

















# Creating and Sharing Knowledge and the Rapid Learning Health System

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November 18, 2010

### **President Obama's First Weekly** Address









Saturday, January 24th, 2009



"To lower health care cost, cut medical errors, and improve care, we'll computerize the nation's health records in five years, saving billions of dollars in health care costs and countless lives."



## **American Recovery and Reinvestment Act (ARRA)**









#### TITLE XIII—HEALTH INFORMATION TECHNOLOGY

SEC. 13001. SHORT TITLE; TABLE OF CONTENTS OF TITLE.

(a) SHORT TITLE.—This title (and title IV of division B) may be cited as the "Health Information Technology for Economic and Clinical Health Act" or the "HITECH Act".

TITLE IV—MEDICARE AND MEDICAID HEALTH INFORMATION TECH-NOLOGY; MISCELLANEOUS MEDICARE PROVISIONS February 17, 2009



#### Office of the Secretary

OFFICE OF THE NATIONAL COORDINATOR FOR HEALTH INFORMATION TECHNOLOGY

(INCLUDING TRANSFER OF FUNDS)

For an additional amount for "Office of the National Coordinator for Health Information Technology", \$2,000,000,000, to carry out title XIII of this Act, to remain available until expended: *Pro-*



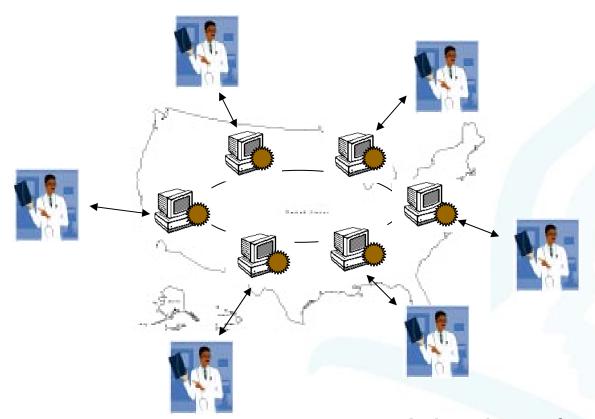
## Primary Goal of the HITECH Program in the U.S.











- 1. Adoption of certified EHRs
- 2. Health information exchange
- 3. Quality reporting

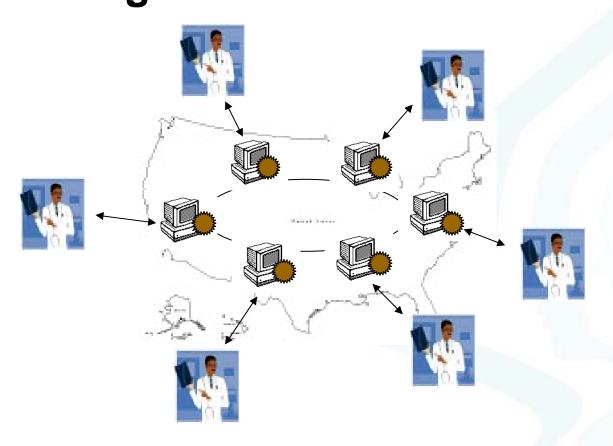
# This Can Improve Care but It Can't Generate Knowledge













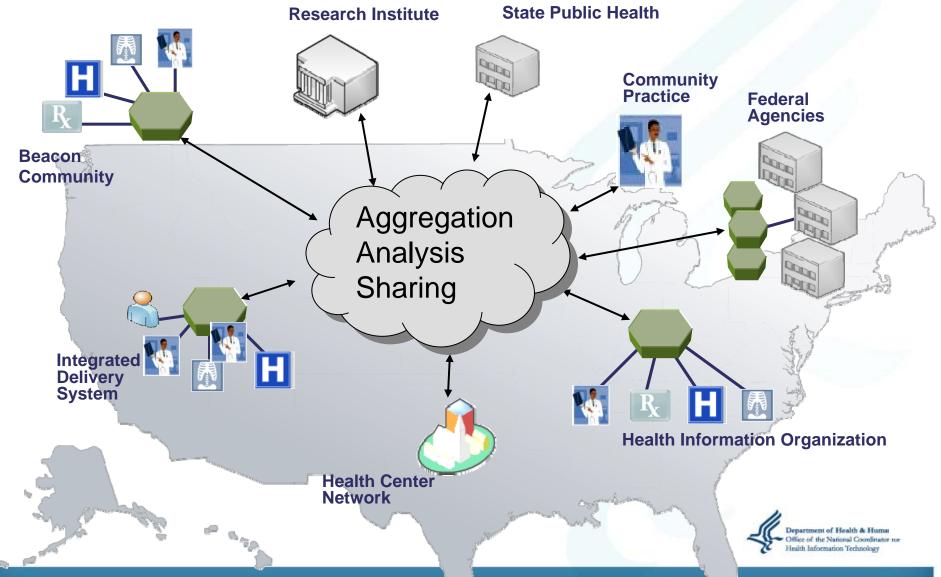
### A Learning Health System











### A Learning Health System









- Can be regional, national, or global
- Can "re-use" data originally collected for other purposes
- Can be based on central or distributed data repositories
  - Distributed models have many advantages



### **Scenarios**

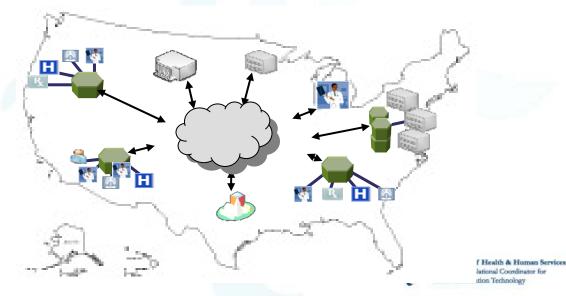








- Post-market surveillance of a new drug reveals unexpected side effects in some patients. A decision support rule is created to alert care providers.
- During an epidemic, new cases reported directly from EHRs. As the disease spreads into new areas, clinicians are alerted.



# We are Building a Learning System





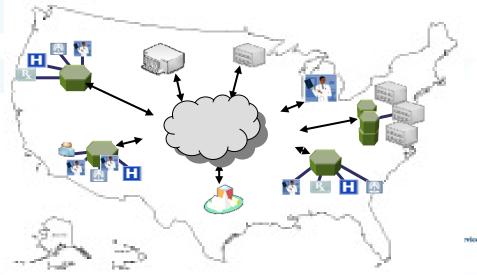




- Recognition of the need
  - All data are fundamentally reusable
- A single technical approach
- Explicit data definitions and standards

A policy and governance structure to ensure

trust











## Thanks and Write to Me:

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