Well-Beat was Co-Founded in 2015, by Keren Aharon the CSO, David Voschina CTO and Ravit Ram Bar-Dea who also serves as the CEO. The three bring over 60 years of combined experience in all aspects of Well-Beat's business.

Recently commercialized, Well-Beat has signed contracts with Novolog healthcare group, the company also won an Israeli Ministry of health tender worth USD 2.8m and will go live at the end of the year on a pilot with Israeli HMO. Well-Beat raised a total investment of around USD 1.8m in government grant from the

Israel Innovation Authority, angel investors and Novolog healthcare group. Well-Beat is now raising an additional 2m USD (on the basis of a pre-money valuation of USD 6M).

# Testimonials: Elevating Client Relationship

#### Binnfeld Freya - Certified Nurse, Cardiac Prevention and Rehabilitation Institute

"By having a personal communication that fits to individual needs and sensitivities of each patient engages them and helps them persevere and continue the exercise regime. A system such a Well-Beat that identifies the patient's profile is essential and I was happy to be part of this."

#### Yeshayahu Shoshana - Exercise Physiology, Cardiac Prevention, and Rehabilitation Institute

"By using the Well-Beat system, I can see how to better communicate with a patient and not let anyone fall through the cracks. When a patient with low self-esteem pops up on the toolbar, I know I can improve his feelings and make him see that he is capable of succeeding in his rehabilitation. I quickly found that it was very simple to use and I heartily recommend it."

#### Prof. Klempfner Robert, MD – Director of Cardiac Prevention and Rehabilitation Institute, Sheba Medical Center

"I was pleasantly surprised by the rapid uptake of the system by both patients and our healthcare team. It was very easy to use. It was not intrusive. Patients saw real interest into what really makes them up. The team has insight into elements that were not there before."

"Our mission forward is to fundamentally improve chronic patient wellness and health regimens and build the Well-Beat brand on a global scale."