

Building a RHIO in Long Island: A Work in Progress

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Agenda

- Introduction to HealthUnity
- Introduction to Long Island Regional Health Information Network
- Customer needs
- Solution
 - Governance
 - Technical Infrastructure
 - Project execution
- Next steps

Introductions

- About HealthUnity
 - Founded Fall 2004
 - Microsoft Alumni
 - Venture Capital Backed
 - Bellevue, WA and Bangalore, India
- Secure, privacy-protected health information network product
- Team
 - 30 strong and growing
 - 100s including partners
- 100,000 hours of R&D



Types of Health Networks served

- **RegHIN™** (Regional Health Information Network)
 - Healthcare networks created to serve hospitals, labs, clinics in a given region
- **LabHIN™** (Laboratory HIN)
 - Enables the frictionless distribution of lab results to a lab's customer base
- **RadHIN™** (Radiology HIN)
 - Enables the frictionless distribution of radiology results to a radiology group's customer base
- **ProHIN™** (Provider/Physician Connectivity HIN)
 - Enables a large hospital or IDN (Integrated delivery network) to electronically connect to its referral base of providers
- **EntHIN™** (Enterprise HIN)
 - Connecting clinical data and enabling collaboration within the walls of an integrated healthcare delivery network

Broad Feature set of HealthUnity Products

- **RELEASE 3.1**
- **Smart network**
 - Security and Verified nodes
 - Privacy selection
 - Auto publishing
 - Directory services
 - Human to human messaging
 - Audit and logging
 - Workflows
 - Message import capability
- **Latest Technology**
 - Web Services architecture
 - Auto software distribution
 - Software as a service
- **Health Information Services (out of the box)**
 - Demographics
 - Allergies
 - Medications list
 - Problems list
 - Lab results
 - Radiology results
 - Progress notes
 - Discharge summaries
 - Referrals/consults
 - Protected Messaging
 - Smart client
 - Network-wide clinical summary
 - Adapters to major applications in the market

Network Participants

- Long Island Regional Network (Central Suffolk County, NY)
 - Stony Brook University Medical Center, New York
 - 504 bed; level 1 trauma Center
 - Peconic Bay Medical Center:
 - 214 bed; level 2 trauma center
 - Eastern Long Island Hospital:
 - 80 bed; level 3 trauma center
 - 5 Nursing homes/assisted living facilities
 - Up to 127 other physician practices
 - Serving up to 5 million people once deployed
- Investment
 - Part funded by “HEAL-NY” grant from NY Department of Health

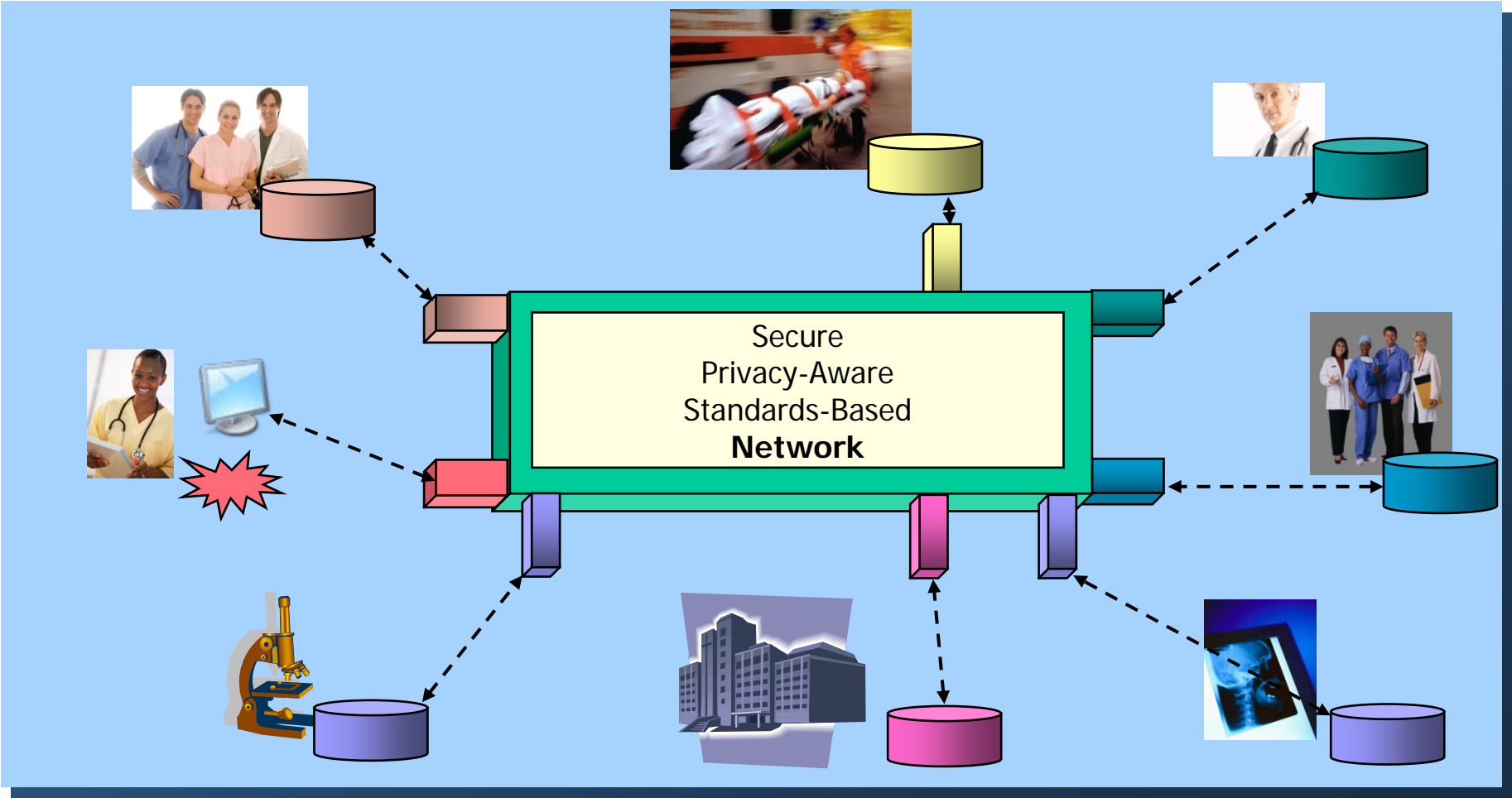
Business Need in Long Island, NY

- Efficiency gains
 - Avoid paper, faxes, phone calls
- Quality of care improvements
- IT Support cost reduction
 - Internal integration is still one of the biggest CEO/CIO challenges
- Patient experience
 - Patients are requesting electronic ways to connect to providers
- Solution for Accreditation / compliance
 - JCAHO
- Electronic connectivity
 - Care moving away from hospital
 - Home care, nursing, assisted living, rehab, self care, telehealth
 - Connect the islands
- Looking to cut waste in Medicare/Medicaid; safety net care
 - Government funded health programs are insisting that providers take the necessary steps
 - Many insurance pay on capitated basis

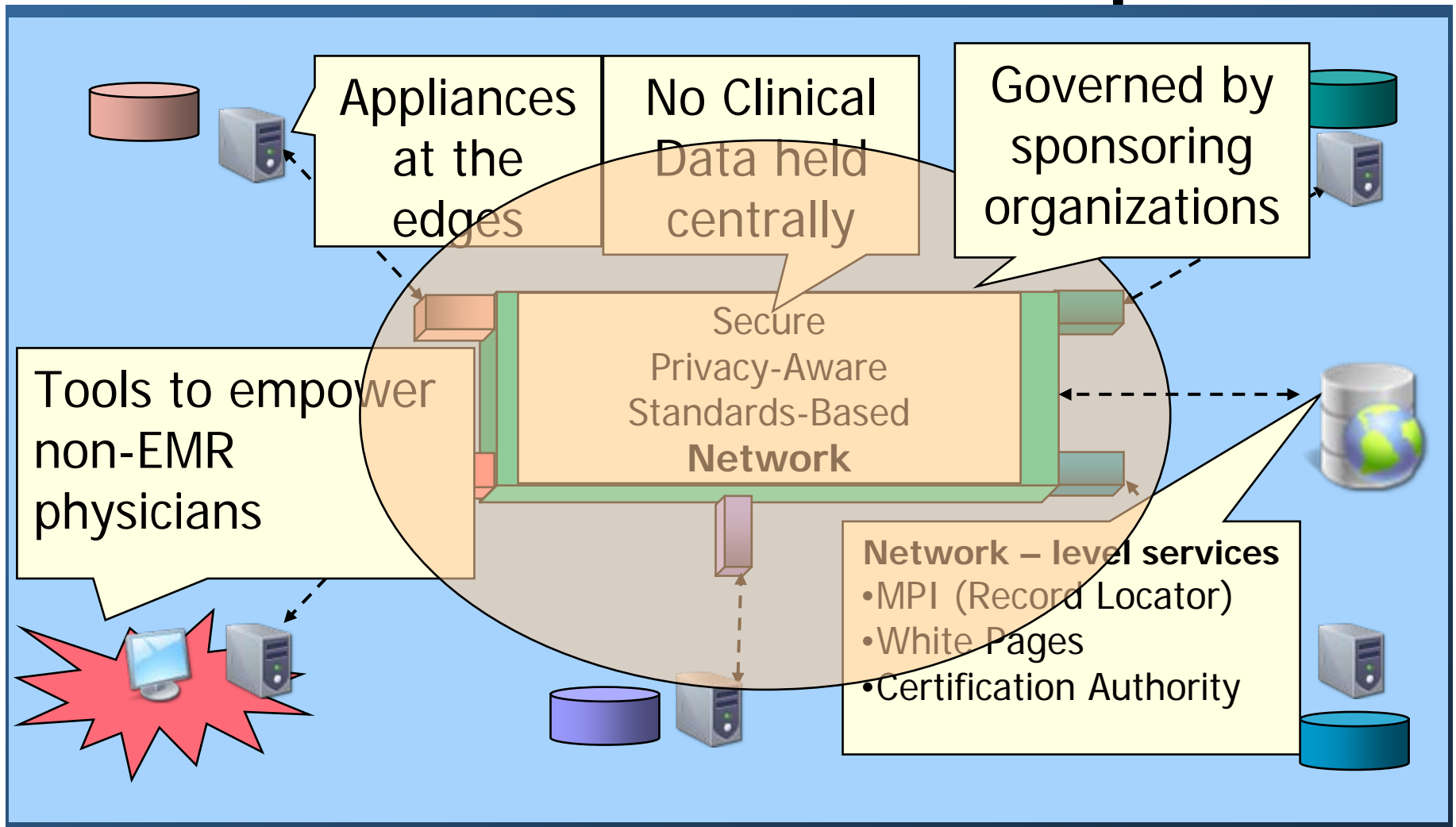
Customers Requested ...

- Control over PHI data
 - Data remains in their physical and administrative control
 - Security
 - Privacy
 - Incremental/rapid solution deployment
 - Integration with disparate systems
 - support non-EMR users
 - Bidirectional data exchange
- Services that grow with the community's need
 - Machine to machine as well as human to human collaboration
 - No national patient identifier
 - Cost-effective solution
 - Configurable product; not a development project
 - Low overhead for governance

One Network : Heterogeneous Providers



Architectural Principles



Demo

- Clinical Documents
 - Network search
 - Clinical summary
 - Document distribution
 - Document importation
- Privacy
 - Organizational level
 - Patient level
- Communication and collaboration
 - Human messaging
 - Notifications
- Security
 - Role-based
 - Other aspects
- Miscellaneous

Security

- HIPAA Security requirements mandates
 - Physical security
 - Access to devices and hardware
 - Access to terminals
 - Locks, cameras, guards
 - Technical safeguards
 - Network guards – Topology/Firewalls(DMZ)
 - Encryption (SSL / PKI / Certificates / Digital Signatures)
 - Controlled non-volatile storage (client side caching, save-to-disk)
 - Process measures
 - Track and control administrative data access
 - Procedures for threat detection
 - Training
 - Process for handling breaches

Microsoft Technology Used

- Microsoft SQL Server
 - Reliable, high performance storage, high availability – clustering, disaster recovery – log shipping
- Microsoft Biztalk Server
 - Pluggable document transformations
 - Flexible Integration framework
- BizTalk HL7 Accelerators
 - Comprehensive HL7 transformation engine
- Microsoft Windows Server 2003 R2
 - Stable OS for high performance application
- Microsoft Windows XP SP2
 - Affordable physician office appliances
- .Net framework
 - Pervasive programming platform

Project Team

- Nimble and agile teams
 - HealthUnity
 - One overall project manager
 - One technical person per hospital
 - Each hospital
 - Minimum one resource on the project
- Keeps costs low
- Enhances communication

Implementation Process

- Follows a proven process model
 - *HealthUnity Rapid Onramp*[™] Methodology
- Governance document drives project
- Functional specification
- Incremental roll out
- Feedback from initial roll out drives next phase

More Information

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Contact

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