The Dutch are the international front-runners in e-Health. Public-private collaborations and investments are the driving force behind a multitude of new ideas and right now, countless new e-Health applications are in the making.

The East Netherlands Development Agency (Oost NV) promotes economic growth and new jobs in the East Netherlands. We pursue this task by encouraging entrepreneurs to innovate, investing, developing international markets and by creating a beneficial business infrastructure.

The East Netherlands area is a European Hub in e-Health and Health IT technologies, due to a combination of substantive research in healthcare (Radboudumc Nijmegen) and the two strong University IT institutes based at Twente University (Enschede) and Radboud University (Nijmegen). In the cross-over between these two fields of expertise many companies and research teams are developing technologies of the future. Examples are Parkinson, The Rockstart Digital Health Accelerator, Radboud Reshape Innovation Center.

“The Netherlands has been probably the most connected country in the world, for many years,” describes Friso Hennings Backer of Oost NL. “The Dutch Health industry has been leading in Europe for many years and we have a very high level of adaptiveness and open culture to innovation. It is in the Dutch culture to innovate; we are simply leads the way thanks to its top-level science. It boasts the highest ICT penetration in hospitals and clinics and it offers exciting opportunities for start-ups and scale-ups.

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“More pragmatically, more than 5 years ago we set laws in motion at a national level, and through the Dutch Health Insurers Association, that pushed healthcare organizations to digitalize their offerings. This trickled through to lower levels. For example: In mental health, organizations had to dedicate 2% of their budget in investment in e-Health.”

Let’s join forces in e-health

Working with a Dutch partner in the field of e-health is a smart choice. But it works both ways. Dutch companies and organisations can learn a lot from international experts. There are plenty of e-Health challenges for us to tackle together, so let’s join forces!

Are you interested?

Are you interested in working with a Dutch partner? Contact us to find out more and go over your options.

Contact

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Mental healthcare comes with large societal costs and expenses are rising: increasing the societal burden. In many countries the costs have doubled over the last 10 years. Mental issues are associated with high levels of suffering and low quality of life. Effective treatments for psychological disorders are available, but not always accessible. Moreover, psychiatric complaints are still experienced as stigmatizing, meaning that not all that require help, seek help. A solution to these major challenges is supporting mental healthcare with digital treatment tools: e-health. The advancements in e-health present an opportunity to provide high-quality care at low costs.

Combined with traditional, face-to-face treatment, this so-called ‘blended care’ is providing the best of two worlds. Therapeutic face-to-face interventions will still be necessary, but more time-efficient as the therapist can build on results from the e-health platform.

This is what TelePsy stands for. TelePsy offers mental healthcare professionals an online platform with digital tools to support them throughout the therapeutic process of their service users. This includes an extensive test library for diagnostics and evaluation. For treatment, numerous educational content, exercises, diaries, and modules are available. The content can be used flexibly within any individual treatment process.

TelePsy was founded in the Netherlands in 2010 in collaboration with various GPs and mental health professionals. Initially, TelePsy focused on supporting GPs by developing an internet application for the diagnostics and evaluation of mental health problems. In 2011, TelePsy’s platform was awarded ‘Best Test Application’ by the Dutch Association of Psychiatrists for its user-friendliness, functionality and cost-efficiency.

Today, the TelePsy extensive platform is broadly applied by thousands of healthcare professionals. Every year, an additional 200,000 service users receive help through the platform. TelePsy continues to collaborate closely with (scientific) experts to constantly meet the needs of healthcare providers as well as the latest practical and scientific knowledge. TelePsy is located in Maastricht, the Netherlands, and has its second venture in Berlin. Since TelePsy opened their latest venture in Manchester last July, they collaborate with, inter alia, Manchester Metropolitan University for further research and development of the e-health components for the English platform.

In all, with its expertise in e-health with thousands of practices, TelePsy offers the platform the mental healthcare requires to evolve to the ‘blended’ state society wants and needs it to be.

Follow us on Facebook, Twitter, LinkedIn. Or check our website telepsy.co.uk
AbcdeSIM
The Flight Simulator for Medical and Health Professionals that Increases Patient Safety

Training doctors and nurses for emergency situations is a vital part of medical education. Using online serious gaming technology and a proprietary physiological model of the human body, VirtualMedSchool created an innovative program to teach emergency skills to doctors and nurses according to the internationally known and used ABCDE-method: AbcdeSIM.

Available versions are: AbcdeSIM for Doctors in a hospital, Nurses in a hospital, Severe Burns treatment, General Practitioners and Paediatrics (more to come).

The idea for AbcdeSIM comes from dr. Stephanie Klein Nagelvoort Schuit, internist acute medicine-intensivist at Erasmus University Medical Center in Rotterdam, the Netherlands. Aside from patient care, she is chair of the emergency department, but her first job is to train residents, medical students, etc. in emergency medicine.

Dr. Schuit: “Being an instructor for many ABCDE orientated courses (MedicALS, ALS and ATLS for example), I know how important good quality training is. At Erasmus University Medical Center, we have 300 new residents who start training in a wide range of clinical specialties each year. To prepare them for their first shifts on-call, we trained them in ABCDE skills. However, we had a chronic shortage of qualified instructors, and the residents often had problems getting time-off from the work-floor to be able to train with us. We decided that a lot of the skills we were teaching them in face-to-face training, could be shown in an online virtual emergency room. This way place residents can endlessly practice their resuscitation skills (wherever and whenever they had time), without any risk to (real) patients. We firmly believe that everyone should have face-to-face training time. By using the AbcdeSIM game as part of the curriculum of the residency programs, we reduced the face-to-face training time with 50%, so we have more time for extra learning goals, and we reduced the costs considerably.”

AbcdeSIM is an accredited course for Continuing Medical Education for Dutch physicians and Nurses (the first game ever). It’s currently in use by over 6000 doctors and nurses in several hospitals in The Netherlands and the UK.

In the UK VirtualMedSchool has a collaboration with the Royal College of Physicians to support the national IMPACTCourse and is a partner in foundation process of the Faculty of Remote and Rural Healthcare as part of the Royal College of Surgeons in Edinburgh.

You can find more about AbcdeSIM here: http://virtualmedschool.com/abcdesim

Where healthcare and Dutch Data Science meet, innovations in personalised solutions begin

By: Marieke Timmer MSc, Healthcare Communications Director

Coming from a linguistic background, I never expected to spend my working days with a company where algorithms and mathematics play such a vital role. As healthcare communications professional I almost accidentally bumped into Orikami, a Data Science company from the Netherlands, specialized in healthcare & life sciences. I fell in love instantly with their enthusiasm, the crazy way their minds work, the solutions they provide and the drive they have to research and validate...

From that moment on I am convinced that, at the cross-section of healthcare and data science, real innovations towards truly personalized solutions begin. At orikami, we use state of the art machine learning techniques to discover hidden patterns in healthcare data and make predictions based on these patterns. We believe healthcare is as personal as it gets. Your health is not mine and my experience of fitting care is probably completely different from yours.

Delivering high-quality personalized healthcare

The biggest challenge of healthcare remains to find a solution to deliver fitting and affordable healthcare. We are absolutely sure that by using our modern Data Science tools we are able to deliver efficiently, high-quality personalized healthcare. We do so as consultant and service provider and by developing our own products. Sounds too good to be true? Let me give you an example.

Multiple-Sclerosis self-monitoring and predictive analytics

When our team was confronted with the personal tragedies surrounding MS, we couldn’t believe that there were no signals to predict upcoming setbacks, or at least signals to monitor every day life with MS. We were actually convinced that by using modern technology we should be able to find patterns in MS data to help patients manage their condition. So, together with MS patients and MS clinics in the Netherlands we developed a Multiple-Sclerosis self-monitoring and predictive analytics tool. We provide a smartphone based multi-dimensional longitudinal measurement of disease activity in MS. Predicting personalized treatment trajectories. Combining data from a smartphone app (including clinical neurological tests & queries) with Fitbit data, we aim at personalizing diagnosis, prognosis and treatment of Multiple Sclerosis in order to help people with MS gaining control over their lives again.

Want some more Orikami examples of real innovations towards truly personalized solutions? www.orikami.nl
Obli Encouraging and Monitoring Fluid Intake

Obli encourages people to drink sufficiently and regularly. This is achieved by nudging users in a very intuitive way by lights and sounds. Obli is easy to use, even for elderly with very little experience with technology and patients in the first stages of dementia. The total oral intake of fluids is registered by Obli, both drinks from the carafe as well as tea, coffee or cold drinks from the refrigerator.

The Obli system enables caregivers also to remotely monitor and reinforce healthy drinking behaviour. Data related to the actual fluid intake can be used to provide feedback to the user or integration with health platforms. It is also possible to change settings so Obli will fit the personal needs.

Why is hydration care important?

Water is our primary and most important nutrient. It makes up approximately two-thirds of our body. We need to maintain a healthy level of body water. Insufficient water leads to dehydration, which is the underlying cause of many common conditions including: constipation; falls; urinary tract infections; pressure ulcers; malnutrition; incontinence; and confusion. Dehydration can also lead to life-threatening conditions, such as acute kidney injury, cardiac disease and venous thromboembolism.

For whom?

Primary target users are those at risk of dehydration, in particular elderly. Other patient groups are people with e.g. obstipation, chronic cystitis or diabetes, but also people with a fluid restriction because of chronic heart or kidney failure. Obli is being used in people’s homes, in care homes and in institutions for disabled people.

Obli is validated

A scientific effect study (Randomized Controlled Trial) has been conducted together with GP’s. Within patients that were selected because of low fluid intake a mean increase of 65% was achieved, after patient education and the use of Obli for 6 weeks. Also, long term effects (after 6 months) were included in this study. Obli is introduced in the consumer market and implemented in the care sector in the Netherlands, Germany, Belgium and Luxemburg.

Improving quality of care, avoiding hospital (re-)admittance and costs are big challenges in care homes and in community care. We have built a convincing business case in avoiding unnecessary admittances by conducting an effective preventive strategy. The first steps goes for the consumer market, health care providers and community care are made successfully within the UK.

For more information www.obli.info/en

Fresh Idea Factory (the Netherlands) is a start-up that develops and implements innovative products that help people to live healthy and promote smart care. We believe that prevention and self-management are key issues in modern healthcare.

CareWatch motivates to ‘get-into-action’; helps to prevent (falls)

Dutch TeleCare, Internet of Things [IoT] specialist and start-up 112Motion markets personal care solutions which keep elderly people safe & healthy. Our mission is to provide truly personalized care solutions addressing the needs of the people that face the risk of falling and the people & organizations that help them to avoid this risk. The CareWatch [wearable] is a prime example of a new generation of care solutions aimed at prevention.

The CareWatch is a multi-function device supporting fall detection, a personal alarm as well as monitoring a person’s wellbeing. The CareWatch addresses the needs of tomorrow’s (pre-)elderly; it helps to prevent the decline of essential body functions which might result in falling; it does this by offering personal advice - wherever possible in motivational messages to the wearer.

The CareWatch is unique; first and foremost, it’s a stylish wrist-worn, watch-like, wearable that provides the ability to monitor a person’s wellbeing, wherever they are in the world - without the need for a [mobile] phone. Furthermore, it provides the means to facilitate the communication between the Care provider and the CareWatch wearer. Fall prevention requires a large range of solutions; each providing data which, combined, facilitates truly personal advice, with actions that people should take; to stay healthy - or minimize their risks. We call this self-activated prevention; it’s about motivating people to act. The CareWatch is the cornerstone of a new generation of assisted technologies which allows caregivers to be truly pro-active in a very cost-efficient way. Caregivers can send messages to the CareWatch; such as alerts, notifications or call to actions.

The CareWatch connects to the Health Decision Support Platform which allows caregivers & medical specialist to solve their digital challenges. The platform provides care & personal rules, with workflows to cater for any individual, personalized, action, or even treatment/health plans and is a case management solution that ‘logs’ every step, every decision, all the data involved, over the lifetime of all its users. It provides very powerful features for sharing and collaborating. In short, it enables care to be organized around the individual.

The health benefits of higher levels and greater frequency of physical activity are well documented to lead to reduced risk and improved health. Check out this research paper by Lis Boulton, Maria Horne and Chris Todd: http://onlinelibrary.wiley.com/doi/10.1111/hex.12608/full

More information

www.TheCareWatch www.HealthMonitor.Me Nanno@112Motion.com

112Motion

Smart Healthcare

Self-activated prevention and personal care solutions

Drinkstimuleren en -monitoring