

Already 1,500 pocovid patients have benefited from the treatment of depression with our VR - Paweł Pasternak (VR TierOne)

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Hospital in Głucholazy in Silesia, and in it those who suffered the most severe COVID. What does a startup with a virtual reality product do here? Heals effectively!

VR is not only a gadget that allows you to enter the world of your favorite game more forcefully, but it is also a tool that already allows you to remotely train in the use of complex devices, and has already had numerous successes in medicine. As Wojciech Kreft, co-creator of Therapy VR, told on our website, transferring the patient to virtual reality [gives great results in the treatment of anxiety and phobias](#) , in reducing pain and increases the effectiveness of physiotherapy.

Paweł Pasternak's startup, VR TierOne, has created a product that uses virtual reality to treat patients with depression. It is another proof that VR is widely used.

However, it must be said that Paweł Pasternak's VR solutions were not intended to serve patients from the beginning, and the decision to change the path of action was determined by a chance meeting. The product was created with computer games in mind, Paweł already had talks with companies in this field, but it was then that he met his friend from school, professor Joanna Szczepańska-Gieracha, who worked for many years in hospital neurological wards. When he told her about the capabilities of the product his company creates, she immediately said that this is what patients need. And that's how it all started. Paweł Pasternak will tell you about how it went.

Who is VR TierOne and how did you build the team?

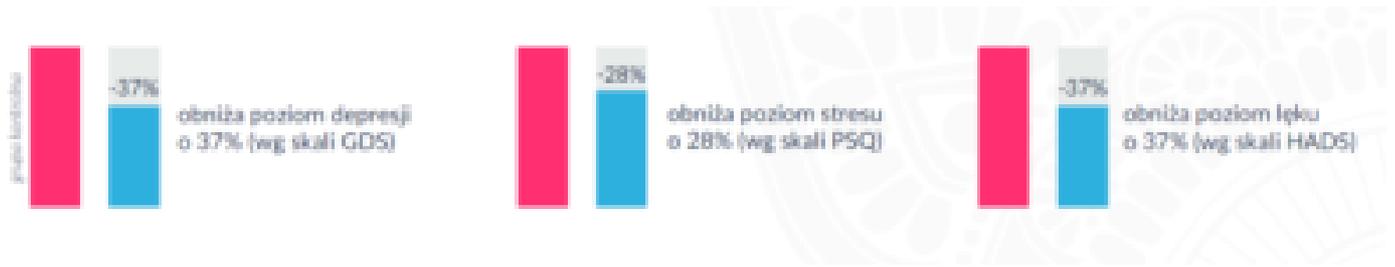
Some of the people involved in the project are employees and partners of my first company, Stolgraf. We are talking about system architecture, IT, engineering and legal work. Scientists, garden therapists and music therapists were selected in such a way that each of them contributed a therapeutic element. Their contact with psychotherapy was important. They understood and had the belief and knowledge that there is a huge connection between the mental state of the patient and his possibility of effective rehabilitation. This was the only way to create a tool containing elements of real psychotherapy.

What does the patient experience when putting on glasses with your soft?

VR TierOne is a therapeutic story. It begins with a visit to a garden that has been damaged, which is a metaphor for the patient's state of health. During the following sessions, various tasks appear, the completion of which results in the garden gradually transforming into a colorful, friendly place, full of lush vegetation, birds and the ubiquitous soothing and supportive music. The patient already knows that everything is possible. Yes, it takes effort and time, but it is doable. So was his recovery.

Why is it possible to get out of depression more effectively by immersing a patient in VR?

Immersion in VR or - technically speaking - the phenomenon of total immersion, is a process in which we literally take the patient into the world created by us. By using VR technology, we deprive him of contact with the environment, often not very friendly, and we start stimulating in a manner controlled by us. The therapist's voice transmits messages with the appropriate intonation, at a certain pace, releasing the patient's sense of agency and strengthening his motivation. The conditions prepared in such a way definitely increase the therapeutic effectiveness. It is also worth adding, because in my opinion it is important that the therapy itself is extremely pleasant.



The effects of VR TierOne, source: VR TierOne press materials.

A public facility, the hospital of the Ministry of Interior and Administration in Głucholazy, uses VR TierOne in the treatment of postviral patients. 1,500 people have already used the device, what are the effects of the therapy?

People who go to the Ministry of Interior and Administration in Głucholazy for the postviral ward are patients with changes left behind after a covid-19-related disease. Many of them require emotional support because they have experienced anxiety, chronic stress or depressive episodes. They undergo the entire rehabilitation process on the spot. One of its elements is the VR TierOne therapeutic solution. We do not have personalized data on the effects of treatment, but the best proof of the effectiveness of our system is the fact that the hospital purchased the second equipment because there was such a demand and such a positive reception.

| Stan psychofizyczny | Postęp badań | Miejsce badań |
|---|--------------|---|
| Depresja, lęk, stres u pacjentów z chorobą płuc w rehabilitacji pulmonologicznej | 100% | SPSOZ Szpital Specjalistyczny MSWiA im. św. Jana Pawła II ul. M. Karłowicza 40 48-340 Głucholazy, Polska |
| Depresja, lęk, stres u kobiet 60+ w terapii depresji wieku podeszłego | 100% | Fundacja Aktywności Seniorów „Stęży Dym” ul. Kazimierza Jagiellończyka 8c 50-240 Wrocław, Polska |
| Depresja, lęk, stres u pacjentów z chorobą wieńcową w rehabilitacji kardiologicznej | 100% | Centrum Kardiologiczne „Pro Corde” Sp. z o.o. ul. Nowosielska 64-66/1A 50-385 Wrocław, Polska |
| Depresja, lęk, ból u pacjentów po udarze mózgu w rehabilitacji poudarowej | 100% | SPSOZ „Repty” Górnolęski Centrum Rehabilitacji im. gen. Józefa Dąbka ul. Śniadeckiego 1 42-604 Tomaszów Górny, Polska |
| Depresja, lęk, stres u pacjentek z rakiem piersi w rehabilitacji onkologicznej | 100% | Dołholęskie Centrum Onkologii Centrum Chorób Piersi Breast Unit pl. Hirsfelda 12 50-40 Wrocław, Polska |
| Depresja, lęk, stres u pacjentów po COVID 19 w rehabilitacji odciskowej | 20% | SPSOZ Szpital Specjalistyczny MSWiA im. św. Jana Pawła II ul. M. Karłowicza 40 48-340 Głucholazy, Polska |
| Depresja i lęk u osób po 60 roku życia w terapii objawów depresji | 20% | Fundacja Aktywności Seniorów „Stęży Dym” ul. Kazimierza Jagiellończyka 8c 50-240 Wrocław, Polska |

VR TierOne impact studies are carried out on various groups of patients. Source: [VR TierOne](#).

How did you establish cooperation with the hospital in Głucholazy?

We were ready for sale at the time of the pandemic. I don't need to remind you what reality was like then. The priorities of medical facilities have changed in an instant. Supporting patients in the rehabilitation process has gone a long way. We used this time to establish contacts with various foundations, non-governmental organizations and other partners in order to promote the idea of our solution. We used videoconferences for presentations, lectures and ordinary meetings.

After some time, it turned out that there are patients who, as a consequence of a severe covid transition, have neurological changes that require support. It was then that in Głucholazy, the first postovid department in Poland was established under the leadership of prof. The little one. It was his openness that allowed the test to be carried out in this department. Previously, we did research in the pulmonary department of this hospital. As they were positive, we came to the conclusion that it is worth using VR TierOne to help other patients. And that's how it started ...

How do you finance your project and what are your plans in this regard for the next 12 months?

The project was co-financed by the National Center for Research and Development. It ended in June 2021. We finance the rest from our own resources. We have started the commercialization process, which I hope will finance further stages of development.

The VR market is developing very dynamically (e.g. [Facebook data](#) shows that between January 2019 and December 2020, the frequency of searching for AR and VR-related content on the portal increased by 44%) - you agree with this thesis, you feel, that you have a door to success wide open in front of you?

Undoubtedly, VR is a technology that is developing very quickly. I think that the dynamics will increase even more due to the metaverse. In my opinion, the number of owners of VR glasses will increase rapidly, which will make this technology common.

At VR TierOne, we are at the beginning of the commercialization process. We have already completed a few implementations, a dozen more ahead of us. The idea we propagate becomes more and more understandable. The VR TierOne solution is gaining more and more recognition. Of course, the problem for hospitals is money and the tedious process of obtaining it. Decision-makers in medical facilities write applications, applying for funds also for our equipment, but unfortunately the entire process is long. [After the experience on the Polish market, we have ideas for leaving the country, scaling the process to foreign markets.](#) The first talks are underway.

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After the pandemic, the interest in the field of telemedicine among companies declined significantly, and the focus was shifted to solutions for hospitals, mainly cardiology, neurology and oncology. Such conclusions are provided by the report "[Top Disruptors in Healthcare 2022](#)", prepared by the Polish Federation of Hospitals. The document also shows that startups are more interested in cooperation with medical institutions than with investors.

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