BUILDING THE HOSPITAL OF 2030

How mobile technology and IoT is shaping the future healthcare experience for patients and caregivers.

Executive summary

The hospital that you walk into in 2030 may look very different from the one you know today. With mobile technology now at the centre of how we obtain information, and the rise of connected devices that can detect vital medical information with no more than a touch, our ability to achieve a quick and accurate diagnosis will be improved drastically. With the added ability to store, share and review patient information in the cloud, caregivers too will find that the ability to do their job becomes easier.

However the barriers to achieving a digitised health service are significant, and many. Regulations must be adhered to, patients consulted with, and with the addition of every connected device comes the risk of data security breach. These concerns must not be ignored, but neither can they be allowed to stand in the way of progress.

This report examines how technology is likely to transform healthcare over the next decade, looking at the changing nature of the patient experience, opportunities for clinicians and what the hospital of the future might be like. It is based on interviews with senior healthcare leaders, commissioned by Aruba, and in-depth views from two renowned experts; UCL Professor of Intensive Care Medicine Dr. Hugh Montgomery, and Digital Health Futurist Minnesh Juneja.

These conclusions of these interviews delivered five key trends that Aruba believes will shape how the healthcare industry transforms between now and 2030. They are as follows:
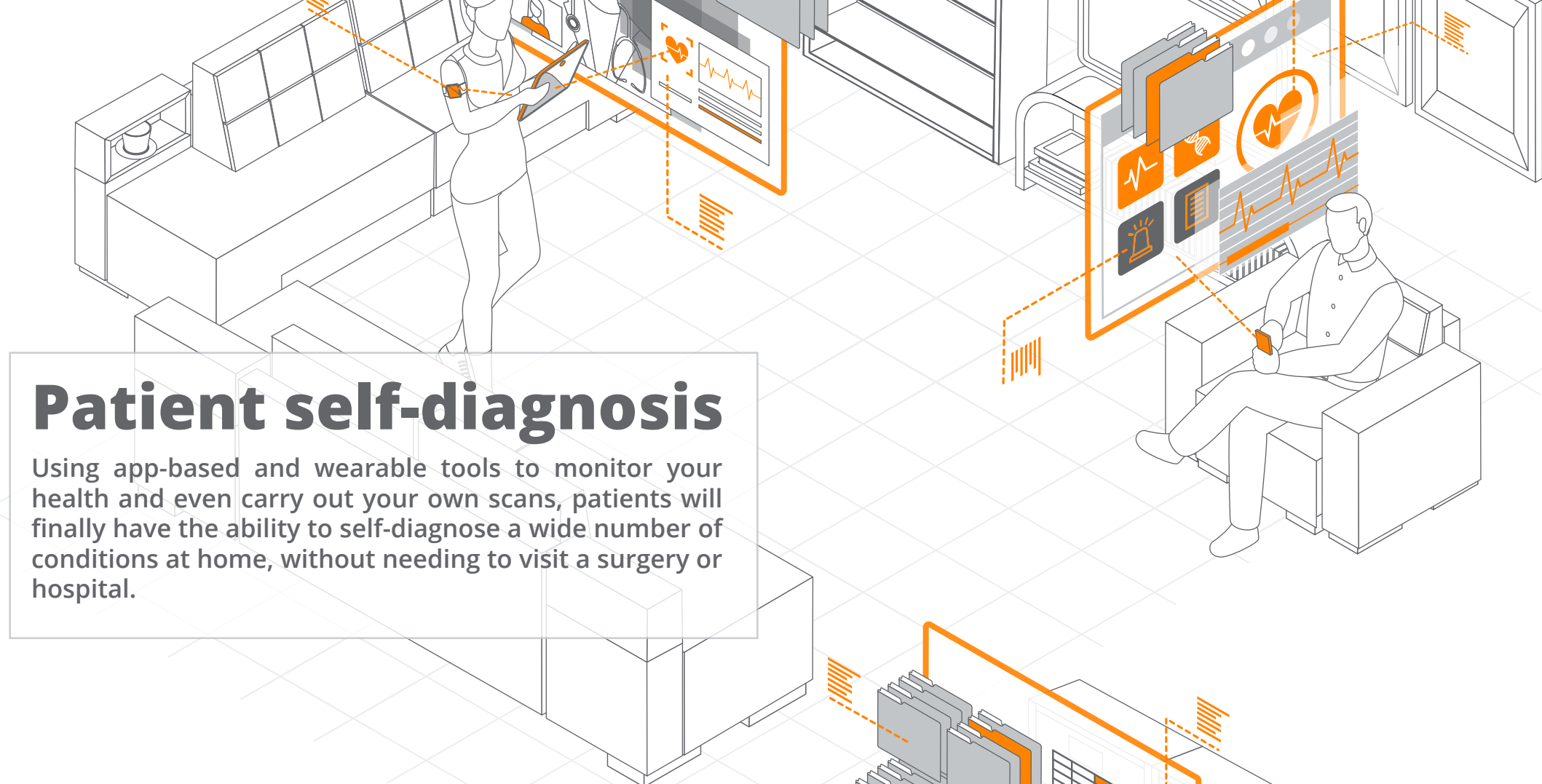
Patient self-diagnosis

Using app-based and wearable tools to monitor your health and even carry out your own scans, patients will finally have the ability to self-diagnose a wide number of conditions at home, without needing to visit a surgery or hospital.
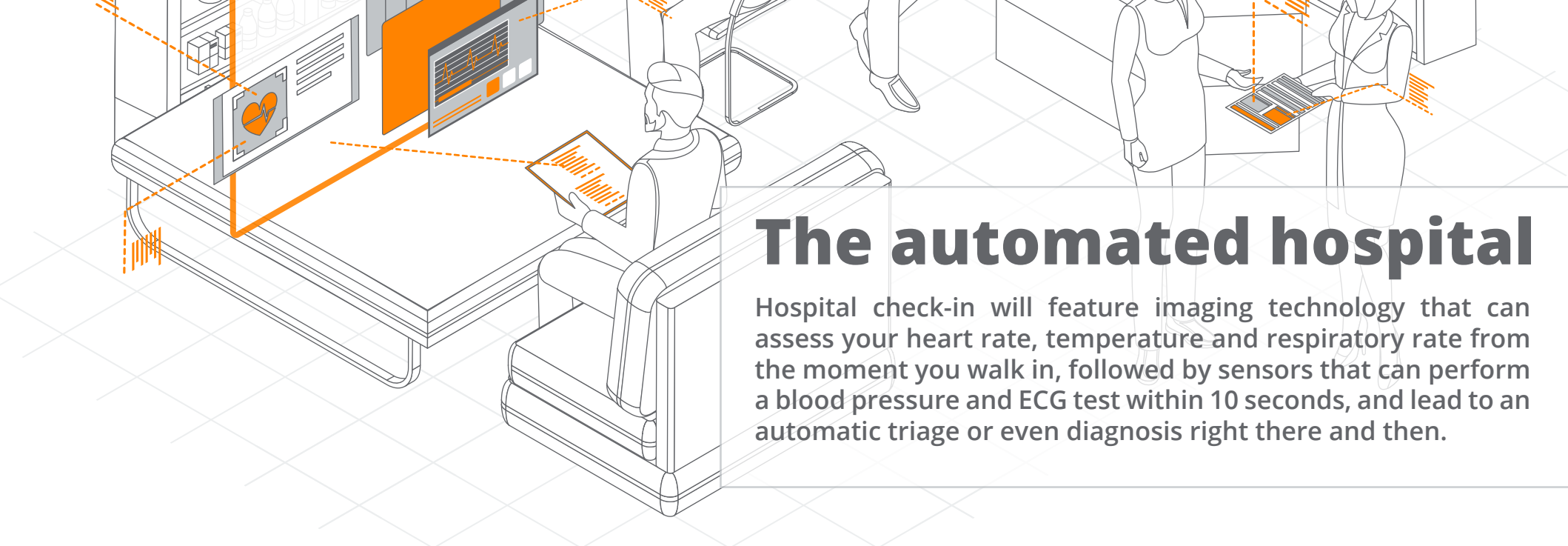
The automated hospital

Hospital check-in will feature imaging technology that can assess your heart rate, temperature and respiratory rate from the moment you walk in, followed by sensors that can perform a blood pressure and ECG test within 10 seconds, and lead to an automatic triage or even diagnosis right there and then.

Health professionals double their free time

Doctors and nurses, who are currently spending up to 70% of their time on administrative work, will be able to quickly analyse scans or patient records via their mobile device, freeing up huge amounts of their day to focus on patient care.
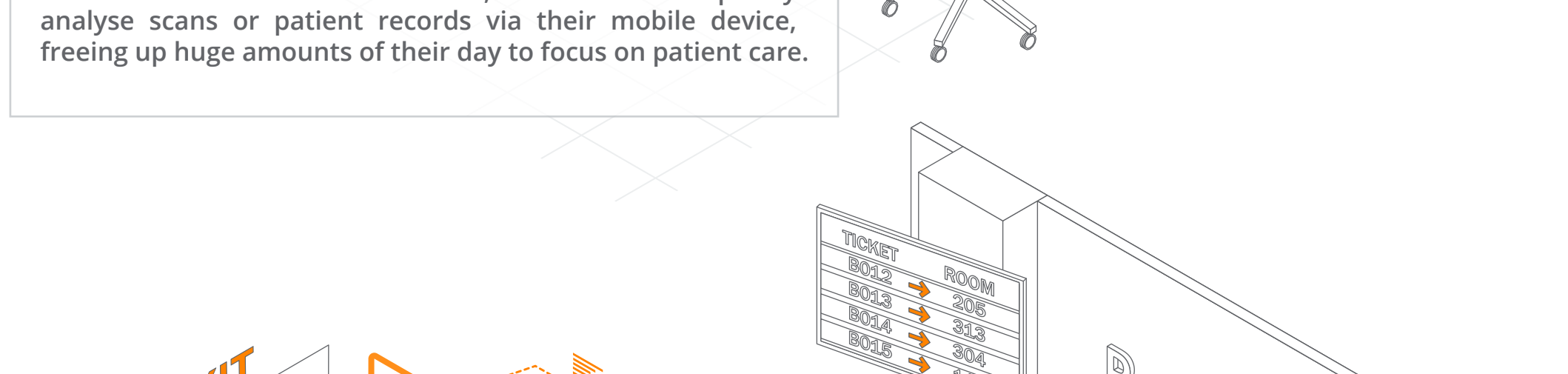
Digital data repositories

Devices will automatically integrate with your digital patient records, automatically updating on your condition and treatment, giving caregivers a richer, real-time, readily-accessible data to make more better decisions.
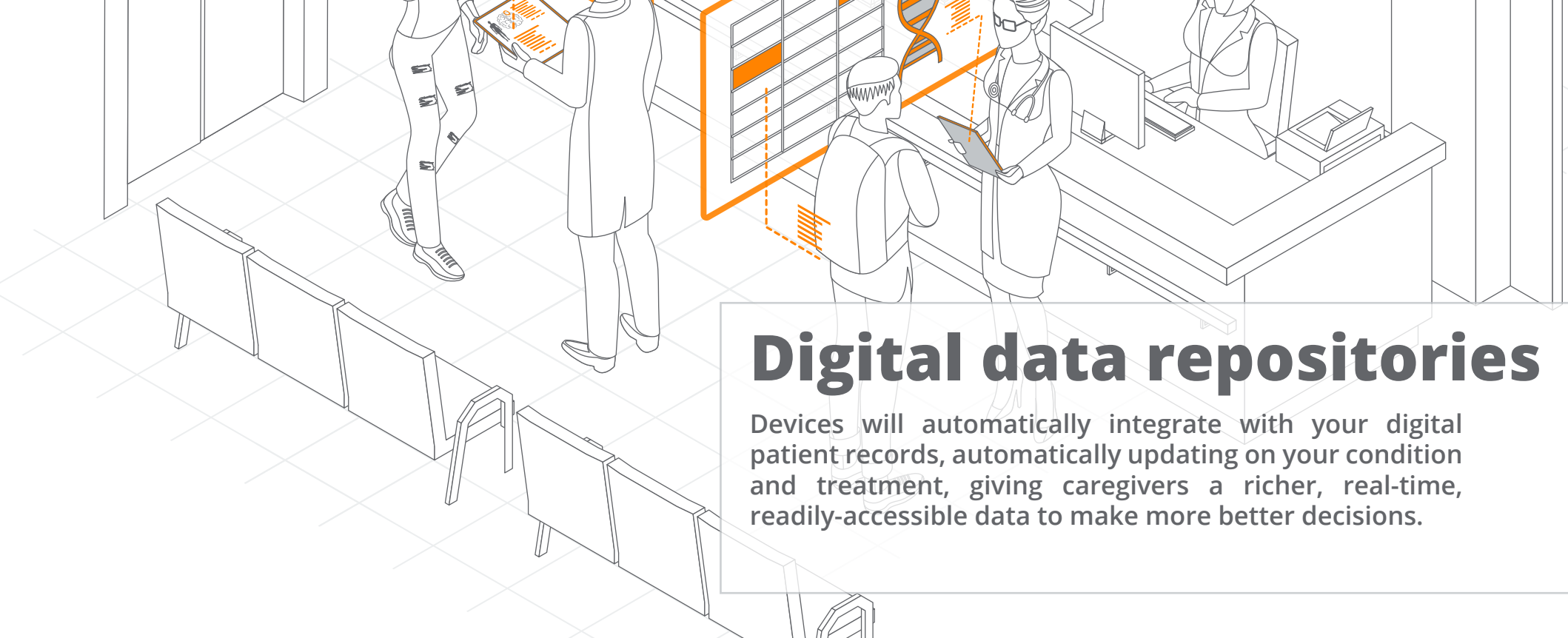
Acceptance of AI

As artificial intelligence (AI) starts to play an increasing role in diagnosis and treatments, public support will grow to the extent that you will be willing to be diagnosed by machine – provided that services are designed and implemented around patients, the benefits are explained, and permission is sought.
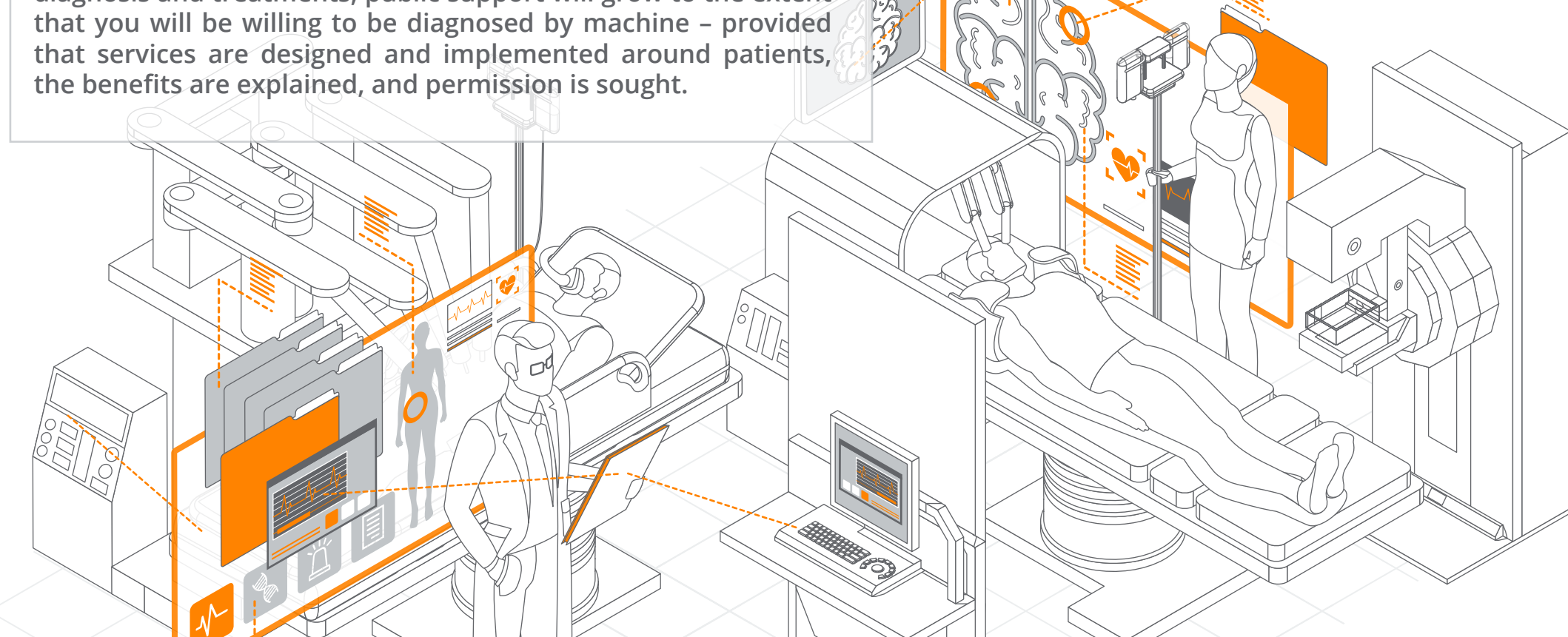
Introduction

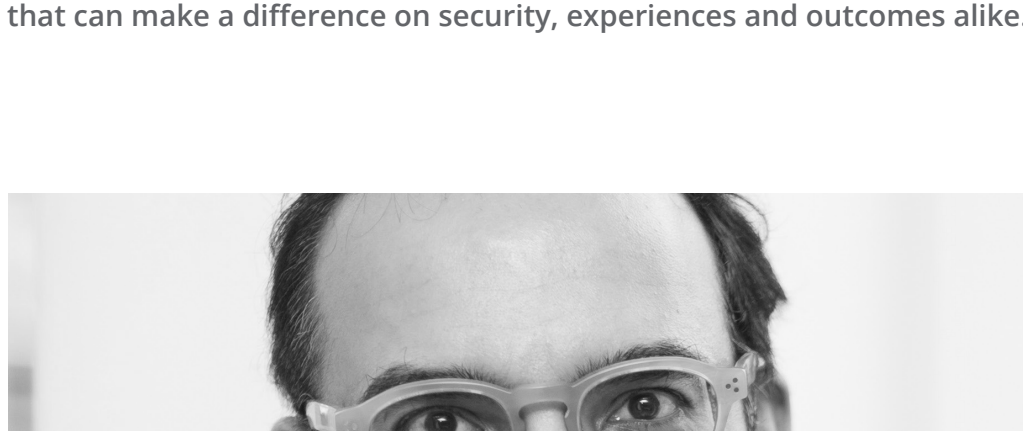Across the world, healthcare systems face rising pressures on all sides, as costs grow, populations age and demands on their services increase.

Dr. Hugh Montgomery

Dr. Minnesh Juneja