

# MARYLAND/DC COLLABORATIVE FOR HIT RHIO

## How to Build Local Coalitions to Implement the National Health Information Infrastructure

Presentation to HIT Summit West

Victor Plavner, M.D.

Chairman

Maryland/D.C. Collaborative for  
Healthcare Information Technology  
Vplavner@collaborativeforHIT.org

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# Agenda

## Maryland/D.C. Collaborative for HIT RHIO

- Participants
- Governance Structure
- Mission and Goals
- Advantages and value of CPOE and Interoperability
- Technology overview
- Pilot Project
- Milestones
- Funding strategy

# Provider-led Initiative



**MARYLAND/D.C. COLLABORATIVE**  
FOR HEALTHCARE INFORMATION TECHNOLOGY

- Grassroots, independent physician-lead initiative began in 2001
- Vision to create connectivity between disparate healthcare systems in the State of Maryland and Washington, D.C. area to improve patient safety, quality of care, and efficiency

# Momentum Building Regionally

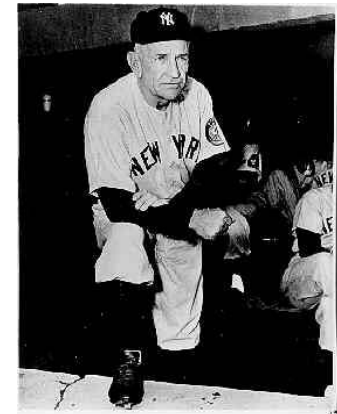
## ASSEMBLED CRITICAL MASS OF COMMITTED PARTICIPANTS

- Diverse Physician groups
- MedChi support
- Community Hospitals with wide geographical coverage in Maryland
- Maryland Hospital Association support
- Three major academic health systems committed to working collaboratively (JHM, UMMS, MedStar)
- All providing outstanding contributed resources
  - Information Technology
  - Public Health research design
  - Administrative staff

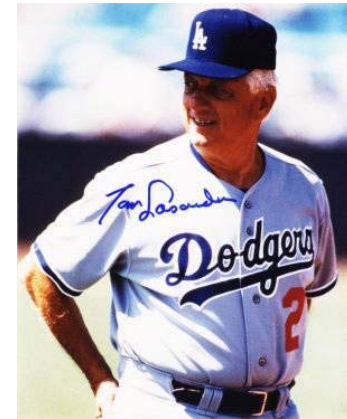
# Governance Structure

- 501(c)3 non-profit Maryland corporation
- Supported by Maryland's Department of Health and Mental Hygiene
- Initial Member Classes:
  - Member Class A. Community Physicians (Primary care and Specialists)
  - Member Class B. Academic Health Systems
  - Member Class C. Community Hospitals
  - Member Class D. Payers
  - Member Class E. Consumers, Employers, State of Maryland (Proposed)
  - Others TBD
- Fair and equitable interest and voting rights

“The key to being a good manager is keeping the people who hate me away from those who are still undecided.”  
....Casey Stengel



“The challenge is to get my 25 ballplayers to play for the name in front of their uniforms instead of the name on the back.”....Tommy LaSorda



“I’m glad I have my day job.”..... Dr. Ed Miller



# Momentum Building

- Over 30 recent letters of support, including:
  - Secretary Nelson Sabatini
  - Speaker Mike Busch
  - Senators Barbara Mikulski and Paul Sarbanes
  - Maryland Delegate John Hurson
  - Joyce Evans, M.D., MAFP
  - Michael Preston, M.D., MedChi
  - Calvin Pierson, M.D., MHA
  - K. Edward Shanbacker, MSDC
  - Community hospitals
  - Provider participants
  - Payer participants – CareFirst, Aetna

# Momentum Building Nationally

- Federal government leading the way, leadership and resources focused on
  - Regional Healthcare Information Organization (RHIO)
  - National Healthcare Information Network (NHIN)
  - Development of data standards
  - Bio-surveillance
- One of 9 community projects awarded the Connecting Communities for Better Health grant, selected from a field of 134 state projects



# Maryland/DC Collaborative RHIO

## MISSION AND GOALS

- Work collaboratively with Maryland and Washington, D.C. providers and healthcare organizations to improve quality of care, patient safety, and efficiency through healthcare information technology (HIT)
- Design, implement, and measure a common data exchange (CDE) infrastructure that is replicable, scalable and economically sustainable
- Understand the incentives and disincentives to physician adoption
- Employ “best practices” learned from other communities

# Advantages of Interoperability

## **Drives Patient Safety and Cost Reductions**

- ✓ Provides evidenced-based clinical decision support at point of care
- ✓ Standardizes medical practice with uniform application of clinical pathways
- ✓ Reduces adverse drug events and injuries related to healthcare delivery
- ✓ Reduces duplicative tests, hospitalizations, lengths of stay
- ✓ Enhances disease management capabilities
- ✓ Improves tracking and collection of quality performance measures
- ✓ Increase patient and provider satisfaction

LOOK AT THAT...CLEAR SKIES  
AND CALM WATERS.  
HOW LUCKY CAN WE GET?!!

2009

HEALTHCARE COSTS

Schulz  
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# Healthcare Costs Are Increasing

- U.S. healthcare spending estimated at \$1.7 trillion in 2003, or \$5,800 for every American
- Expected to reach \$3.4 trillion by 2013
- Chronic care makes up a majority of this spend, increasing with aging population
- Institute of Medicine (IOM) reports:

Information Technology is the backbone for improvement of quality and safety as well as a reduction of costs.

# Potential Value of CPOE

- Improved clinical outcomes
- Reduced medication errors
- Increased clinical care efficiency
- Eliminate unnecessary costs

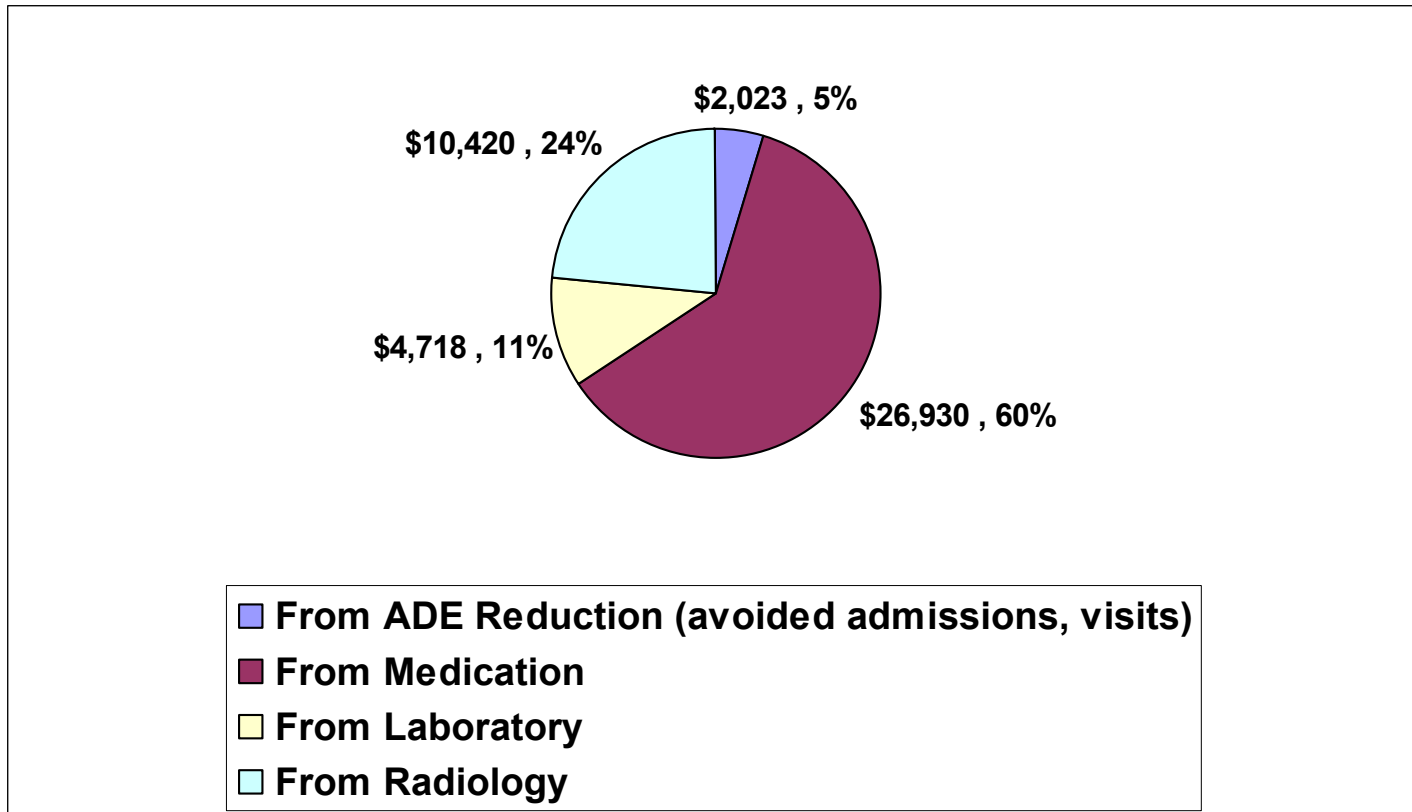
# Value of CPOE Adoption

- Improved Patient Safety
  - IOM 44,000 – 98,000 death/year from medication errors
  - Leapfrog Group – promotes adoption of CPOE as one of its three safety standards
- Significant Economic Impact
  - Advisory Board states a 500 bed hospital saves millions of dollars per year

# Estimated CPOE Cost Savings

CITL/Harvard IT Studies (2003, 2004):

- Breakdown of National Estimated Cost Savings from ACPOE (in Millions of US Dollars)



# Cost Savings of Interoperability

CITL/Harvard IT Studies (2003, 2004):

Standardized, encoded, electronic healthcare information exchange would

- Save US healthcare system \$395 Billion over 10-year implementation period
- Save \$87 Billion in each year thereafter
- Dramatically reduce the administrative burden associated with mutual data exchange
- Decrease unnecessary utilization of duplicative laboratory and radiology tests



# Cost Savings of Interoperability

## CITL/Harvard IT Studies (2003, 2004):

### Net benefits to stakeholders:

- Providers \$34 B
- Payers \$30 B
- Labs \$13 B
- Radiology Centers \$8 B
- Pharmacies \$1 B
- Public Health \$0.1 B

# Policy / Legislative Movement

- President Bush, Executive Order #13335 on April 27, 2004 – widespread deployment of HIT within 10 years
- Office of the National Coordinator for Health Information Technology (ONCHIT) - Dr. David Brailer, MD, PhD
  - Strategic Framework released 7/21/04
- Physicians EHR Coalition (PEHRC)
- eHealth Initiative (eHI)
  - Working Group on HIT in Small Practices
  - Working Group on Financial Sustainability
- Markle Foundation's Connecting for Health to release report on Financial and Organizational Sustainability end of Sept.
- EHR certification process underway under Dr. Brailer's leadership
- Medicare Modernization Action of 2003 (MMA)
  - Section 649 (DOQ-IT)
  - Section 721 (CCIP)
- Medicare's 8<sup>th</sup> Scope of Work
- Leapfrog's Ambulatory Leaps

# THE PROMISE...

HIPAA TRANSACTION REQUIREMENTS



HEALTHCARE IT NEWS

# THE REALITY...

HIPAA COMPANION DOCUMENTS



**BUDDY, CAN YOU SPARE \$10 MILLION FOR AN EHR?**

**HEALTHCARE  
IT NEWS**





**DAVID BRAILER**

Health I.T. Czar  
Most Powerful

SCHULER FROM  
INSIDE HEALTHCARE  
©2004

# POLITICAL HOT POTATOES



HEALTHCARE IT NEWS

DR. BRAILER

# Broad Technology Schematic

PCP/Specialty  
Practices

Long-term Care/  
Home Health

Community  
Hospitals

Tertiary Care  
Hospitals

Labs

Imaging  
Centers

PBMs/  
Pharmacy

Payors

Public Health  
Measures

Patients

# Broad Technology Schematic

PCP/Specialty  
Practices

Long-term Care/  
Home Health

Community  
Hospitals

Tertiary Care  
Hospitals

Labs

Imaging  
Centers

PBMs/  
Pharmacy

Security / MPI

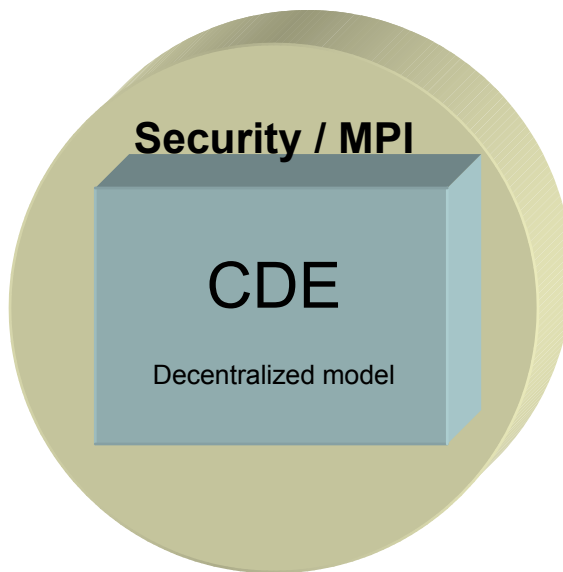
CDE

Decentralized model

Payors

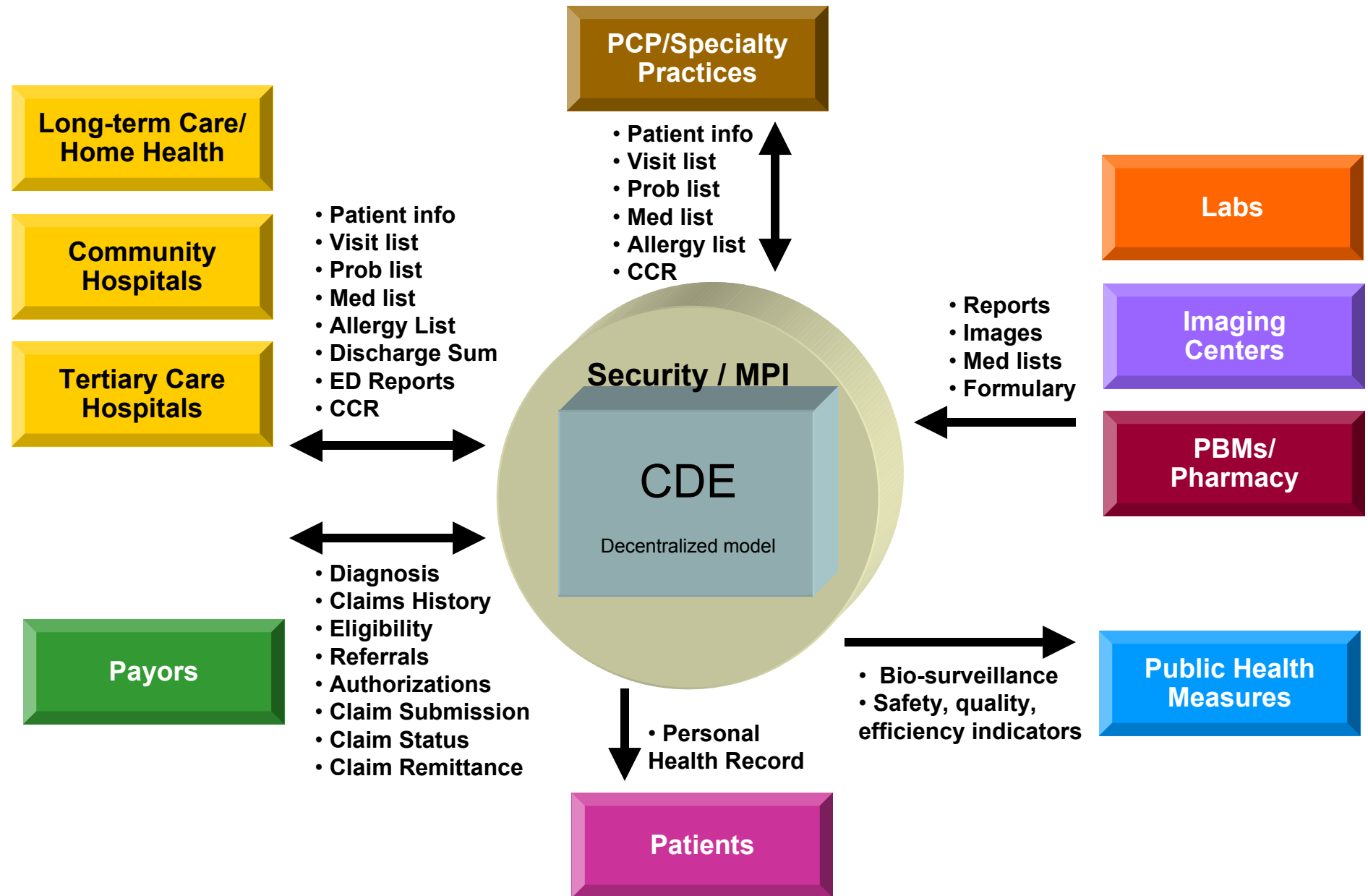
Public Health  
Measures

Patients





# Broad Technology Schematic



# Technology Challenges

- **Challenges**

- Interoperability
- Interfaces
- EMPI
- Privacy & Security
- Electronic Health Record implementation
- Audit trail
- Standards

- **ARINC Guidance**

- Transportation communications for the airline industry
- Communications and information processing systems
- Systems engineering and integration solutions

# Operations

## Technology Work Group

- **John Cuddeback, M.D., Vice President of Clinical Informatics, MedStar Health**
- **Bill Bame, Technical Architect, University of Maryland Medical System**
- **Mark DeVault, Director Clinical Information Systems, Data Management & Integration, University of Maryland Medical System**
- **Rick Edwards, CIO, Howard County General Hospital**
- **Charles Henck, CIO, Information Technology Management, University of Maryland Medical System**
- **Jeff Huddleston, Vice President, Information Systems, University of Maryland Medical System**
- **Carey Leverett, CIO, Washington County General**
- **Marisa MacClary, Project Manager, Maryland/D.C. Collaborative**
- **Steve Mandell, Senior Director of Clinical Information Systems, Johns Hopkins Hospital**
- **Michael Minear, Senior Vice President and CIO, University of Maryland Medical System**
- **Dan Moffatt, CIO, Anne Arundel Medical Center**
- **Victor Plavner, M.D., Chairman, Maryland/D.C. Collaborative**
- **Jack Price, CIO, Shore Health System**
- **Stephanie Reel, CIO, Johns Hopkins Medicine**

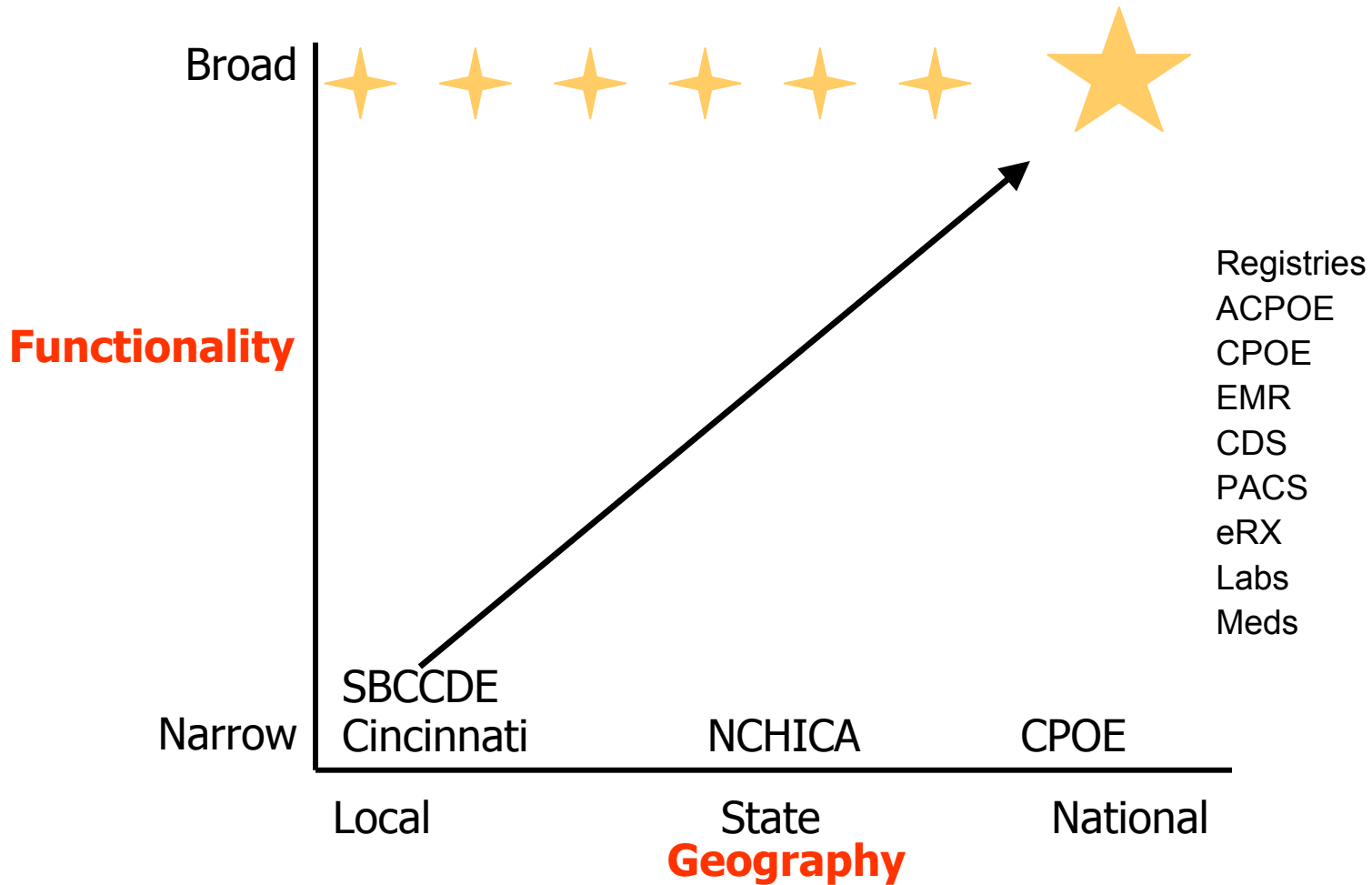
# Work Groups

- Steering Work Group
- Provider Work Group
- Technology Work Group
- Patient Privacy and Security Work Group
- Public Health/Outcomes Measurement Group
- Financial Outcomes Group

# Pilot Project Goals

- Examine and validate that a Common Data Exchange:
  - Will improve the quality and safety of patient care
  - Will decrease overall clinical and administrative costs
  - Is economically sustainable in our region
  - Is adoptable by providers
- Identify measurable and sustainable improvements

# Lack of Capital Drives Incremental Approach



# Pilot Project Objectives

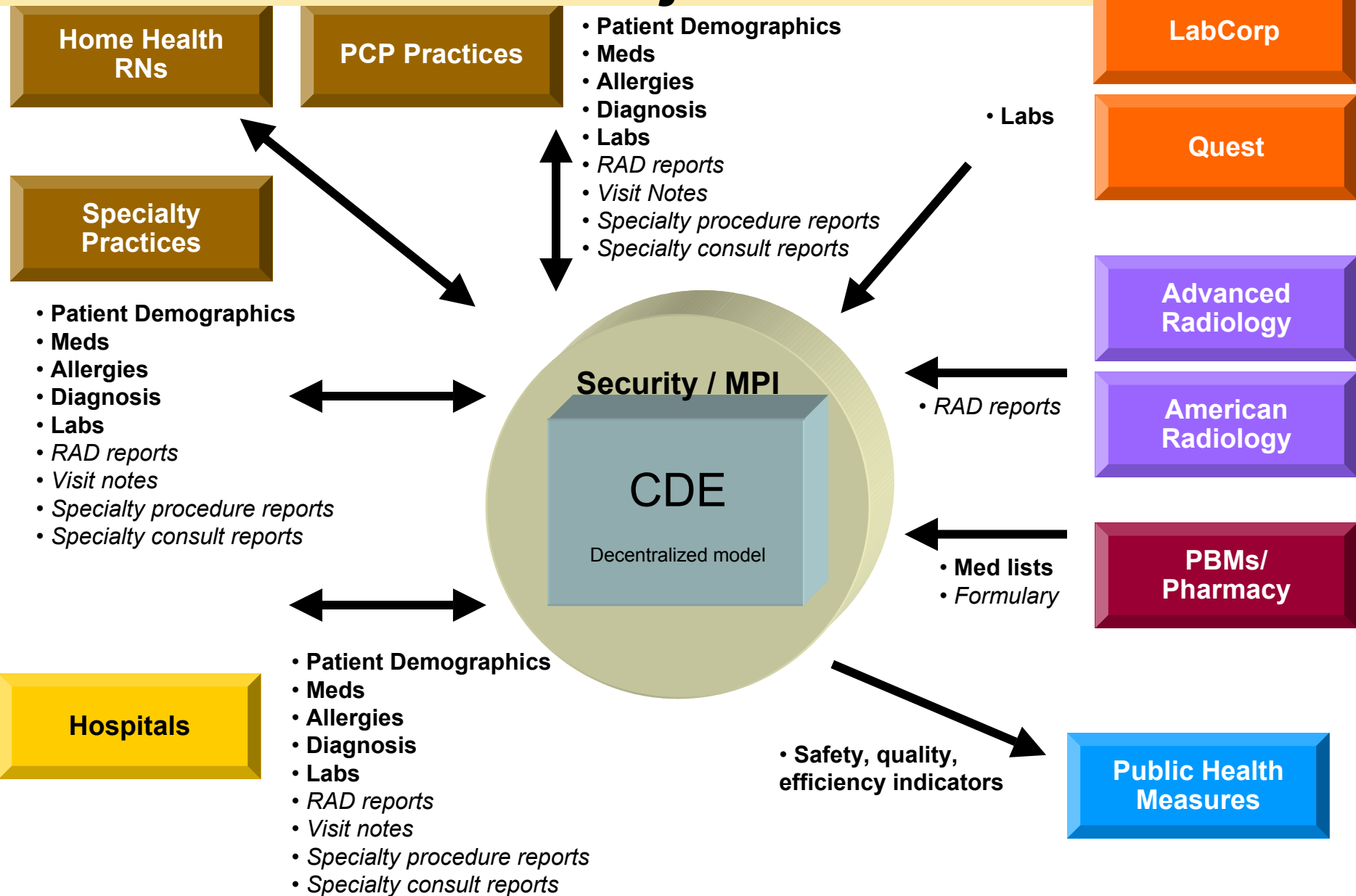
- Mobilize a broad core data set over a local region
  - Integrate disparate systems to exchange clinical data
  - Examine necessary incentives for physician adoption of connected EHRs
  - Track specific outcomes related to quality, safety, and efficiency
  - Align costs and the benefits among all participants
- Create a scaleable and replicable infrastructure for other pilot applications
  - Administrative simplification of transactions
  - Hospital/Home Health data exchange
  - Intra-Hospital solution
  - Maryland/DC Hospital to Hospital Network
  - Personal Health Record

# Howard County- Proposed Site

- Demonstrate Quality, Safety and Cost Value
  - City of Columbia population of 90,000
  - 90% of healthcare stays within the area
  - Large enough to extrapolate yet small enough to measure
  - Howard County General Hospital
    - 182 beds, 14,000 admits/year, 13,000 surgical procedures, 3600 newborn deliveries, 70,000 patients seen per year in the Emergency Department
    - MEDITECH information system



# Pilot Project Model



# Pilot Project Milestones



# Maryland/DC Collaborative RHIO

## FUNDING STRATEGY

- Federal Government (AHRQ, HHS, ONCHIT)
- State Government
- Stakeholders
  - Contributed services approx \$1 million
  - Seed Money
  - Dues
- Foundations – National, Regional and Local
- Others
  - Vendors
  - Venture capital

# Maryland/DC Collaborative RHIO

## Summary

- Agreed upon governance structure
- Necessary stakeholders committed
- Completed political heavy lifting
- Strong technological knowledge
- Broad provider, payer, organizational and governmental support
- Willingness to move forward in unison

# Maryland/DC Collaborative RHIO

[www.collaborativeforHIT.org](http://www.collaborativeforHIT.org)

Victor Plavner, M.D.

Chairman

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[Vplavner@collaborativeforHIT.org](mailto:Vplavner@collaborativeforHIT.org)