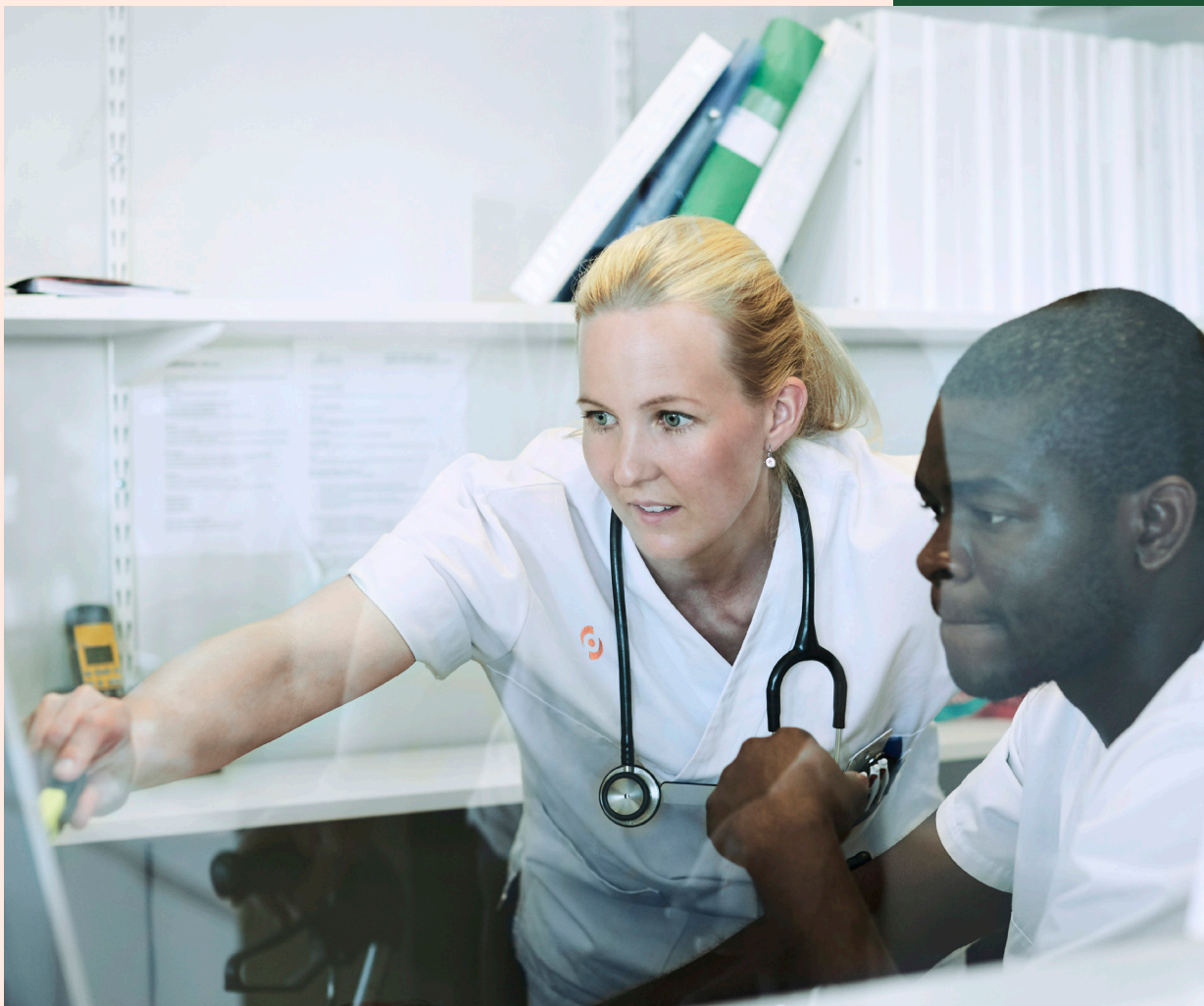


Diaverum's digital transformation

# Personalised, life enhancing renal care

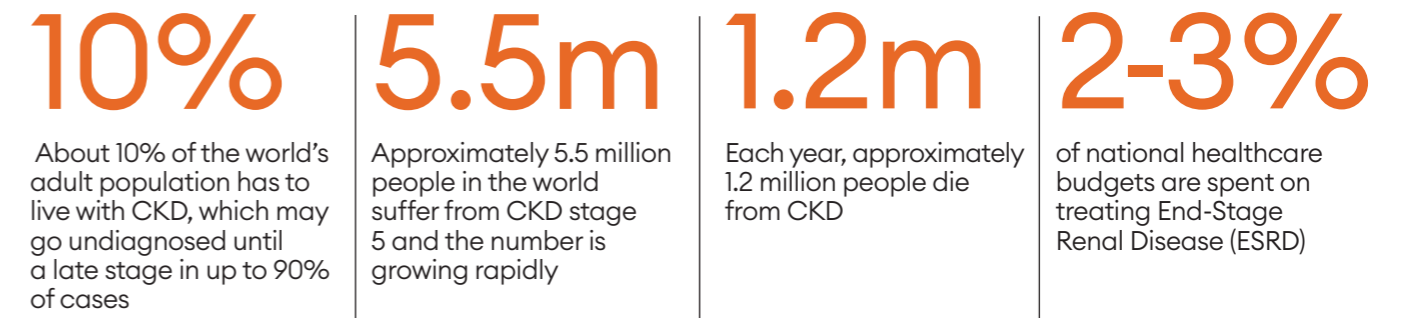


**“We have embarked on an ambitious journey to become the global renal care provider of choice, and a leader in integrated, AI-enabled, personalised dialysis care.”**

Dimitris Moulavasilis  
Chief Executive Officer



### Chronic Kidney Disease (CKD) at a glance



## Unlocking better care through digital

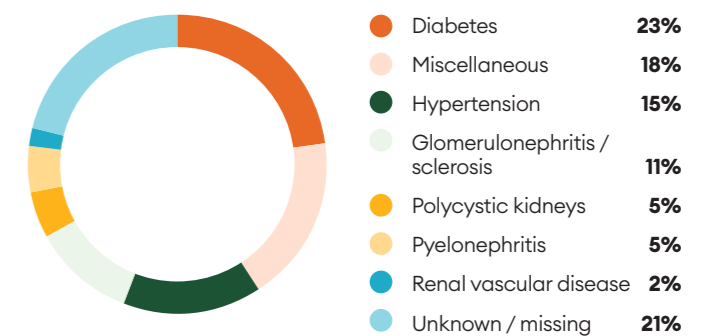
At Diaverum, we are dedicated to enhancing the lives of people with CKD.

CKD is an escalating global challenge. It has multiple causes, including many linked to unhealthy lifestyles. Moreover, it adds to the unsustainable growth in expenditure and disease burden affecting national healthcare systems and patients around the world.

To tackle this challenge, digital innovations are key – they have the potential to unlock an unprecedented level of personalised, standardised, efficient and high-quality care.

At Diaverum, we are dedicated to enhancing the lives of people with CKD, which is why we are developing a range of digital platforms and applications to improve renal care and patients' well-being.

Main causes of CKD



# Shaping the future of renal care

**Digital is reshaping the future of our industry and we are determined to play a key part in this.**

In the future, we see physical clinics and digital platforms combining to improve renal care. This will include AI predictive analytics and mobile apps contributing to the delivery of efficient and personalised care, adjusted to each patient's needs.

Physicians will have better predictive tools, nurses will come closer to patients, processes will be more effective and patients will be better treated.

Data scientists will increasingly be part of the healthcare profession – members of our multidisciplinary teams working with patients to ensure our focus is always on delivering what each patient needs, individually.

We foresee our specialists being able to provide the basics for dialysis treatment from wherever they are, without having to physically be where patients are.

For example, in the future we aim to connect our skilled nephrologists with our global network of clinics remotely, so they can provide the best clinical governance and renal care to Diaverum patients anywhere in the world.

**“We are not building digital solutions around dialysis machines; we are building digital solutions around our patients.”**

Fernando Macário  
Chief Medical Officer



“As part of our digital journey, we have been converting all our know-how into a proprietary digital platform. So we can provide the most efficient, standardised, high-quality and highly scalable ESRD service in the industry.”

Zoltan Szepesi  
Chief Transformation Officer



# Our digital transformation

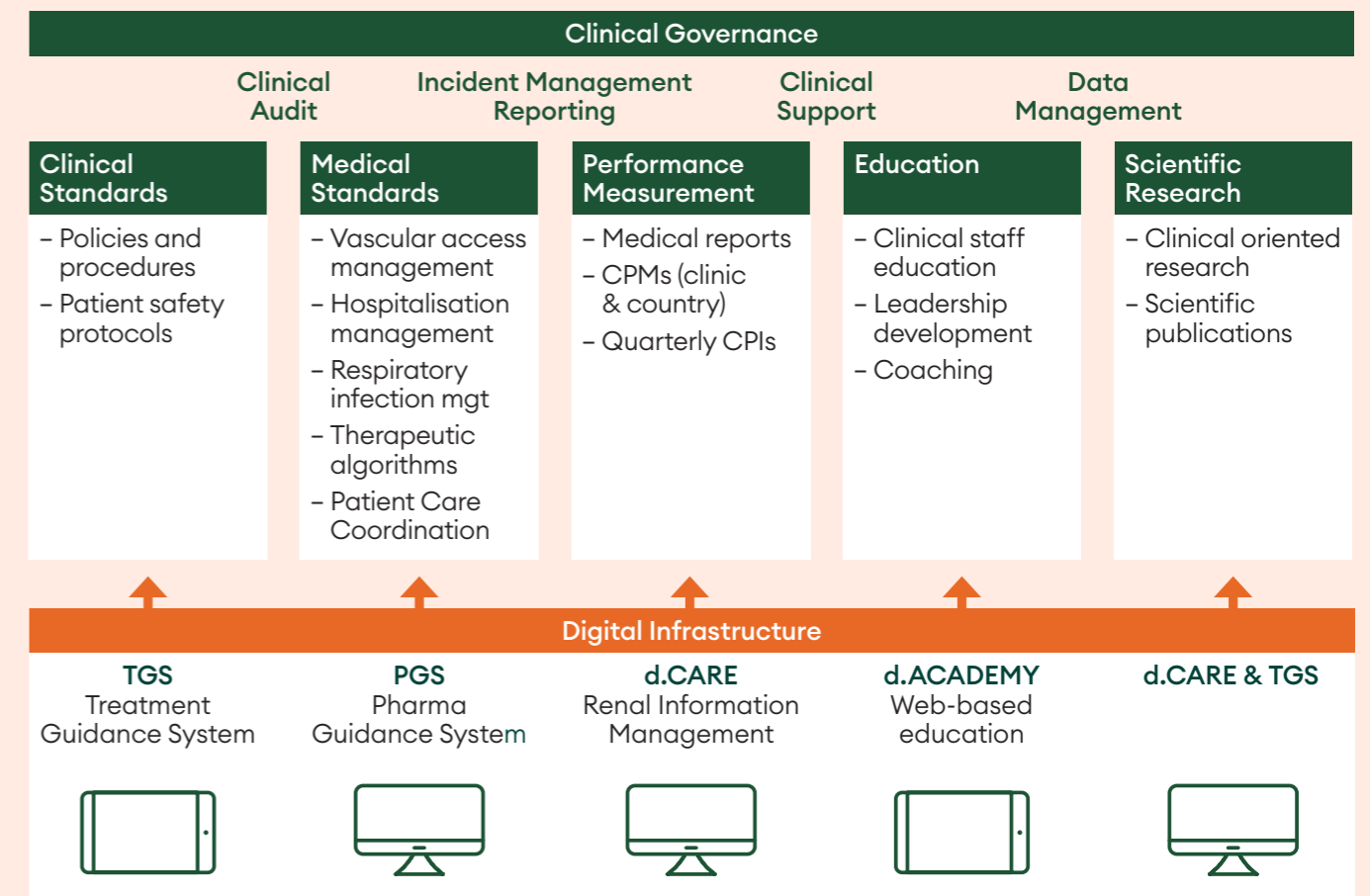
We are developing digital solutions and applications around our patients' needs to improve treatment effectiveness, efficiency and medical outcomes worldwide, while also empowering them to contribute to their own care and well-being.

This includes **human-centric, explainable, and responsible AI solutions** to support our physicians to deliver personalised care to our patients.

Looking ahead, we are building our own AI development factory to train, validate, deploy and monitor a series of AI models that will address important unmet clinical needs.

## Our Care Delivery Model

Our care delivery model consists of five pillars of excellence, governed by a robust clinical governance framework and enabled by a continuously evolving digital infrastructure.



## d.CARE app Patient Management System



## Business case: Targeting major ESRD\* complications with AI

We are using AI solutions to improve outcomes that really matter to our patients, like their vascular access (VA) survival.

Central to our clinical strategy, vascular access thrombosis is a major complication for haemodialysis patients and healthcare providers, which we are now tackling with an innovation breakthrough.

With 0.11 to 0.5 episodes per patient every year, it creates uncertainty and fear for patients, who are understandably worried by the possibility of it happening and the lack of knowing whether or when it might happen to them. If it does happen, it is not always possible to recover permeability of the access, increasing the risk of having to have a Central Venous Catheter (CVC). Moreover, VA thrombosis is associated with increased mortality. At the very least, it causes discomfort for patients and disrupts their dialysis treatment.

Relatively common and with multiple impacts, VA thrombosis accounts for a significant increase in the total cost of care for patients. This includes increased costs for health systems, for example due to urgent procedures, hospitalisations and CVC care. It also leads to increased waste of consumables and logistical challenges.



\*End-Stage Renal Disease



# 75%

Simulations using our historical patient data showed that on average, our AI model accurately predicted 75% of actual cases that were not previously detected.

## A breakthrough innovation in VA prevention

To tackle this critical problem, we have created a high-accuracy AI model. It delivers a step-change in our ability to predict and prevent VA thrombosis episodes among our haemodialysis patients.

It is a big win for everyone - innovative digital tools and predictive analytics insights for our healthcare professionals, improved medical outcomes for our patients and lower cost of care for payors and national health systems.

# Human-centric, explainable and responsible AI

Our highly effective VAAI model follows the core principles of ethical AI.

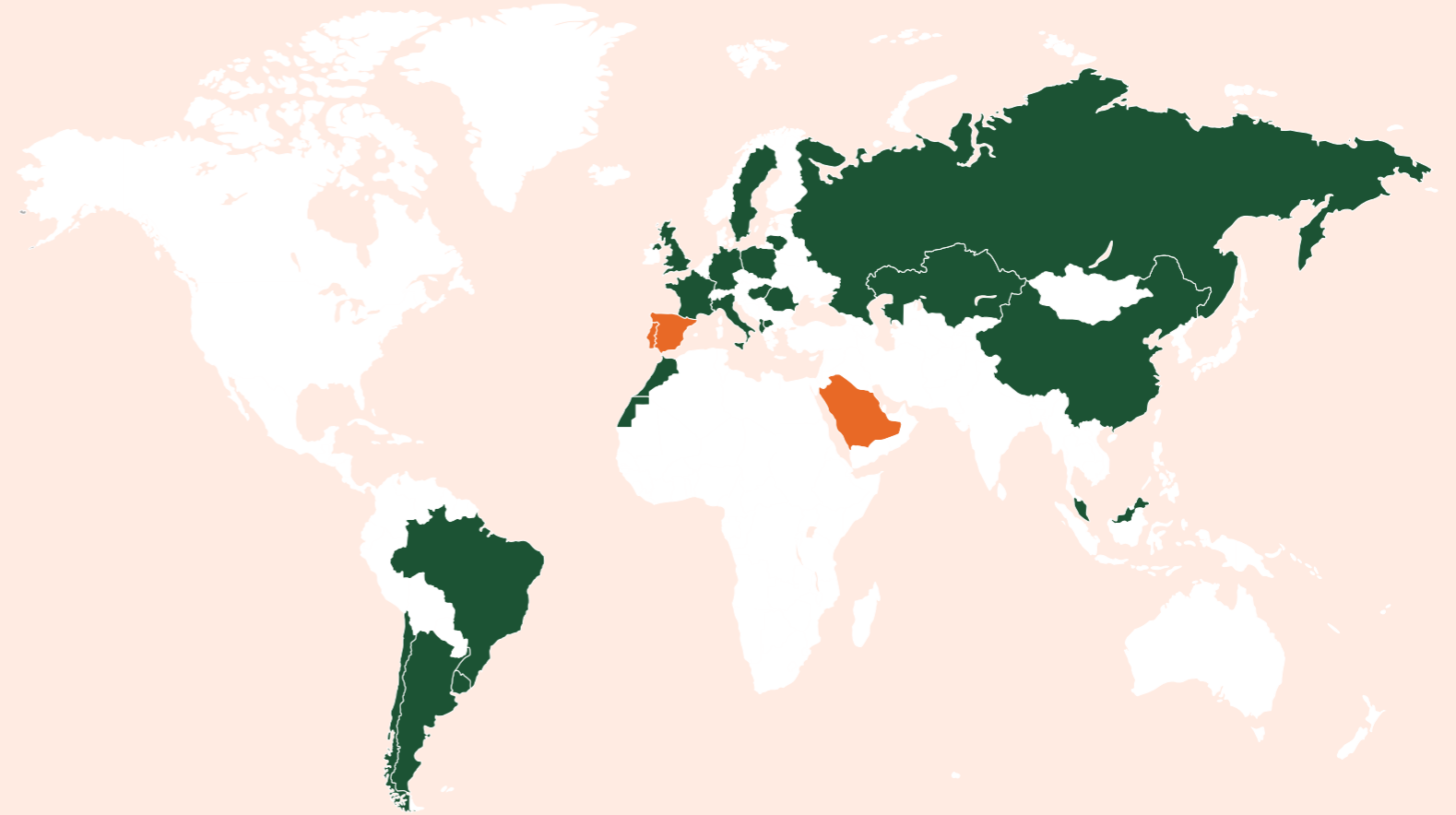
It uses personalised input variables comprising dialysis treatment data, lab tests results and demographics, predicting if the patient will suffer from a thrombotic event one week before the episode takes place.

The AI prediction is presented to the nephrologists together with a set of clear insights, empowering them to offer preventive personalised care to maintain the patient's vascular access survival.

The model is integrated into our digitalised clinical workflows and it connects seamlessly to our digital infrastructure, including our proprietary renal information platform, d.CARE, and our Treatment Guidance System (TGS).



## Rolling out our VA AI model across our network



We are initially rolling out our model to our operations in Portugal, Saudi Arabia and Spain, which care for approximately 12,000 renal patients. Our objective is to roll it out to our entire network of 452 clinics in 24 countries, over the next 18 months.

Our ambition is to have an AI-empowered clinical workforce in all our clinics, improving outcomes that really matter to our patients – enhanced prediction and prevention of VA thrombosis, and more.

452

Clinics globally

24

Countries in our network

40,000

patients

## About Diaverum

Diaverum provides life enhancing renal care to patients with Chronic Kidney Disease (CKD), enabling them to live fulfilling lives. Diaverum is a leading global provider in renal care services; we help some 40,000 patients with 6.2 million treatments annually. Our vision is to transform renal care, to deliver the highest quality of care for patients and reduce total cost of care for payers.

Our focus is haemodialysis, but we offer a portfolio of treatments ranging from preventive care, peritoneal dialysis and home care to coordination of patients' comorbidities, transplantation services and holiday dialysis. Diaverum employs around 14,000 people and operates 452 clinics in 24 countries globally. Diaverum has its head office in Malmö, Sweden.