Frameworks and Models for Integration

Connecting Communities for Better Health
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Noam H. Arzt, Ph.D.
President, HLN Consulting, LLC

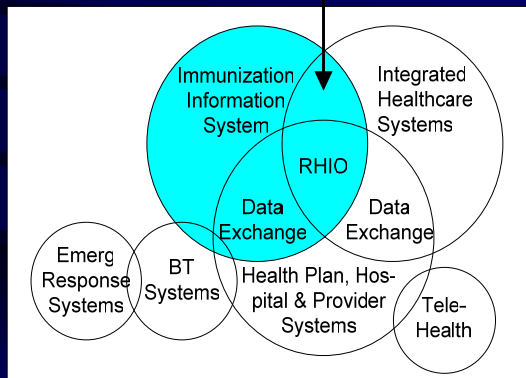5/27/2005   1

Integration Roadmap:
Public Health Perspective

Integrated Child Health Systems

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What Can Child Health Systems Contribute to a RHIO?

- "Quick start" by leveraging existing activities
- Data, including consolidated data
- Expertise: de-duplication, database management, web applications, data exchange including HL7
- Existing relationships with many relevant stakeholders: providers, hospitals, payers, professional associations
- Governance: experience in negotiating and implementing data sharing agreements
- Childhood health data somewhat more contained and manageable than adult health data
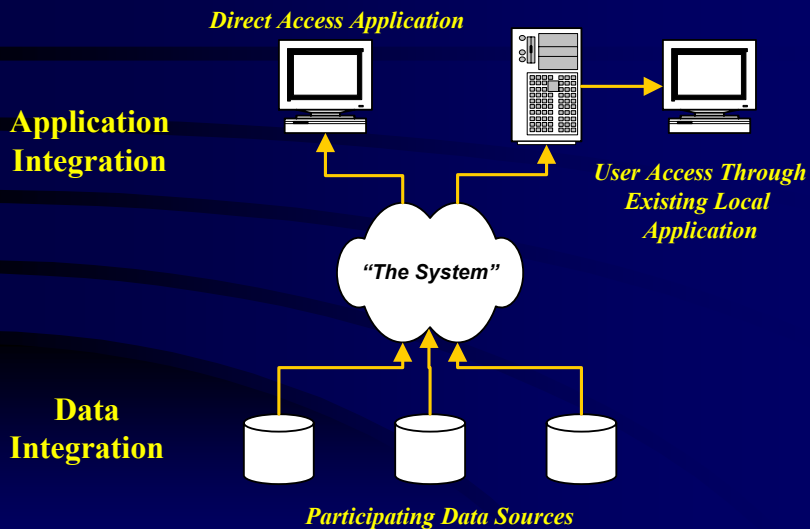
Two Types of Integration

- Data Integration: forming valid relationships between data sources

- Application Integration: presenting a unified view of data to a user through a computer application

Data versus Application Integration

Direct Access Application

Application Integration

User Access Through Existing Local Application

"The System"

Data Integration

Participating Data Sources

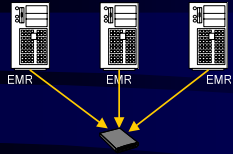5/27/2005   5
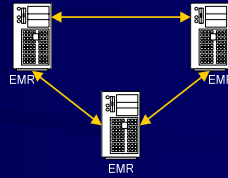

Data and Application Integration

The message:

– These are two parts of the same puzzle

– Perceptions about "ease of access" and "ease of use" have to be viewed based on assumptions about these two types of integration

– Issue of timely access to/submission of data is critical to all strategies

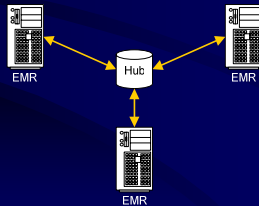5/27/2005   6

Data Integration Models

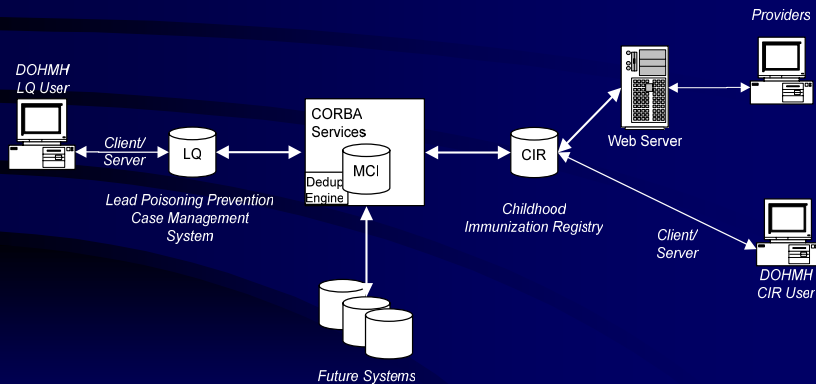### Model 1: Smart Card

Model 2: Peer-to-Peer

Model 3: Info. Broker

Example: NYC MCI

Providers

DOHMH LQ User

Client/Server

LQ

CORBA Services

Dedup Engine   MCI

Lead Poisoning Prevention Case Management System

CIR

Web Server

Childhood Immunization Registry

Client/Server

DOHMH CIR User

Future Systems

Data Integration Models (continued)

Model 4: Partitioned Warehouse
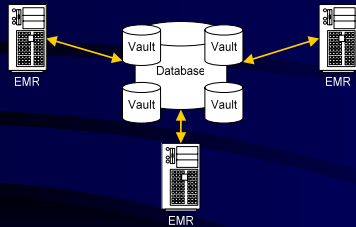
Example:
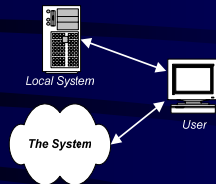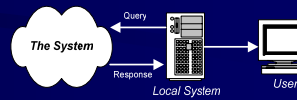*Indianapolis Network for Primary Care*

Model 4: Central Warehouse
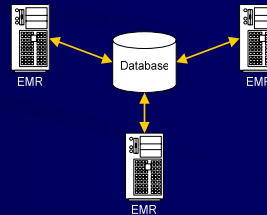
Example:
Arizona HealthQuery

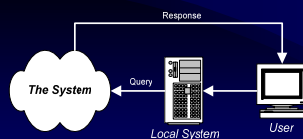
Application Integration Models
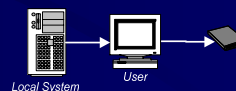
Model 1: Independent App

Model 2: Data Exchange

Model 3: Local App

Model 4: Smart Card

Thanks!

Noam Arzt

arzt@hln.com

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