

## **Quanta Supports the American Kidney Health Initiative**

Alcester, UK, 11 July 2019: A major overhaul of American kidney health was announced yesterday by the <a href="Trump Administration">Trump Administration</a> and the <a href="US Department of Health and Human Services">US Department of Health and Human Services</a>. This initiative has enormous potential to improve the lives of American kidney patients by promoting better screening and prevention, making organ transplantation more accessible and providing dialysis patients with greater choice and better access to home therapies. Importantly, this includes proposals for Medicare to incentivise increased utilization of home dialysis through payment mechanisms.

Quanta Dialysis Technologies welcomes these exciting initiatives. It is our mission to improve the lives of dialysis patients through innovation. For this purpose, we developed our personal haemodialysis system SC+ with the goal of making selfcare and home dialysis more accessible, thereby giving patients more choice and empowerment. We look forward to working with our colleagues in America to achieve the vision of the kidney health initiative once we have secured FDA clearance for SC+, which we are actively working on.

#### We can do better, we must do better

About 10-12% of us suffer from some form of chronic kidney disease (CKD), which is defined as abnormal kidney function or structure, or protein or blood leak into the urine. Some CKD patients will progress to kidney failure requiring life-sustaining kidney replacement therapy in the form of a transplant or, most often, chronic dialysis. Unfortunately, most of these kidney failure patients have survival rates worse than most forms of cancer and congestive heart failure. The models of care we have created to detect and treat CKD prior to kidney failure are insufficient and the treatment of kidney failure is costly for payers and deadly for patients. We can do better. We must do better. Whatever side of the aisle one is on, many of us caring for CKD patients and in the dialysis business feel that the Trump Administration has taken a bold step in the right direction in doing just that.

#### A modern healthcare approach

We must take a modern public health approach to identifying CKD, predicting who is at risk of progression, and aggressively treating those individuals with lifestyle interventions such as diet and exercise, blood pressure control and optimizing management of those who are diabetic. We have several treatments, both new and old, that are known to reduce the risk of progression; but sadly these are often applied too late or not at all. Besides relying on the primary care system to order the right tests and refer to specialists at the right time, big data sources can be leveraged to find those at risk and ensure that they are offered the appropriate testing and treatment. For those high-risk groups such as the poor, underinsured or geographically isolated who are outside of the traditional care system, mass screening programs can play an important role in identifying kidney patients before it's too late to provide

early preventative care. Finally, coordinated, multidisciplinary care needs to be provided to meet the complex needs of kidney patients who often have multiple comorbidities.

## Efficiency

For those who are eligible for a kidney transplant, waiting times must be cut. This requires more efficient organ procurement systems, the use of less than perfect donor organs and major awareness campaigns surrounding the importance of both living and deceased kidney donation. Despite these efforts however, many patients will still require life-sustaining dialysis. Fixing this part of CKD care may be the most challenging but will likely have the biggest impact on outcomes for patients and the economic sustainability of our health care system.

The traditional centre-based haemodialysis model does not always put patients first and the delivery model is broken and unsustainable. The inherent inflexibility of this model leads to a long, two-day "killer gap" over the weekend, when patients are not treated, leading to increased mortality and hospital admissions on Mondays. Healthy kidneys work 24 hours a day, 7 days a week to keep our body in a fine balance between dehydration and fluid overload, maintain pH and electrolyte balance so our organs function optimally, clear waste products and drugs from our system, produce hormones and activate vitamins to help produce blood and promote healthy bone turnover. It has always been an impossible goal to replace kidney function with just three 4-hour dialysis sessions per week—the standard in most of the world. This method of centre-based dialysis is also very costly: building centres with complex water treatment facilities, paying skilled staff, buying equipment and transporting frail, sick patients to and from dialysis clinics three times a week, many for the rest of their lives.

#### The future: choice, empowerment and home therapies

The announcement today is great news for patients. We strongly welcome the US federal government's commitment to early detection and treatment of CKD at risk of progression, and to have up to 80% of new patients receiving home dialysis or a transplant by 2025. Enabling more patients to treat themselves at home will not only assist in the lowering of the overall cost of kidney treatment but, most importantly, will significantly improve their quality of life and health outcomes, allowing them to dialyse when they want and more frequently, not just when the centres are open and able to fit them into their schedules.

Building the support for flexible patient pathways to home treatment with such a large patient population will, of course, present significant challenges to the providers of dialysis care. We will need to inspire and support greater numbers of patients new to dialysis to take more control of their therapy while also overcoming learned helplessness in established patients already on unit-based assisted dialysis. This will require patient-friendly devices and cost-efficient training and support structures.

## Quanta is at the centre of enabling home dialysis

To enable this, Quanta has worked with technologists, patients and clinicians to create a state-of-the-art, best-in-class, small, simple and powerful haemodialysis system called SC+ that supports patients across the continuum of care, from the clinic to the home. SC+ is designed to provide dialysis patients with greater choice, efficiency and empowerment in the delivery of their life-sustaining renal replacement therapy. Our device is the smallest and lightest

haemodialysis system on the market offering online fluid generation. SC+ is specifically designed for patient operation—with simplicity and <u>ease of use</u> as core attributes. Meanwhile, the system also has the power to provide high-dose, high volume dialysis treatments equivalent to larger, more complex facility-based machines. These attributes make SC+ ideal for empowering more patients to take control of their therapy, through both selfcare-in-centre and home dialysis.



SC+ has CE Mark approval in Europe and has already been successfully piloted with the NHS. We are excited for our upcoming commercial launch in the UK planned for later this year, and in Europe and the US thereafter. We are committed to pursuing Quanta's mission to improve the lives of dialysis patients by bringing SC+ to market and developing additional cutting-edge technologies.

## Home dialysis in the UK

The benefits of home dialysis and the potential value of this treatment approach to patients and the NHS have long been recognised by NICE, the UK's National Institute for Health and Clinical Excellence, which has stated that <u>up to 15%</u> of patients would be on home haemodialysis if given the choice. However, this vision has not yet been fully realised, with only <u>5.2%</u> of haemodialysis patients currently treated at home. Quanta would support similar initiatives in the UK to those proposed in the US; specifically, policies for integrated reimbursement mechanisms that reflect the total cost of kidney care decisions and which promote greater utilisation of home therapies.

For more information, please visit: www.quantadt.com

SC+ is not yet FDA cleared and not yet available in the USA.

# For more information about Quanta, please contact:

QuantaT: +44 (0)1789 400043John E. Milad, Chief Executive OfficerE: <a href="mailto:enquantadt.com">enquiries@quantadt.com</a>

Dr. Paul Komenda, Chief Medical Officer

Consilium Strategic Communications T: +44 (0)203 709 5708

Mary-Jane Elliott / Matthew Neal / Lindsey Neville E: <a href="mailto:quanta@consilium-comms.com">quanta@consilium-comms.com</a>