

# 104

### Never Wait for a Doctor Again? Revolutionizing Health Care

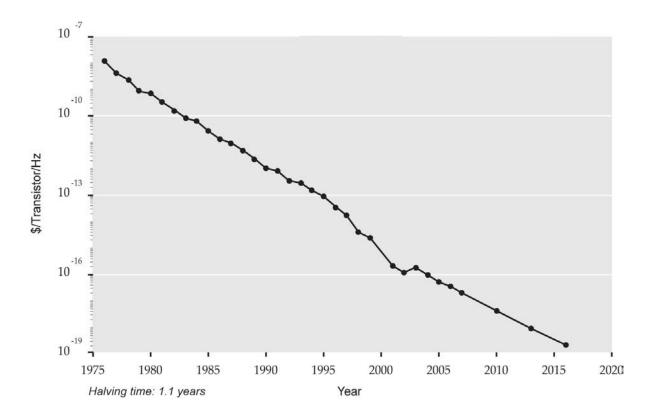
Dr. Clay Johnston December, 2016

Produced by and for *Hot Science - Cool Talks* by the Environmental Science Institute. We request that the use of these materials include an acknowledgement of the presenter and *Hot Science - Cool Talks* by the Environmental Science Institute at UT Austin. We hope you find these materials educational and enjoyable.

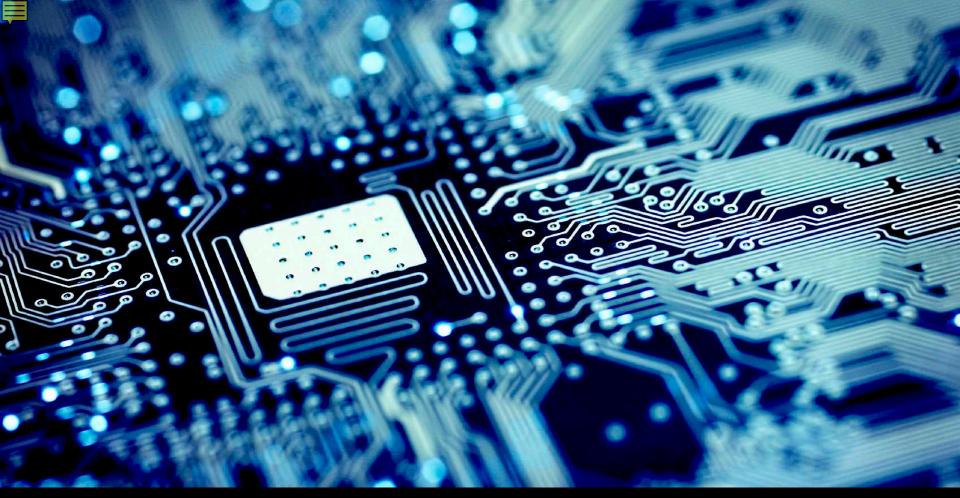
## Never Wait for a Doctor Again? Revolutionizing Healthcare

Clay Johnston, MD, PhD Dean, Dell Medical School

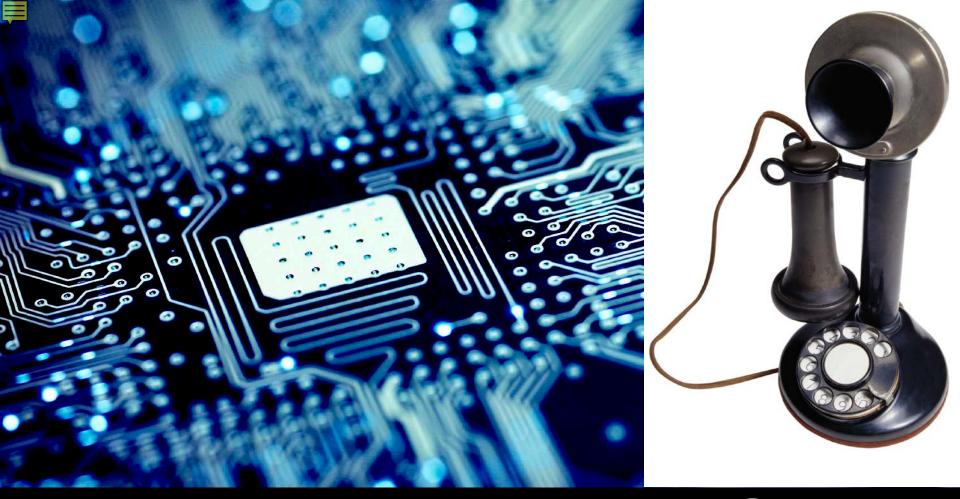
















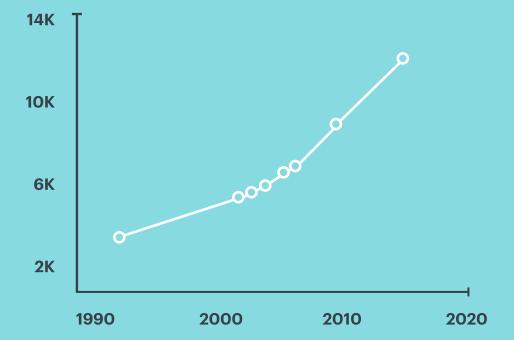




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# Cost of healthcare

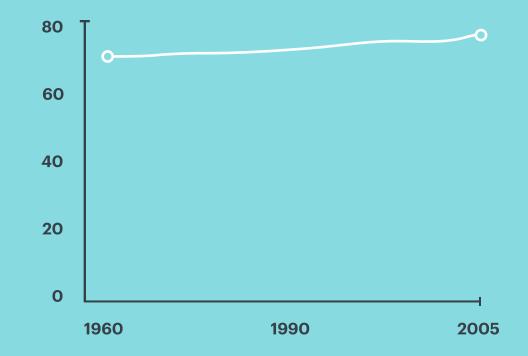
Per person spending



Wells Fargo Insurance Services



# US life expectancy







# Investment

Return





### U.S. is the number one spender on healthcare in the world



#### **But only** 34<sup>th</sup> in health outcomes



# **10 Glaring Examples**





# Costs of care are out of control and only going up











## No one reminds you to take your meds







## Flu management requires an office visit



# Can't find an apple in a vending machine



## Seeing more of the back of your doctor's head



# Can't email your doctor



# Hospital gowns expose your rear



# Broken healthcare delivery system



### Invested in the status quo





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# Doing more, rather than doing better



# Treating the sickest rather than promoting health



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# Resistant to technology and other approaches to enhance efficiency





# Broken community health system











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#### Cause of death in San Francisco women (2003 - 2004)



- 1. **HIV/AIDS**
- 2. Drug overdose, unintentional
- 3. Self-inflicted injuries, all mechanisms
- 4. Breast cancer
- 5. Pancreas cancer

#### Cause of death in San Francisco men (2003 - 2004)

- Violence/assault, 1. all mechanisms
- 2. Drug overdose, unintentional
- 3. **HIV/AIDS**
- Self-inflicted injuries, all 4. mechanisms
- 5. Alcohol use disorders



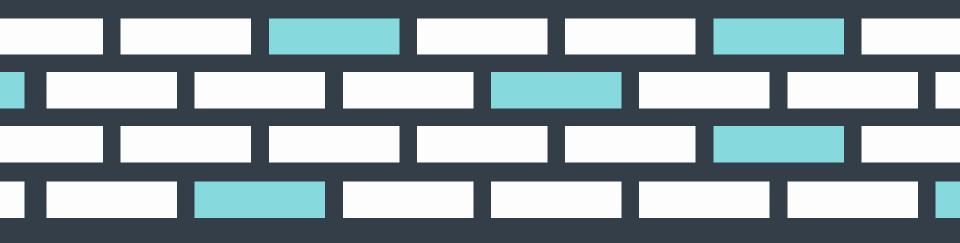
## Broken research system







# Research











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## **Dell Medical School:**

### **Opportunity to start** from scratch





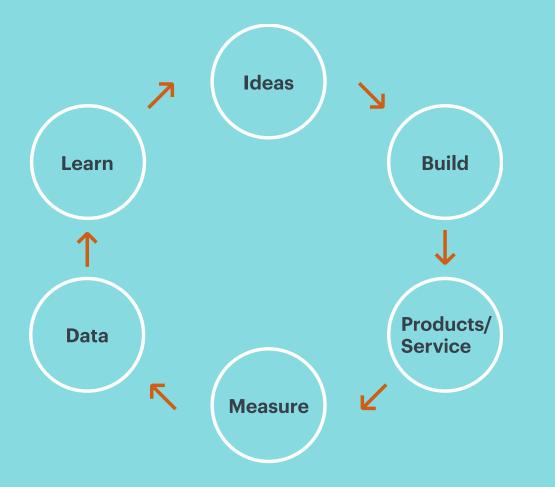
Can we create a better ecosystem for health innovation?





## Faster Innovation Cycles: Lean Start-Up Model







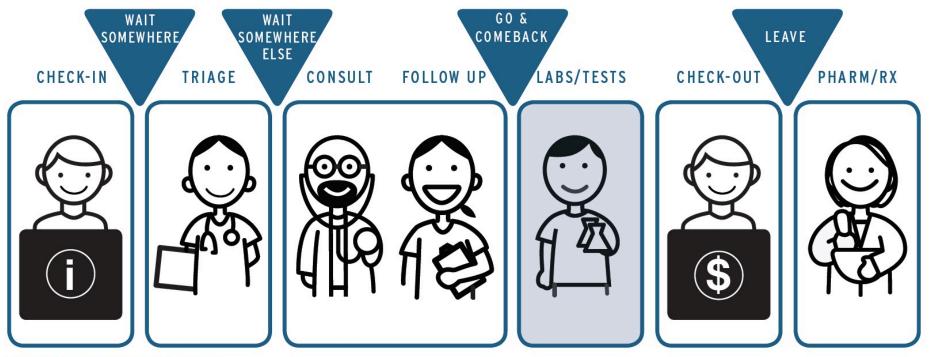
# Focus on making Austin a model healthy city





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**Traditional Patient Journey** 





**IPU Patient Journey** 

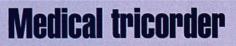












The clamshell-shaped medical tricorder is made from micromilled duranium foam.

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INTRISH

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**Touch-sensitive buttons** cover the face of the unit. **Tricorders also respond to** voice commands.

> The main body is a standard-model tricorder.

A STATE

The medical peripheral device works with the tricorder interface to access all the normal functions as well as the added medical ones.

Detachable high-

resolution scanner



The medical tricorder

contains information on many non-human races, making the instrument equally effective for treating other life forms, such as Cardassians.

















## Liberate entrepreneurs





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# Video: HealthHIVE

### https://www.youtube.com/watch?v= DF9WtvGrv7U















### Please submit your idea by Dec. 5, 2016:

#### **On Paper**

- Pick up and drop off a paper form at the following Austin Public Library locations: Carver, Little Walnut Creek, Manchaca, Ruiz, St. John, Southeast, Terrazas, University Hills and Willie Mae Kirk.
- Fax applications to 512-495-5556 (Attention: Population Health), email a copy to populationhealth@utexas.edu, or call 512-495-5155.

### Online

Visit dellmedschool.utexas.edu/center-for-place-based-initiatives

to submit a mobile-friendly electronic form.





