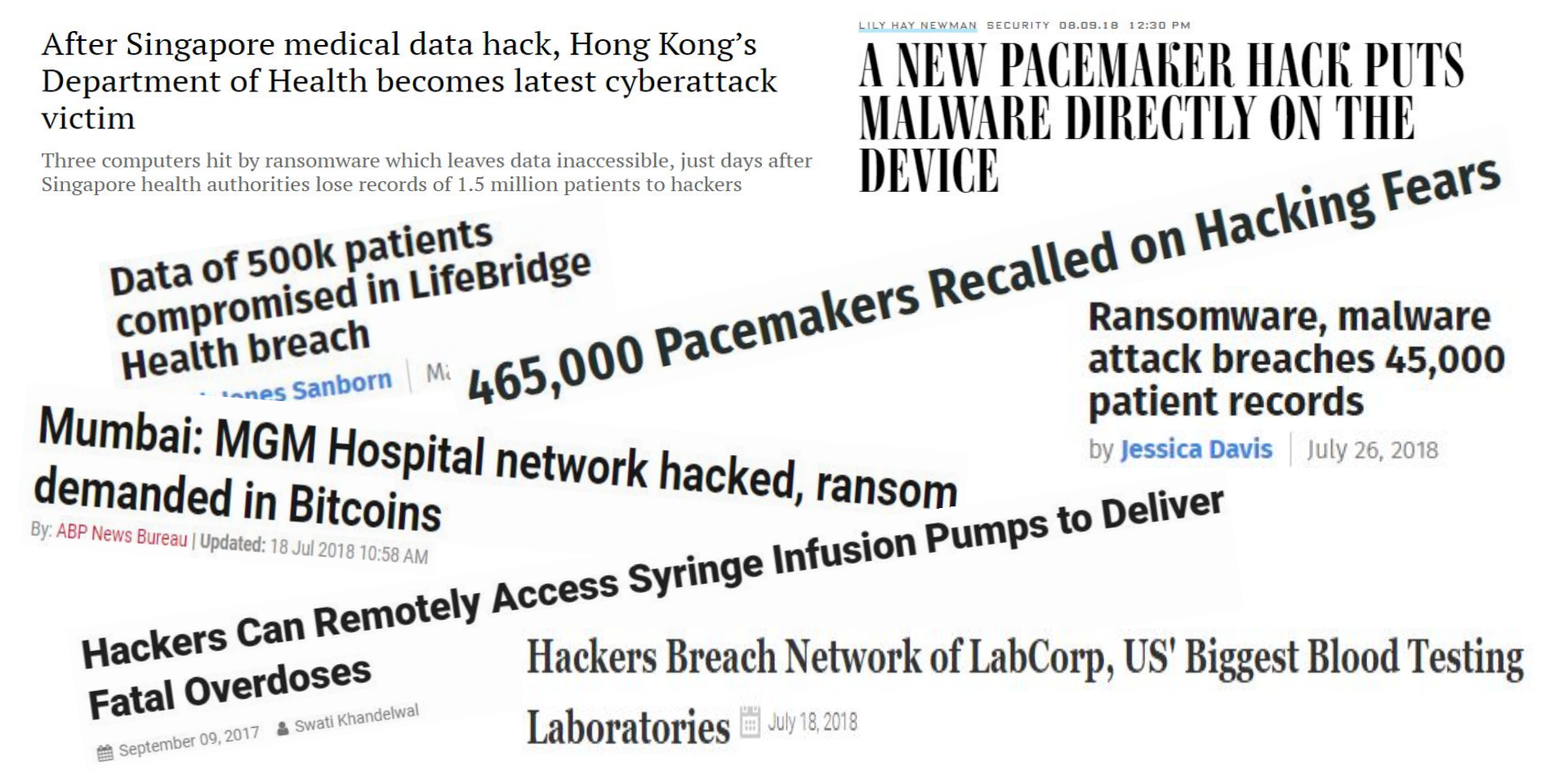
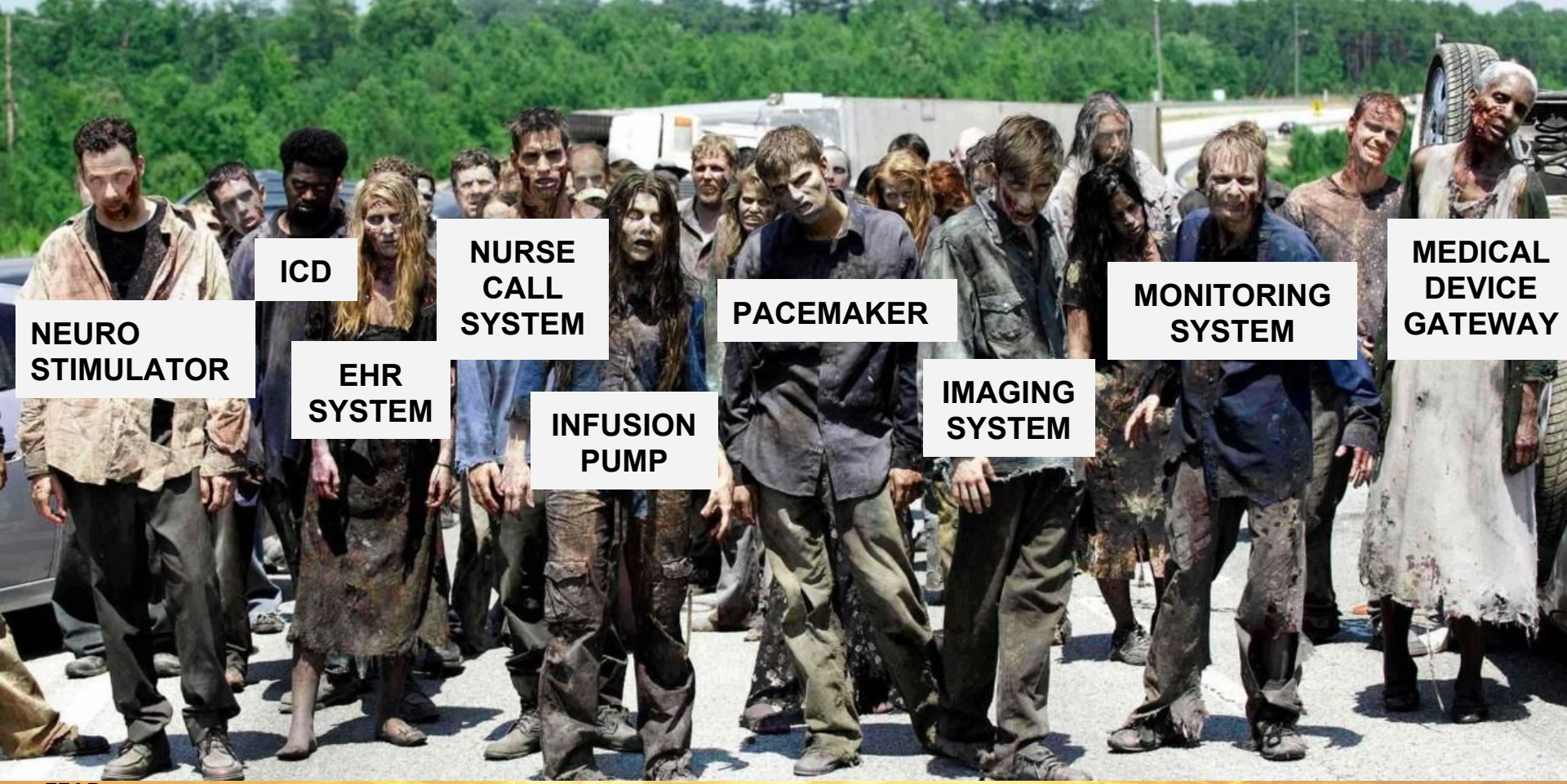


FEAR THE HACKED IoT MEDICAL DEVICES

The apocalypse is already happening, and no one noticed?

Sara Rampazzi
University of Michigan
SPQR Lab

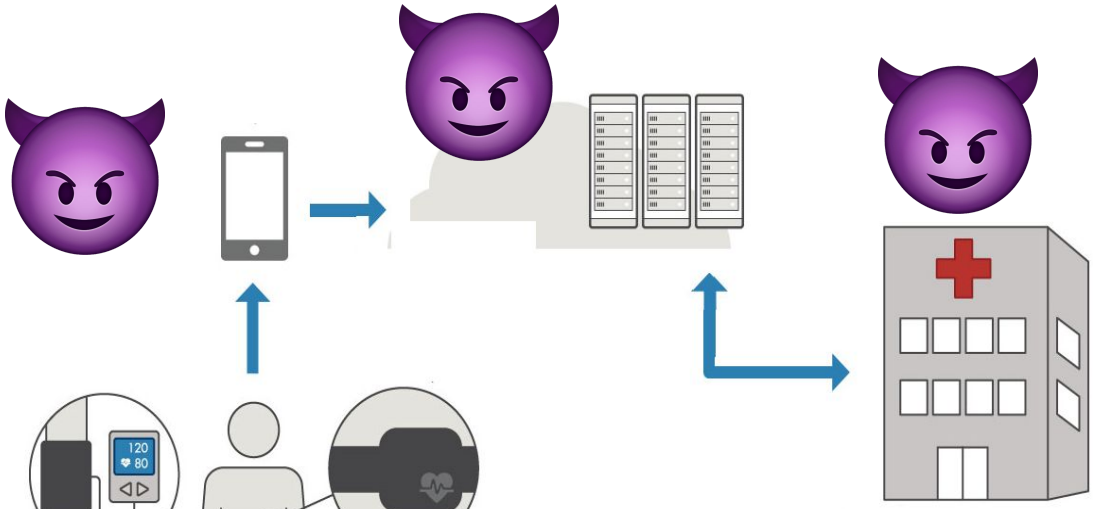

After Singapore medical data hack, Hong Kong's Department of Health becomes latest cyberattack victim
Three computers hit by ransomware which leaves data inaccessible, just days after Singapore health authorities lose records of 1.5 million patients to hackers
LILY HAY NEWMAN SECURITY 08.09.18 12:30 PM
A NEW PACEMAKER HACK PUTS MALWARE DIRECTLY ON THE DEVICE
Data of 500k patients compromised in LifeBridge Health breach
465,000 Pacemakers Recalled on Hacking Fears
Ransomware, malware attack breaches 45,000 patient records
by Jessica Davis | July 26, 2018
Mumbai: MGM Hospital network hacked, ransom demanded in Bitcoins
By: ABP News Bureau | Updated: 18 Jul 2018 10:58 AM
Hackers Can Remotely Access Syringe Infusion Pumps to Deliver Fatal Overdoses
September 09, 2017 Swati Khandelwal
Hackers Breach Network of LabCorp, US' Biggest Blood Testing Laboratories
July 18, 2018

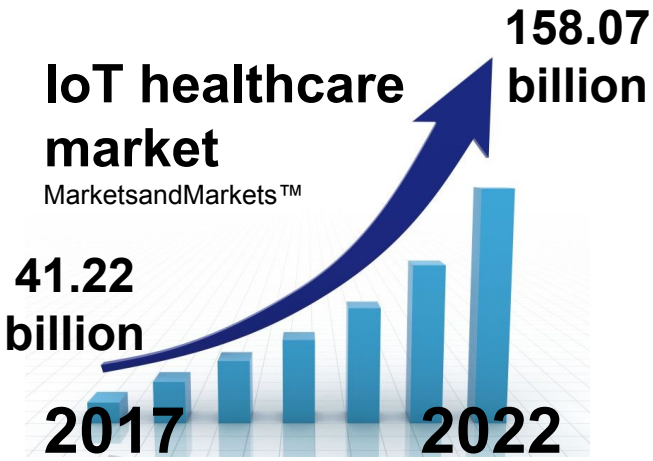


FEAR THE HACKED IoT MEDICAL DEVICES

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Security requirements not homogenous

Different devices, different protection

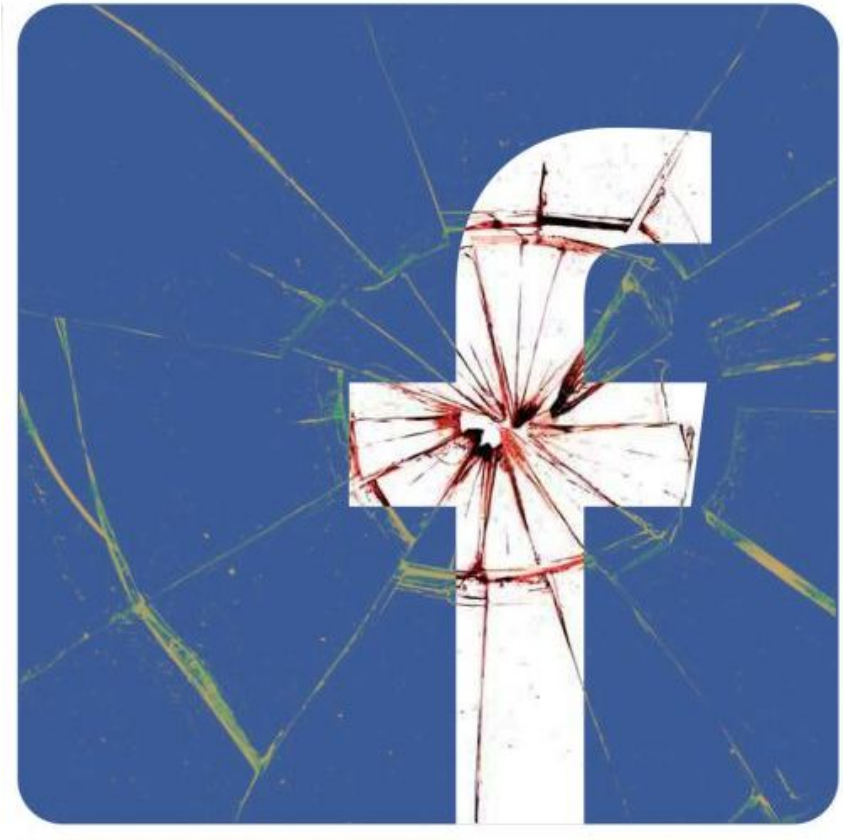
Strava fitness map 'accidentally revealed the location of secret military bases' by tracking soldiers' movements

Some of the world's most secret and sensitive bases in the world are lit up brightly on the running tracker's map

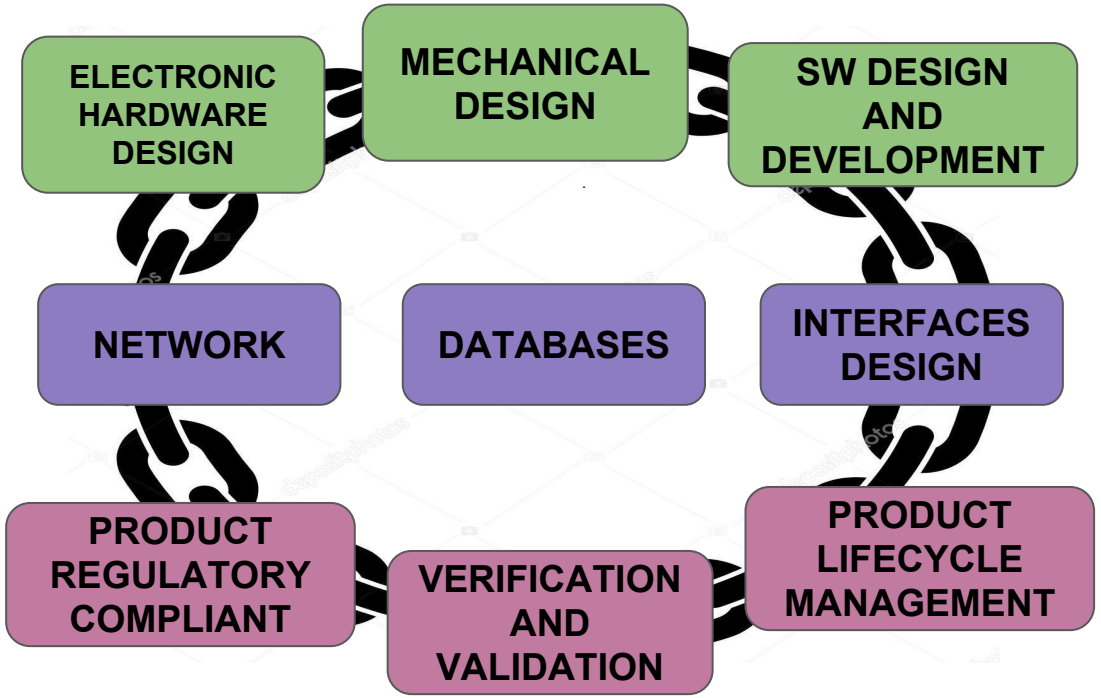
Third-party vendor error exposes data of 19K patients for 2 months

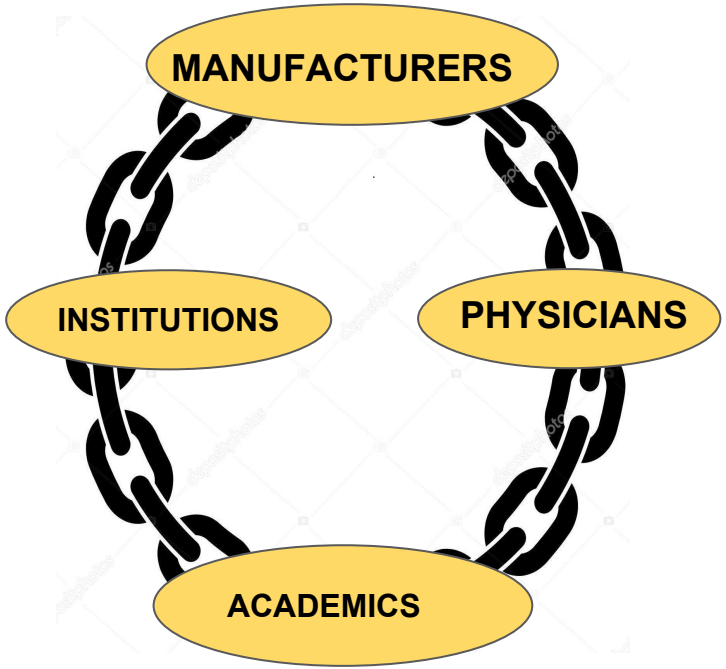
Smart Kids Thermometer Coughs Up Digital Health Data to Hackers

Ivy Health Kids Thermometer, a smart and portable arm thermometer for babies and small children, failed to protect sensitive digital health data of children from hackers, according to testing by CI4S Ltd. on behalf of security firm vpnMentor.



Trustworthy chain for health devices





Build the trustworthy chain for health devices

- Security-based HW/SW Co-design
- Risk-based approach
- Centralized health data management
- Authorized third-party consortiums
- International shared regulation and standard
- …



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