



# Top Target Treatments

TOP TARGET TREATMENTS, *F. LEGA*  
PRECISION HEALTH AND POPULATION HEALTH: CAN THEY INTERSECT EFFECTIVELY? *T. RASSAF ET AL.*  
PERSONALISED MEDICINE: THE ROAD AHEAD, *D. PRITCHARD*  
A HUMAN-CENTRIC APPROACH FOR DATA COLLECTION, *I. RÄSÄNEN & J. SINIPURO*  
ENHANCING PRECISION MEDICINE: SHARING AND REUSING DATA, *C. PARRA-CALDERÓN*  
PERSONALISED MEDICINE AND CARDIOVASCULAR DISEASE, *D. MUNDRA*  
LEVERAGING ADVANCED METHODS TO EVALUATE AI-PHARMA COMPANIES, *M. COLANGELO & D. KAMINSKIY*

EUROSON 2019 WELCOMES  
WORLD OF ULTRASOUND,  
*P. SIDHU*

BREXIT MEANS BREXIT:  
RADIOLOGISTS WITHOUT  
BORDERS, *V. PAPALOIS*

FIGHTING CYBER THREATS  
WITH A GLOBAL COMMUNITY,  
*D. ANDERSON*

WHEN DOES STRIKING OUT ALONE  
WORK BEST? *D. MICHAELIDES*

VALUE-ORIENTED MANAGEMENT,  
*W. VON EIFF*

SEX AND GENDER IN MEDICINE,  
*N. KUMAR & T. ROHR-  
KIRCHGRABER*

SECRETS OF INNOVATION  
SUCCESS, *N. HENKE & R.  
BARTLETT*

NEW HOSPITAL POLICIES AND  
PROCEDURES REQUIRED FOR  
PATIENT SAFETY, *M. RAMSAY*

PEOPLE POWERED HEALTH  
MOVEMENT FOR PATIENTS,  
*L. THOMPSON*

HEALTHCARE AND INDUSTRY  
PARTNER FOR TECH INNOVATION,  
*A. FREJD*

NURSING ON THE MOVE:  
CROSS-BORDER HIRING,  
*I. MEYENBURG-ALTWARG*



**Denise Anderson**

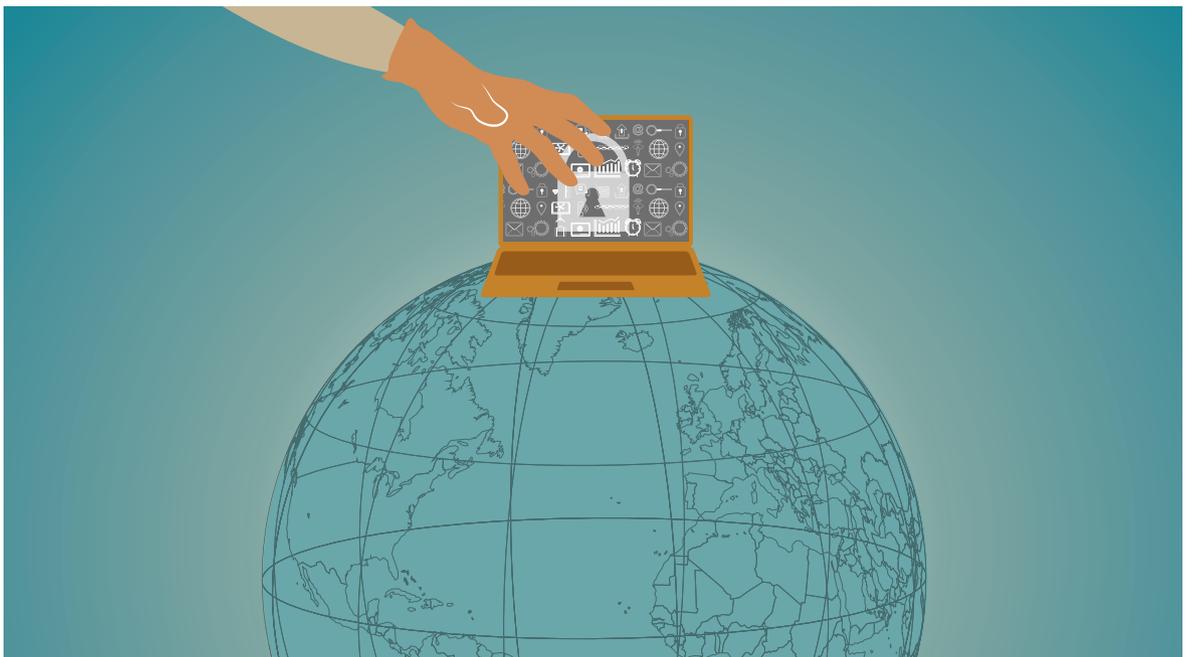
President, Health Information Sharing and Analysis Center  
Ormond Beach, USA

contact@h-isac.org  
h-isac.org

@HealthISAC

# Fighting cyber threats with a global community

Denise Anderson, President of the Health Information Sharing and Analysis Center (H-ISAC), spoke to HealthManagement.org about this growing global organisation's aim to fight cyber threats through cooperation among healthcare stakeholders.



**H-ISAC aims to foster trust and cooperation amongst members with the objective of achieving a more secure digital health environment. How does H-ISAC achieve this and where are the greatest challenges?**

I actually think, in general, that the sharing is fairly good within healthcare and the ISAC, especially amongst the larger organisations. It's harder for smaller organisations which either, don't have a security operation or resources, don't understand the importance of sharing information or being part of a trust community, or don't prioritise security. I think that education and sharing experiences among members is the best way to make the smaller organisations aware of the opportunities the ISAC offers.

When it comes to medical device security, the issue is very complex. Manufacturers and healthcare delivery organisations (HDOs) can have contentious relationships. Within HDOs there are a number of stakeholders that often operate in silos. The regulators are also different for manufacturers and HDOs so the entire ecosystem is fragmented. It is very important that all stakeholders work together to solve security problems. In H-ISAC, we have a Medical Device Security Information Sharing Council which is co-chaired by a manufacturer and an HDO. We purposely did this and the goal is to ensure that both parties understand each other's issues and perspectives so that everyone can work on challenges together.

**Is healthcare management sufficiently concerned with cyber security?**

In some organisations, there is focus. But really what we should be doing across industry is to change the conversation from one of cyber security to one of enterprise risk management (ERM). Cyber is just one component of the risk to the enterprise. If an organisation deploys ERM correctly, it will understand the ‘crown jewels’ and build its risk management strategy out from there. Of course it also means knowing what the threats are, who the threat actors are and what their motivations are - which is part of information sharing - as part of the equation. I don’t think healthcare, in general, is able to tackle that yet.

**When it comes to physical security, are the issues of developing trust similar to those of cyber security?**

I actually think the sharing in cyber is better for a variety of reasons. One is that there is machine-to-machine sharing so those indicators get shared automatically. Second, most of the infrastructure is within the private sector and industry understands one person’s defence becomes everyone else’s offence. Traditionally, the physical security teams have been mostly former law enforcement and the community has tended to be very close fisted. Also, government had access to intelligence that wasn’t available to the private sector so, unless one had a clearance or need to know, information wasn’t freely shared. Trust exists but it isn’t as broad.

**What do you anticipate for both cyber and physical threats in healthcare in the next five to ten years and how can they be addressed?**

We see incidents stemming from old malware and vulnerabilities that will most likely still be around five years from now. The Nigerian prince and romance schemes still exist because they work! That being said, attackers will always find ways to take new technologies that come into play and that are connected to the Internet to achieve their goals. We just need to be aware and always mindful of the potential risks that can come from a lack of availability of resources and integrity of data. We also need to be very cognisant of cascading impacts from incidents that target other organisations, such as an attack like Petya/Not Petya that targeted a country but ended up affecting numerous large and small organisations to the tune of billions of dollars. Hurricane Maria in Puerto Rico was another example of

cascading impacts from other sectors on the pharmaceutical and medical supply chain.

**You have experience in a number of sectors, including finance. As far as security is concerned, do you think there are any lessons healthcare could learn from other industries?**

I think any sector can certainly always learn from other sectors. Obviously the financial sector has been dealing with cyber attacks and incidents for decades because of the electronic nature of global finance and the fact that they are a target. So yes, healthcare can learn from finance and can see the benefits of their lessons learned, especially when it comes to information sharing. But it is more than just technology; it is also people and process and until there is awareness and acceptance from the leadership of an organisation/sector, lessons learned only go so far.

**What are some of the key objectives you have for your continued tenure as President of H-ISAC?**

Primarily I want to make sure that we are delivering value to our members. There are a number of things that we are doing to help assess what members want and what we can deliver. One area in particular is in building our Security Operations Center (SOC) to do more analytics on what members are seeing, create threat trending and other reports and build a ‘visit programme’ at the SOC among other things. We are hiring a Chief Security Officer this year to help accomplish this vision.

Another area is global expansion. As part of the expansion we have established an H-ISAC EU Council and are creating an H-ISAC Japan Council to establish regional forums for sharing and collaborating. We will look to hold summits in each region within the next year. I consider myself an evangelist for global information sharing and collaboration and the more we can get the world to share the better off everyone will be.

Finally, we will continue to grow the membership so that more organisations can benefit from being a part of the great community we have in place. ■



# Innovation and collaboration: FT Digital Health Summit

**T**he FT Digital Health Summit, is a one-day conference focusing on how innovation can help address healthcare's increasing bottom line and how the issues of security, engagement and fragmentation can be tackled.

Now in its fifth year, the summit brings together leading speakers from the patient, hospital manager and practitioner, investor and innovator fields to discuss how technology/innovation are meeting and addressing the growing challenges facing healthcare.

The agenda is simple: where and how can digital technologies, devices and applications, and the data they produce have the most meaningful and effective impact within patient care?

"People's perception of the healthcare sector can be very niche," says Daniel Mahony, Healthcare Fund Manager of Polar Capital Partners and summit speaker. "It is often focused on the big pharma companies who can be seen driving the news agenda. The reality is that there are a variety of themes, innovations and developments happening in the healthcare sector and events like these help us to communicate the exciting investment opportunities available."

The FT Digital Health Summit will explore ways to implement digital transformation and improve the impact of innovation. Some of the key topics on the agenda are the hospital of the future, the challenges of security, engagement and integration in digital health and the role of preventative solutions in promoting wellness and collaboration as a catalyst for transformation.

An additional key focus area is the ongoing issue of finding the skills and leadership needed to spearhead transformation.

"Based on almost 15 years of experience from health sector, I still feel that professional mindset, and clinicians lacking interest of technology is still a main issue for big breakthroughs," says Jaana Sinipuro, Project Director at the Finnish Innovation Fund Sitra and speaker at the FT Digital Health Summit. "In order to adjust technology to serve people, and not opposite, we need to motivate

clinicians and healthcare professionals to become curious about technology and make them innovate together with tech professionals."

Industry is also on the agenda with a look at best practices for closing the gap between product development and adoption and the critical need to move pharma into the digital age.

"In the Life Science industry, more and more pharma companies are willing to invest in generating new data sources for real world evidence. Real-world data, together with patient reported outcomes is needed to implement value-based healthcare practices. The Life Science industry is working on new collaboration models with authorities and societies," says Sinipuro.

"Data could be described as one of the healthcare sector's biggest catchwords at present and rightly so - the potential it holds to transform both practices and processes and patient outcomes is revolutionary. Harnessing this potential in practical and practiceable ways is another theme of the FT Digital Health Summit.

"Rising costs of healthcare, due to ageing population and cost-pressures from targeted medicines, will maintain the focus in data interoperability and skills and tools to enable better use of data and analytics," says Sinipuro. "It will be necessary to find means for data exploitation and combining different sources of data, like measuring patient reported outcomes, combining personal data to clinical data and evaluate direction towards value-based healthcare."

Looking to the future, an industry event on healthcare cannot ignore the impact Artificial Intelligence (AI) is also having and will continue to have on processes and patient care.

"We are entering a new phase of structural disruption that is not just about a new therapy – be it drug or device. The next phase of disruption requires a realignment of interests across the value change and relies on collaboration," says Mahony.

The FT Digital Health Summit takes place in Berlin on June 18, 2019. For further details go to: [live.ft.com/DigitalHealth](https://live.ft.com/DigitalHealth) ■