Populations/Quality
Patient-Centered Medical Home Hearing

David R. Hunt, MD, FACS
Chief Medical Officer, OHITA
Office of the National Coordinator for HIT

Overview

- Building a national HIT infrastructure
- Clinical data and standards for the Medical Home

Building a national HIT infrastructure

Key Health IT Components

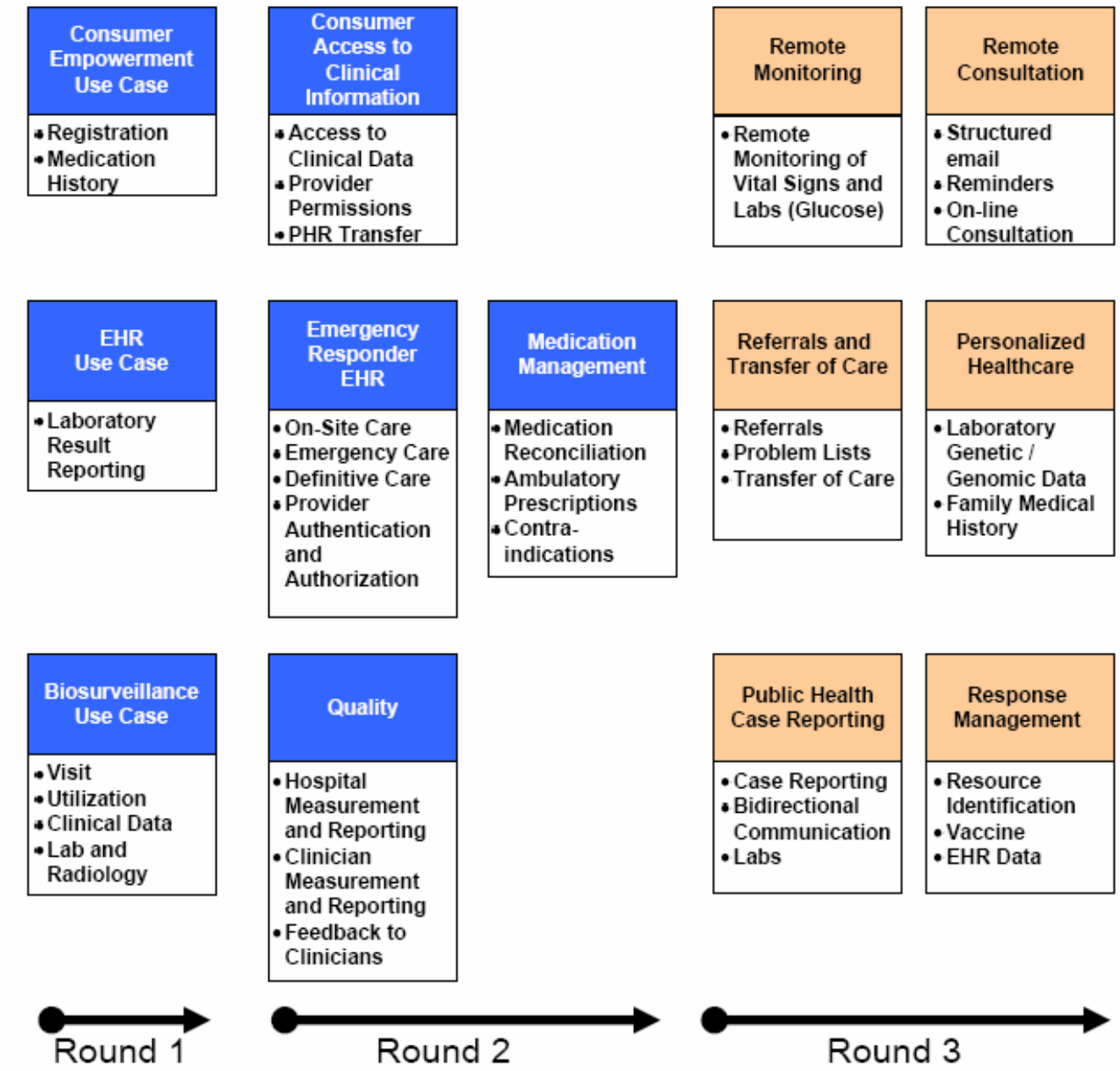
A Robust, Interoperable, Health IT Environment that brings together:

- Electronic Health Records (EHR)
- Personal Health Records (PHR)
- Public Health Information

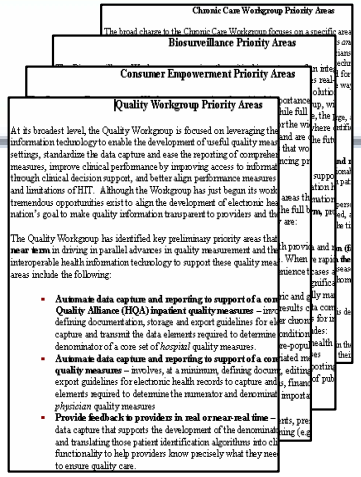
- Standards (Data, Technical and Security)
- Interoperable Health Information Exchange Network

(Nationwide Health Information Network - NHIN)

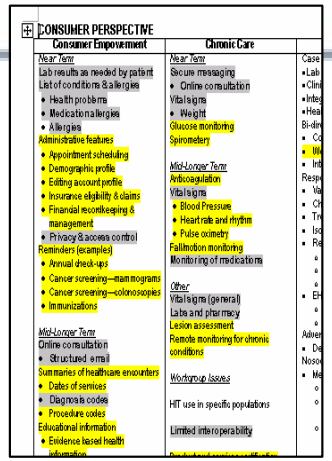
AHIC Priorities and Use Case Roadmap



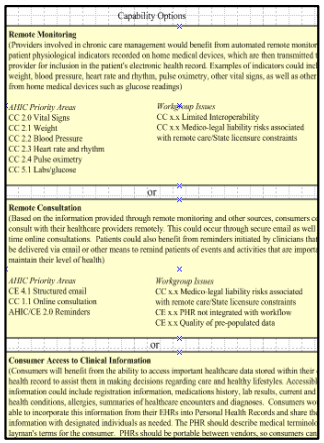
AHIC Priorities Into Use Cases



AHIC workgroup priorities and issues



Priorities and areas clustered for coordination and synergy

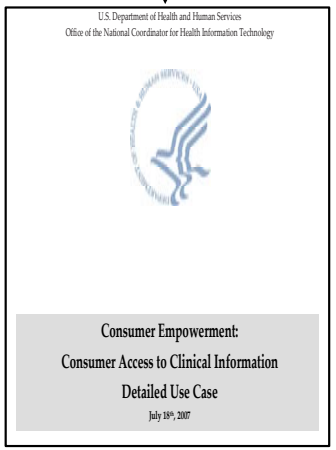


Use case options for AHIC prioritization

Public Feedback

Prototype Use Case

Public Feedback

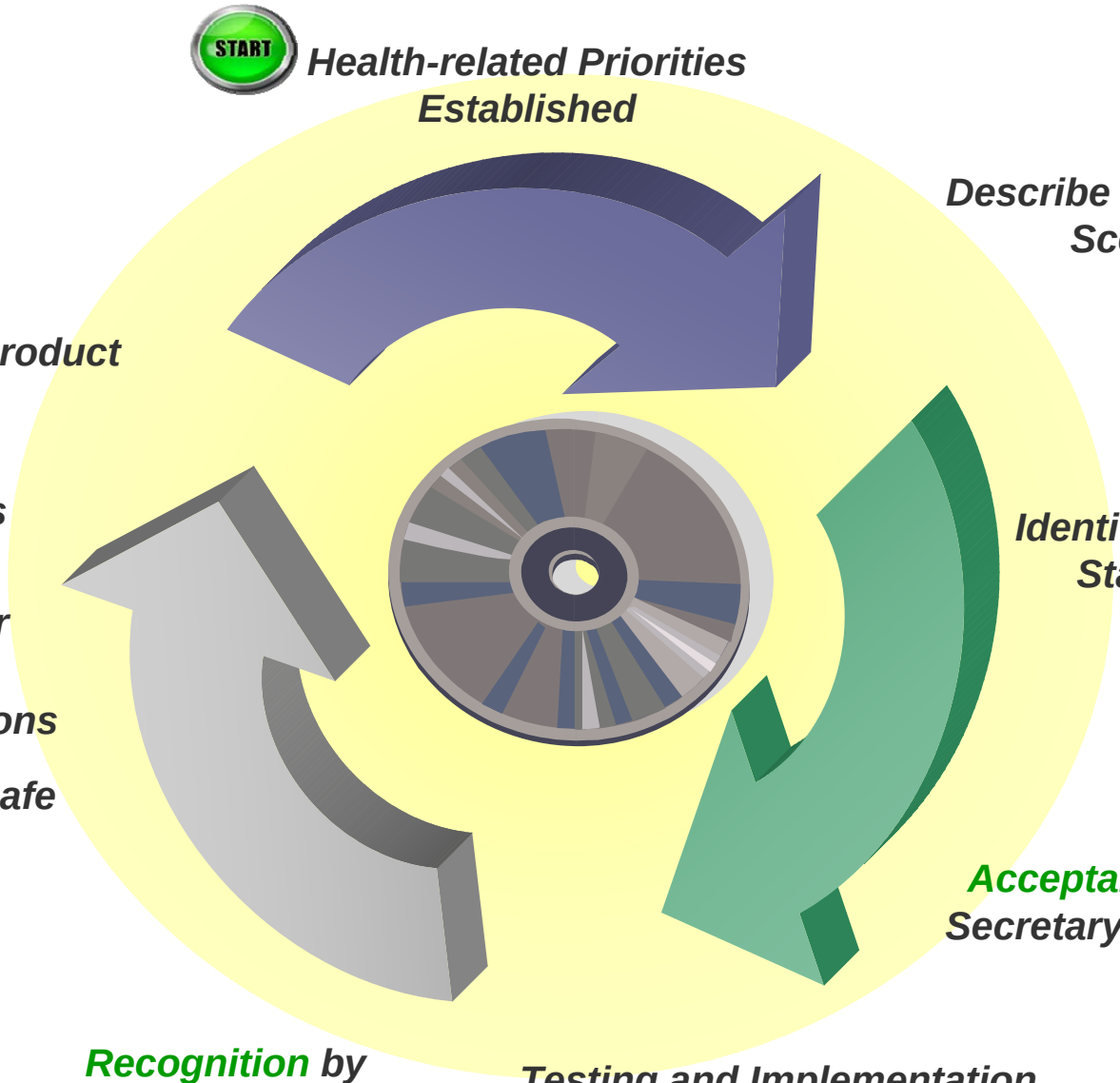


Detailed Use Case

"Use cases (*anvendningsfall*), stated simply, allow description of sequences of events that, taken together, lead to a system doing something useful."

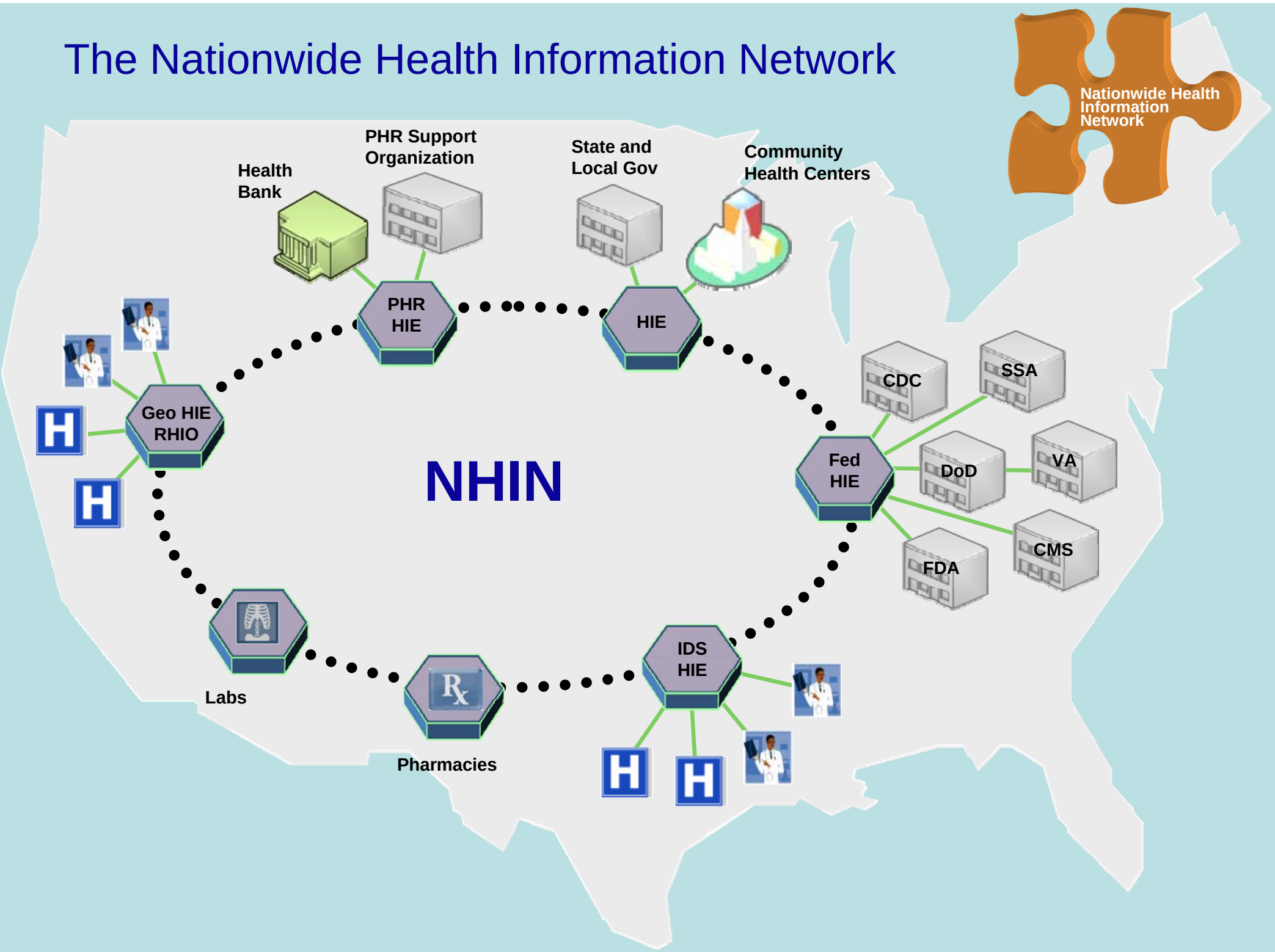
Kurt Bittner, Ian Spence (2002). *Use Case Modeling*. Addison Wesley Professional, 2-3. ISBN 0-201-70913-9.

Standards into Products – Summary of the Cyclical Process



- *Used in Health IT Product Certification*
- *Required in*
  - *Federal Systems and Healthcare Contracts (Executive Order 13410)*
  - *"Stark" exceptions and Anti- Kickback safe harbor*

The Nationwide Health Information Network



Privacy, Confidentiality, Security

Privacy

(L. *privatus*; belonging to oneself, not to the state): **a right**

Confidentiality

(L. *confidere*; to trust): **a trust**

Security

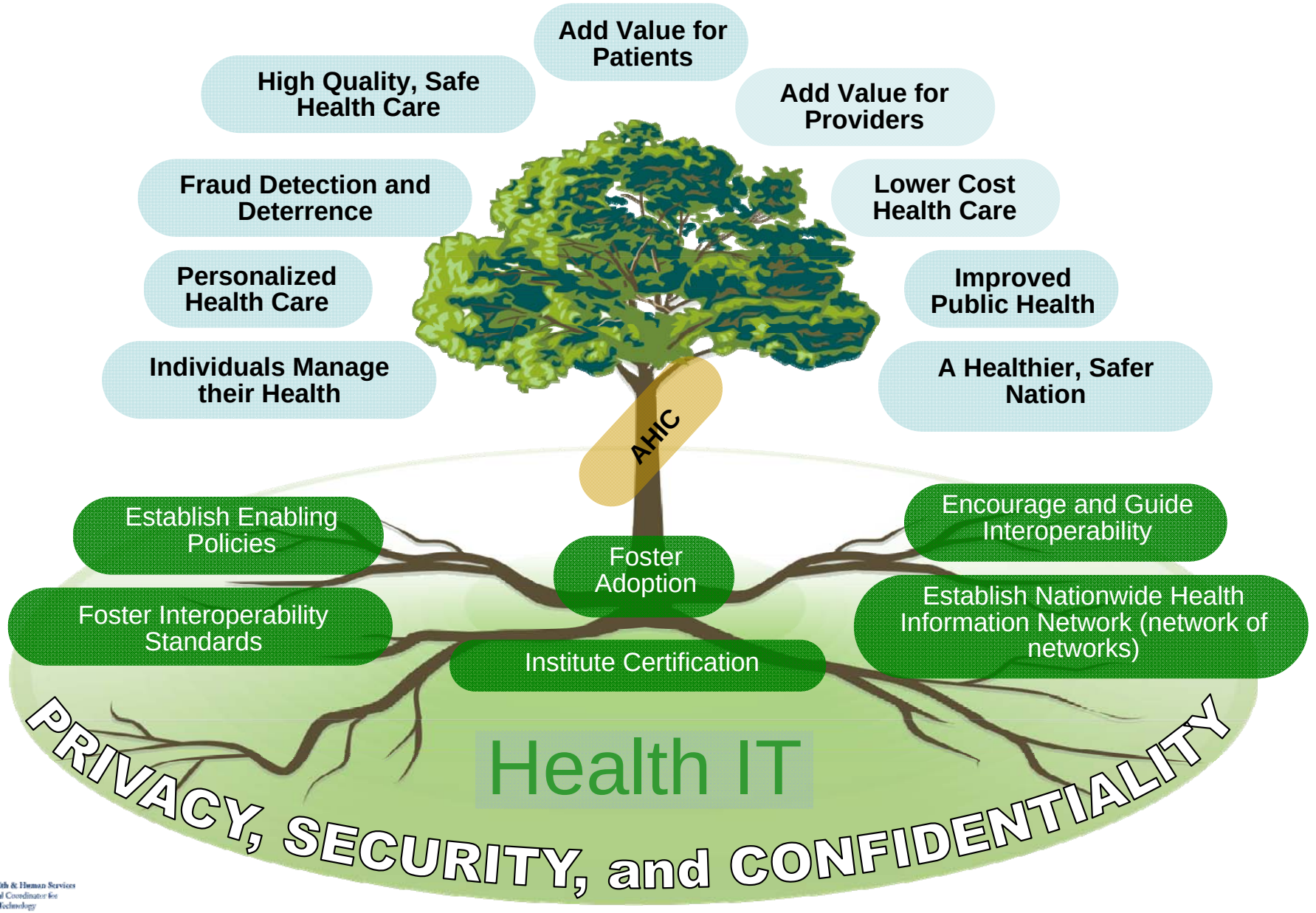
(L. *securus*; free from care): **a state of being**

The AHIC Successes

- **Standards to allow interoperability** will be "recognized" by Secretary Leavitt over the next several months
  - Laboratory data access by providers
  - Medication lists for patients
  - Electronic clipboard for patient registration
  - Manage community-level health events
- **92 Ambulatory EHRs** have been **certified** (2006 & 2007)
  - Have begun Enterprise (Inpatient) EHR certification this year
- **Nationwide Health Information Network advancing**
  - "Trial implementation" contracts announced October 2007
    - Move from prototypes to trial use with data exchange among communities and with other health-related entities

More progress in the past 3 years than in the TWO decades

Health IT Support for Transforming Health Care



Clinical Data and Standards for the Medical Home

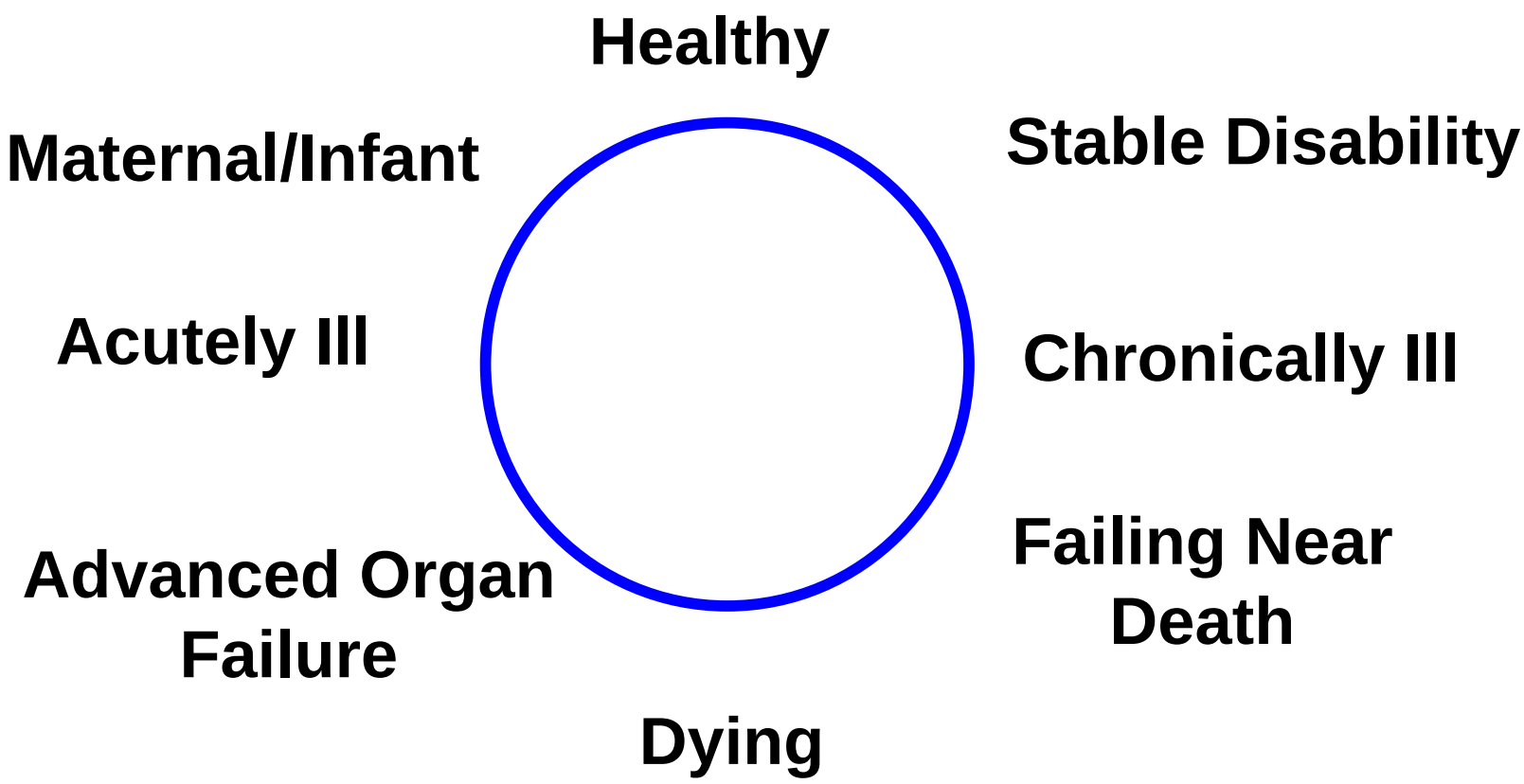
Joanne Lynn, MD et. al.

THE MILBANK QUARTERLY
A MULTIDISCIPLINARY JOURNAL OF POPULATION HEALTH AND HEALTH POLICY

Volume 85, Number 2, 2007

Using Population Segmentation to Provide Better Health Care for All: The "Bridges to Health" Model

Centers for Medicare and Medicaid Services, U.S. Department of Health and Human Services



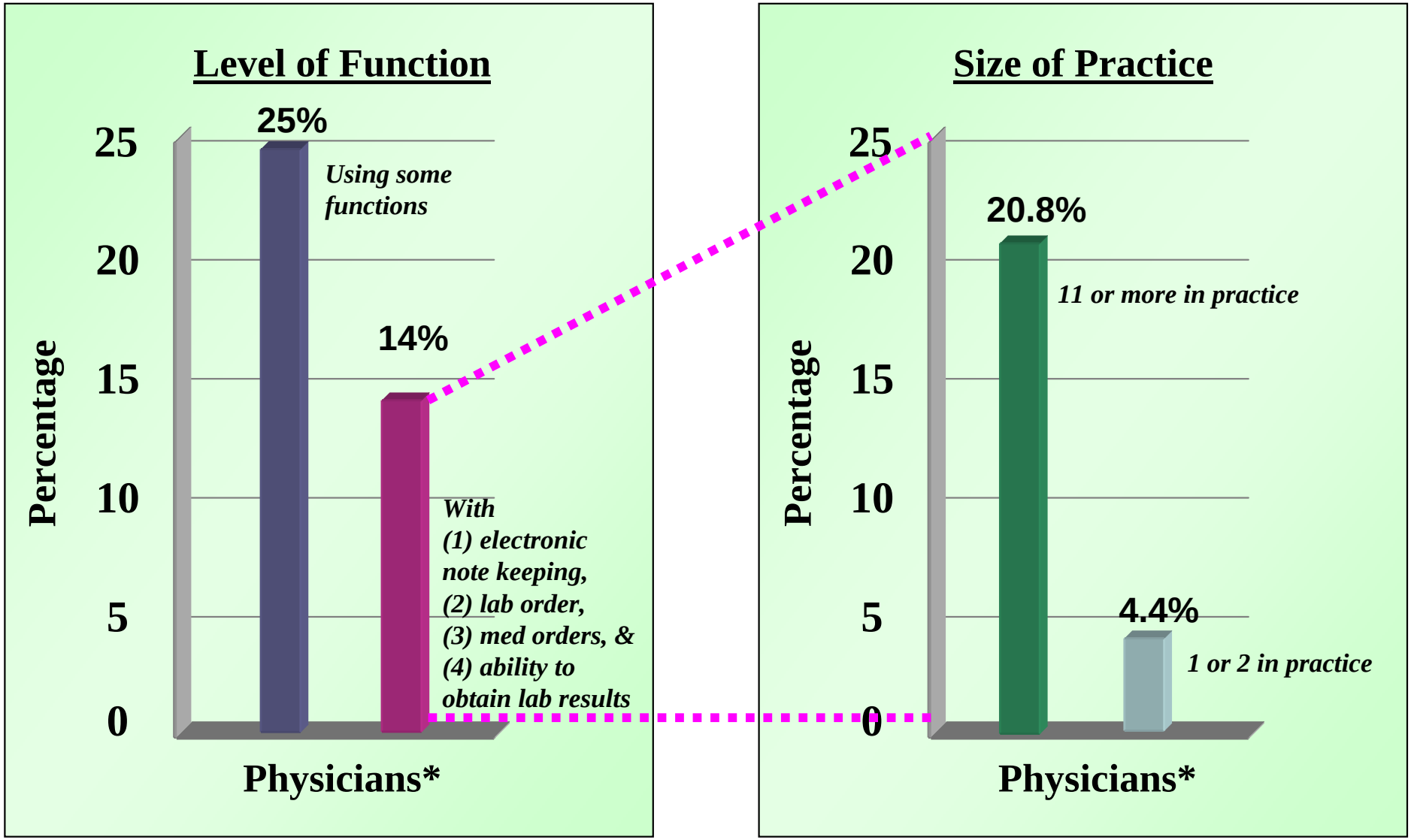
Sir Cyril Chantler

Medicine used to be simple, ineffective and relatively safe.

Now it is complex, effective and potentially dangerous.

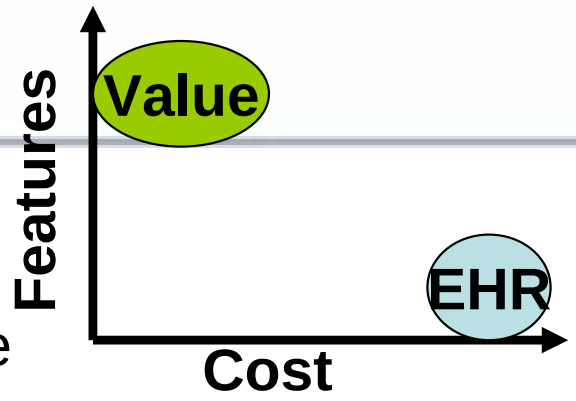
The role and education of doctors in the delivery of healthcare. Hollister Lecture delivered at the Institute of Health Services Research, Northwestern University, Illinois, USA. October 1998. *Lancet* 1999;353:1178–81.

Current State EHR Adoption: US Physicians (2007)



*3 times more prevalent in metropolitan areas

EHR Value Proposition



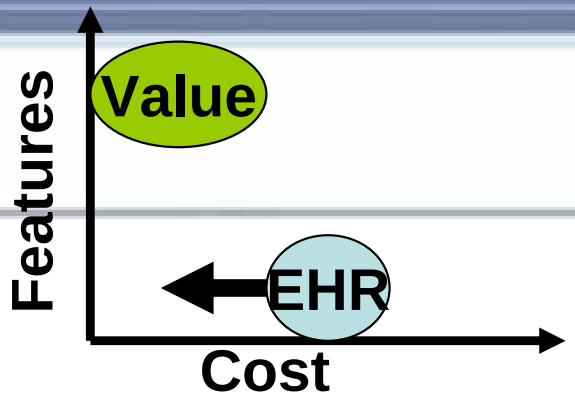
Cost

- Physician office average cost: $20,00/user of software, installation, loss of productivity – hardware additional
- Hospital median costs: $17,500/bed ($12,000 ongoing annual operations)
- Misalignment of incentives

Features

- Usability
- Necessary workflow changes
- Concerns about obsolescence and reinvestment
- Lack of interoperability
- Privacy, Confidentiality, Security, and New Legal Exposures

Cost



- ✓ Stark & Anti-kickback for Donations by Hospitals to Small Providers
- ✓ Decreased Malpractice Premiums Being Explored
- ✓ **HRSA grants to promote adoption and effective use of HIT in the safety net community**
- ✓ Medicare Demonstration Announced – to Involve up to 1,200 Physician Practices to Receive **Bonus Payments** for Reporting & Quality Improvements From EHR Use

The medical home in action.

Mrs. White, a 55 year old woman you have known for years, books an appointment to see you this afternoon.

CONSUMER EMPOWERMWENT

- She electronically submits from home her **reasons for encounter** – new symptoms of fatigue and nausea and discussion about screening tests.
- When she arrives, your EHR face sheet displays her **active health problems** (overweight, dyslipidemia) and medications (lovastatin), and **prompts** you that she is in need of a mammogram.
- As you clarify her symptoms and enter them into her record, you run a **decision support** routine that uses your PBRN's **longitudinal epidemiologic database** to calculate a list of likely diagnoses and their relative odds ratios for primary care patients in her demographic group.
- You discuss these possibilities with Mrs White, decide to assess the most likely diagnoses with laboratory tests, and confirm that she has new-onset Type 2 diabetes.

EHR Use Case

- Entering her diagnosis into her record automatically enrolls her in your **practice diabetes registry**, sends an **email notification** to her with the website for **on-line patient education** and asks her to schedule a visit with your practice nurse, who does diabetic training sessions.
- She self-monitors glucoses and **posts results** to the practice through the **secure patient portal**, where they are forwarded to your nurse who reviews the pattern of results.
- After a brief honeymoon period, her glucoses rise and you send her an **email message** to begin metformin, and send to her local pharmacy an **electronic prescription** for metformin.

Remote Monitoring

Remote Monitoring Consumer Access

- At her follow-up face-to-face encounter with you 3 months later, your EHR **prompts** you to carry out initial diabetic care measures and **reminds** you that her last recorded LDL-C is above target range. You spend much of this encounter discussing how she is adapting to her diagnosis and helping her set **treatment goals and preferences**, which are entered into the record.

- After the visit, she continues to monitor and forward her home glucose readings for review and adjustment of medications, and forwards all questions to the practice through the **patient portal**.

- As a new member of the diabetes disease registry, her data are included in the **patient summary report** on diabetes disease management compiled every 6 months for review within the practice and forwarded yearly to her insurance company to calculate pay-for-performance bonus payments.

For More Information:

www.hhs.gov/healthit

DavidR.Hunt@hhs.gov
202-205-8118