The right care and the right place for Care@Home

From successful pilots to the new normal

White paper part 2

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Contents

Foreword and introduction

Treating patients with cancer in their own home environment. The Care@Home pilots show that this offers added value for the patient, the healthcare provider and the hospital. Now that the movement of home administration is gaining momentum in even more places in the Netherlands, we need the courage of our convictions and take a bigger step forward to embed this care in a sustainable manner. Geared to our healthcare system and overcoming existing barriers. We would like to discuss this with you. Because only together we can turn these successful pilots into the new normal.

"The pilot went very satisfactorily and we see many opportunities for further expansion. In fact, there is already a waiting list of willing patients. But it remains to be seen whether we will continue, since we can't get the business case right"

- Day Treatment Oncology Manager, pilot hospital

"Among our nursing staff there is certainly enthusiasm for scaling up, but we're afraid that this care will no longer be financed by the insurer. And that is not in line with our current financial situation."

- Day Treatment Oncology Manager, pilot hospital

The pilots

Care@Home is an initiative from Roche, Vintura and three partner hospitals to provide oncological care closer to home where it is possible, and in the hospital where it is needed.

Goals of the Care@Home project:

Launch pilots for home administration of oncological medicine
- Develop a basic concept for a new way of working
- Prepare the business case containing quantitative and qualitative aspects

discussed in paper part 1

Exchange knowledge and experience with other hospitals

Learn which barriers hospitals encounter when starting up and scaling up this care and discuss with the field how to overcome them

central in paper part 2

The offer of oncological care at home is growing

In May 2019, white paper part 1[1] was released, in which our experiences with setting up oncological care at home pilots are bundled. Meanwhile, the pilot phase has been completed in the three partner hospitals, Martini Hospital, Tergooi and St. Antonius. Experiences to date have been very positive; the next chapter will discuss this in more detail.

Oncological hospital care at home has been offered long before this project. The number of hospitals offering this service continues to increase and some hospitals are already out of the pilot phase. For example, Isala Oncology Centre, which started a pilot as early as 2016, was able, in collaboration with Zilveren Kruis, to convert the pilot into regular care and expand it to five days a week.[2]

This is in accordance with the multi-year agreements with the aim of moving 10% of care to the patient's home by 2021.[3] There are more and more examples that show that the Netherlands is busy fulfilling the need and necessity for care closer to home or care at home.

The Covid-19 pandemic has added another argument: home treatment relieves the burden of care in the hospital and limits possible infection risks. This is relevant for people who are particularly vulnerable, for example due to cancer.

[1] White paper: How to deliver hospital care at home, May 2019, Roche and Vintura. https://www.roche.nl/content/dam/rochexx/roche-nl/pdf/Care@Home%20Paper%20part%201%20(Roche%20Vintura).pdf

[2] Isala hospital extends oncological care at home in cooperation with Zilveren Kruis, Dec 2019. https://www.zn.nl/338067458/Nieuwsbericht?newsitemid=4457070592

[3] Zilveren Kruis and Isala move 10% of care to patient's home, Feb 2019. https://www.zn.nl/338067458/Nieuwsbericht?newsitemid=3714646016

Care@Home is part of a larger transformation

Despite these movements and the positive feedback from both patients and healthcare providers, hospitals and healthcare insurers sometimes decide not to start, not to scale up or even stop with home administrations. In most cases, the financing and cost-effectiveness of this form of care is the stumbling block.

"The expertise of the hospital in your own safe environment."

- Nurse of pilot hospital

SELECTION OF ONCOLOGICAL PATIENT GROUPS FOR THE PILOTS:

MARTINI	TERGOOI	ST. ANTONIUS
Multiple myeloma: bortezomib s.c.	Multiple myeloma: bortezomib s.c.	mammary carcinoma: trastuzumab mono i.v. *Work has also been done on 2 non-oncological care pathways*
Non-small cell lung carcinoma and renal cell carcinoma: nivolumab i.v. and pembrolizumab i.v.	Mammary carcinoma: trastuzumab in v.	
	Colon carcinoma: 5FU i.v.	

"The relocation of hospital care requires vision and a long-term perspective. Despite the positive experiences of nurses and patients, the emphasis quickly shifts to the financial aspects. Factors such as financing and automation make the structural relocation of care with the same quality standard complicated. But if we really want to move care permanently, we need to look beyond the walls of our own cost centres, for example, and get the wind in our backs."

- Day Treatment Oncology Manager, pilot hospital

When costs and financial revenues of administration in the hospital and at home are compared, the business case for the hospital is still negative at the moment, due to higher costs of care at home and less efficient deployment of nursing staff. As a result, this type of care does not seem desirable, considering the rising healthcare costs and staff shortages.

However, a business case covers more than hospital finances; it also includes the added value for the patient, the healthcare providers, the hospital and society at large. In addition, medical and digital developments will contribute to making care at home more cost-efficient. The business case and the implementation of the care concept should be placed in a broader perspective; for example, by looking at the right care in the right place for the entire care pathway, and in the context of regionalisation of care.

After all, Care@Home is part of a larger transformation in Dutch healthcare, namely the 'right care in the right place'.

With this in mind, this second part of the white paper examines the results of the pilots, the discussion around the business case and alternative concepts. The following question is of central importance: *how do we go from successful Care@Home pilots to the new normal?*

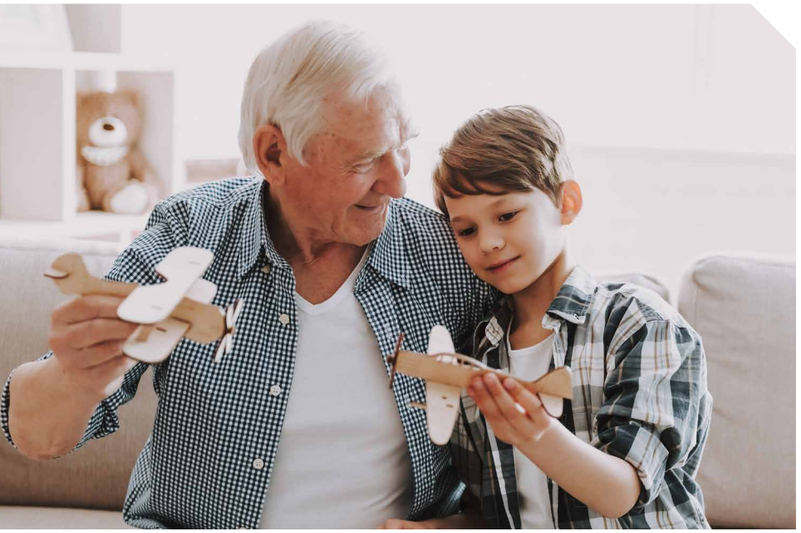
The pilots: what are their results so far?

"More time for personal contact. I experienced it as very positive."

- Patient

“It all went effortlessly. It's all done professionally."

- Patient



Patients are very satisfied and saving time is the most important benefit

Virtually all patients deemed suitable by the doctors and nurses chose to take part in the pilots. In order to gain a better insight into the experiences of these patients, a brief evaluation was made within the pilots. Conclusion: patients are very positive about Care@Home and see several advantages, especially the time savings.

Table 1 General experience of Care@Home pilot: Participating patients rate home treatment on average with a 9.9 and would also recommend it to others.

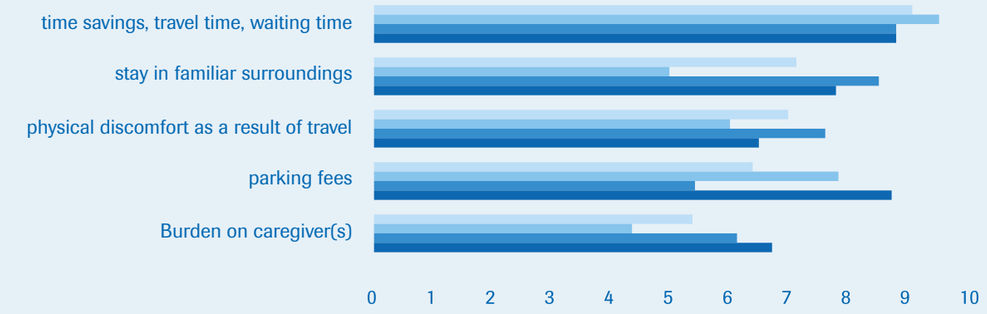


Table 2 Main considerations for Care@Home: Time savings are clearly seen as the most important consideration for home treatment, followed by staying in a familiar environment and the inconvenience of travelling to hospital.

Healthcare providers are enthusiastic about offering added value to patients

Besides the patients, the care providers involved are also very satisfied and enthusiastic about this new form of care provision. Not only do they find more variety and positive challenges in their daily work, they also experience more room for personal contact with the patient. Nurses also see added value for patients with limited mobility who would otherwise have to be transported by ambulance to the hospital for administration.

However, the preparation of home administrations takes considerably more time by the nursing staff and planning team. In the home situation, the nurse has less opportunities to perform other tasks during the infusion. Shortening the administration time and implementing an alternative for nursing supervision may contribute to achieving cost efficiency and added value for the patient.

In addition, scheduling appointments in a separate diary in the EPD and the coordination of routes, medication and materials requires extra time. Due to the small quantities in the pilots, economies of scale have not yet been capitalised on, for example, smart route planning and optimal agenda management.

"My employees are really very enthusiastic. They would like to go out more often. It's a very nice change from our current duties on the ward."

– Day Treatment Oncology Manager, pilot hospital

"Pleasant care. Hopefully the pilot will be continued."

– Patient

Strategic added value for the hospital

Thanks to the positive experience of home administrations for both patients and care providers, Care@Home also has indirect strategic added value for the hospital. By demonstrably better structuring the care pathway around the patient, the hospital can distinguish itself positively towards patients. Delivering added value for the patient can ultimately lead to a better quality of life for the patient and greater job satisfaction for healthcare providers. This will enable the hospital to profile itself regionally in the labour market as an attractive employer.

Care@Home also ties in with the movement to use the available hospital capacity for highly specialised care. By relocating care, unnecessary occupation of hospital beds can be avoided. Additional freed up capacity for day care can be used to meet the growing demand for more complex treatments. These developments are in line with keeping the national movement towards 'the right care in the right place'. In addition, the hospital creates a flexible capacity shell for special situations such as the Covid-19 pandemic, where hospital capacity proves to be limited and there is an increased environmental risk.

However, hospitals still encounter fundamental barriers for further upscaling:

- Not all patients want to be treated in their own home environment; will it remain a no-obligation service by the hospital or should the hospital offer this as a structural working method?
- Additional staffing of nurses is needed for home care, while there is already a scarcity of specialised nurses in the hospital
- Cooperation with specialist neighbourhood teams and general practitioners is not being sufficiently applied or even investigated for reasons such as fear of losing the patient, trust, finances, liability and IT infrastructure
- The hospital's financial business case is currently not sustainable: higher costs, but no extra or even lower revenues for the hospital (or specific ward)
- The hospital's financial situation does not offer sufficient room for investment

The Right Care in the Right Place is a movement of parties in the Dutch care sector aimed at bringing the daily functioning of people back to the centre of attention and to make care future-proof.

THE THREE PILLARS OF THE RIGHT CARE IN THE RIGHT PLACE ARE:[4]

- preventing (more expensive) care
- relocating care and organising it around people
- replacing care by smart care and deploying e-health

A step in the bigger movement Right Care in the Right Place

And what is the impact on the healthcare system? Care@Home is a step within the larger movement in Dutch care that takes place under the denominator 'the right care in the right place'. From this starting point, we need to take a holistic view of the total care pathway to determine which care can best be relocated to the patient's home.

To warrant the quality, accessibility and affordability of care in the face of an ageing population, staff shortages and rising healthcare costs, care must and can be organised differently.
In this connection, care is increasingly organised at home or close to home when possible, and in the hospital when really necessary.

The current concepts within the pilots have been designed from a hospital perspective, aimed at learning what arrangements need to be in place as preconditions for the relocation of care, and also to experience what obstacles hamper the setting up, implementing and scaling up of the pilots. Although useful and sensible as an initial step, the concepts are at odds with two major challenges in the healthcare system: rising healthcare costs and staff shortages.

And this is where scaling up of home oncology administrations now often grinds to a halt. Patients and healthcare providers are very satisfied and an increasing number of oncological treatments are suitable for application at home. But the agreements between hospitals and healthcare insurers are short-term and strongly focused on improving quality in combination with efficiency.

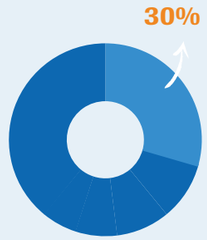
When home administration has to compete with day treatment, hospitals are unable to present a viable financial business case and there is little room for investment to capitalise on economies of scale.

[4] Website De juiste zorg op de juiste plek https://www.dejuistezorgopdejuisteplek.nl

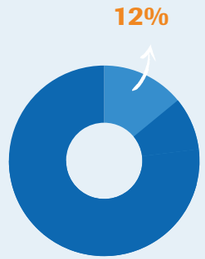
During the ongoing Covid-19 crisis various treatments, including the administration of immunotherapy and chemotherapy, have been postponed. This has made it clear that it is valuable to have an alternative location outside the hospital, where especially the most vulnerable patients can be assured of continuity of care. It shows that a flexible shell has advantages and is sometimes necessary, but it requires investments that are unlikely to pay off in the short term. This debate is also being held at national level with regard to flexible scaling of ICU capacity.

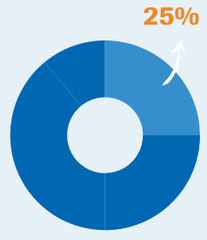
In April 2020, NFK (Dutch Federation of Cancer Patient Organisations), in collaboration with medical specialists and its members, launched an online survey of 5302 people who have or have had cancer to collect experiences about the consequences of the Covid-19 crisis.[5] This showed that patients have indeed experienced obstacles in receiving optimal care:

A third (30%) of respondents find that the corona crisis has consequences for their treatment or follow-up.

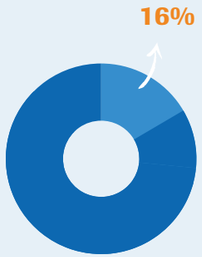


Among people who are currently receiving treatment, 1 in 8 experience delays (12%). In particular, immunotherapy, chemotherapy and targeted therapy are being postponed.



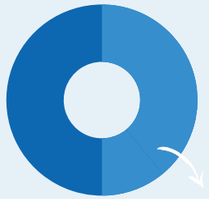


A quarter (25%) of cancer patients who are not (yet) experiencing any consequences are worried or very worried that the corona crisis will have consequences for the treatment or follow-up of their type of cancer.

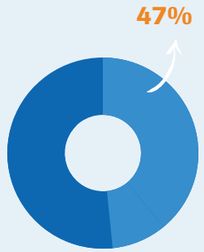


Of those who have yet to start treatment, 1 in 6 (16%) experience delayed treatment.

Half (50%) of the people whose treatment has been postponed are worried or very worried about this.



Almost half (47%) of cancer patients are worried or very worried about getting the coronavirus themselves.



[5] NFK national online survey, April 2020: The consequences of the corona crisis: what is your experience? nfk.nl/resultaten/gevolgen-van-de-coronacrisis-voor-kankerpati%C3%ABnten-wat-is-jouw-ervaring

The business case of Care@Home in a broader perspective

The increasing demand for and offer of treatment options and care services is putting pressure on the sustainability of our healthcare system. At the same time, we expect more impact and quality for the patient. In order to guarantee the accessibility, affordability and patient-orientation of our healthcare, we are increasingly focusing on value-driven care, or *Value Based Healthcare* (VBHC).

The concept of VBHC advocates organising the entire care pathway on the basis of patient value, defined as patient-relevant outcomes as compared to the costs in the chain to achieve these outcomes. In other words, VBHC aims at maximising the value of care for the patient and reducing healthcare costs.[6] From this perspective, the focus is not on the healthcare provider, but on optimal care for the patient, with various healthcare providers working closely together. But what is the value of Care@Home and what costs are involved?

As also pointed out in paper part 1, it is not easy to get the business case for home administration right, so it is not surprising that hospitals cannot either. However, a financial business case should include more than the hospital's perspective alone. When certain parts of the treatment are moved outside the hospital with collaboration with other care providers where necessary, this can result in higher economies of scale and quality. In addition, the benefits of moving the administration of oncological therapies towards the patient's home should be viewed in a much broader sense. Not only from the financial side, it also concerns the added value and impact for the patient, the healthcare providers, the hospital and society at large.

So far, there are limited data insights and social value is not easy to express in terms of financial value. Below is a description of the elements which, in our opinion, a broader business case should include in order to properly assess the added value of Care@Home.

[6] Vintura website, vision on VBHC www.vintura.com/nl/value-based-healthcare/

Hospital-related impact

Additional costs

- Extra staffing of nurses and planner/coordinator for home administrations
- Purchase and maintenance of required materials
- Adjustments to IT infrastructure

Revenue

- Reduced pressure on the physical hospital capacity
- Solution to accommodate growth in patient population within current physical structures
- Access to a flexible shell enabling the delivery of care in other places as well
- Distinctiveness of the hospital
- Patient-related impact: better quality of life and patient satisfaction; and therefore for example lower use of care or higher patient loyalty
- Employee-related impact: more job satisfaction among employees; and therefore for example lower absenteeism due to illness or better recruitment and retention of employees.

Other care-related impact (scope of health insurer)

Additional costs

- Time and money to realise the transformation: for the current Care@Home concept and also to develop this concept further within The Right Care in the Right Place/regionalisation of care.

Revenue

- Prevention of reimbursed travel expenses
- Prevention of ambulance costs
- Better health outcomes at lower costs with optimised oncology pathway
- Lower costs when, in the longer term, less complex oncological care can be transferred to primary care or the primary care-plus level (primary care with some specialist support)

Social impact

Besides the added value for the patient and the described revenues within and outside the hospital budget, revenues are also expected that are more difficult to quantify and also come outside the scope of a healthcare business case. These are social elements such as lower loss of productivity, lower absenteeism due to illness, and higher social participation of patients and caregivers. However, these elements are not part of the considerations of healthcare decision-makers.

In the interview with Zilveren Kruis they share their perspective on the business case and on future developments.

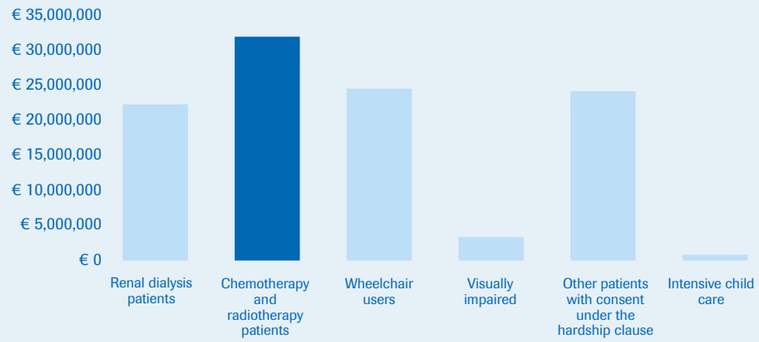


Table 3 In 2017, €31 million in travel costs was paid for oncology patients[7].

A study by the National Health Care Institute showed that in 2017, 106 million euros in travel expenses were paid out under the hospital transport scheme (Regeling Ziekenvervoer). In total, this amounts to approximately € 31 million for oncology patients.

[7] Report: ZorgCijfers Monitor: Regeling ziekenvervoer - gebruik en kosten, Zorginstituut Nederland, March 2019

Interview

- Zilveren Kruis

Anna-Linde Schermerhorn
Care Innovation Consultant
&
Rachel Bosman
Sr. Policy Officer for medical-specialist care

What was the reason for your focus theme 'Safe care at home'?

- Because we want: pleasant for the patient and we believe that remote care is going to be one of the solutions for solving the challenges of the healthcare system.
- Because we can: the technology is there to do this safely while maintaining quality. At Zilveren Kruis we have the experience and resources to make this possible.
- Because we must: pressure on affordability, accessibility, and capacity due to, among other things, an ageing population.

Zilveren Kruis sees this transformation as an enrichment of care, and it also gives our policyholders more freedom of choice. With the possibility of care in one's own environment, we bring health closer. In addition to, for example, digital consultations and telemonitoring, treatment at home is one of the ways to provide care safely at home.

How is the transformation of oncological treatment at home going?
In recent years, together with healthcare providers, we have introduced an increasing number of treatments to the home environment. This brings us to the next phase: from starting up to scaling up. We believe specialists can play an important role in this.

In many cases, innovation also requires investment; we notice that financing can be seen as a challenge in this respect. That's why we support healthcare providers with transformation funds to facilitate the relocation of care. For the business case, we sit down with the care provider to make the costs transparent, but we are also keen to point out how relocation of care yields savings.

"If we add costs, somewhere costs must also be eliminated."

Providers have to look for cost-saving elements; or possibilities to use the freed up space differently, or consider whether housing expansion can be prevented. Besides added value for the patient, we want the transformation to be cost-neutral or cost-positive. That is why we help hospitals to approach the right care in the right place in a programmatic way; oncological home administration is part of this.

Patients' appreciation of home treatment is tremendously high, and we can make this transparent. The social business case is strong; with elements such as lower absenteeism due to illness, increased patient productivity and a lower impact among caregivers. However, this has no direct impact on healthcare costs. That is why we would like to have more data to demonstrate even better what Care@Home delivers financially. After all, a healthcare insurer reimburses the care and has the role to keep care accessible, of good quality and affordable in the future.

What is the desired implementation of Care@Home according to Zilveren Kruis?
Zilveren Kruis sees implementation with support from the district nurse as the future. District nursing teams have the experience of care at home and also have an existing infrastructure and resources (e.g. cars). Ideally, there should be more cross-fertilisation between the hospital and district nurses. More regional cooperation can also alleviate the shortage in the labour market.

It can also be considered whether some kind of *oncology light* training is possible. For example, by using a limited 'administration formula' or developing a basic oncology nurse module that can be followed at primary care level, supplemented by product-specific training. At the same time, nurses from the same hospital can do part of their work in the patient's home. In terms of financing, the healthcare provider providing the care should preferably also be the one who submits the declaration. For that matter, a good distinction should be made between specialist district care and generalist care, to keep the pressure on district teams well distributed.

What other models do you see for organising hospital care closer to the patient?
Because we are really at the forefront of oncological care at the primary-plus care level, there are few other examples available as yet. Pioneering also means that there is still plenty to discover; from exploring the needs of hospitals to regional differences and geographical distances. Of course, we keep a close eye on innovations in the healthcare sector. In the field of administration, for example, there are already intravascular catheters for administration. Patients can do all or part of the administration themselves, with minimal support from the nurse. This means more personal control for the patient and it counts for the experienced quality of life.

We also see opportunities within oncology for digital applications. In the future, for example, aftercare can be much more digital and personalised. There are interesting developments, for example in the field of *dynamic modelling*, in which predictive models are used to connect even better to the individual patient. We are looking at the entire care pathway, which is in line with a programmatic approach.

What roles do you see for the health insurer and the industry to stimulate this movement?
Healthcare is transforming, and so is our role as health insurer. Based on our broad knowledge and skills to facilitate this transformation in a sustainable way, we are working together with the healthcare sector to develop the healthcare offering. For example, in various hospitals, including Isala and Tergooi, we are working together in unique transformation teams.

Besides our own changing role, we also see opportunities for collaboration with the pharmaceutical industry. It plays an important role in the development of techniques for bringing care home. The price of medicines remains a topic of discussion in this respect. We call on the pharmaceutical industry, in the interests of patients, to work together even more.

Interview

- Roche

Judith van Beek
Field Access Manager Sustainable Solutions

"The benefits of the pilots are therefore not limited to Care@Home alone, they are also a step towards new sustainable care models."

Why is Roche investing in Care@Home?
As a result of social and technological developments, there is an increasing demand to move care closer to the patient. Roche has an ambitious agenda to accelerate care innovation, in which *personalised health care* plays a central role. Personalised health care is a broad concept, allowing for the implementation of tailor-made care to meet the individual characteristics and wishes of patients as much as possible. Take for instance *precision medicine*, with the dosage being precisely tailored to a patient's unique characteristics, or where medicines can even be tailor-made. These developments can generate many health gains, but require adjustments to the current healthcare system.

Personalised health care goes beyond finding the best treatment from a medical perspective. It is also about a patient's wishes and values and aligning them with what is important to him or her. This shifts the focus from 'being a patient' to 'living with an illness'. In the near future, more and more options such as telemonitoring and e-consultations will become available and care will be organised around the patient instead of being focused on optimisation within the hospital walls. Care@Home is therefore in many ways a great initiative to offer personalised care close to the patient.

How does Roche think Care@Home will develop further?
The patients and nurses who took part are extremely positive about Care@Home. To make oncological home treatment available to more patients, the follow-up to Care@Home is threefold:

- First of all, a blueprint has been developed, based on the experiences from the pilots, to organise oncological care outside the hospital. This blueprint, described in paper part 1, is available to other hospitals wishing to start home treatments
- In addition, there are various home administration initiatives in the upscaling phase, in which care providers can offer home treatment to more patients
- A third interesting development is that there are also new initiatives under development to provide oncological treatments at central locations

The biggest challenge is to combine the positive experiences of patients and nurses with a good business case. With the feedback from patients and healthcare providers, the most important *value drivers* and barriers have been identified. Based on these insights, for example, primary care-plus initiatives are now being explored to organise care more regionally. Together with Van De Valk Vitaal we are also investigating how we can further combine quality, safety, affordability and *hospitality*. By transforming to Care@Hotel, the advantages of moving care outside the hospital can be exploited, resources can be deployed efficiently and for the patient 'home is truly home'.

Care@Home is part of the larger transformation to *Value Based Health Care* and The Right Care in the Right Place. On the basis of the pilots, we are developing blueprints for the relocation of care that previously could only be provided in the hospital. This pilot was developed specifically for oncological treatments with immunotherapy and chemotherapy, but is also a good basis for other care. In the future, for example, treatments will also be available in which the patient safely administers therapies himself. As a result, there will be a demand for more hybrid (financing) models in which care activities are offered physically or online with support from the hospital, general practitioners, district nursing or fully automated e-health care.
To prevent that the financing system will obstruct access to desirable innovations, it is very important to invest now and develop a sustainable ecosystem.
I expect the use of e-health and telemonitoring to increase even further. Patients will soon receive much more care at home, with the support of GPs, district nurses and specialists from the hospital.

What is the role of the pharmaceutical sector in stimulating sustainably accessible care?
The pace of innovation continues to increase and the role of the patient is also developing: A lot of medical information is available online and the use of *smart watches* and health apps is the norm rather than the exception. In the Covid-19 pandemic, the number of patients using e-health applications has increased significantly. Also in other sectors, home delivery and *software-as-a-service* models are now rapidly gaining ground. Given the opportunities for both improving care and affordability, it is essential that parties, including public-private ones, work together to capitalise on the opportunities for innovation.

The pharmaceutical and *life sciences* sector can make a contribution to Dutch healthcare in various ways. Primarily by making cost-effective and value-driven innovations available, but also by taking responsibility for the development of new funding models and co-investing in a future-proof innovation climate. *Personalised medicine* is not yet very well aligned with current funding methods, for example because it represents one-off expensive treatments, rather than multi-year therapies, or because an investment in diagnostics is funded from a different budget than the treatments. These developments call for new ways of collaboration that have an impact on the patient and sustainably accessible healthcare.

Finally, the industry can be of great value to various Dutch healthcare parties by providing knowledge, advanced data infrastructures and a global knowledge network. The potential for collaboration in these areas is enormous and promising.

Alternatives for the right care and the right place

The pilots in the Care@Home project were very successful in getting a movement in motion. However, we will have to proceed further to make this form of care future-proof. By taking a fresh look at what is the right care in the right place, the benefits of Care@Home can become permanently available to many more patients. Below is a description of various factors that can contribute to facilitating successful upscaling:

The right care

- Application to more products based on familiarity with the product, risks, duration and route of administration and treatment regimen
- Relocation of multiple components of the oncological care pathway, such as remote follow-up
- Hospital-wide approach for relocation to home or closer to home, because many more chronic treatments are suitable and desired for relocation to home

The right healthcare provider

- Oncology day care nurse trains district nurses for safe home administration and is remotely available for patient support at home
- Specialist district nurse for oncological treatments provides this care
- Regional transmural team of oncology nurses works both at day treatment ward and in people's homes.
- Patient performs safe self-administration

The right place

- At home for low-complex, short-term, high-frequency treatments that can be done safely at home, possibly with digital support
- Closer to home for more complex, longer-term treatments that can be safely performed outside the hospital but are too complex or inefficient for application at home; different locations are possible such as:
  - General practice or Health centre
  - Primary-plus care treatment centre (primary care with some specialist support)
  - Care hotel
- In the hospital for new and/or highly complex treatments
- Hybrid forms for partly at home, closer to home and in the hospital.

The complex financing and the importance of broadening perspectives were also central to the RocheDialogues@Home of 30 June 2020.[8] The interview with Erasmus MC and the case description of Care4homecare outline how alternative options are already being successfully applied in practice.

8. Skipr article: "Op zoek naar businesscases om ziekenhuiszorg uit het ziekenhuis te halen", 8 July 2020 https://www.skipr.nl/partnernieuws/op-zoek-naar-businesscases-om-ziekenhuiszorg-uit-het-ziekenhuis-te-halen/

Interview

Niels Steenbergen
Sector Manager for Ambulatory Care
- Cancer Institute

- Erasmus MC

What are the benefits of home treatment?
Erasmus MC has been providing oncological treatments at home for more than 5 years. Last year, it involved approximately 1,000 administrations. Patients are very satisfied and the care can be provided with the same quality and safety. And the collaboration with care groups Laurens and Mediq, which supply the specialist district teams, is going well. With this service, the Erasmus MC Cancer Institute has also created a flexible capacity shell for when day treatment reaches full capacity. However, from a purely financial hospital perspective, this service does not deliver any revenue. After all, it is more inefficient care while there is a structural shortage of nurses.

"Home treatment requires a great deal of coordination, which also costs money."

What is the Cancer Institute's vision for the future?
That is why Erasmus MC has defined a vision to bring care closer to the patient, but in a future-proof way. This means in concrete terms:

- Subcutaneous administrations can be provided at home (relocation of care), and in due course possibly partly at the GPs (substitution of care).
- Intravenous administrations are carried out in the hospital for the time being, but may eventually be moved to an external location. This could be, for example, a nursing home, a primary care-plus centre or an external Erasmus MC location (relocation of care)
  .

In this way, the hospital tries to set up care close to home more efficiently. And even then extra staff will be needed.

In addition, we also need to work towards a regional transmural team, because the shortage of nurses plays a role both in hospitals and in district care.

What are the biggest barriers for sustainably implementing care at home?
There are various possibilities for organising care at home more efficiently in the region, for example more cooperation with the surrounding hospitals, district teams and GPs. Current funding remains the biggest stumbling block to organising it optimally.

The choice of only administering subcutaneous treatments at home, and intravenous treatments in the hospital or at an external location, can be extended much more widely to other specialisms and also nationwide. Only then will clear choices be made in innovative care.

And finally, an important conclusion from the dialogue is that there is a great opportunity and need for the developments from the industry: more subcutaneous treatments, preferably suitable for self-administration or oral administration. This is more pleasant for the patient and makes care more future-proof.

Case study of successful complex hospital treatment at home

Intrathecal administration at home
Care4homecare

The emergence of the first integrated outpatient clinic in the Netherlands

The origin
Since the 1980s, treatment with medication directly into the fluid around the spinal cord (intrathecal) has been known in the Netherlands. This treatment can be very effective for people with severe spasticity, among others. These patients rely on an implanted pump that is surgically placed under the skin. The pump with a muscle relaxant must be refilled regularly or the dose must be adjusted in a hospital.

This is burdening for immobilised patients and caregivers, and it is expensive and can lead to complications. In 2010, the idea of integrated treatment at home resulted in the first outpatient clinic in the Netherlands: Care4homecare. Focused on chronic care for patients with an implanted pump, who receive intrathecal treatment with baclofen (ITB therapy) and where the complex care can be provided on location.

Home treatment
The implantation takes place in a specialised hospital. The pump is placed subcutaneously and the catheter lies directly near the spinal cord. Chronic aftercare with assessment of the therapy in view of the individual goals, refilling the pump and the assessment in case of problems is carried out on site in the patient's home by Care4homecare. This is now done for some 570 patients (60% of all patients with an implanted pump system in the Netherlands).

From pioneering to practice

Project-based approach
After Care4homecare was recognised as a medical specialist institution, it started an innovation process in cooperation with Erasmus MC and health insurer CZ for the reimbursement. The result of an intensive process is an innovation code awarded by the Dutch Healthcare Authority NZa. This allows Care4homecare to independently submit declarations for the care of these patients. To negotiate the awarded DOT reimbursement with all healthcare insurers, Care4homecare is affiliated as an Independent Treatment Centre (ZBC) with Zelfstandige Klinieken Nederland (ZKN). In this way, it can demonstrate by means of an annual audit and quality mark that quality and safety are guaranteed.

It concerns integrated and transmural care
Patients are treated in their familiar home environment, and for clinical interventions or monitoring they can be admitted without any threshold. The care is integrated with regular hospitals that have ITB as their area of expertise. Arrangements for multidisciplinary collaboration with short lines of communication have been made with various centres. This is warranted through individual agreements, regarding protocol and finances.

Highly trained team and flexible organisation
The fact that the specialists work independently and remotely requires highly trained employees. In addition to the medical specialists, Care4homecare therefore works exclusively with nursing specialists or specialised nurses, who they train themselves.

Online supervision
Double-checking of medication is a must. For medication control and discussing questions about the therapy, an online supervision is standard for us at every consultation. A nurse and medical specialist are available at all times.

In the hospital where necessary, at home when possible

Thanks to this experience with ITB, Care4homecare now provides high-quality hospital care at home to some 650 patients with chronic complex care, palliative and drip treatments for oncology and rheumatism. The number of patients and indications can be further expanded by organising regular care and transmural care accordingly.

Our recommendations for follow-up

As we pointed out in the introduction to this paper, oncological care at home is possible, permitted, desirable and even necessary. However, the follow-up to the successful pilots must go much further than scaling up. Together, we must look for a sustainable concept that is well aligned with the current healthcare challenges. And make optimum use of available innovations. To achieve this, we need to think outside the existing frameworks. After all, patients will receive much more care at home or closer to home in the coming years. In order to maintain the position of the Netherlands as a frontrunner in healthcare, parties are needed who take the lead. None of the parties can do this alone.

The various stakeholders must work together to make this possible. By putting the patient at the centre and deciding together how we can organise (oncological) care differently, it is possible to make a difference. This could be done, for example, by hospitals that are prepared to cooperate in an integrated way with other care providers for low-complex care. Scaling up already available e-health solutions is another possibility to move part of the care closer to home. In addition, the healthcare insurer can use innovative care contracting to reward value-driven care. The Ministry of Health, Welfare and Sport also plays an important role in developing a sustainable innovation climate and shifting focus to health and prevention.

Together with parties in the field, we would like to explore the broader perspective of Care@Home. In this paper, we have shared a number of views that we would like to discuss with you:

Put the Care@Home concept in a broader perspective

- Entire care pathway; combine with other innovations such as e-consultation, home monitoring and digital patient information and education
- Regional approach and cooperation compatible with Right Care in Right Place
- Investigate alternative locations close to home

Develop transmural financing models for integrated care

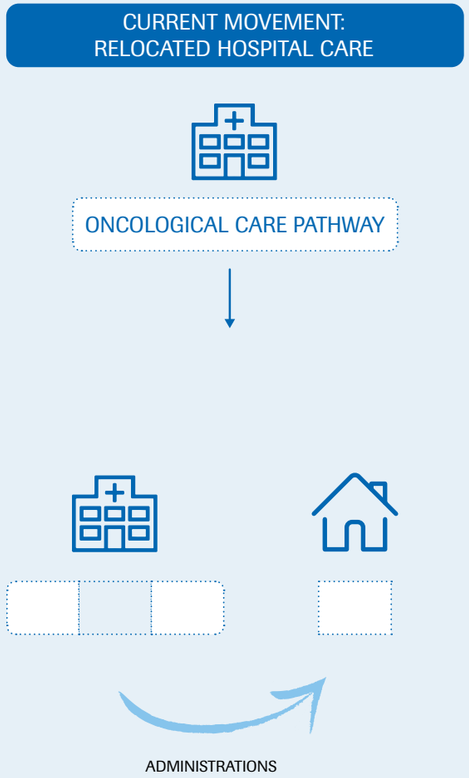
- Collaboration/cross-pollination with hospitals, specialist district teams, general practitioners, insurers
- Financing on the basis of results rather than activities

Make added value of home administrations transparent by means of data

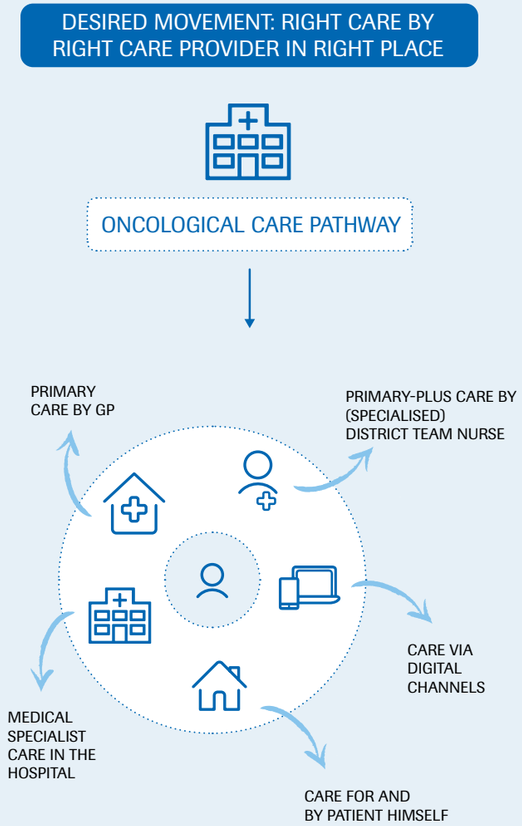
- Patient experience
- Nurses' experience
- Medical outcomes
- Financial impact

Make concrete choices in healthcare

- Make choices as to which treatments can/ cannot be moved to home/near home
- Extend vision/choices to other specialisms
- Stimulate innovations from industry to make care better possible at home, e.g. self-administration



Increasingly, oncological services can be provided at the patient's home, in most cases by the oncology nurse from the hospital. Content and form of care provision remain the same.



The oncological care pathway will be organised regionally around the patient for sustainability: the starting point for each component is the right care by the right healthcare provider in the right place. Focus is broadened from care to health.

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