PENNSYLVANIA

(N) Delaware

MARYLAND

NEW JERSEY

Claymont
Wilmington
Elsmere
New Castle
Newark

Delaware
City

Middletown

Smyrna
Clayton

Dover ◉

Delaware
Bay

Annapolis ◉

Chesapeake
Bay

Harrington
• Milford

DELAWARE

Lewes

Atlantic

Ocean

39°

Bridgeville
Georgetown •
• Seaford

Millsboro •
Laurel •
Frankford •

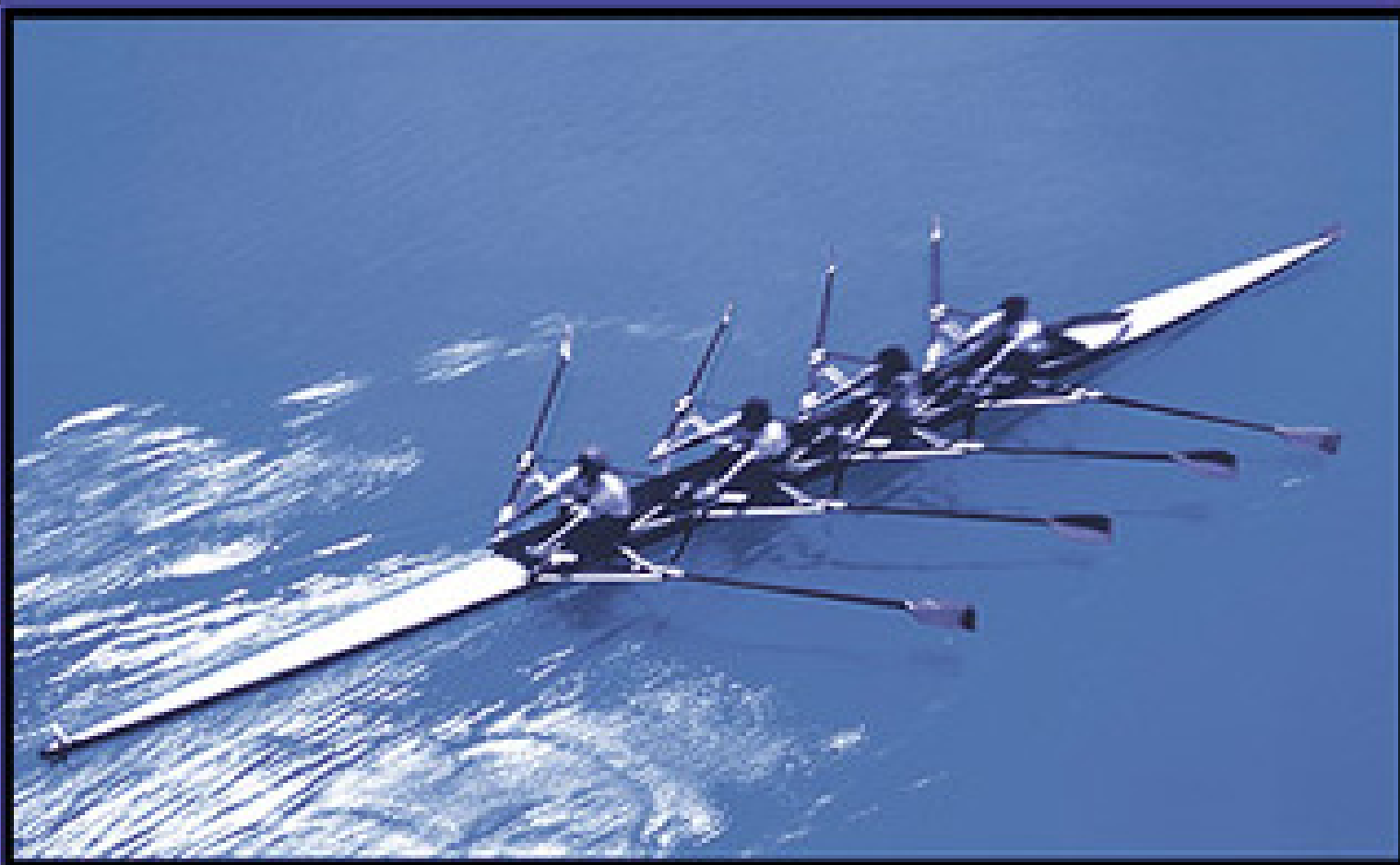76°

75°

0   7.5   15 mi

0   7.5   15 km

Keys to RHIO Planning

- Rally Around a Common Vision
- Create an Organizational Structure
  - Technical Committee to Drive Planning
  - Executive Committee to Oversee Project
- Engage Those with Greatest Interest
- Build Consensus Around Critical Success Factors
- Remain Focused

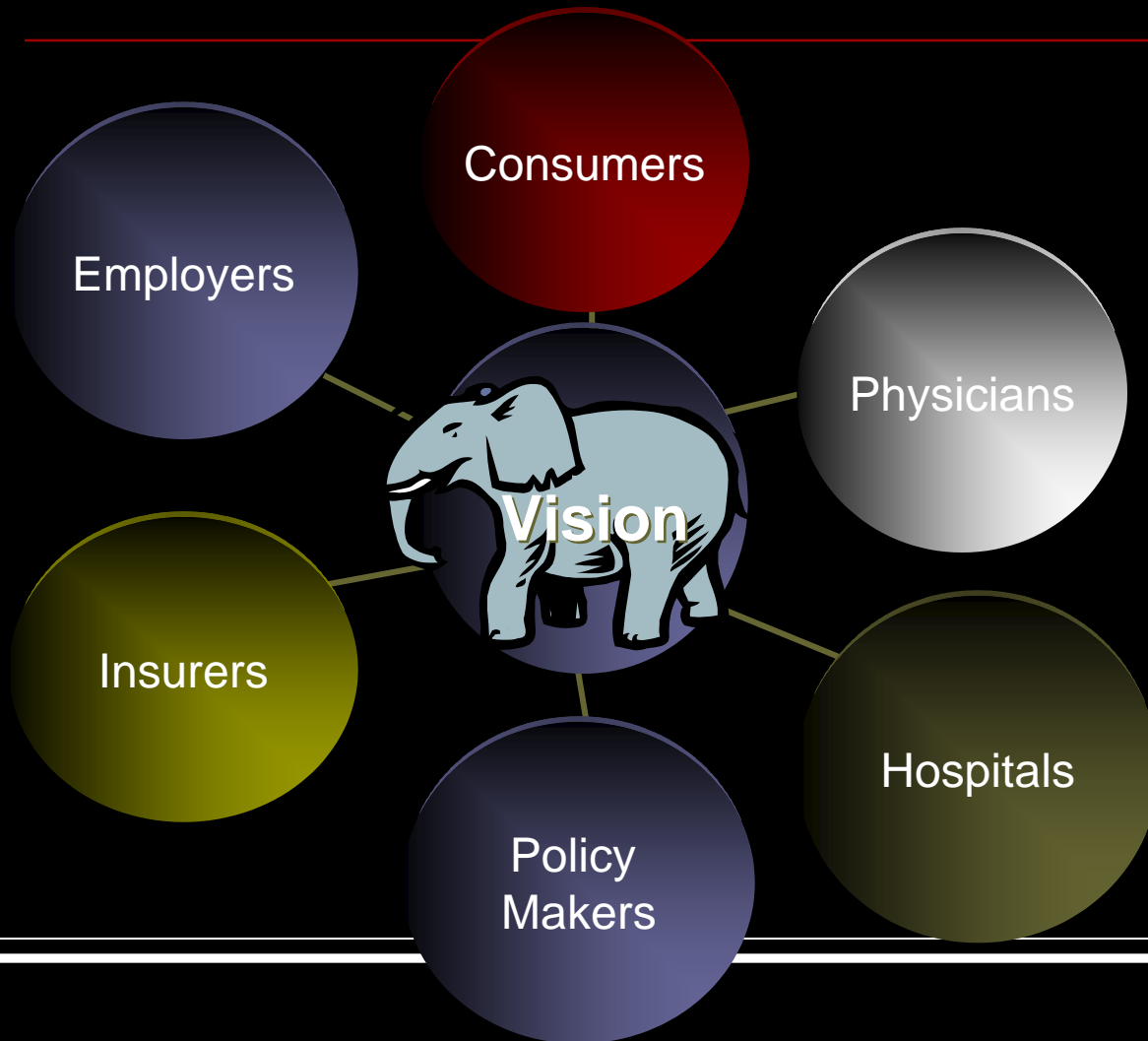# Rally Around a Common Vision

IGNORANCE

IT'S AMAZING HOW MUCH EASIER IT IS FOR A TEAM TO WORK TOGETHER
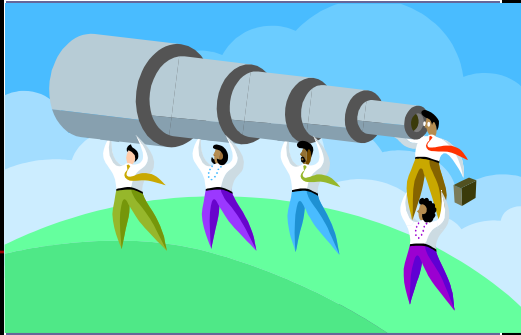WHEN NO ONE HAS ANY IDEA WHERE THEY'RE GOING.

www.despair.com

The Elephant & the 6 Stakeholders

So, oft in theologic wars
The disputants, I ween,
Rail on in utter ignorance
Of what each other mean;
And prate about an Elephant
Not one of them has seen!

John Godfrey Saxe (1816-1887)

DHIN Vision

Develop a network to exchange real-time clinical information among all health care providers (office practices, hospitals, labs and diagnostic facilities, etc.) across the state to improve patient outcomes and patient-provider relationships, while reducing service duplication and the rate of increase in health care spending.
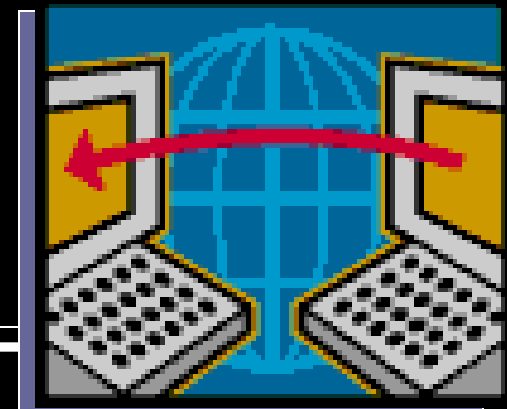
Lessons Learned

- Learn what is important to each of your stakeholders

- Define the value and benefits in terms that are:
    - Understandable
    - Meaningful

- Keep the patient at the center of the discussion and focus

Create an Organizational Structure
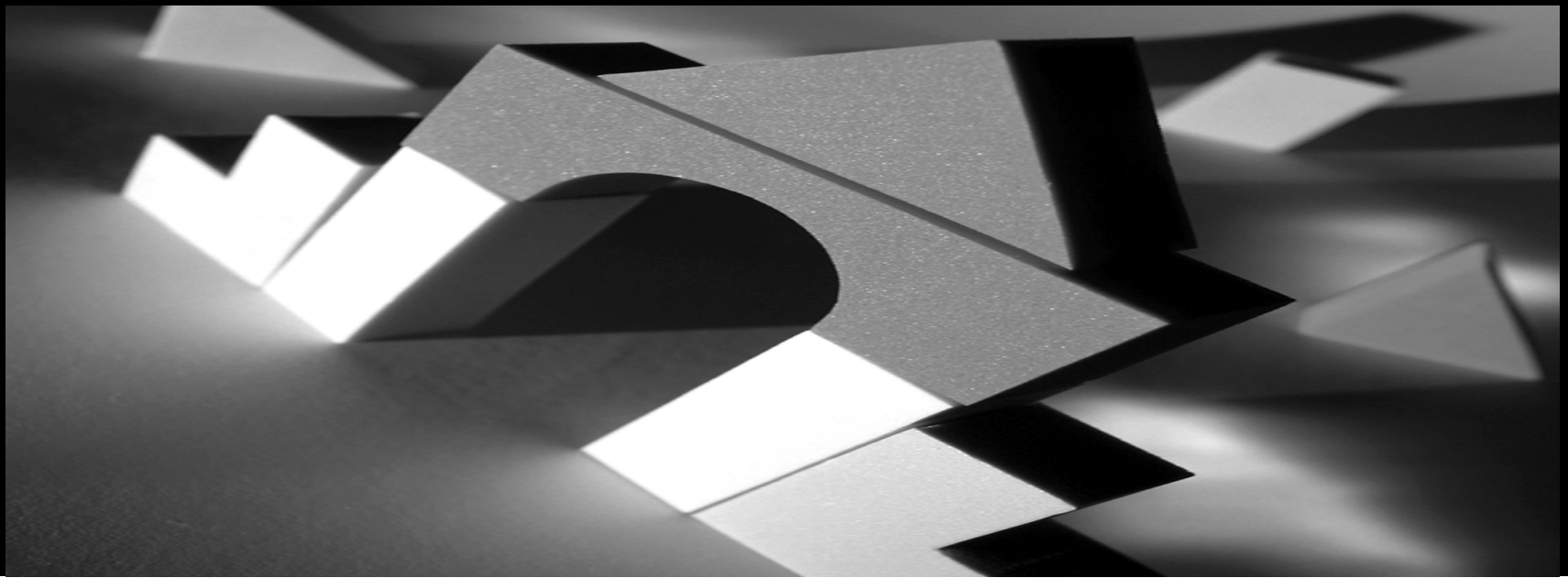
Delaware Health Information Network

- Created statutorily in 1997 as a public instrumentality of the State of Delaware
  - To advance the creation of a statewide health information and electronic data interchange network for public and private use.
  - To be a public-private partnership for the benefit of all citizens of Delaware
  - To address Delaware's needs for timely, reliable and relevant health care information.

Balanced Multi-Stakeholder Representation

- Hospitals
- Physicians
- Consumers
- Business
- Insurance
- State Government

Executive Committee

Board of Directors

Project Management Committee

Consumer Advisory Committee
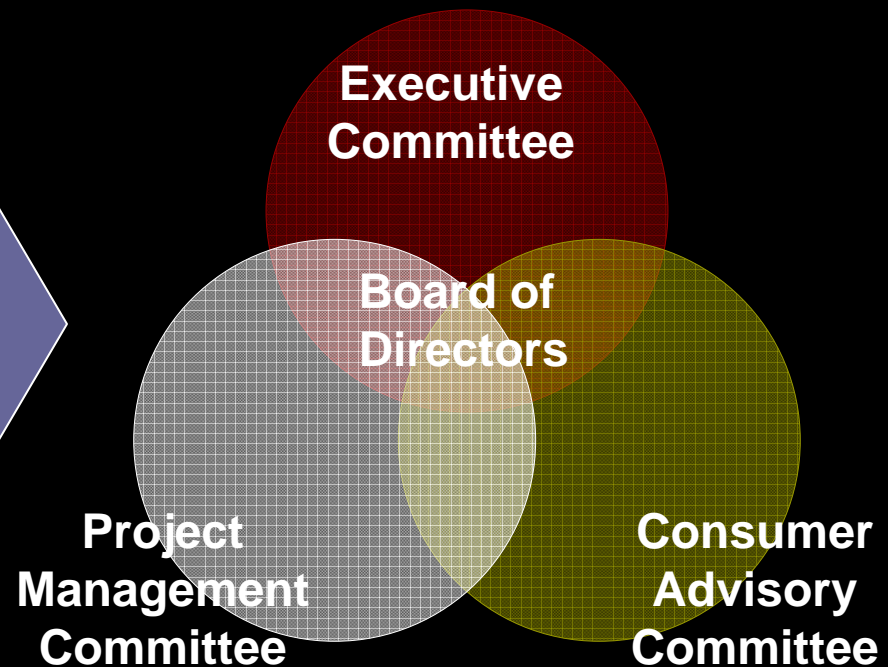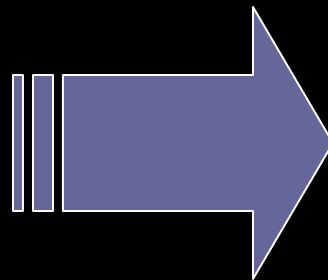
Lessons Learned

- Must be public-private partnership
- Must be balanced among stakeholders
- Must be tied to sustainability plan

- And…..We're still learning…….
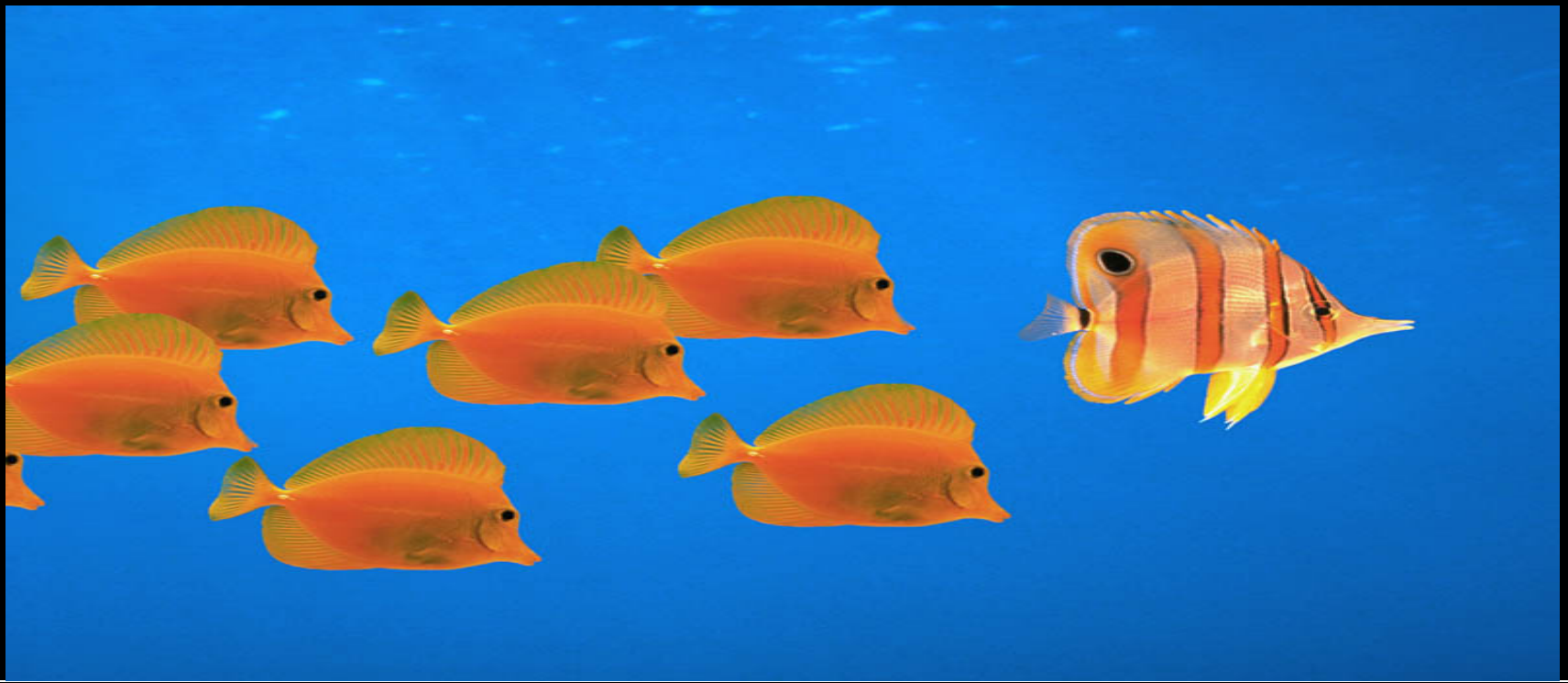
CHANGE

WHEN THE WINDS OF CHANGE BLOW HARD ENOUGH,
THE MOST TRIVIAL OF THINGS CAN TURN INTO DEADLY PROJECTILES.

www.despair.com

Committee Structure Evolution

System Implementation

System Planning

Vision & Organizational Development

PM Team
13 Members
12 IT Reps

2006-2007

Technical Committee
15 Members
12 IT Reps

2004-2006

Management Team
24 Members
4 IT Reps

2003-2004
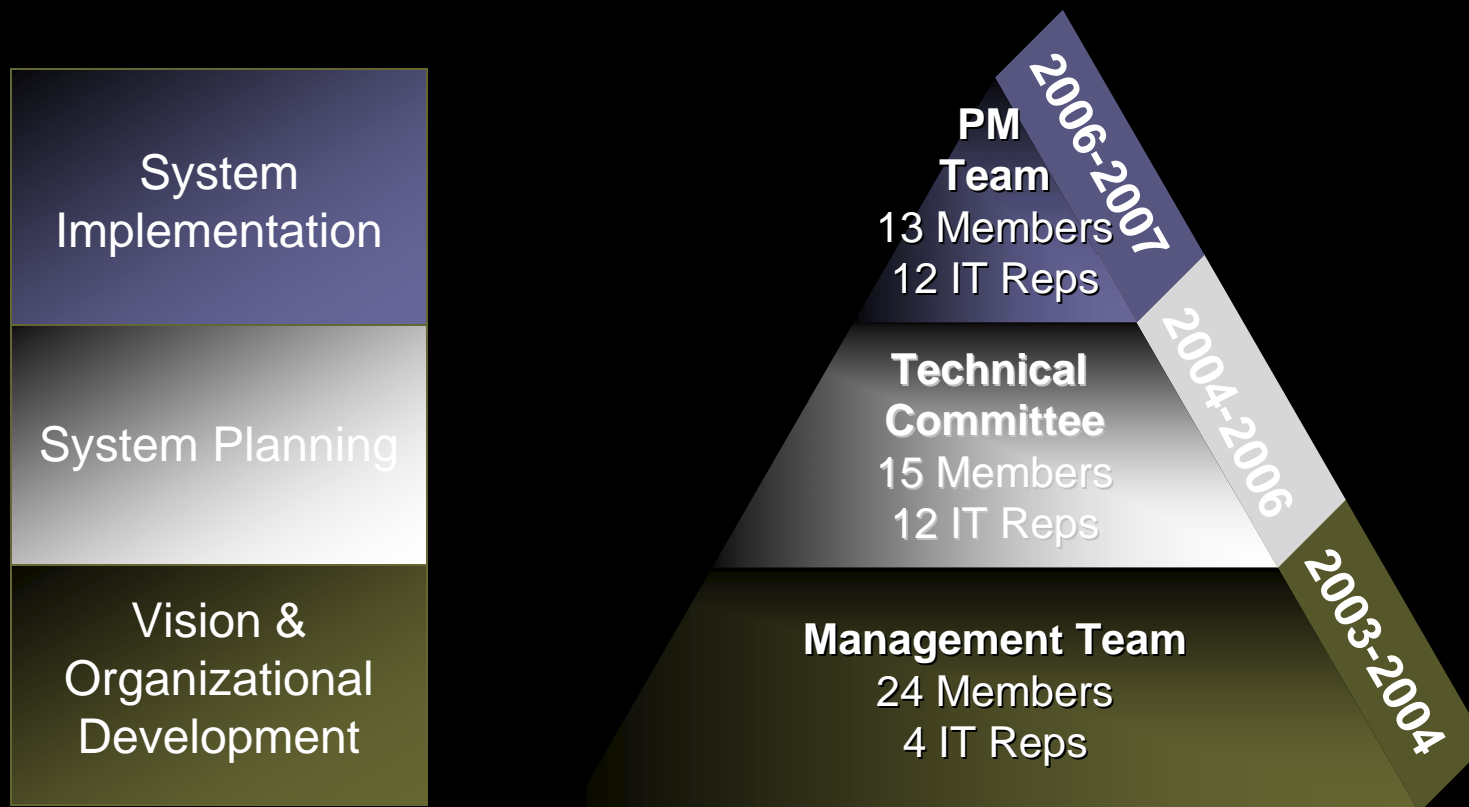
Managing Scope Creep

Stakeholder Meetings

Physicians

Hospitals

Payers

Consumers
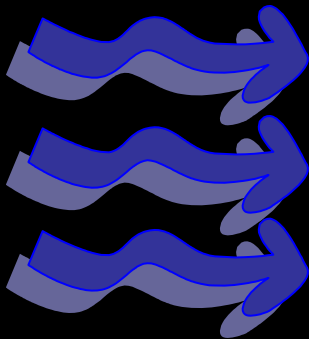
User Input

Must Haves

Nice-to-Haves
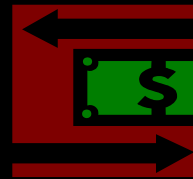
External Influencers

ONC HIT Framework

Funding Opportunities

Reports

Referrals/ Consults

Decision Support

Patient Portal

Images

PHR

eOrders

Claims

Data Mining/ Research

Disease Management

eRx

Secured Messaging
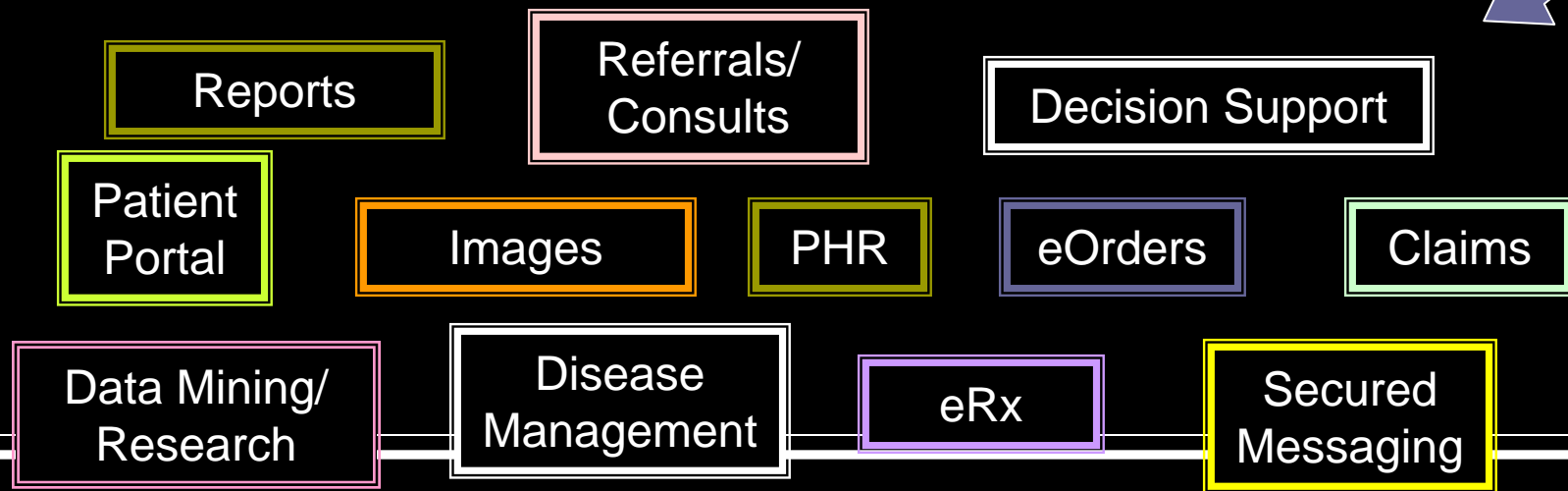
Lessons Learned

- Cannot be "all" to "everyone" in the beginning
- Crawl, Walk, Run mentality
- Resource dedication of data senders
- Long term commitments for funding stability

PLANNING

MUCH WORK REMAINS TO BE DONE BEFORE WE CAN ANNOUNCE
OUR TOTAL FAILURE TO MAKE ANY PROGRESS.

Non-Technical Stakeholders: Why Plan?

Why can't we just find a vendor to build the system?

It will take too long to plan.

We know what we want; let's go build it!

Really, how hard can it be? We've been talking about it for years.

IT Stakeholders: We must plan!

What data sets do you want us to send to DHIN? In what format?

How will we ensure the integrity of our data? What are the security requirements?

Is this in real-time or batch? How will you ensure DHIN won't crash my production system due to high volume use.

I have other internal IS priorities. How is this going to help me meet my organization's goals?

Reasons for RHIO Planning

- To define the operating policies and requirements of the system/organization

- To manage cost, scope and implementation timelines

- To build a uniform approach to system development

- To establish the foundation for a solid RFP by which to select the most appropriate vendor for meeting system needs.

- To solidify the organization's thinking and understanding of the environment and the problems the system will solve.

Planning Assumptions

The system will be designed to be:

- Useful to a "critical mass" of users;
- Feasible from a technical and operational standpoint;
- Complementary to the existing technical environment; (i.e., enhance communication among systems, not replace existing systems);
- Valuable to users; Available and reliable for users; &
- Architected for scalability and modular functionality enhancement

DHIN Planning Activities:
May 1, 2005 to June 30, 2006

Environmental Analysis

High-level System Architecture

High-level Functional Requirements

Cost-Benefit Analysis

Operations and Sustainability Plan

Request for Proposal → Prototype Demonstrations

Capital Funding (Federal, State, Private) ← Vendor Selection

System Implementation
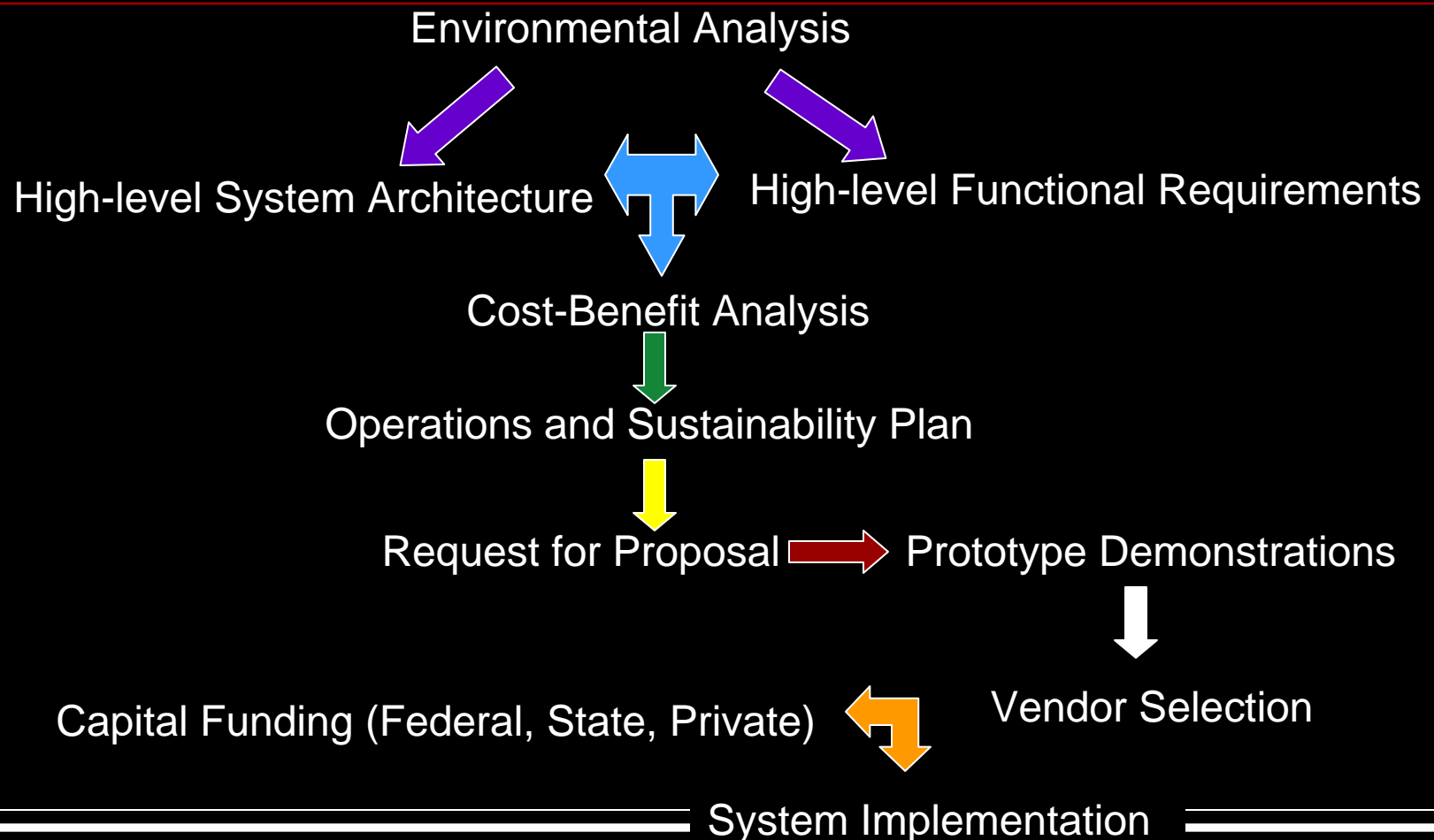
Lessons Learned

- **Step 1: Hire Project Manager**
  - Neutral
  - Objective

- **Step 2: Nail Down Vision and Scope**

- **Step 3: Secure Third party Panning Vendor**
  - Bring experience of other projects
  - Truly neutral
    (Not tied to any one organization, stakeholder group or vendor)

Building Consensus Around Critical Success Factors

COMPROMISE

LET'S AGREE TO RESPECT EACH OTHER'S VIEWS,
NO MATTER HOW WRONG YOURS MAY BE.

www.despair.com

User Adoption

- Clinical Workflow
- Data Reliability
- System Reliability
- Immunity Protections
- Patient Clinical History
- Data Privacy/Security
- Low/No Cost

Financing

- Cost Savings
- Cost Avoidance
- Improved Patient Care
- Healthier Employees
- Immunity Protections
- Governance
- Data Privacy/Security

Reaching Consensus on Functional Requirements

DHIN Working Draft Prioritization Matrix

Vertical axis: Doable Now

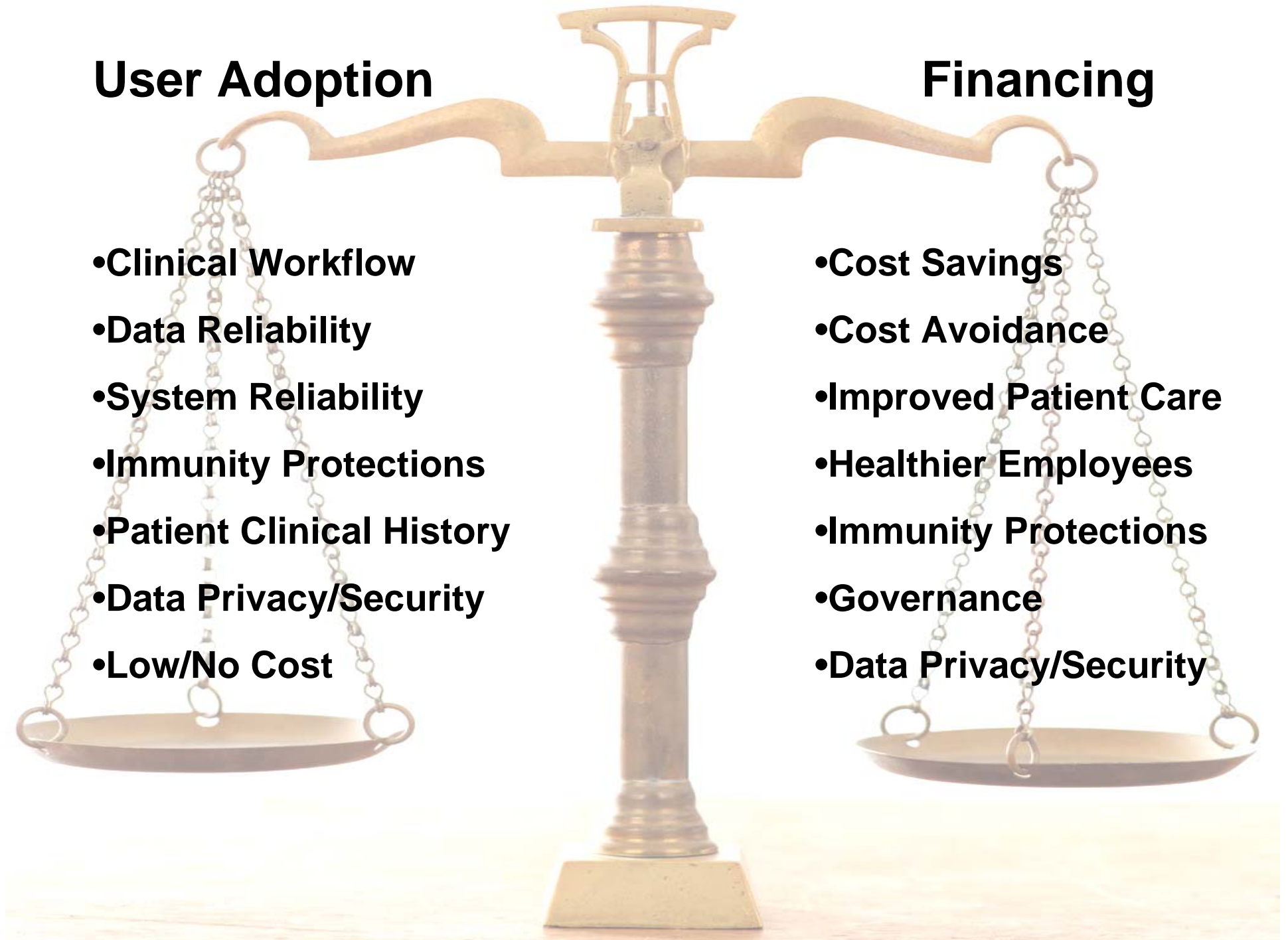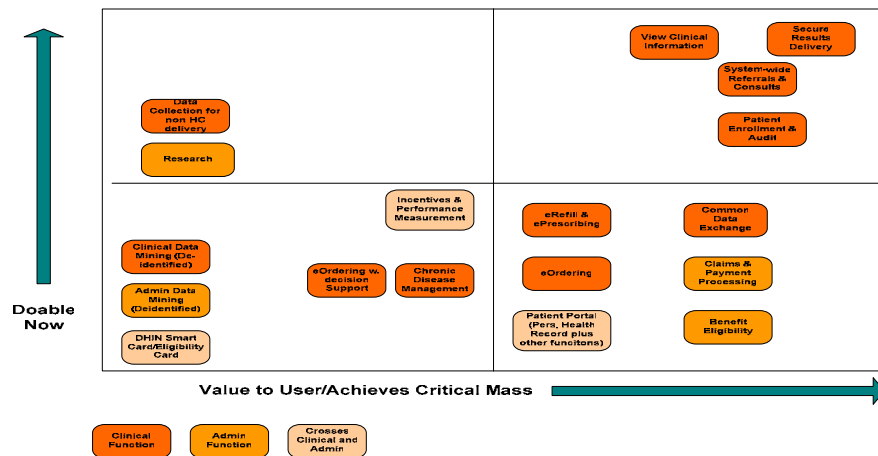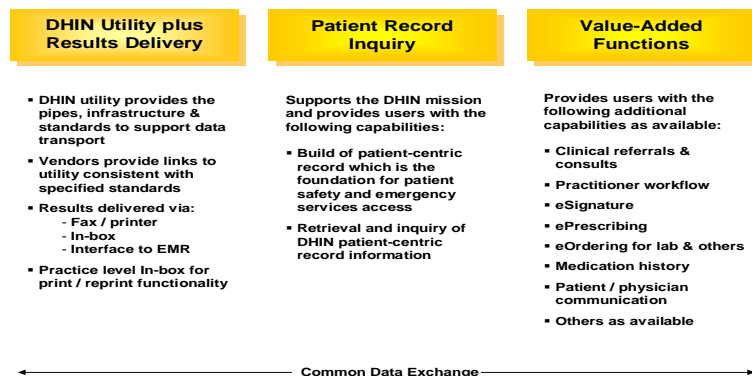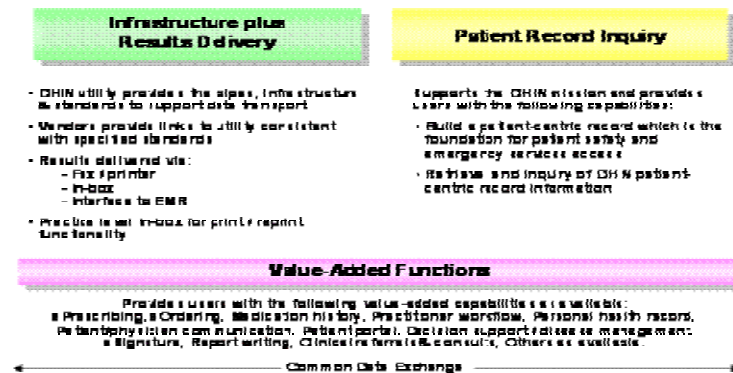Boxes (upper area): Data Collection for non HC delivery, Research, View Clinical Information, Secure Results Delivery, System-wide Referrals & Consults, Patient Enrollment & Audit

Boxes (lower area): Clinical Data Mining (De-identified), Admin Data Mining (Deidentified), DHIN Smart Card/Eligibility Card, eOrdering w. decision Support, Chronic Disease Management, Incentives & Performance Measurement, eRefill & ePrescribing, eOrdering, Patient Portal (Pers, Health Record plus other funcitons), Common Data Exchange, Claims & Payment Processing, Benefit Eligibility

Horizontal axis: Value to User/Achieves Critical Mass

Legend: Clinical Function, Admin Function, Crosses Clinical and Admin

Core Functions Potentially Provided by DHIN

Utility Only

1) DHIN provides the pipes: infrastructure and standards

2) Vendors provide link to utility consistent with standards.

Basic Results Delivery + Workflow

DHIN provides user inbox with the following capability:

1) Electronic delivery of results to multiple inboxes for all staff

2) Ability to organize in-box to suit physician or staff (urgency, by patient, when ordered test, etc.)

3) Remote access -- hospita , office or home

4) Can print/reprint patient data on demand

5) Electronic signature for hospital and practice charts, prescriptions

Basic + Patient Record Inquiry

DHIN providers user inbox with the following capabilities:

Same as basic results delivery and workflow management plus:

1) Retrieval and inquiry of patient-centric record

2) Clinical Database for
- Enhanced timeliness and accuracy
- Foundation for patient safety
- Emergency services access

Enhanced Additional Functions

DHIN provides user inbox with the following additional capabilities (as available):

1) Customizable clinical documentation and report writing

2) ePrescribing with electronic orders, formularies and decision support

3) Claims-based medication history

4) Patient/physician communication

5) Others as made available

DHIN Functional Grouping

DHIN Utility plus Results Delivery

- DHIN utility provides the pipes, infrastructure & standards to support data transport
- Vendors provide links to utility consistent with specified standards
- Results delivered via:
  - Fax / printer
  - In-box
  - Interface to EMR
- Practice level In-box for print / reprint functionality

Patient Record Inquiry

Supports the DHIN mission and provides users with the following capabilities:

- Build of patient-centric record which is the foundation for patient safety and emergency services access
- Retrieval and inquiry of DHIN patient-centric record information

Value-Added Functions

Provides users with the following additional capabilities as available:

- Clinical referrals & consults
- Practitioner workflow
- eSignature
- ePrescribing
- eOrdering for lab & others
- Medication history
- Patient / physician communication
- Others as available

Common Data Exchange

DHIN Utility – Functional Grouping

Infrastructure plus Results Delivery

- DHIN utility provides the pipes, infrastructure & standards to support data transport
- Vendors provide links to utility consistent with specified standards
- Results delivered via:
  - Fax / printer
  - In-box
  - Interface to EMR
- Practice level in-box for print / reprint functionality

Patient Record Inquiry

Supports the DHIN mission and provides users with the following capabilities:

- Build a patient-centric record which is the foundation for patient safety and emergency services access
- Retrieve and inquiry of DHIN patient-centric record information

Value-Added Functions

Provides users with the following value-added capabilities as available:
ePrescribing, eOrdering, Medication history, Practitioner workflow, Personal health record, Patient/physician communication, Patient portal, Decision support/disease management, eSignature, Report writing, Clinical referrals & consults, Others as available.

Common Data Exchange

Manage Distractions

- Chasing after funding

- Promises of the perfect solution

- Pressures to move quickly

- Politics

- Stakeholder interests

All who have accomplished great things
have had a great aim, have fixed their gaze
on a goal which was high, one which
sometimes seemed impossible

- *Orison Swett Marden*

HAZARDS

THERE IS AN ISLAND OF OPPORTUNITY IN THE MIDDLE OF EVERY DIFFICULTY. MISS THAT, THOUGH, AND YOU'RE PRETTY MUCH DOOMED.

Contact Information

Gina Perez
DHIN Project Director
Advances in Management, Inc.
(302) 645-1490
gina@aim2bbest.com

Edward Ewen, MD
Christiana Care Health System
(302)733-1961
eewen@christianacare.org