HEALTHCARE IN THE 21ST CENTURY

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- HL7 International Ambassador (2009 – current)
  - Member HL7 Technical Steering Committee (TSC) - 2016
  - Co-Chair Structure & Semantic Design Steering Division - 2016
  - Founding Co-Chair HL7 Mobile Health Work Group (2011 – current)
  - HL7 2009 Volunteer of the Year Award Winner

- HL7, IEEE, HIMSS Speaker
- HL7 MACRA Tutor/Speaker
- Chair IEEE OC (Region 6 – USA) (2016 – current)
- Co-Chair IEEE OC CyberSecurity SIG (2015 – current)
- ISO TC/215 Liaison to ISO/IEC JTC1-WG 10 Internet of Things
- ICT Expert - World Bank, Asian Development Bank
- Senior Member: IEEE, ACM
LAYMAN DEFINITION

- WHAT IS LIFE

- WHAT IS IoT

Source: https://en.wikipedia.org/wiki/1916
WALK DOWN THE MEMORY LANE

- British Royal Army Medical Corps carries out the first successful blood transfusion using blood that had been stored and cooled
- BMW is born
- Toggle light switch is invented
- *Pacific Aero Products* (later renamed *Boeing*) is born

MOBILE & IoT REVOLUTION!

- Mobile phone market
  - first billion mobile phones: 20 years
  - second billion phones: 4 years
  - third billion: 2 years
  - Fourth & fifth billion: 1 year – in 2013
  - 2014: nearly One Billion “smart” mobile phones sold globally
  - 2015 – Over 1.2 Billion smart phones sold

- IoT connected world by 2020
  - Projected to be 50 Billion devices
HEALTHCARE IN THE 21st CENTURY

1. Next generation: “iPAD™” kids
2. Blurred Lines: Impact of Social Media
3. Are we there yet: I want it NOW
4. Take Charge: Consumer Health
5. Gene to genes: from Star-Trek (Gene Roddenberry) to Genetic Health – personalized medicine
6. Space – The Final Frontier: “Healthy” flights
7. Back to the Future: longitudinal Health Record
8. Live long & prosper: from provenance to preservation
9. Emerging Areas: IoT (HoT), Big DATA, Open Data
11. “l'addition s'il vous plaît”: Mobile micro-payments
12. Take care: CyberSecurity
SUMMARY!

- As we transition to a digital record framework; use of Mobile Health leads the way (in access, capture and dissemination of health information)

- As Mobile & IoT Devices become more and more ubiquitous, accessing our Health Information is only a few tap/swipe/transmit away!

HEALTHCARE IN 21st CENTURY

- Cloud connected, IoT driven, micro-services enabled Mobile Health Enterprise