



FibriCheck®

PRESS KIT



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1

CHECK YOUR HEART RHYTHM, PREVENT STROKES



FIBRICHECK: A SOLUTION THAT SAVES LIVES

Did you know that heart rhythm disorders are responsible for 20% of all strokes? And that in the European Union alone there are around 350,000 strokes every year? And that 75% of them can be prevented with timely screening and active follow-up?

Mobile technology has become an indispensable part of our daily lives. So why not use it to save lives?

That is the idea behind FibriCheck, the world's first medically certified app capable of the early detection of heart rhythm disorders such as atrial fibrillation using nothing but an app on your smartphone or smartwatch. Simply place your finger on your smartphone's camera for 1 minute or perform a measurement on your smartwatch and FibriCheck immediately produces an accurate analysis of your heart rhythm thanks to its built-in medical software with artificial intelligence.

Trusted by doctors and researchers all the world over

FibriCheck has been granted the CE mark as a medical device and has also been approved in the US by the Food and Drug Administration (FDA). As such, the medical solution has earned the trust of doctors and researchers across the globe.

FibriCheck was founded in 2014 by Lars Grieten (CEO), Bieke Van Gorp (CBDO), Jo Van der Auwera (CRO) and Kobe Leysen (CTO). The company is based in the Corda Campus in Hasselt, Belgium and has offices in Leuven, Paris and San Francisco.

FibriCheck is currently in the marketing phase with several active business models: from a prescription-only app and a business-to-consumer (B2C) approach to corporate screenings (B2B).

FibriCheck has more than 200,000 users in the European Union and the UK. The innovative app may be sold throughout the European Union and, thanks to its approval by the FDA, FibriCheck is now also ready to be launched on the American market.

Parent company, Qompium nv was recently declared best digital health company by the European Society of Cardiology and was also awarded the prestigious Best Venture Award by the European Institute of Innovation & Technology (EIT). FibriCheck has since completed several capital rounds and has the support of LRM, Plug & Play, Bluehealth Innovation Centre, imec and Start it @KBC.

ORIGINS

“How FibriCheck saved my father’s life”

The father of Lars Grieten, CEO of FibriCheck, suffered his first stroke in 2013. He was just 51 years old at the time. “While holidaying with his fellow motorbike friends, he fell one morning in the shower half paralysed. A stroke. Just like that, out of the blue. Despite feeling perfectly fine immediately before the incident. I still remember the panic when we received the call. The ambulance couldn’t get to him in the mountains of southern France and so he was airlifted by helicopter to the hospital in Nice. They were unable to find the cause at first. In the end, it turns out it was a temporary constriction of a blood vessel in his brain. After a few days of anxious

waiting, his motor functions gradually returned.”

Two years later, the exact same scenario played out all over again. This time in a restaurant. And once again, the hospital’s specialists were unable to determine the cause. “That was a scary thought. In the meantime, I had been working for the past year on a project together with the cardiologists at the East-Limburg Hospital in Genk. Determining the cause of a stroke, it appeared, was a very difficult task. And so I was determined to overcome the shortcomings of the hospital’s own medical equipment with a software-only solution,” tells Lars Grieten.



The power of data

In the meantime, a prototype of Lars' digital application FibrCheck was ready. So when his father, a few weeks after his second stroke, felt unwell, Lars used the brand-new app to measure his heart rhythm. "The results were mind-blowing. Without even realising it himself, Dad had atrial fibrillation, one of the most common forms of heart rhythm disorder. He immediately received personal treatment. And together with the cardiologist, we closely monitor his heart rhythm on a regular basis using our FibrCheck app."

"FibrCheck saved Dad's life. Developing the app to guarantee a high quality of life makes me feel like we make a difference. Not just for my father but for all patients who suffer from heart rhythm disorders."



MILESTONES

2014

- Qompium is founded as the result of a Master's thesis at Hasselt University
- Qompium is chosen by Bayer Healthcare for the Grants4Apps accelerator programme

2015

- Further development, improvement and certification realised for FibriCheck
- Agoria, the Belgian technology industries trade association recognises the app with an eHealth award in the Mobile Health category
- Feasibility study launched with the support of the Flemish government

2016

- CE certification approved for FibriCheck
- ISO 13485 certification obtained (quality management system for the design, development and distribution of medical equipment)
- FibriCheck wins audience award at the Aging 2.0 conference in San Francisco
- Innovation project launched with the support of the Flemish government

2017

- FibriCheck books first paying user
- First major capital round takes place (before which only FFF investors): €1.5 million invested by LRM, Volta Ventures and other private investors
- FibriCheck awarded Best Mobile Health app at the conhIT conference in Berlin (Connecting Healthcare IT)
- FibriCheck officially launched as app on prescription
- Chosen as mHealth project as part of FAGG (Federal Agency for Medicines and Health Products of Belgium) and RIZIV (Belgian National Institute for Health and Disability Insurance)
- Awarded most innovative digital health company at the European Society of Cardiology conference in Barcelona, the world's largest and most important cardiology conference
- First major digital screening concluded with 12,328 participants and 122,337 measurements

2018

- Venture award received from European Institute of Innovation and Technology (EIT)
- Vodafone Award received
- Company screening model officially launched
- FDA approves FibriCheck as first-ever app for heart rhythm disorders
- FibriCheck launched for smartwatch

2019

- Mass screening takes place with 65,000 participants. Results of this screening are presented as late breaking science presentations on both HRS and ESC conferences
- CE recertification
- Launch of the FibriCheck B2C model
- ORCHA, an authority advisor for health applications, grants FibriCheck one of their highest rankings
- Launch of FibriCheck on Fitbit.

2020

- Expansion of the FibriCheck on Fitbit partnership
- FibriCheck is appointed as new innovation joining the 2020 NHS Innovation Accelerator (NIA) programme
- Launch of FibriCheck continuous night monitoring

People over the age of 40 have a 25% chance of developing heart rhythm disorders like atrial fibrillation. And the older you get, the higher the risk. 40 plussers therefore have a lot to gain by checking their heart rhythm on a regular basis. Especially those who experience heart palpitations or inexplicable increases in heart rate from time to time.

A timely diagnosis is of vital importance. Three quarters of all strokes can be prevented with proper screening and active follow-up. Using FibrCheck enables you to check your heart rhythm whenever you wish. A quick check-up takes just 60 seconds and fits perfectly in between even the busiest schedules.

Heart patients who have already been diagnosed can also monitor their heart rhythm more easily with FibrCheck. At home or away from home.



CLINICALLY VALIDATED AND MEDICALLY APPROVED

FibriCheck is unique in several aspects. It is the first app in Europe to be approved as a medical device (CE Class IIA). It is also the first medical smartphone app for heart rhythm disorders to be approved by the US watchdog FDA.

This is the result of a long journey. FibriCheck worked together with leading cardiologists for over 2.5 years in developing the product. And the app has been subjected to extensive clinical validation and medical certification. In doing so, FibriCheck has proven that it is clinically just as accurate as traditional technologies when it comes to detecting heart rhythm disorders. The latter measure

the heart's electrical activity via an external device.

Users can download FibriCheck themselves or obtain it from their doctor via prescription. In the latter case, it is the doctor who is in the driver's seat since he/she determines which patients can benefit from the solution. The prescription contains a unique code which the patient needs to scan before using the app for the first time. That creates a safe link between doctor and patient. More than 1,500 cardiologists and general practitioners in Belgium and beyond have already prescribed FibriCheck. And the Partena health benefit fund even reimburses users who download the app.

Why doctors choose FibriCheck

FibriCheck is a reliable and accessible tool which measures patients' heart rhythm with a level of accuracy that meets medical standards. Doctors can also access their patients' data and measurements anytime, anywhere via visual reports ranked according to priority. As such, FibriCheck offers more efficient care and follow-up of symptomatic patients along with an effective (pre)screening of higher-risk patients.

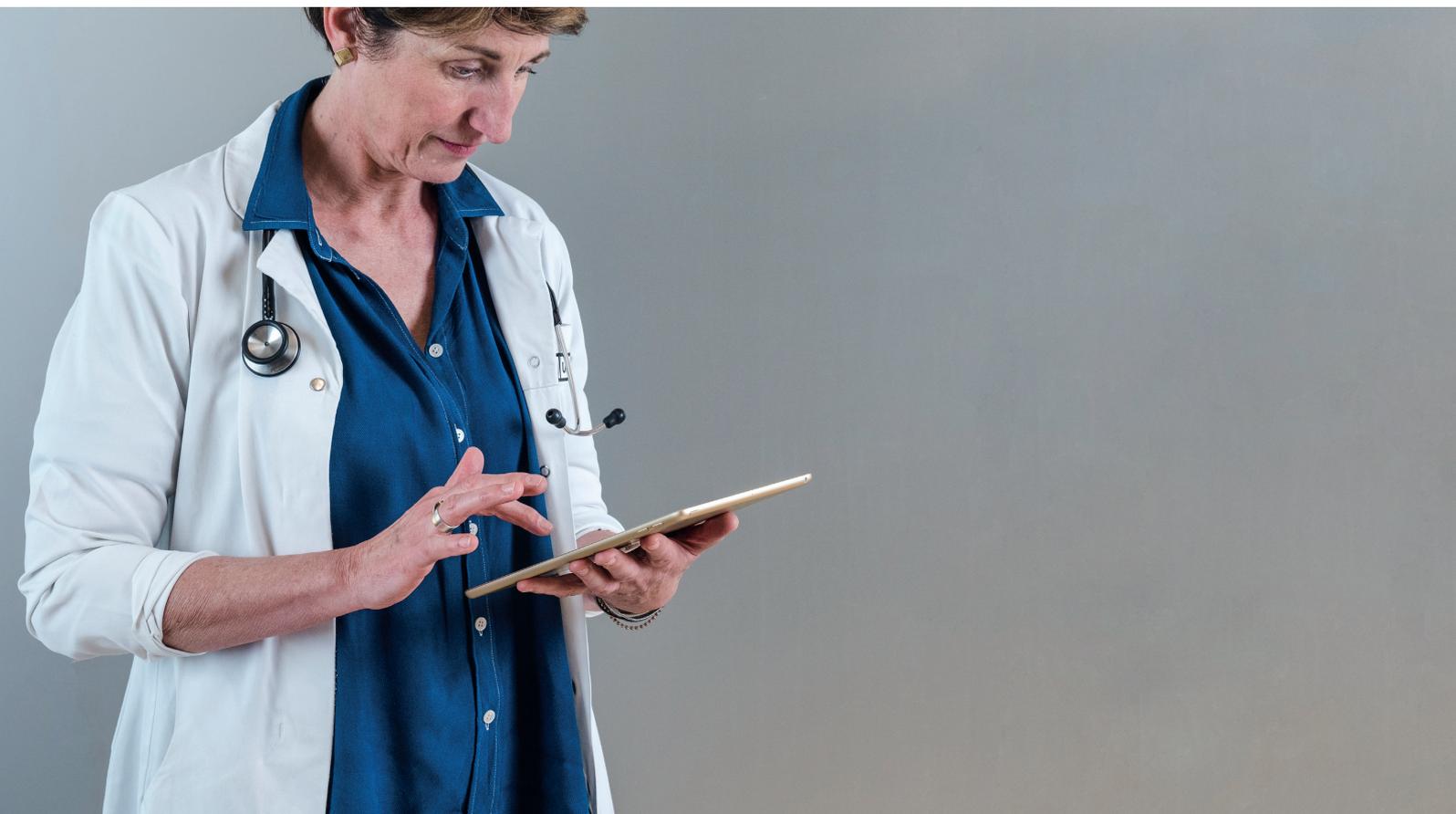
General practitioners and cardiologists typically measure heart rhythm using an electrocardiogram (ECG). This simple and painless exam involves attaching electrodes to the body which measure the heart's electric impulses.

FibriCheck, on the other hand, uses an entirely different measuring technique which requires no specialist hardware and can be done outside the hospital environment. Rather than focusing on the electrical impulses themselves, the medical app focuses on their effect on the blood vessels. With each heartbeat, these blood vessels “expand” and in between “shrink” back to their original diameter. FibriCheck uses the flash built-in to most smartphones to illuminate the fingertips and the built-in camera to observe the minute fluctuations in the amount of blood that flows through the pulsating blood vessels. The end result is a photoplethysmogram (PPG).

How does the user go about it?

All you have to do is download FibriCheck from [Google Play](#) or the [Apple App Store](#) and create an account. You then place your finger over your smartphone's camera for 1 minute. After each measurement, you are asked how you feel and whether you have any symptoms. All this information is submitted over a secure connection. Using medical software equipped with artificial intelligence, FibriCheck then produces an accurate analysis of your heart rhythm. All of this is included in FibriCheck's “Essential” model. If desired, users can also purchase a medical expert opinion for each measurement.

This medical advice is included in the “Premium” model where each irregular measurement is by default submitted to a follow-up centre for interpretation. Everything is subsequently compiled in a clear report which also indicates whether or not further action is required.



What makes FibriCheck unique?

- Measurements anytime, anywhere
- No specialist hardware required
- At-home solution, no need to visit a medical centre for measurement or follow-up
- Programmable measurement reminders
- Measurements examined by medical experts
- Detailed reports with clear advice

PRICING

Essential

1 month	€5.99/month
3 months	€24.99/month
12 months	€3.99/month
Evaluation of irregular measurements by a medical expert	€9.99/measurement

Premium

1 month	€24.99/month
3 months	€14.99 /month
12 months	€9.99/month
Evaluation of irregular measurements by a medical expert	FREE

FIBRICHECK AND THE COMPETITION

There are now dozens of cardiological mHealth apps on the market. Most of them, however, are limited to providing information or measuring heart rate. Only a few apps claim to be able to detect atrial fibrillation. Many of FibriCheck's direct competitors are hardware-only solutions or require additional hardware to measure the heart rhythm. And none of them can extend their current product portfolio to include non-invasive, long-term and continuous monitoring.



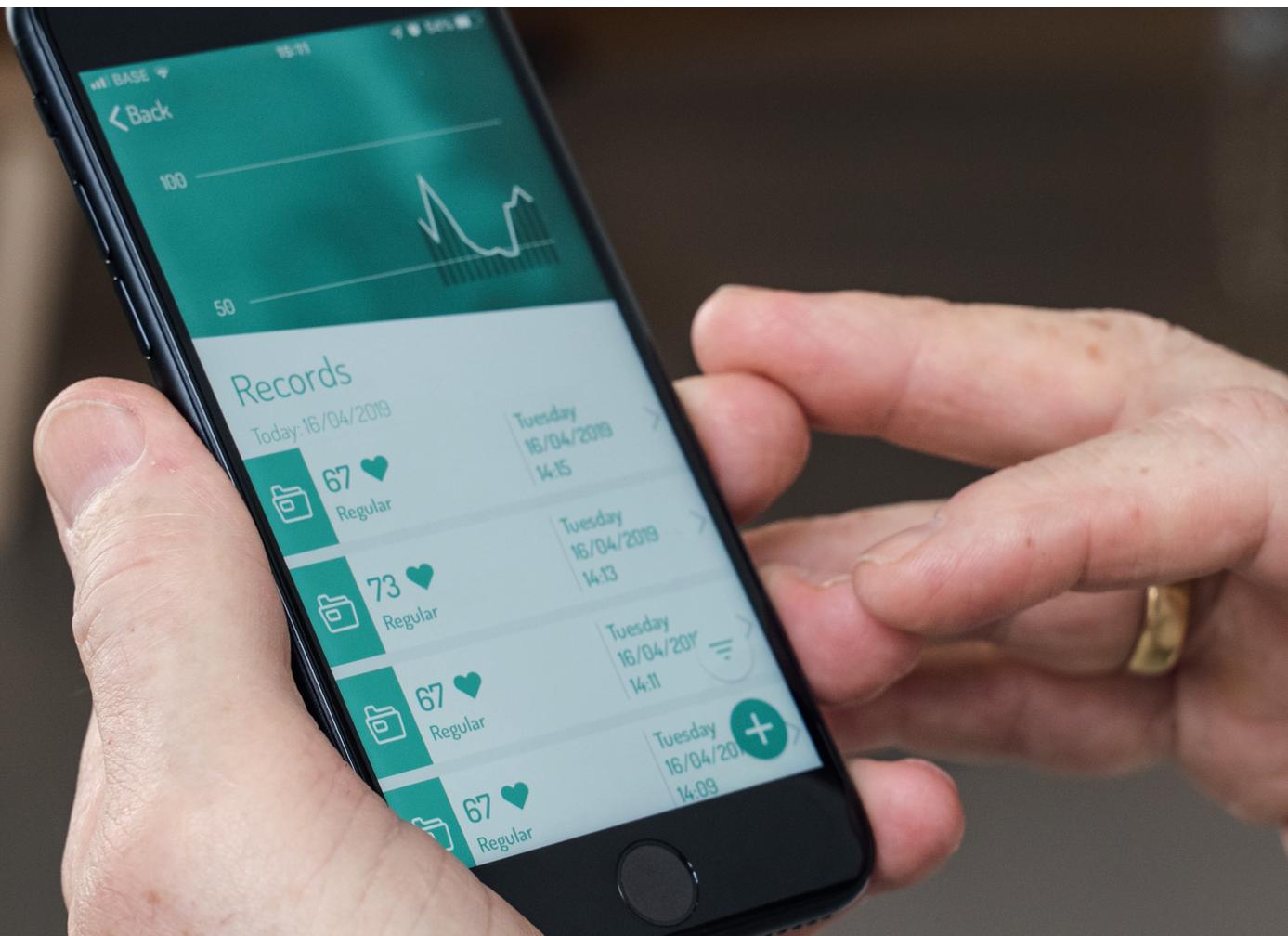
THE DANGERS OF HEART RHYTHM DISORDERS

Whenever your heart beats irregularly, there is an increased risk of blood clots forming in the chambers of the heart. If one of those blood clots become lodged in a blood vessel in the brain, they can cut off the blood supply. The result? The brain no longer receives vital oxygen.

Heart rhythm disorders are responsible for 20% of all strokes. And when you consider that in the European Union alone, 350,000 strokes occur every year and that 75% of them can be prevented with timely screening and active follow-up,

then the importance of a reliable form of measurement becomes immediately clear. Especially for those over the age of 40 who have a 25% chance of developing a heart rhythm disorder. And the older you get, the higher the risk.

Atrial fibrillation is the most common form of heart rhythm disorder. Moreover, it is a “silent killer” since 40% of people with atrial fibrillation never experience any symptoms. The number of people with this kind of heart rhythm disorder is expected to increase by 70% by the year 2030.



HEART RATE VS. HEART RHYTHM

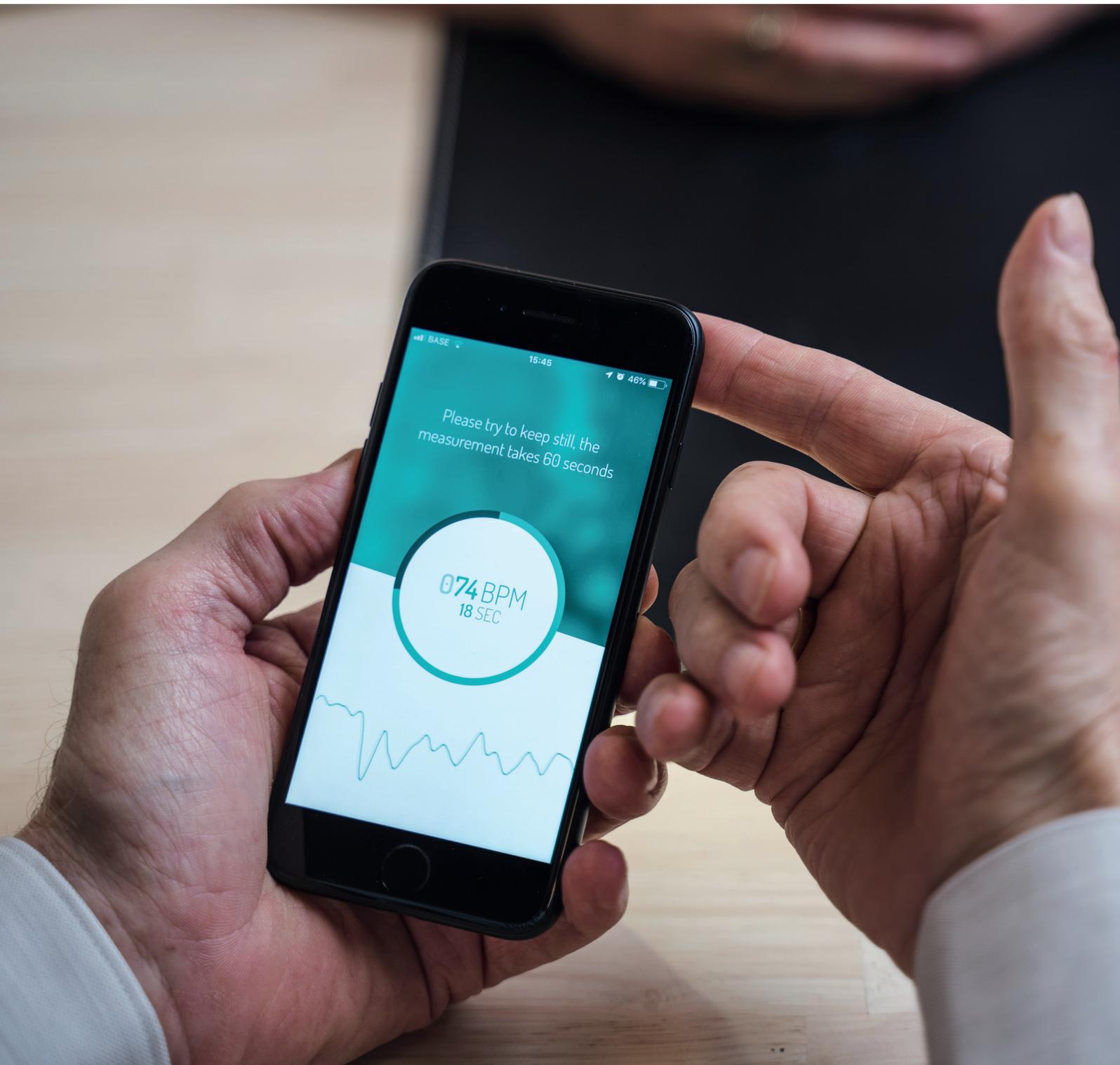
It is possible to suffer from heart rhythm disorders and still have a perfectly normal heart rate. What is the difference between the two?

The heart rate is the number of times the heart contracts per minute. That varies from one person to another and throughout the day. When at rest, the heart will normally beat between 60 and 100 times per minute. Typically, the more fit you are, the lower your heart rate will be at rest. Under physical exertion, however, the heart rate automatically goes up, since the heart needs to pump more oxygen and nutrients throughout the body.

The heart rhythm is the rhythm at which your heart beats. Imagine you have a heart rate of 60 beats per minute. Your heart rhythm will tell you whether or not those beats are nice and regular. Ideally, the heart rhythm should remain regular throughout the day.

The illustration below shows two cases with the same heart rate (60 bpm). The rhythm on the top is regular. The interval between each heart beat is the same and each peak has the same height and width. The rhythm underneath, however, is irregular. The second and third heartbeat for example are in quicker succession than the others.

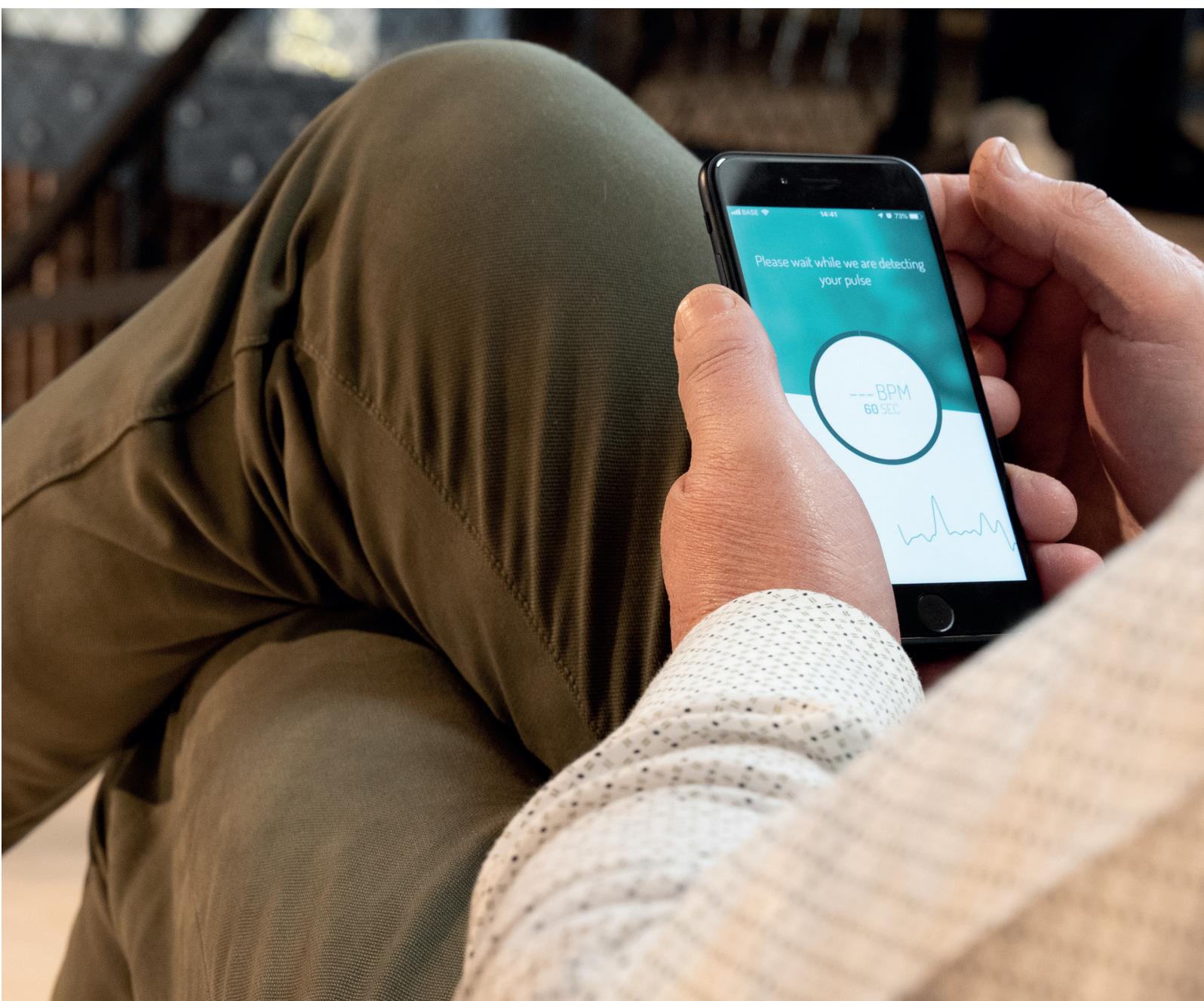




Checking your heart rate is easy, simply by counting the number of heart beats during 1 minute. You can use a stop watch, heart rate monitor or one of many online applications for this. Measuring your heart rate, however, is more difficult since changes can occur very quickly. Irregular rhythms can appear suddenly and then disappear again. In the past, it was necessary to make an appointment with a GP or cardiologist for an electrocardiogram (ECG). But such measurements can only check the heart rhythm at a specific moment, whereby irregularities can remain under the radar. FibriCheck makes measuring your heart rhythm quick, easy and reliable.

FibriCheck also works together with companies for the preventative screening of their employees for heart rhythm disorders. Such screenings can not only save lives but also limit the risk of long-term employee absences. Such in-company screenings also boost the sense of community amongst colleagues, since such innovative initiatives become major talking points on the work floor.

In such cases, FibriCheck creates a unique access code which the company can distribute to its employees. Once they have downloaded the FibriCheck app and scanned the access code, employees can measure their heart rhythm an unlimited number of times. FibriCheck then sends each employee a personalised report. The organisation also receives a general, anonymous overview of the results. They can see, for example, how many potentially life-threatening disorders were detected. This gives them a clear and tangible indication of the potential impact on their employees' health.



WHAT PEOPLE ARE SAYING



“From time to time I suffered from palpitations. FibriCheck allows me to check upon my heart rhythm anywhere, anytime. As such, I could finally get a diagnosis and a treatment plan.”

Eric, 49



“After a long career in the health care sector, I know the benefits of prevention all too well. FibriCheck is very valuable to me, now that I’m at an age where I start worrying about my heart’s health a little more.”

Phil, 69



“Arrhythmias run in our family. FibriCheck is an easy and convenient way to follow-up on my hearth rhythm. I really appreciate it that an expert has a look at the data to have that human validation.”

Sandra, 44



“Without this app I would never have known I had an arrhythmia. My cardiologist told me I was at high risk for a stroke. After 2 medical procedures, my heart is perfectly healthy again. This is priceless!”

Maria, 76

The FibriCheck team represents a mix of talented people from technology, quality, research and business.

THE FOUNDERS



Lars Grieten, *CEO*

Armed with a PhD in biomedical sciences, Lars began working at the East-Limburg Hospital in 2012 as project manager for the Limburg Clinical Research Programme. It is there that he founded the Future Health department where he and his team investigated and developed a range of digital health solutions. In 2013, Lars became senior researcher at imec, Europe's largest research centre for micro-electronics and digital technology. In 2015 he was guest professor of digital health at Hasselt University. Since 2016, Lars works full-time as CEO of Qompium, dedicated to bringing digital health solutions into daily clinical practice.



Bieke Van Gorp, *CBDO*

After completing her Master of Business Administration at the Catholic University of Leuven and a Master in Finance at the Labovitz School of Business and Economics, Bieke began a career in Mergers & Acquisitions at BNP Paribas Fortis in Brussels, Amsterdam, Paris and New York. She later worked at Pomin (owner of several different Belgian companies) as direct strategic advisor where she was responsible for Mergers & Acquisitions and special projects. At Qompium, Bieke applies her financial and strategic expertise to achieve successful market preparations and the roll-out of the company's various business models.

THE FOUNDERS



Jo Van der Auwera, CRO

Jo has a Master of Science in biomedical sciences from Hasselt University with majors in bio-electronics and nanotechnology. As a clinical researcher at East-Limburg Hospital, he worked on remote patient monitoring and disease management in patients with an implantable cardiac device. Since the launch of Qompium, he is responsible for quality control, compliance and aftersales. Jo is a highly sought-after expert in the medical approval of mHealth applications. Under his wing, FibriCheck was able to obtain a CE mark and FDA approval.



Kobe Leysen, CTO

Kobe has a Master of Science in Industrial Engineering and is specialised in Computer Engineering. For his thesis, he designed a mobile haemodynamic laboratory. As co-founder of Qompium, he developed the entire existing technical system with the help of medically approved microservice architecture, which has since proven its scalability with more than 200,000 users. He is now in charge of a team of 11 developers and data scientists at FibriCheck.

THE TEAM

Tine Proesmans - *Clinical Research Manager*

Salina Smellers - *Product Manager*

Wilco Waaijer - *Head Backend Development*

Steven Van Bael - *Backend developer and dev-ops*

Pieter Frederix - *Head Frontend Development*

Jonas Allard - *Web Application Developer*

Thomas Reyskens - *Head Mobile Development*

Amaury Vanvinckenroye - *Head Data Science*

Xavier Lambein - *Data Scientist*

Glenn De Witte - *Data Scientist*

Kevin Van Craen - *Quality & Customer Care Manager*

Livia Reekmans - *Office Manager*

Daisy Geerkens - *Accountant*

Mathis Gelens - *Sale Representative*

Felicia Vaz - *Project & Business Development Manager*

Eline Vandeput - *Project Coordinator*

Ine Van Loon - *Marketing Manager*

Natalie Hoekx - *Strategic Marketer*

Anneleen Vaes - *Content Marketer*



CONTACT DETAILS

Facebook: <https://www.facebook.com/FibriCheck/>

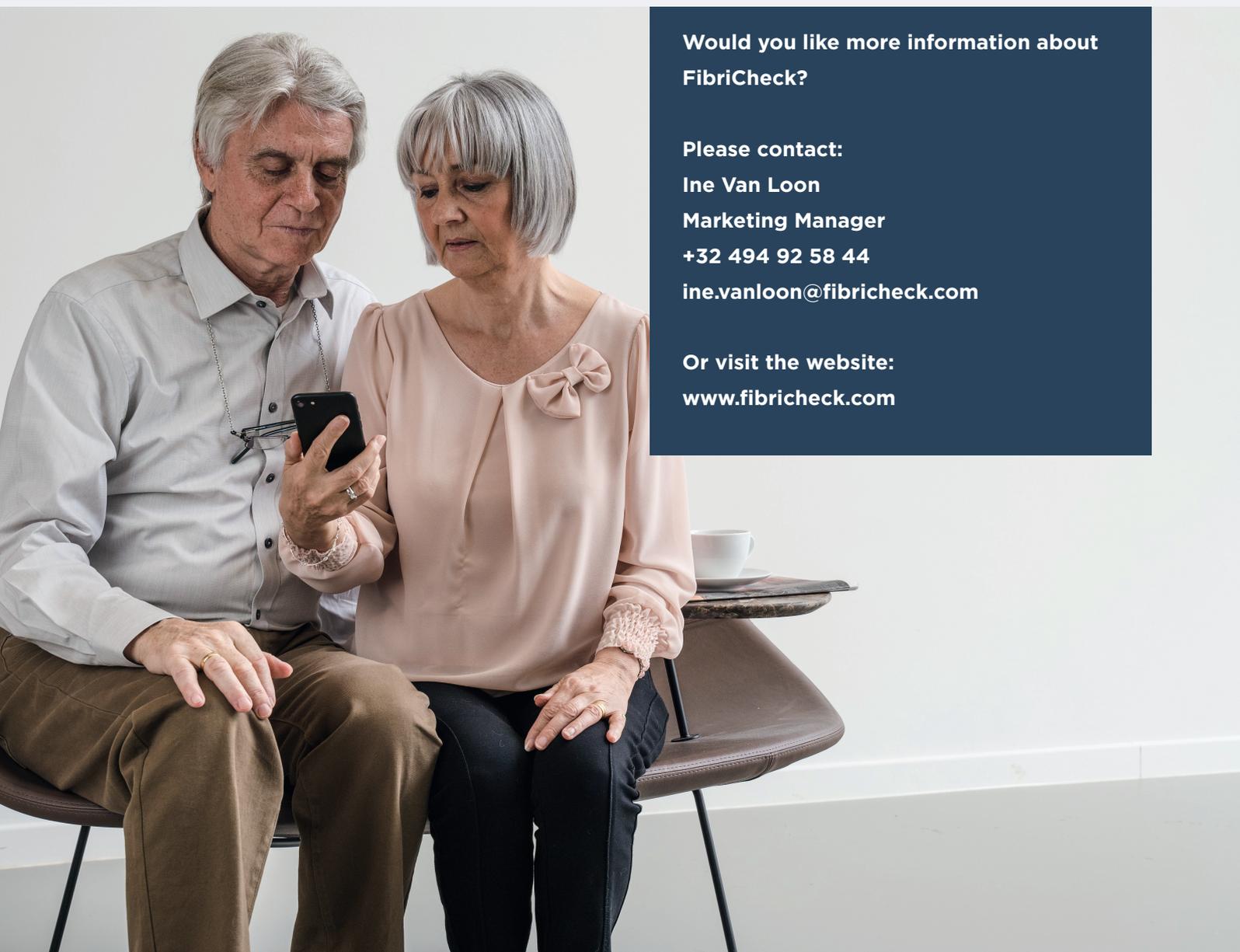
Twitter: <https://twitter.com/fibrichack>

LinkedIn: <https://www.linkedin.com/company/qompium/>

YouTube: <https://www.youtube.com/channel/UCmR1YQqAarrDMxdYQa23q6w>

Blog: <http://www.fibrichack.com/blog>

Website: <http://www.fibrichack.com>



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