The Inaugural ESC Digital Summit

The first European Society of Cardiology (ESC) Digital Summit took place in Tallinn, Estonia, during October 2019

The ESC is deeply committed to being a key stakeholder in the digital transformation of health and healthcare that is rapidly underway across the world. As part of this commitment, it ensures a large Digital Area in its annual meeting (in Amsterdam in 2020 there will be 4000 m² of space, directly behind the registration area), but it also has started to hold an annual Digital Summit for those who are more involved in digital health.

The Inaugural ESC Digital Summit was held in Tallinn, Estonia, on 5–6 October 2019. More than 500 delegates attended a meeting that had a very modern feel: it was held in a converted power station and there were TED-style talks, United Nations-style Panel discussions, and an almost continuous presentation of technology, much of which was already entering clinical practice.

Estonia is one of the most digital countries in Europe, with all of its public services being digital and interconnected. It has a thriving digital entrepreneurship culture and was a natural home for the first ESC Digital Summit. The Prime Minister of Estonia, Jüri Ratas, welcomed the ESC and emphasized the policy importance of healthcare becoming more digital and connected to the society within which it is embedded.

Importantly, this was not a meeting where only healthcare professionals talked to each other—all of the key stakeholders were represented and had a voice: patients and patient groups, technology companies, entrepreneurs, digital engineers, regulators and reimbursement authorities, and a wide range of healthcare professionals. Having the same conversation together, rather than in separate silos, is key to the ESC strategy of ensuring our voice is heard as society and healthcare changes around us.

All topics core to digital health were covered, from cybersecurity to artificial intelligence and machine learning, future digital hospitals and cities, ethics of digital technologies, mobile health including Apps and wearables, social media, Big Data and Real-World Evidence, and virtual and augmented reality.

Some of the personal highlights were:

(1) During the first scientific session, three TED-style talks were delivered to a packed room on the digital future from the different perspectives of the patient/citizen (Trudie Lobban CEO of the Atrial Fibrillation Association, UK), nurse (Tiny Jaarsma, Sweden), and doctor (Martin Cowie, UK). It was clear that the boundaries between health and lifestyle and healthcare are becoming blurred, and that our citizens expect care and input to be delivered more conveniently and more rapidly—‘virtually’ if that is as effective and more convenient than traditional approaches. Digital technology will be key to this—although some concern remains regarding cybersecurity and interoperability.

(2) A heated debate on whether artificial intelligence (AI) will replace human intelligence, with Ruben Casado-Arroyo from Belgium arguing pro, and Amitava Banerjee (UK) arguing against. At the end of this debate, it was recognized that healthcare will always require human interaction, but that AI may bring many advantages, particularly for identifying patterns of abnormality, supporting diagnostic and therapeutic decision making, and allowing more consistent and expert interpretation of imaging.

(3) A controversial session on whether Big Data and Real-World Evidence added to evidence to that provided by Randomized Controlled Trials, or not. The audience heard perspectives from Jeroen Bax, previous president of the ESC (Netherlands), Dipak Kotecha (UK), and Gillian Leng, Deputy Chief Executive of the National Institute of Health and Care Excellence (NICE, UK). It was clearly acknowledged that there are major challenges in making rapid but evidence-based decisions on care and deciding whether innovation is sufficiently transformative to be funded by the public taxation system.

(4) A UN-style panel on preparing the workforce for a more digital future. After talks from Susannah Price and Wajid Hussain (both UK), there was much discussion on the need for a modern curriculum to support healthcare professionals to be comfortable with a more digital future. There is likely to be a more remote approach to care, where interoperability between the electronic medical record (EMR) and other sources of data can underpin more remote monitoring and virtual consultation. This topic has been embraced by the ESC
Education Committee, with the next version of the ESC curriculum having digital competence woven through the disease topics.

(5) John Rumsfeld, Chief Innovation Officer of the American College of Cardiology, gave a fascinating talk on why the EMR had consistently failed to deliver the benefits it promised. The need for more clinical engagement when building systems, better interoperability, entering data only once for multiple purposes, and ensuring clinical issues rather than only billing purposes drive design were key points. The ESC will continue to work with professional organizations across the world to ensure it is fully aware of the key issues and can advocate for changes that improve cardiovascular health and outcome of care globally.

There were many other topics, and excellent presentations, and all of them are available to view on ESC365 on the ESC website.

If you missed the Inaugural Digital Summit, look out for advance notices about the 2020 Digital Summit (held for the last time in Tallinn) on 9–10 October 2020. For the second meeting, we will be focusing on discussing a wide range of digital approaches that have already made it into clinical practice, encouraging the sharing of best practice, but with the theme of multiple stakeholder involvement in co-design as in the First Summit.

Its aim is to disseminate digital initiatives within the European cardiovascular clinical and scientific communities. The portal encompasses news, research, and education throughout the ESC community, and beyond.

I look forward to welcoming you to the ESC Digital Area in Amsterdam at the Annual Meeting of the ESC, and (for those of you more closely involved in all things digital) at the 2nd Digital Summit in Tallinn, Estonia on 9–10 October 2020.

Conflict of interest: M.R.C. receives research grant funding from Medtronic, Abbott, Boston Scientific and Roche Diagnostics. He provides consultancy advice to Novartis, Servier, Bayer, Abbott, Boston Scientific, Medtronic, AstraZeneca, Boehringer Ingelheim, Fire1Foundry, and Neurotronik.