

DIGICARE - AWARE

We need a solution to create more awareness amongst healthcare professionals about the necessity and possibilities of remote patient monitoring and the Virtual Care Center and to also activate them to make more use of remote patient monitoring. The goal is to scale up remote patient monitoring to further realize transformation of healthcare to make it futureproof. We want to contribute to a culture change.

Rijnstate is a teaching hospital in the Netherlands and offers inpatient and outpatient services in 28 medical specialties, as well as emergency care, with a special focus on oncology, immunology, vascular care, and vulnerable elderly. Approximately 5,500 employees work at Rijnstate. Together they focus on the 450,000 residents in the service area. This makes them one of the largest healthcare providers in the Netherlands and the largest employer in the region.

Rijnstate wants to be at the forefront of innovation. That is why we are constantly working on ways to noticeably improve ourselves and our services. And if we believe that something can indeed lead to better care, then we really go for it. We want to realize innovations that are tangible, so we focus on evidence development of innovations in daily clinical practice. To make our care increasingly pleasant, flexible, and effective on all fronts. On a very human level. In other words: for you.

Challenge description

Creating awareness on remote patient monitoring

Rijnstate has already implemented the means for remote patient monitoring, which means that care is only given physically in the hospital if necessary and at the home setting when possible. Rijnstate has a Virtual Care Center for this, which is a department of specialized nurses who are responsible for the remote patient monitoring. Remote patient monitoring is necessary to keep healthcare accessible with the growing demand for healthcare and the decreasing number of healthcare professionals.

We need to create more awareness amongst healthcare professionals about the possibilities of remote patient monitoring and the Virtual Care Center to achieve upscaling this kind of care transformation for more patients, by more healthcare professionals and for more patient populations. We are continuously increasing the number of care pathways with remote patient monitoring, but so far only a relatively small group of healthcare professionals makes use of this. To really transform healthcare, we need the majority of healthcare professionals to understand the necessity and know the possibilities. The question is how we can reach and encourage a large group of healthcare professionals (Rijnstate has ~3500 healthcare professionals).

What is the difficulty to scale up?

There are a variety of reasons for the limited awareness (of the added value of) or use of remote patient monitoring. For some healthcare professionals it might be unfamiliarity with the possibilities and/or with the added value (for patients or themselves). For others it might be fear of change, high workload, limited digital skills, limited financial compensation. Often there



is insufficient time to invest in a new innovation, neither for the implementation nor for the adoption of innovations such as remote patient monitoring.

What solution do we want?

This challenge requires a solution to create awareness about the added value and possibilities of remote patient monitoring among healthcare professionals in a clear and attractive way for which limited time investment is needed. The goal is to create awareness to increase motivation and use of remote patient monitoring for their patient population(s). The solution needs to include information about the necessity and the possibilities, and it needs to activate them to start/increase using remote patient monitoring. It should be encouraging to a large group of healthcare professionals of distinct roles and various levels of knowledge and (digital) skills. Most importantly, it should be suitable for healthcare professionals who are experiencing a remarkably high workload and tight working schedules.

The goal

A solution to create awareness to increase motivation and use of remote patient monitoring is essential for upscaling to contribute to transforming healthcare to make it futureproof. What we need is a culture change. We can use a creative solution to get there.

If we find a solution, then there will be a lot of potential to expand it to create awareness of other innovations and digital tools. This can have a significant impact.

Challenge main objectives

The main objective is to scale up remote patient monitoring for more patients, by more healthcare professionals and for more patient populations to transform healthcare to make it futureproof. To achieve this, we need to create more awareness amongst a larger group of healthcare professionals in Rijnstate about the necessity and the possibilities of remote patient monitoring and the Virtual Care Center. We need to encourage and activate them to start/increase using remote patient monitoring. We want to achieve a culture change.

Solution functional requirements

Compulsory functional requirements

- The solution shall take little time for healthcare professionals to use. It shall be suitable for healthcare professionals who are experiencing an extremely high workload and tight working schedules.
 - This could mean that the solution shall be brought to healthcare professionals (e.g., at their departments or computers) instead of asking the healthcare professional to go somewhere for the solution.
 - This also means that the solution shall be flexible regarding availability. It shall not be at set times, because many healthcare professionals do not have breaks at predefined times.
- The solution shall be applicable to a large group of healthcare professionals. Rijnstate has ~3500 healthcare professionals and we want to reach as many as possible. It doesn't have to reach all healthcare professionals at once, it can be phased.
- The solution shall be appealing to distinct roles of healthcare professionals (physicians, nurses, doctor's assistants, team managers). These are mostly practical people, so the solution should also be practical.
- The solution shall be appealing to various levels of knowledge (of remote patient monitoring) and (digital) skills.
- The solution shall be able to give information about the necessity and possibilities of remote patient monitoring but shall also have an element to activate healthcare

professionals to start using remote patient monitoring (a call to action). It must contain an adoption plan, which also addresses existing fears about this new way of working.

- The solution shall be proven effective (not necessarily in healthcare organizations).
- The solution shall be scalable to other innovations or digital tools.
- It shall be clear from the start what it will cost to scale up the solution after the pilot.

Desirable functional requirements

- The solution shall be tailored to the Rijnstate corporate identity if applicable.

Pilot scope

In the pilot we can start with the solution at two departments: one inpatient and one outpatient department.

End-user type	Role	Number
Healthcare professionals of an inpatient department (physicians, nurses, doctor's assistants, team managers)	Target group of the solution	<i>Depending on the department</i>
Healthcare professionals of an outpatient department (physicians, nurses, doctor's assistants, team managers)	Target group of the solution	<i>Depending on the department</i>

Table 1. Targeted users

Language

- The solution and the pilot must be in Dutch for the target group.

Pilot set-up conditions

Ethical, legal, or regulatory

- The solution must be fully GDPR compliant.
- The privacy and security of the solution must be approved by the Compliance & Risk department of the hospital.

Technological

- The solution (if it is a digital solution) shall be stand-alone, independent of the hospital's existing systems.
- The solution (if it is a digital solution) shall be approved by the IT-department.

Other

- The solution must be in line with the Rijnstate corporate identity and approved by the Communication department.

Expected impact and KPIs.

- Increase in the use of remote patient monitoring for existing care pathways, expressed by an (irregular) increase in patient inclusions.
- Increase in the number of requests to implement remote patient monitoring for care pathways that do not contain remote patient monitoring yet.
- A participation percentage of at least 50% of the targeted departments.



- User satisfaction of the solution: on average a positive result.

The expected impact and KPIs can be further detailed before the start of the pilot, depending on the solution. The “before”-situation to further specify the expected increases can be measured before the start of the solution.

Business opportunity

Market size

There is potential to extend the solution to create awareness of other innovations and digital tools within the hospital. Rijnstate is an innovative hospital, so creating awareness and activating a large group of healthcare professionals will always be applicable and necessary.

In addition to the use within Rijnstate, there could also be an opportunity for a supplier of the solution to scale it to the region (e.g. primary care), other hospitals (e.g. start within the mProve network of 7 hospitals or regional hospitals) and other large companies (if the solution is not health-specific). The problem of how to activate a large group of people into adapting an innovation is broadly applicable.

Adoption plans

If the solution is successful, we plan to scale up the solution to use for creating awareness for other innovations and digital tools.

Resources

inDemand. (2020). [inDemand stories](#).

inDemand (2018). [EPICO Challenge](#) - inDemand Call for Companies Murcia Region.

inDemand (2019). [GRAVIDITY Challenge](#). inDemand Call for Companies Murcia Region.

InnoBuyer. (2023). [InnoBuyer Webinar](#): How to master innovation needs identification.