



CoWin.

Where autonomy and safety come together.

A theoretical foundation for how CoWin enhances both autonomy and safety in a clinical setting.

RECONNECT

Human touch.
In every interaction.

Introduction

Staff working in departments with patients suffering from severe psychiatric issues often have to decide quickly whether coercive measures are necessary. Various factors play a role in these decisions, such as the availability of colleagues and knowledge of alternative and preventive interventions ^[1].

Recornect was founded in 2013, integrating technology to improve the quality of care for individuals with severe psychiatric disorders. The innovation emerged during a period when the use of restrictive measures in the Netherlands was increasingly under scrutiny. Internationally, it was noted that the application of coercive interventions in the Netherlands led to more isolation compared to other countries ^[1]. In some European nations, the practice of seclusion, as it was applied in the Netherlands, had already been legally banned for years ^[2]. In response, efforts were made in the Netherlands to reduce the number of seclusions, such as the introduction of comfort rooms, crisis plans, and intensive care units ^[3]. Additionally, there was more emphasis on reducing the duration of seclusion when it was deemed necessary.

Now, ten years later, and after much international collaboration, we see that significant changes have occurred. A clear cultural shift has taken place, with more focus on preventive and recovery-oriented care. Almost everyone now acknowledges that seclusion should be the last and least desired intervention, and that it should be as brief as possible.

Although mental healthcare has made positive strides, external challenges are also changing. In every country where we operate, we hear that the pressure on mental health services is increasing — a trend exacerbated by the COVID-19 pandemic. The prevalence of mental health problems continues to grow ^[4], and the associated costs are placing increasing pressure on economies around the world ^[5]. As a result, efficiency, digitalization, and maintaining care quality are becoming ever more crucial topics.

This whitepaper explains how CoWin improves care quality and outcomes and provides the theoretical framework underpinning our approach and innovation.

**Clinical experience
and expertise**

**Self-determination
theory**

Empowerment

Clinical experience & expertise

Reconnect is designed with both professionals and patients in mind, with the goal of improving care for individuals with severe psychiatric disorders. With years of experience in forensic psychiatry, we understand firsthand the feeling of helplessness and insecurity that can arise during crisis situations, the conflict of having to act against a patient's will, and the frustration of temporarily losing the therapeutic relationship. We also know what it's like to work in a department that is chronically understaffed, and how this can influence decisions regarding interventions.

Additionally, we have maintained close contact with individuals with lived experience, who have provided insight into the patient's perspective and actively contributed to the design of both the hardware and software of our solutions.

Our mission is to improve the future of care with a holistic approach, considering the perspectives of:

- The patient
- The staff
- The institution

Self-determination

In developing CoWin, as well as in our operations, we are guided by the Self-Determination Theory (SDT). This motivational theory, developed in the United States, has been clinically validated through extensive research. According to SDT, all people have three basic psychological needs: autonomy, competence, and relatedness^{[6] [7]}. The theory suggests that motivation is of higher quality and more autonomous when these needs are well supported within the care environment:

- **Autonomy** is supported by genuinely understanding a person's perspective, desires, and preferences, showing empathy, and providing choices. According to SDT, it is also important to avoid controlling or pressuring someone to act in a certain way.
- **Competence** is supported by offering optimal personal challenges, providing structure, giving feedback, and fostering a sense of initiative.
- **Relatedness** is supported by showing genuine interest, empathizing with feelings, and creating a warm, caring environment.

Research has shown that when these needs are optimally supported, individuals demonstrate more sustainable autonomous behavior and experience greater well-being^{[8][9]}.

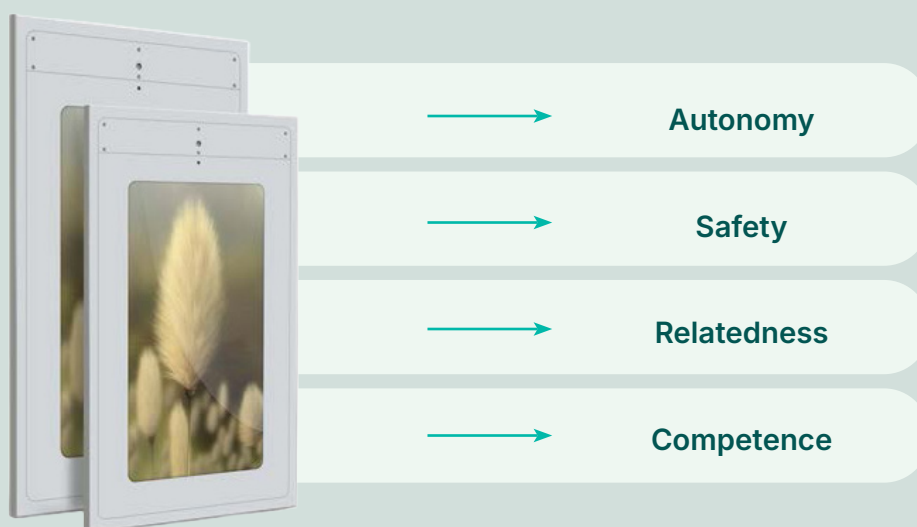
Empowerment

A second guiding philosophy is empowerment. In 1998, the World Health Organization (WHO) defined empowerment as the ability of individuals to make decisions and take control of their own lives.

Though the concept has existed for some time, interest in empowerment has grown in many countries in recent years. Rappaport ^[10] described empowerment in 1987 ^[11] as a process in which individuals are enabled to influence events and situations important to them. It involves fostering a positive sense of personal control or influence. Delespaul et al. ^[12] explain that empowerment at the individual level revolves around processes in which someone regains their identity and self-worth and “takes control of their own life.”

CoWin raises the bar

Based on the literature, expertise, and experience outlined, we have built Reconnect and its products on four key pillars: Autonomy, Safety, Relatedness and Competence. The following section describes how these pillars are reflected in the design and continuous improvement of CoWin.



Autonomy

Central to CoWin's development—and deeply embedded in our vision—is the goal of restoring autonomy to patients. This means that, through an intuitive touchscreen, they can regain control over aspects of daily life that are not typically available during inpatient care. For example, they can control the lighting, make notes and drawings, play games, and view photos and videos of loved ones. Each patient has access to a secure and personalized environment, which can be adapted to changing needs. Staff can also adjust the environment to meet patient needs, significantly enhancing the sense of control for both staff and patients.

Safety

At Recornect, we fully understand the vital importance of safety on a clinical ward. CoWin was developed with the highest safety standards in mind, without losing sight of its friendly and soft character. The design incorporates feedback from both professionals and people with lived experience, reflected in both the physical design and the intelligent software. The software ensures that a patient's personalized environment cannot be easily shared with others. By incorporating CoWin into the therapeutic process, crisis and care plans can be further personalized, enriched with additional options.

Relatedness

A crucial aspect of CoWin's development is the ability for patients to stay connected with their surroundings and loved ones during inpatient care. Thanks to the digital environment, patients can always see the current date and time and be reminded of their identity. This facilitates communication with loved ones and allows patients to view personal photos and videos. CoWin also supports functionalities that enhance connectedness, such as video calls with staff and loved ones, and chat options.

Competence

At Recornect, we believe in the importance of fostering competence during treatment. An inpatient stay does not mean that a patient's skills should go unused; on the contrary, during this vulnerable period, it is crucial to encourage autonomy and skills to promote personal growth and recovery. CoWin also enables patients to complete schoolwork safely, ensuring that children's education is not interrupted during their stay.

Summary and conclusion

In summary, CoWin creates an effective and improved care environment, grounded in both clinical expertise and scientific knowledge. We are confident that increasing autonomy and control positively impacts treatment outcomes and workplace efficiency. At the same time, we recognize the growing pressure on international mental healthcare, making the need for smart, safe technological solutions more critical than ever. CoWin is not a miracle cure, but it is a valuable addition to the therapeutic process, aligned with modern trends like efficiency, digitalization, and more humane, person-centered care.

References

- 1 Bongers, I. M. B., van den Reek, M., Roman, F., van den Wijngaart, M., Balogh, L., & van Dijk, M. (2010). *Separeren in de GGZ: Beleid, praktijk en toezicht. Onderzoek naar de vorderingen in het terugdringen van separaties*. IVA.
- 2 van der Werf, B. (2003). *De separeer en de prikkelarme omgeving*. *Sociale Psychiatrie*, 69.
- 3 van den Wijngaart, M., & Bongers, I. M. B. (2011). *Separaties binnen zeer complexe zorgsituaties*. IVA.
- 4 Institute for Health Metrics and Evaluation. (2021). *Mental health*. Retrieved from <https://www.healthdata.org/research-analysis/health-risks-issues/mental-health>
- 5 OECD/EU. (2018). *Health at a glance: Europe 2018: State of health in the EU cycle*. OECD Publishing. https://doi.org/10.1787/health_glance_eur-2018-en
- 6 Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. The Guilford Press. <https://doi.org/10.1521/978.14625/28806>
- 7 Ryan, R. M., & Deci, E. L. (2008). *Self-determination theory and the role of basic psychological needs in personality and the organization of behavior*. In O. John, R. Roberts, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 654–678). Guilford Press.
- 8 LaGuardia, J. G. (2017). *Self-determination theory in practice: How to create an optimally supportive health care environment*. Independently published.
- 9 Ntoumanis, N., Ng, J. Y. Y., Prestwich, A., Quested, E., Hancox, J. E., Thøgersen-Ntoumani, C., Deci, E. L., Ryan, R. M., Lonsdale, C., & Williams, G. C. (2021). A meta-analysis of self-determination theory-informed intervention studies in the health domain: Effects on motivation, health behavior, physical, and psychological health. *Health Psychology Review*, 15(2), 214-244.
- 10 Boevink, W. (2017). *Herstel, empowerment en ervaringsdeskundigheid in de psychiatrie*. Trimbo's Instituut.
- 11 Rappaport, J. (1987). Terms of empowerment/exemplars of prevention: Toward a theory for community psychology. *American Journal of Community Psychology*, 15(2), 121-148. <https://doi.org/10.1007/BF00919275>
- 12 Delespaul, P., Milo, M., Schalken, F., Boevink, W., van Os, J., & Goede, G. G. Z. (2016). *Nieuwe concepten, aangepaste taal, verbeterde organisatie*. Diagnosis Uitgevers.