

# RHIO Lessons Learned

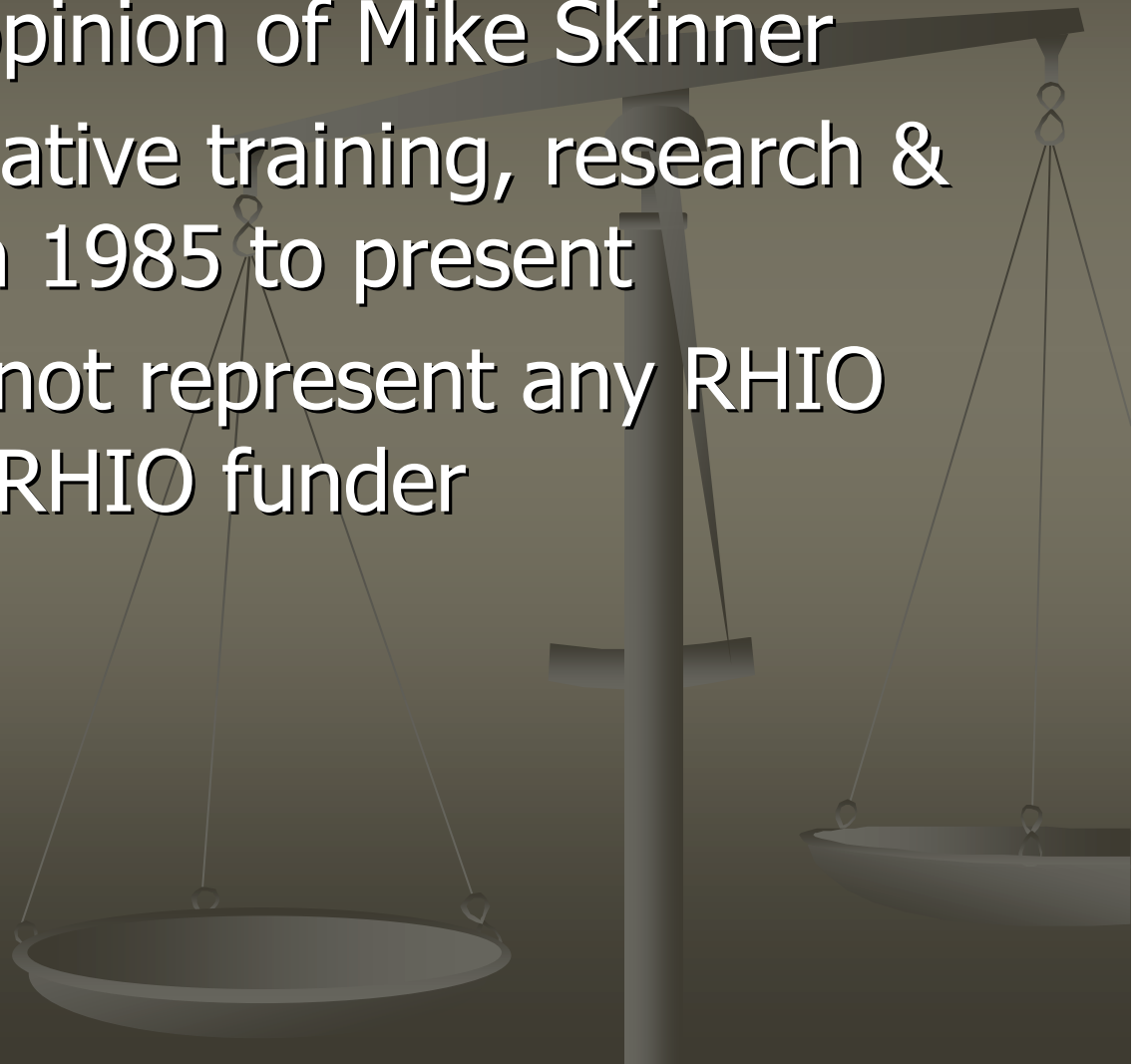
*Presented by:*  
Mike Skinner

Connecting Communities Monthly Call  
March 12, 2007



# Personal Opinion

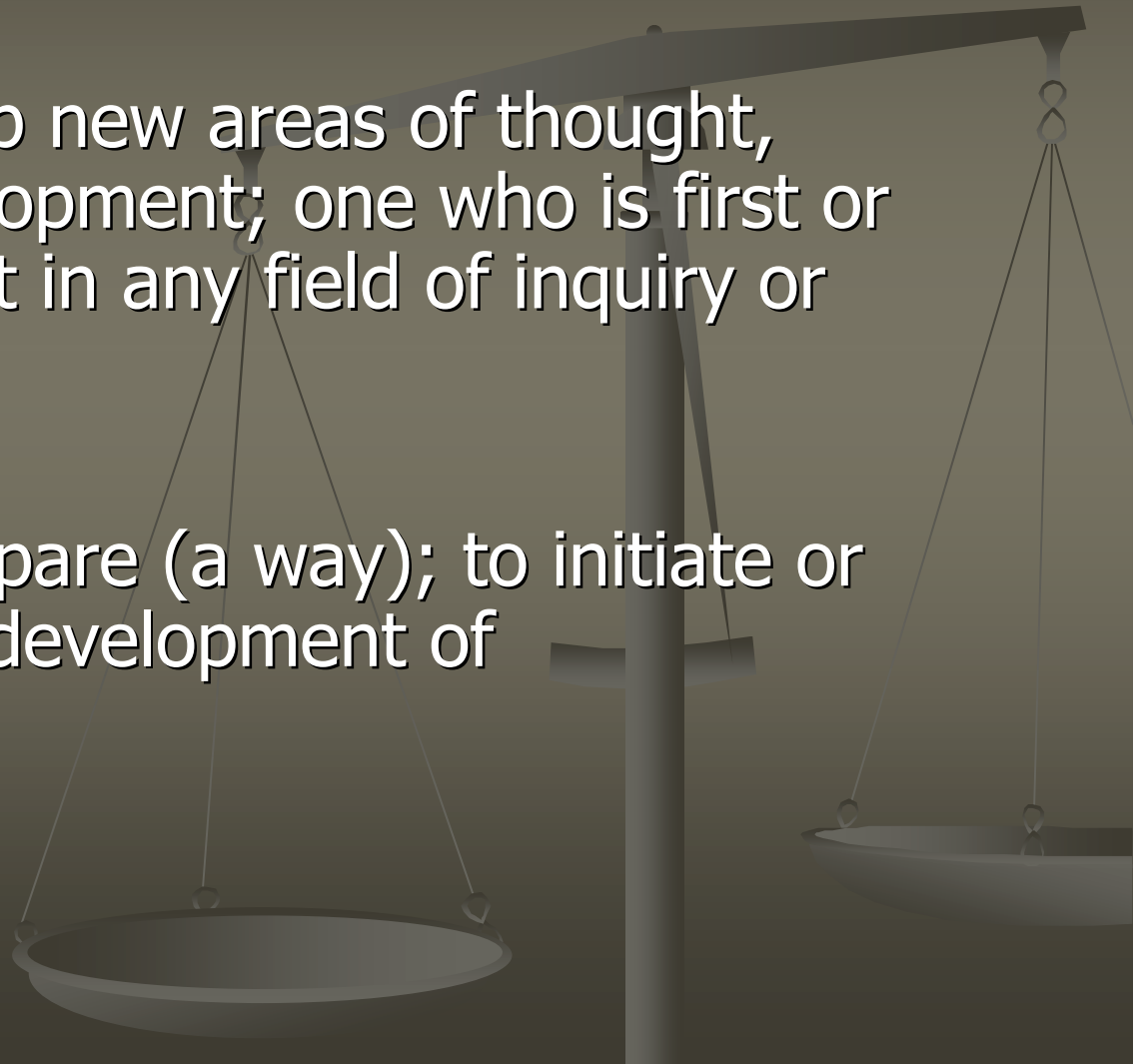
- Content is the opinion of Mike Skinner
- Based on cumulative training, research & experience from 1985 to present
- Presenter does not represent any RHIO organization or RHIO funder



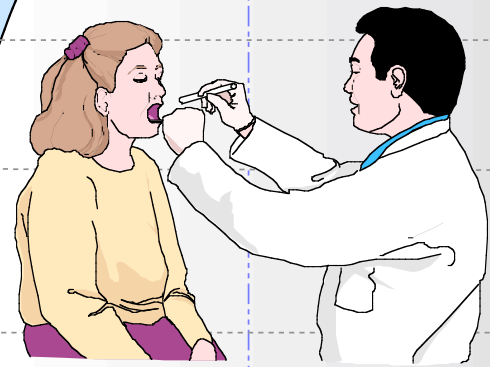
# pi-o-neer (*pahy-uh-neer*)

*n.* one who opens up new areas of thought, research, or development; one who is first or among the earliest in any field of inquiry or enterprise

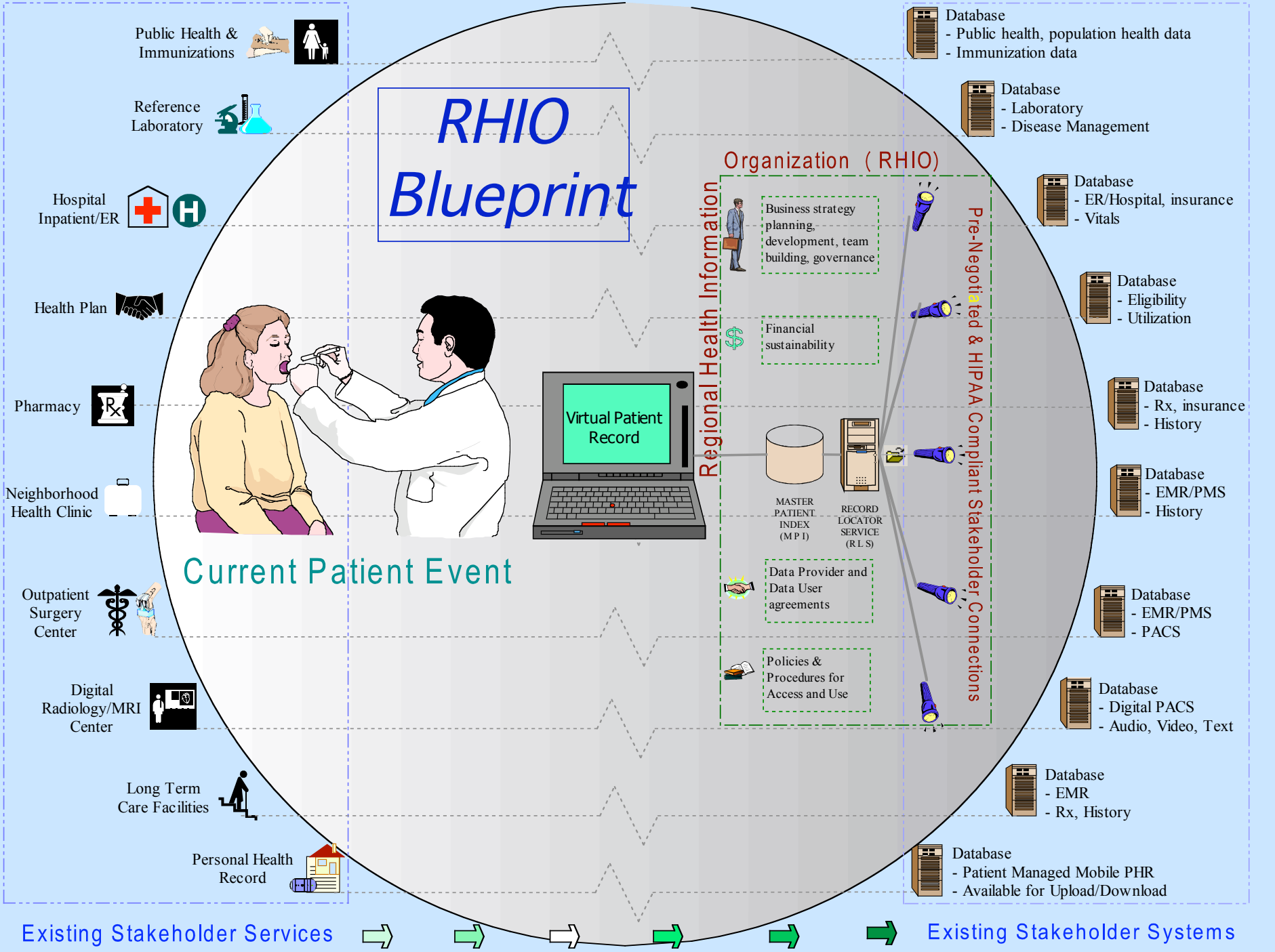
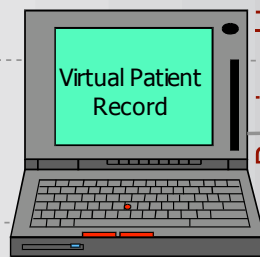
*v.* to open up or prepare (a way); to initiate or participate in the development of



# RHIO Blueprint



Current Patient Event



Public Health & Immunizations

Reference Laboratory

Hospital Inpatient/ER

Health Plan

Pharmacy

Neighborhood Health Clinic

Outpatient Surgery Center

Digital Radiology/MRI Center

Long Term Care Facilities

Personal Health Record

Database  
- Public health, population health data  
- Immunization data

Database  
- Laboratory  
- Disease Management

Database  
- ER/Hospital, insurance  
- Vitals

Database  
- Eligibility  
- Utilization

Database  
- Rx, insurance  
- History

Database  
- EMR/PMS  
- History

Database  
- EMR/PMS  
- PACS

Database  
- Digital PACS  
- Audio, Video, Text

Database  
- EMR  
- Rx, History

Database  
- Patient Managed Mobile PHR  
- Available for Upload/Download

Organization (RHIO)

Business strategy planning, development, team building, governance

Financial sustainability

MASTER PATIENT INDEX (MPI)  
RECORD LOCATOR SERVICE (RLS)

Data Provider and Data User agreements

Policies & Procedures for Access and Use

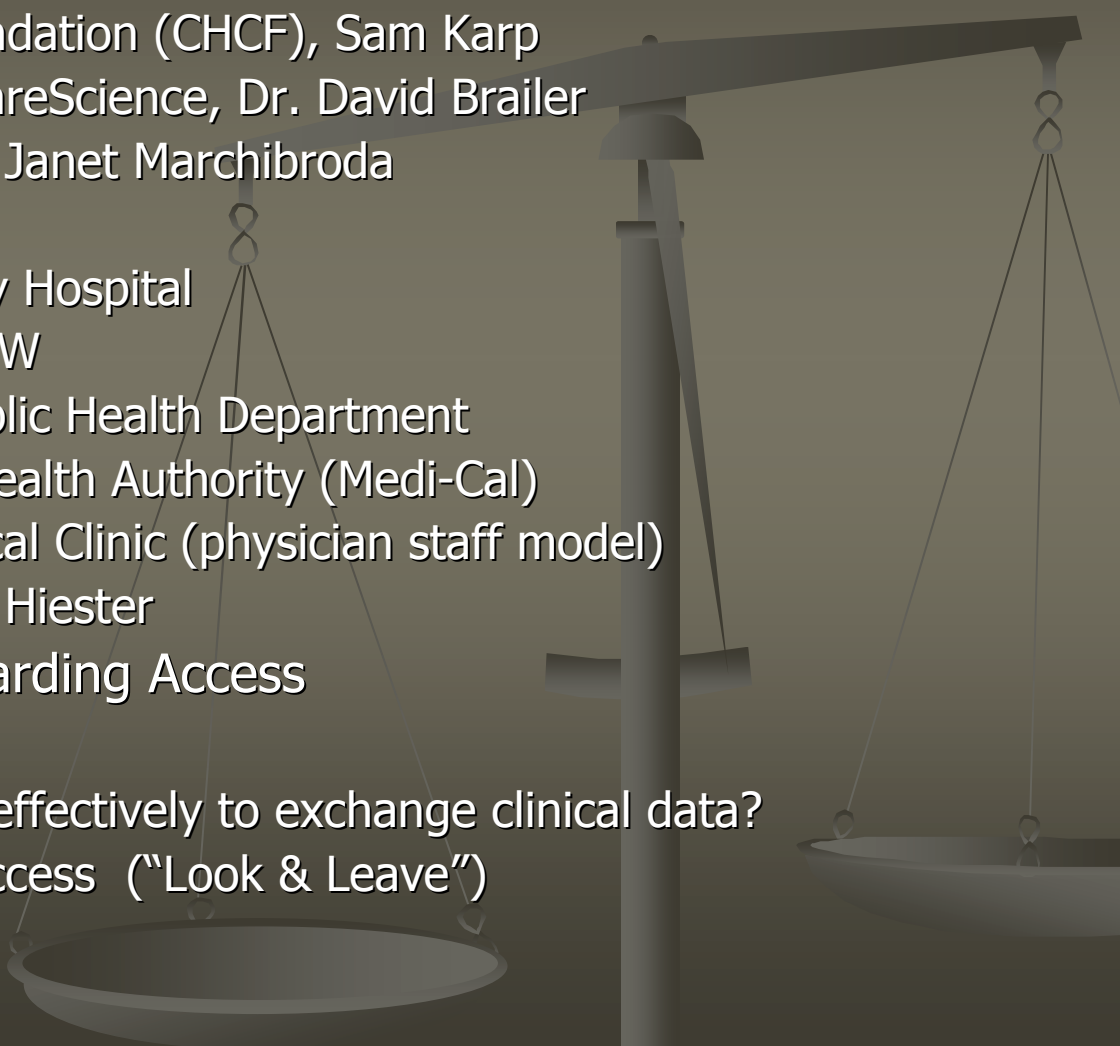
Pre-Negotiated & HIPAA-Compliant Stakeholder Connections

Regional Health Information

Existing Stakeholder Services

Existing Stakeholder Systems

# Santa Barbara – Background

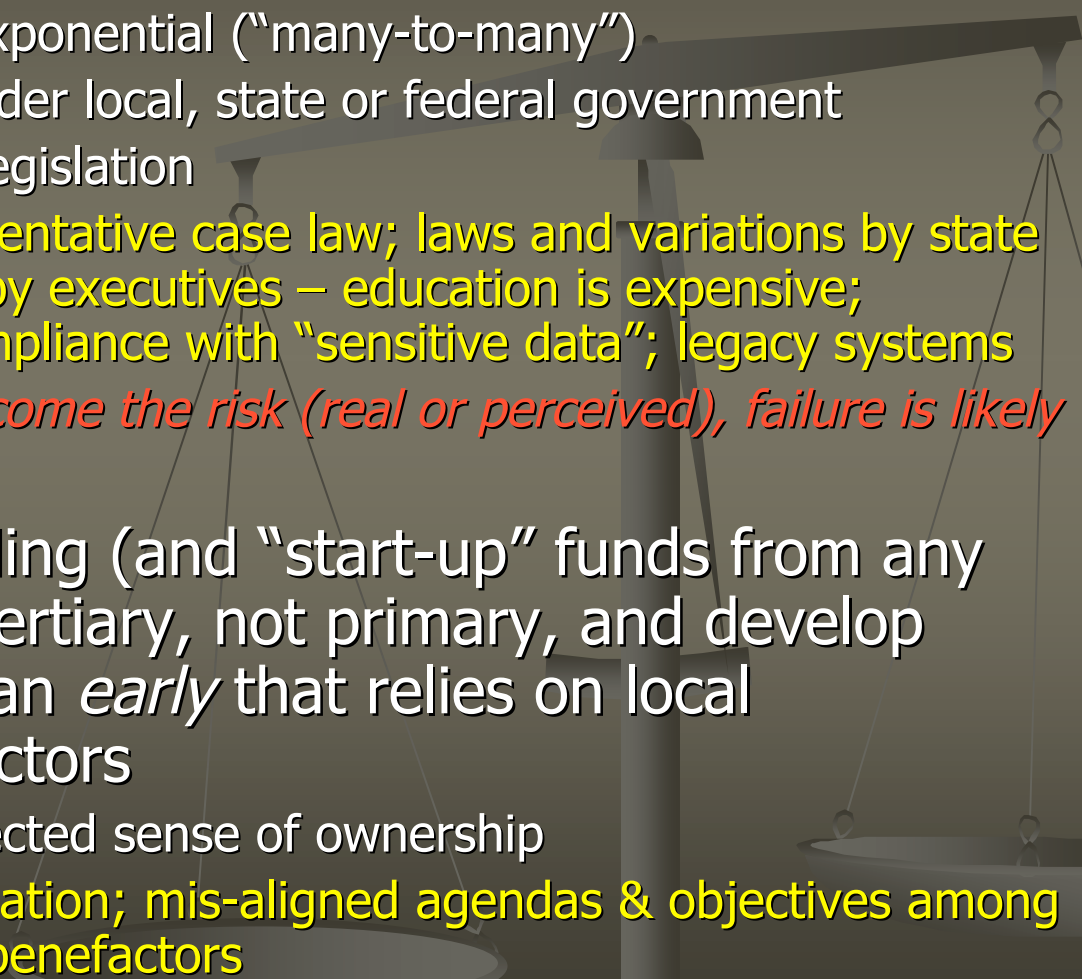


- Pioneers & Champions
  - California Healthcare Foundation (CHCF), Sam Karp
  - Quovadx, Inc. formerly CareScience, Dr. David Brailer
  - HRSA / eHealth Initiative, Janet Marchibroda
  - Cottage Health System
  - Lompoc Valley Community Hospital
  - Marian Medical Center-CHW
  - Santa Barbara County Public Health Department
  - Santa Barbara Regional Health Authority (Medi-Cal)
  - Sansum Foundation Medical Clinic (physician staff model)
  - MidCoast IPA, Dr. George Hiester
- Market Demographics Regarding Access
- Demonstration Project
  - Can the internet be used effectively to exchange clinical data?
    - De-centralized data access (“Look & Leave”)

# Lessons Learned

- Form community-based governance, ownership & sense of “investment” **early**
    - Someone *will* drive – but they pick the radio station
    - **Obstacles: Risk-taker (pi-o-neer) reputation; Acknowledgement of need; Need for community-based unity & political support**
  - Value statement must be irrefutable – fait accompli – when compared to risk – and expressed **early**
    - Projects based on generalized value propositions are supportable *only* until an investment (cash or labor) or an assumption of risk is required – **then the value proposition is called into question**
    - Fact- or evidence-based
    - Formalize & post **conspicuously**
    - Clearly demonstrate
    - **Obstacles: Lack of representative RHIO operations data; tendency to express value as average/overall health improvements versus specific patient impacts**
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# Lessons Learned

- Risk/Liability: Define, Acknowledge & Mitigate (all parties)
    - Indemnification: it has to be a multi-way street
    - RHIO risk perceived as exponential (“many-to-many”)
    - Align or organize with/under local, state or federal government
    - Lobby for “safe harbor” legislation
    - **Obstacles:** Lack of representative case law; laws and variations by state are not well understood by executives – education is expensive; interpretation of law; compliance with “sensitive data”; legacy systems
    - *If the value doesn't overcome the risk (real or perceived), failure is likely*
  - Treat government funding (and “start-up” funds from any source) as secondary/tertiary, not primary, and develop sustainable financial plan *early* that relies on local stakeholders or benefactors
    - Creates remote, disconnected sense of ownership
    - **Obstacles:** Value/risk equation; mis-aligned agendas & objectives among competing stakeholders/benefactors
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# Liability Challenges



- “Many-to-many” interrelationship swells perceived risk & liability
- Complying with state & federal laws under fault-prone, legacy systems
- Complying with California-specific state laws, especially surrounding “minor consent”
- Difficulty in interpreting federal & state laws – produces misaligned assessment of risk
- Contract Terminology
  - General misunderstandings
  - For example, “confidentiality” is frequently misunderstood to refer to PHI when it refers to intellectual property
- Indemnification
  - “Many-to-many” broadens perceived exposure when indemnifying multiple parties
- Aligning & agreeing on limitations on liability among the various parties (“many-to-many” relationship)
- Difficulty understanding medical insurance industry
  - General liability – improper disclosures & damage may come under GL
  - E&O v. Professional Liability
  - Lack of case history

# Funding Strategy



- Development / Proof of Concept
  - Primarily supported by CHCF
- Deployment / First Year Operations
  - HRSA / eHealth Initiative
- On-going Operations
  - Community / Stakeholder / Participants

Sufficient operations to demonstrate value were not established in order to become self-sufficient.

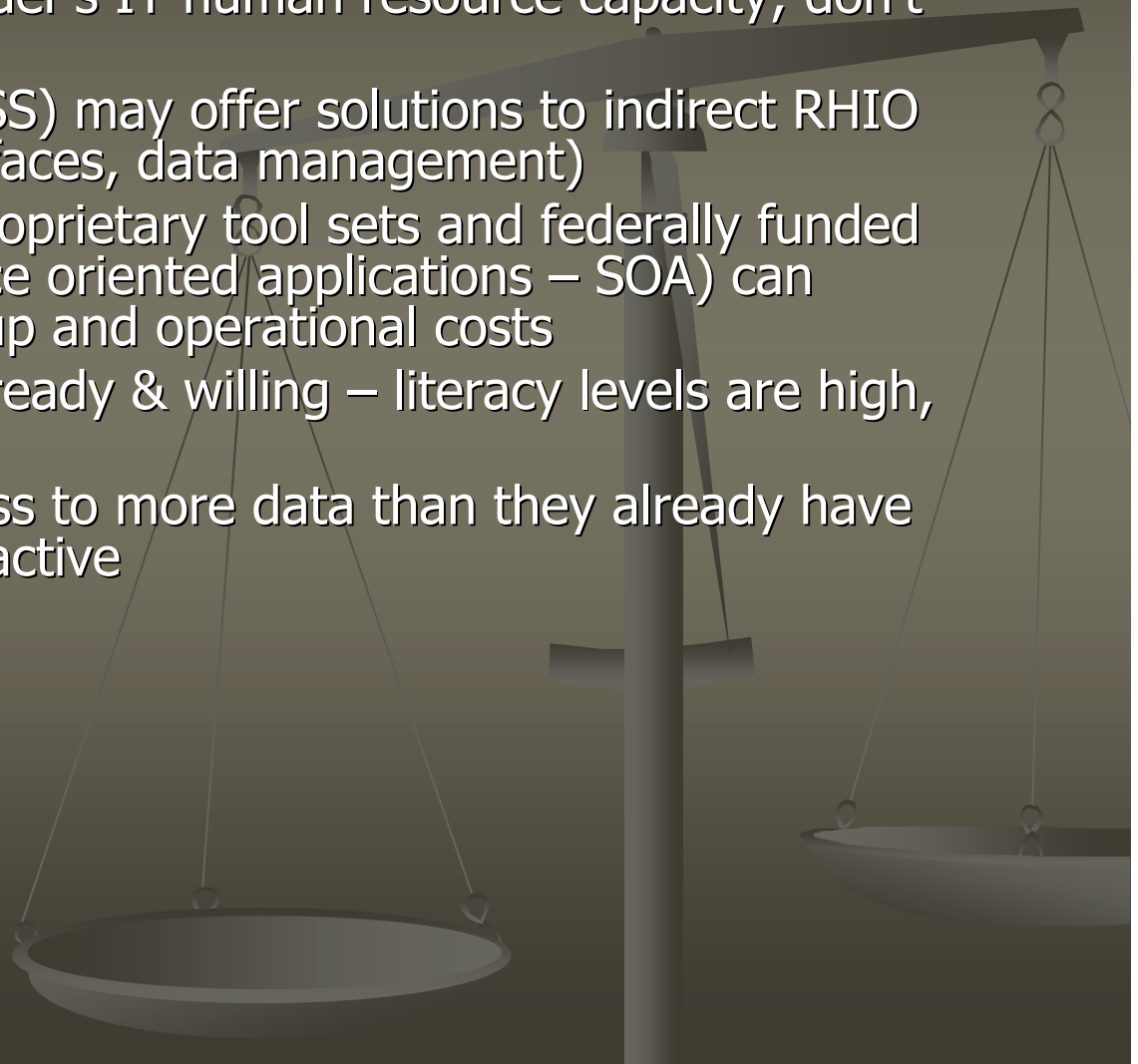
# Technology



- The technology worked.
  - It was fast, secure, highly available.
  - Functionality testing, data integrity, and security testing methodologies were highly effective & successful.
  - But, legacy systems in healthcare are still rampant – HL7 & batch is here for a while.
- Interfaces were NOT a significant problem.
- Peer-to-peer complicates some disclosure compliance issues (PACS)
- Bottom Line: Technology isn't *the* barrier.

# Other Thoughts

- Carefully assess stakeholder's IT human resource capacity; don't overbook CIO
- Open source systems (OSS) may offer solutions to indirect RHIO costs (EMRs, PMSs, interfaces, data management)
- Deployment of open & proprietary tool sets and federally funded products (including service oriented applications – SOA) can significantly reduce startup and operational costs
- The end user clinician is ready & willing – literacy levels are high, turn-over is reducing.
- A RHIO has to offer access to more data than they already have access to for it to be attractive

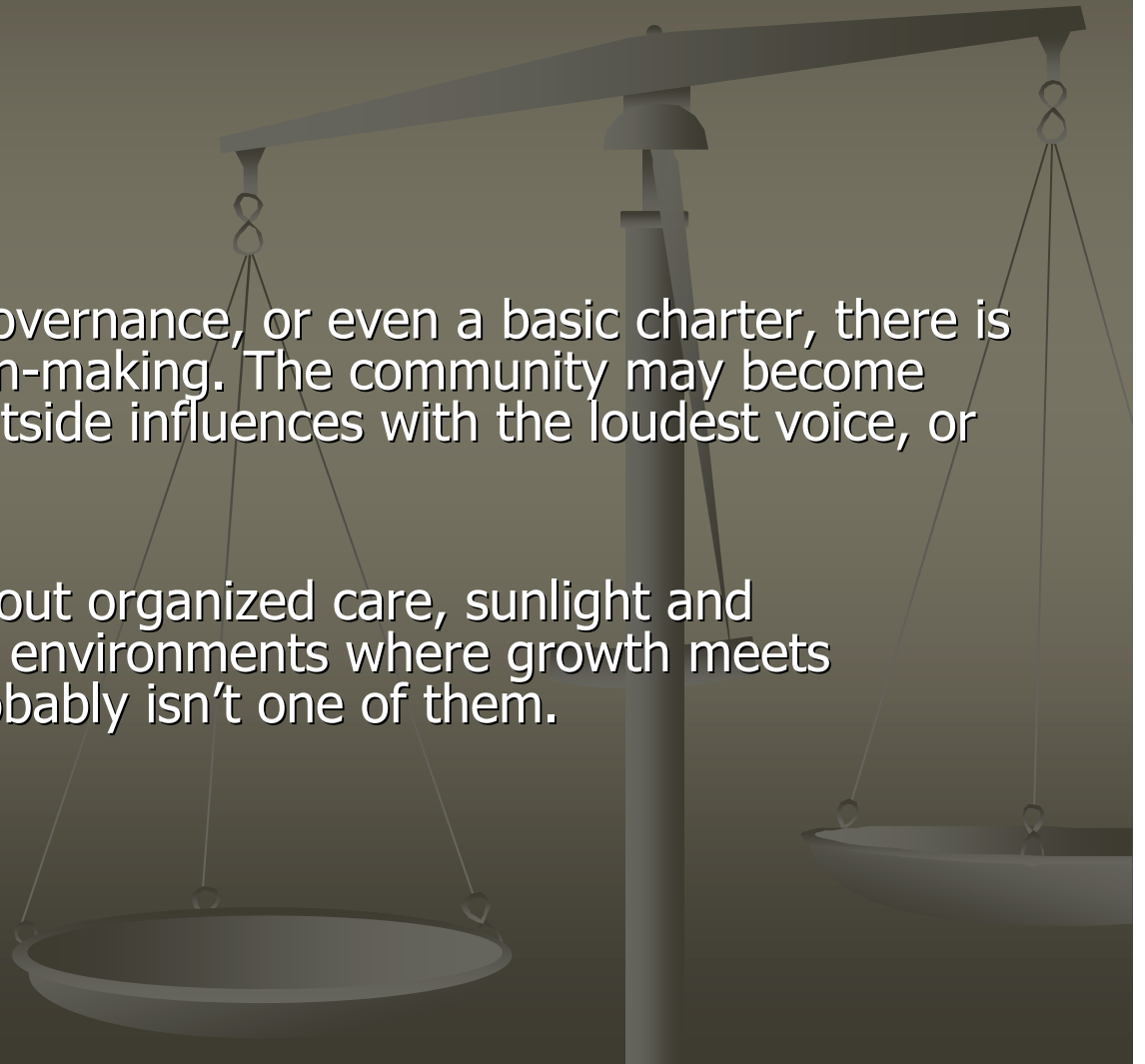


# The Bottom Line

- Who's driving?
- Where's the value?
- What's the risk?
- Who's paying?

In the absence of legal governance, or even a basic charter, there is an implied lack of decision-making. The community may become vulnerable to inside or outside influences with the loudest voice, or stasis may prevail.

Organic is good, but without organized care, sunlight and fertilization there are few environments where growth meets demand -- healthcare probably isn't one of them.



# Questions and Answers

