

## *Medical Devices – Gifted gadgets in service of our health*

### *Clinical Context*

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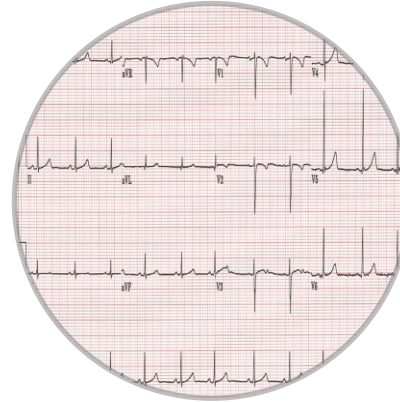
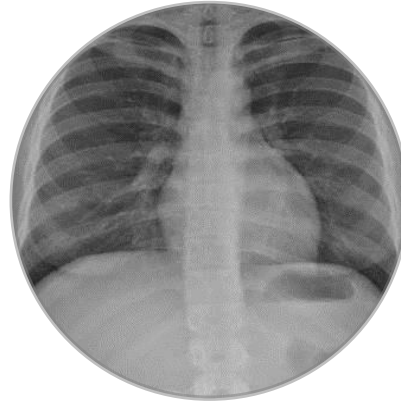
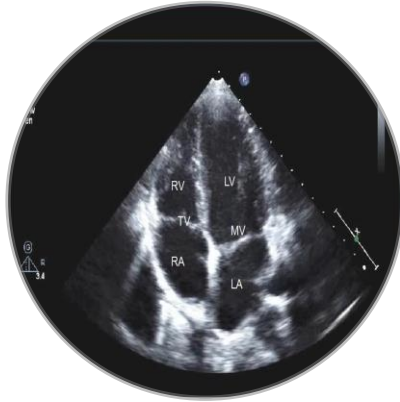


# The president has palpitations





# Echocardiogram, X-ray, EKG and Holter monitoring are all normal





# Integration of information from all surrounding environmental devices is reassuring



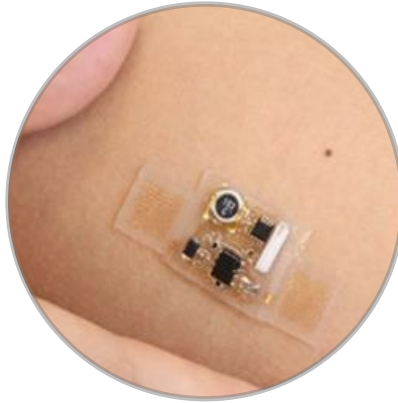
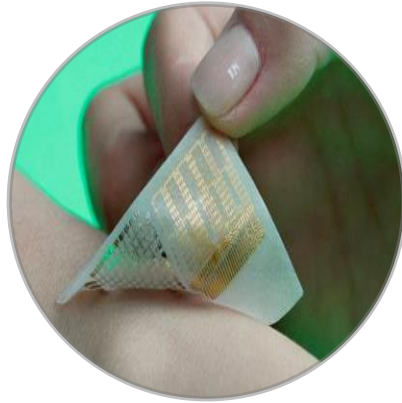




Three weeks later, while standing at attention on a hot day in Arlington Cemetery, the president suddenly gets dizzy.



# Short-term, continuous, non-invasive monitoring is undertaken.







Two months later, while attending a state dinner, the president briefly passes out.





Again, no cause is found, and diagnostics are stepped-up to include a smart, unobtrusive, implantable sensor.







NATIONAL ACADEMY OF SCIENCES

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Sensor alerts teams, locates nearest AED, pings local resources, links EMS to ongoing telemetry and links nearest hospital to medical records.





## Initial attempts at resuscitation are unsuccessful,







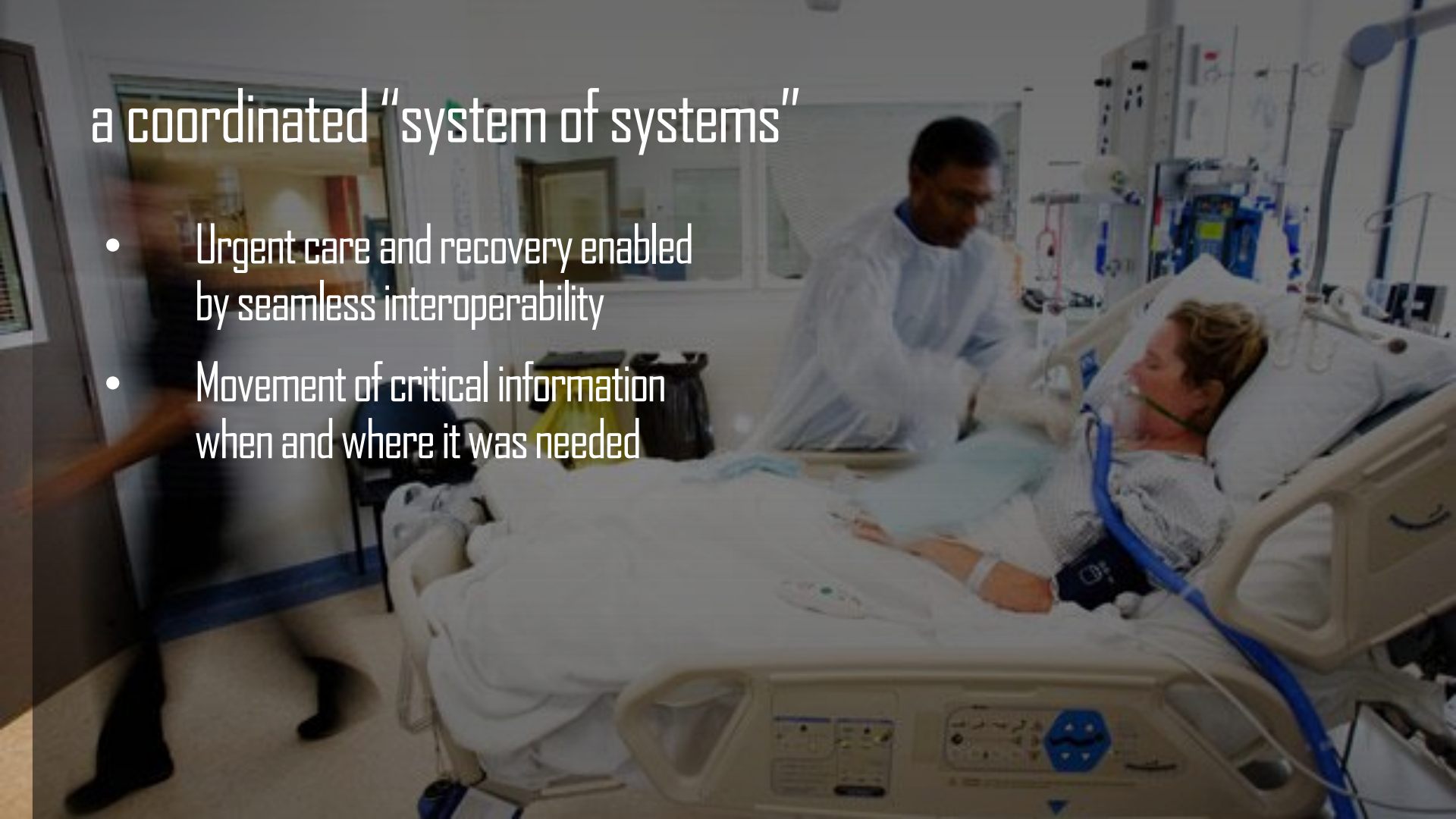
Expert medical systems, provided with medical history and recordings from ongoing arrest identify a critical link -

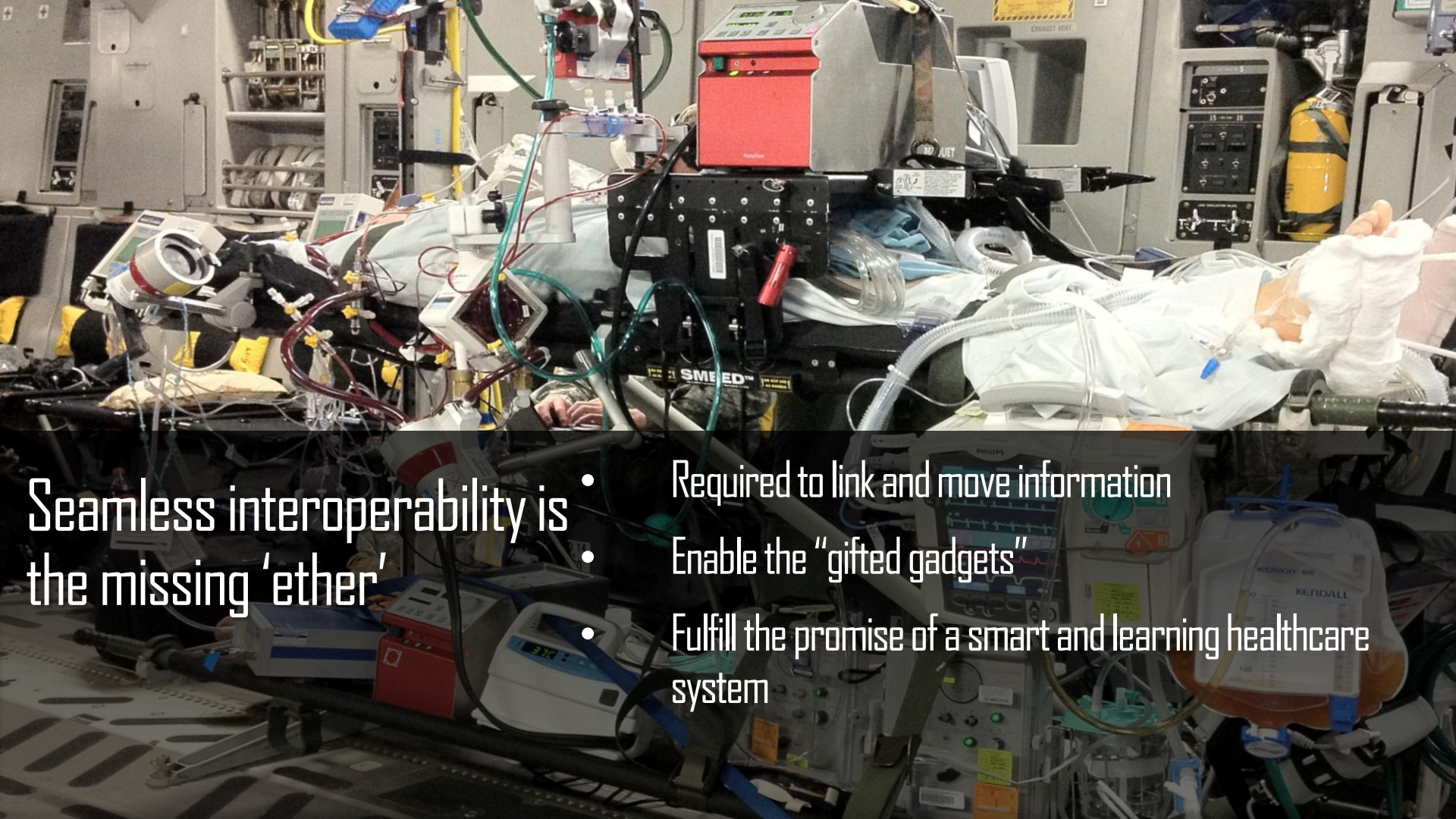




# a coordinated "system of systems"

- Urgent care and recovery enabled by seamless interoperability
- Movement of critical information when and where it was needed





Seamless interoperability is  
the missing 'ether'

- Required to link and move information
- Enable the "gifted gadgets"
- Fulfill the promise of a smart and learning healthcare system

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# join us in our effort to make change possible



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# Thank You