Fostering Innovation Through *Appropriate* Government Regulation

Marc Probst, CIO and VP
Intermountain Healthcare: An Integrated Health System

selecthealth 1983

1975

1983

1994
Information System Organization

- $200+ million annual operating budget (3.8% total operating cost)
- 3 EMR systems
- 60,000 phones
- 1100+ FTE
- >2,600 applications
- 65,000 network connections to devices
- 2 data centers
- 90% of 90,000 daily emails blocked as SPAM
- >1,400 servers
- 21,000 monthly calls to Front Line Support
- >25,000 personal computers
- 500+ projects
Homer Warner Center for Informatics Research

Promote collaboration to advance discoveries in medical informatics research

- Centralized 55 employees
- 10,000 sq ft space
- > $10 million in grants
- Current projects include:
  - Sharp grant projects
  - Statewide MPI
  - Beacon communities
  - Commercial strategies
The Complex I.S. Environment

Environmental Factors

- Rapidly changing technologies
- Increasing expectations
- Knowledgeable users
- National requirements (e.g., ICD-10, Meaningful Use)
A responsibility to innovate
“There’s a way to do it better – find it.”

-Thomas Edison
“Everything that can be invented has been invented.”

-Charles H. Duell, Director of US Patent Office, 1899
“There is no likelihood man can ever tap the power of the atom.”

-Robert Miliham, *Nobel Prize in Physics*, 1923
“The horse is here today, but the automobile is only a novelty – a fad.”

-President of Michigan Savings Bank advising against investing in the Ford Motor Company
“Video won’t be able to hold on to any market it captures after the first six months.”

-Daryl F. Zanuck, 20th Century Fox, commenting on television in 1946
“What use could the company make of an electric toy?”

-Western Union, when it turned down rights to the telephone in 1878
“Who the hell wants to hear actors talk?”

-Harry M. Warner, Warner Bros Pictures, 1927
“When all think alike, then no one is thinking.”

-Walter Lippman
Imagine
Your daughter is in Fiji, has a fever of 104 degrees, and is a type II diabetic. She needs to see your family physician.
Transforming Healthcare

TeleHealth
Your father from Pennsylvania, who is being treated at a Geisinger clinic for several chronic conditions, suddenly falls ill while skiing in Park City, Utah.
Transforming Healthcare

Ubiquitous Data Exchange
Blood sugar management of inpatients improves outcomes by 60% and the tray the food is delivered on can increase accuracy of a patient's next dose of insulin by 80%
Transforming Healthcare

Smart Tray
You need a specifically shaped attachment for your otoscope to properly assess the condition of an abnormal ear canal in a Down syndrome baby.
3D Printing

Transforming Healthcare
A physician in Delhi, India develops treatment for esophageal cancer, which improves the chance of survival by 6x, and you show up in a hospital in Salt Lake City, Utah with the same diagnosis.
"The successful use of competition does not preclude some types of government interference.

To create conditions in which competition will be as effective as possible, to prevent fraud and deception, to break up monopolies - these tasks provide a wide and unquestioned field for state activity."

-- Friedrich August Von Hayek
Why data standards
Rail Gauge in Australia

Variations in gauge standards have been a problem for over a hundred years.
Healthcare’s Standardization Problem
Creating a New Paradigm

Health Data Dictionary
Clinical Element Models
Decision Support
Real success is not achieving greatness...rather, real success is achieving greatness that benefits many. Real success raises all ships.
Intermountain Healthcare

Responsibility to Innovate