Transforming to e-Health: HIPAA is the Foundation for e-Business

Doing Business in New Ways

IBM Global Services
National e-Business Strategy & Change
"Somewhere out there is a bullet with your company's name on it. Somewhere out there is a competitor, unborn and unknown that will render your business model obsolete...the hottest and most dangerous business models out there are on the web."

Fortune Magazine
Agenda

- Basic Roadmap and E-Line
- New Healthcare Models
- Healthcare Applications
- e-HIPAA: Value Added Proposition
Company Characteristics

- Provides full array of care services to a defined population or service area – includes both provider and payer component organizations
- Focus is on minimizing cost structure by streamlining processes and effectively utilizing resources while providing adequate customer service to maintain customer loyalty
- A composite of healthcare entities trying to act as branches of one organization, instead of heterogeneous and disconnected institutions

Customer Acquisition
- Establish Web site
- Product/service information
- Advertising
- Promotions
- Enrollment forms

Customer Support & Development
- Health and wellness information / patient education
- Online nursing/doctor consultations
- Disease management forums
- Benefits, eligibility, claims status
- Referrals, pre-certs, authorizations
- Provider directories/physician profiling
- Prescription inquiries
- Patient test results / formulary history

Billing & Payments
- Electronic claims submission, receipt and remittance
- Automated claims processing (edit checks)
- Electronic Funds Transfer
- Web-based payments

Decision Support/Business Intelligence
- Data warehousing of patient encounters and outcomes data
- Data mining to develop clinical best practices protocols
- Develop preventative care programs/case management
- Collaboration infrastructure

Procurement
- Consolidating medical supplies/equipment purchasing
- Supplier search and selection
- Contract negotiating
- Order status

Inventory Management
- Inventory status
- Link to other systems and departments

Forecasting
- Collect historical demand
- Measure facility specific demand and usage rates
- Project future demand

Transportation Management
- Delivery status
- Shipping to appropriate facilities
- Warehousing
**Key Transformation Areas**

**Customer Relationship Management Value**

- Deliver exceptional value addressing personal preferences, values, needs of the customer.
- Deliver appropriate range of supporting services. Deliver proactive recovery when things go wrong.
- Deliver product or service at minimum expected level.

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**Satisfaction**

**Loyalty**
Payor E-Line: Mainstream Capabilities

- Enrollment, provider directories (members)
- Explanation of benefits, claims status
- Provider authorizations, referrals & eligibility
- Formularies, forms and provider directories
- Sales quotes & proposals
- Product configuration
Provider E-Line: Mainstream
Functional Capabilities

- Claims submission via EDI
- EDI procurement versus supply chain management
- Static web sites
- Provider directories
- Call center with computer assistance versus customer relationship management (CRM)
- Limited on-line prescription writing
Pharmaceutical E-Line: Mainstream Capabilities

- Web enabled call centers ---> CRM
- e-Procurement
- Product web sites for Providers/Consumers Without Data Capture
- e-Detailing & Education for Representatives
- Web enabled ERP
The New Healthcare Model
Consumerism: The New Trend for Payors & Providers

- The consumer will define quality - **differently**
- Choice will be a critical factor
- Consumers will take control of healthcare dollars
- Seamless, single point of care service is important
- Pharmacy costs will continue to be an issue
- Technology will not change healthcare

**The consumer will change healthcare**
What Will The New Healthcare Look Like?

Self managed Health Enablers

- Human Genome
- Life Sciences
- Pharma

The informed, empowered consumer (not patient)

- Transactors
- Financial Management
- Re-Insurance

Health care Merchants

Pharma

Life Sciences

Human Genome

Financial Management

Re-Insurance

Transactors

Self managed Health Enablers

What Will The New Healthcare Look Like?
Understanding Your Business Model

- What functions do you perform?
- For whom do you perform these functions?
- How do you go about performing this function?
- What need do you satisfy?
New Value: Separate information from product

- **Information value net**
  - Information and knowledge flow independent of physical structure
  - Business intelligence
  - Knowledge management as a tool

- **Physical value net**
  - Material and process flow along the supply chain for suppliers
  - Medical care delivery for providers/payers
Business Models for e-Business

What is the role of e-business for you?

Wave 1
- Provide Operational Efficiency

Wave 2
- Extend Range and Reach

Wave 3
- Enable New Business Model

Create Business Strategy
Enhance Business Strategy
Exploit Business Strategy
Key Issues/impact of the new model
For Payors

- Focus on the consumer: health improvement and self empowerment
- Current business model depends entirely upon individuals who do not use the system: AKA - healthy people
- The current model strips over 80% of the market out of the available target market
New Business Models for Payors

Transactors

Manage the point of service payment

Financial managers

Manage the money and how it is spent/invested for healthcare services and products e.g. healthcare spending accounts - defined contribution – MSA.

Re-insurance

Provide insurance for less frequent medical events (e.g. catastrophic coverage).

Infomediary

Provide value added services to consumers on the best available treatment options and disease management practices.
Care Giver: General Contractor Manages Healthcare Subcontractors

- **Care giver**
  - Manages healthcare services, and dollars
  - Identifies best of breed: best value & options

- **Providers & Payors**
  - Subcontracts with care giver
Care Giver: General Contractor Manages Healthcare Subcontractors

- **Defined contributions**
  - Choose plans that provide freedom of choice

- **Navigates healthcare system**
  - Fixes house provides transportation
  - Identifies providers, wellness, prevention & self care

- **First dollar coverage - value proposition**
Virtual Hospital: Information is the Primary Asset

- Separate diagnosis, treatment & after care
  - Hospital not bound by physical walls - reach extended
  - Partnerships are valuable assets - build virtual communities
  - Deliver care at customer’s location - self care & prevention

- The type of care changes
  - Prevention & self care replace repair & fix
  - Care moves from inpatient to extended reach

- The right care at the right location
  - Inpatient - outpatient - extended reach
Forrester Observations

- Genomics dominates healthcare new products & services
- Cost-shifting to consumer
- Consumer self-direction: information
- Prevention & self care: alerted years before
- Health advocate: general counsel
- Consumers accept genetics: wary of privacy
Personalized Medicine

- Financial & legal firms will enter health planning field
- Diagnostic markets will expand - early in disease cycle
- Markets grow to include the susceptible and the ill
- Pharmacy sales soar: high costs & micro-markets
- Doctors become “general counsels” and master genomics
- Hospitals partner or compete with financial groups & law firms for roles as general counsel
- e-Communities form as people ponder genomic issues
Wireless Doctors

- 1% Use computerized records
- 13% use e-mail (personal use)
- 15% use palm pilots
- 85% use cell phones
- User obvious
- PDA (Personal Data Assistant)
The Killer Application

Transcription Services: Continuous Speech Recognition

- Saves doctor most precious asset: time
- We are already paying for it
- Gives doctor ability to work from home
- Creates relationship between hospital & doctor
- Ability to market that relationship
How Physicians are Using the Internet

ACTIVITY

Source: American Medical Association survey; data based on telephone interviews with 1905 randomly selected physicians, 20% of whom reported using the Internet.
The other Killer Application: Collaborative Customer Service

I have a question about my claim payment.

Do you mean the $945 you have circled?

- Real-Time Collaborative Customer Service
- "On Demand" Human Assistance
- Browser Screen Sharing and Annotation
- Voice/Data over Single Telephone Line
Lowering Barriers to e-Business in Healthcare

- **Security**: security solutions ease liability concerns
- **Standards**: HIPAA standards reduce fragmentation
- **Cost**: Application Service Providers (ASP) reduce cost
Federal Health Insurance Portability and Accountability Act of 1996 creates health information standards
- Transactions
- Security
- Privacy
- Eventual standards for an electronic medical record

Major healthcare industry shift to automation
- Similar to banking

Transaction compliance deadline 10/02
e-Health: Better, Faster, Cheaper

- Standardization
- Reliability and security
- One-time infrastructure
- Strategic one-time investment
- Trusted environment
- Enhanced accountability
HIPAA is not a sunk cost like Y-2K

- It is much more than remediation of legacy systems
- It is a vehicle to create new systems and capabilities
Adding Value from HIPAA

HIPAA improves health care by providing

- Reliable, timely and accessible data
- In a secure and trusted environment
- At lower cost
HIPAA Adds Value: The Basics

- Transaction standards and EDI
- Security and privacy measures
- Reduced liability for
- Single system of record improves medical care
- A records database provides new capabilities
What is the role of e-business for you?

- Wave 1: Exploit Business Strategy
  - Provide Operational Efficiency

- Wave 2: Enhance Business Strategy
  - Extend Range and Reach

- Wave 3: Create Business Strategy
  - Enable New Business Model
Wave 1 - Exploit Business Strategy
Quick Fixes

- **Payor:** eligibility/claims processing and inquiries, email
- **Provider:** appointments, content, email, Rx
- **Value:** improved service, reduced administration, lower systems costs, nationally standards, real-time data capture, data integrity, patient trust
- **HIPAA value:** standard data across trading partners and customers, data integrity, reduced vulnerability with Government endorsement, customer trust = increased usage
Wave 2 - Enhance Business Strategy
Improve Current Business Models

- Payor: On-line member enrollment and claims
- Provider: On-line billing, electronic medical record, streamlined lab ordering and reporting, pharmacy error protection, easier self-care monitoring, tele-medicine
- Value: clean claims, further reduced administration, improved service, fewer adverse drug reactions and medical errors, reduced fraud and abuse, wider use of evidence-based medicine
- HIPAA value: clean claims/bills, enhanced data base capability, greater accuracy of patient/member data yields greater returns
Wave 3 - Create Business Strategy
New Business Models

- **Payor:** Financial management for healthcare, anonymous self-care management (PPI)
- **Provider:** Care givers distinct from providers, virtual hospitals, on-line group care
- **Value:** New revenue opportunities and extended reach
- **HIPAA value:** Enables infrastructure for new models
Internet Privacy Solutions
Privacy from Anonymity

- Fully Identified Health Data
- Universal Anonymous Identification
  Privacy & Security Model
    Patent Pending
- Patient Identity
- Internet Privacy Solutions
- Patient
HIPAA: Prevents us From Repeating Mistakes of the Past

- Build systems with different platforms
- Use different standards for different systems
- Handle functions internally that can be better handled externally and at less cost
- Develop proprietary software that cannot easily interface to your external partners
- Focus your time on technical issues and not on your core competencies and core business functions
Blue Cross/Blue Shield of Rhode Island

- HIPAA Assessment: Initial & Detailed Follow On
- Initiating Solution Design
- Broad Business Perspective: e-Business & HIPAA
NASCO

- HIPAA Assessment: Initial & Detailed
- Solution Design & Implementation
- Decision Based on combining e-Business & HIPAA

IBM seen as leader
Personal Path Systems

- HIPAA: Early services support
- Focus on Security and Privacy
- Define Phase III e-Business Offering
SUMMARY

- E-Line: Where the industry leaders reside
- Consumerism: The driving force
- New Business Models and Key Applications
- HIPAA: Value not Cost
- Leverage Current Business Strategy
- Enhance Business Strategy: Business Transformation
- Create New Business Strategy
- HIPAA: Enables e-Business
Other Key Factors

- Meeting Standards: NEON
  Compliance Maps verify X12 Standards

- Integrating disparate systems: MQSI
  Leveraging Assets - Avoiding Total Rebuild

- Protecting Data/Security: Tivoli
  Applications and Systems