The apocalypse is already happening, and no one noticed?

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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

Data of 500k patients compromised in LifeBridge Health breach

Mumbai: MGM Hospital network hacked, ransom demanded in Bitcoins

465,000 Pacemakers Recalled on Hacking Fears

Ransomware, malware attack breaches 45,000 patient records

Hackers Can Remotely Access Syringe Infusion Pumps to Deliver Fatal Overdoses

Hackers Breach Network of LabCorp, US' Biggest Blood Testing Laboratories

FEAR THE HACKED IoT MEDICAL DEVICES

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IoT healthcare market
MarketsandMarkets™

41.22 billion
2017

158.07 billion
2022

WARNING ZOMBIE OUTBREAK

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WARNING ZOMBIE OUTBREAK
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.
FEAR THE HACKED IoT MEDICAL DEVICES

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SPQR Lab
Trustworthy chain for health devices

- **ELECTRONIC HARDWARE DESIGN**
- **MECHANICAL DESIGN**
- **SW DESIGN AND DEVELOPMENT**
- **NETWORK**
- **DATABASES**
- **INTERFACES DESIGN**
- **PRODUCT REGULATORY COMPLIANT**
- **VERIFICATION AND VALIDATION**
- **PRODUCT LIFECYCLE MANAGEMENT**
- **MANUFACTURERS**
- **INSTITUTIONS**
- **PHYSICIANS**
- **ACADEMICS**

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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
- ...

www.secure-medicine.org
thaw.org
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