Optimizing the Health Care Process in an Integrated Trust Community

OCR/NIST Security Workshop

Safeguarding Health Information: Building Assurance Through HIPAA Security

Washington, DC

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About AHIP

•AHIP is the national trade association representing nearly 1,300 health insurance plans providing coverage to more than 200 million Americans

•Our members offer a broad range of products in the commercial marketplace including health, long-term care, dental, vision, and supplemental coverage

•Our members also have a strong track record of participation in Medicare, Medicaid, and FEHBP

•Our health insurance plan members comply with the HIPAA Privacy and Security requirements and have been proactive in the area of information security and health information technology (IT) initiatives

About Harvard Pilgrim Health Care

- Not-for-profit health plan
  - Based in Wellesley, MA
  - 1100 employees across 7 locations
  - Over one million members in MA, NH, ME and other areas
  - Full range of health insurance choices, funding arrangements and cost-sharing options

- #1 Commercial Health Plan in America in Member Service and Quality of Care for the Fifth consecutive year

Privacy, Security, and Health IT Initiatives

- AHIP agrees that the U.S. health system was in need of reform
- We are committed to working with various federal and state agencies in the implementation process
- We supported the Health Information Technology for Economic and Clinical Health Act, as included in the American Recovery and Reinvestment Act
  - EHR Incentive Program for Medicare and Medicaid
  - Privacy and Data Security Requirements
- AHIP members remain committed to the HIPAA Privacy and Security requirements to protect consumers' health information and we believe these requirements should serve as the foundation for future efforts and initiatives

Privacy, Security, and Health IT Initiatives

- The industry is at a unique time which presents major opportunities for positive change
- We believe health IT should be leveraged to promote and improve patient outcomes, reduce medical errors, and improve the quality of health care services
- AHIP's members support the use of health IT to reduce costs within the health care system
- Future health IT initiatives should strive to build on the benefits from administrative simplification, security protocols, and operating rules to improve process efficiencies while advancing consumers' trust in and realizing the benefits from electronic health information processes

Privacy, Security, and Health IT Initiatives

- We appreciate OCR's guidance on important privacy and security initiatives
- NIST guidance documents have also helped promote better understanding and consistency of technical requirements
- We encourage federal agencies to work together and to look to OCR (and NIST, when appropriate) to ensure consistency with the existing privacy and security requirements
  - (E.g., the ONC Strategic Framework for Health IT, CMS requirements for the Medicare, and Medicaid, and the Office of Personnel Management for the Federal Employee Health Benefits Program, etc.)
- The industry can benefit from an overall plan to ensure that the separate but interrelated statutory and regulatory requirements
  - Need successful implementations in compliance timeframes
  - (E.g., ICD-10 conversions, HIPAA v5010, "meaningful use" requirements, required data reporting to federal agencies, state reporting requirements, state health information exchanges (HIEs), etc.)

Privacy, Security, and Health IT Initiatives

- Confluence / consensus around industry action and needs
  - Meaningful use of electronic health records (EHRs)
  - Electronic prescribing (e-Rx) support
  - Reporting on clinical quality measures
  - Reliable provider identification and routing
  - Public and private payer pay for performance (P4P) incentives for EHRs, computerized physician order entry (CPOE), and electronic prescribing
- Practical solutions for achieving objectives
  - Settlement on unifying standards
    - Continuity of Care Document (CCD) as a container
    - NCPDP SCRIPT for prescription-related information
  - Acknowledgement that EHR systems must be certifiably interoperable to qualify for funding assistance and incentives

Harvard Pilgrim Health Plan's Experience: A Case Study

- Harvard Pilgrim Health Plan's Experience Shows the Positive Benefits from:
- Collaboration and Cooperation
- Purpose Driven Governance
- Private Funding
- The Basis for an Internet Model
- "Organic Development" (i.e., having a business plan with objectives and incremental stages to accomplish a flexible and ongoing process)
- Open Architecture/Standards-Based Transmissions
- Vendor Integration
- e-Commerce Mindset that Learns from Experience

NEHEN

- New England Healthcare Exchange Network (NEHEN)
- NEHEN was established in 1997
- NEHEN is a collaborative, payer and provider-owned solution for connectivity and administrative simplification that has:
  - 55+ hospitals, 5,000+ physicians, 4.5M+ health plan members
  - 8 local health plan participants
  - Connectivity to national insurers
  - Over 8 million transactions per month

NEHEN's Original Purpose and Benefits

- Deliver a proven Revenue Cycle Solution
  - Deliver a payer eligibility and claims status solution
  - Deliver an electronic referral submission tool
  - Deliver an claim file submission and tracking solution
  - Deliver a remittance viewing, printing and downloading
- Share development costs and promulgate best practices
  - Batch eligibility, 'self-pay' batch claim status inquiry
- Enable direct administrative transaction exchange between payers and providers

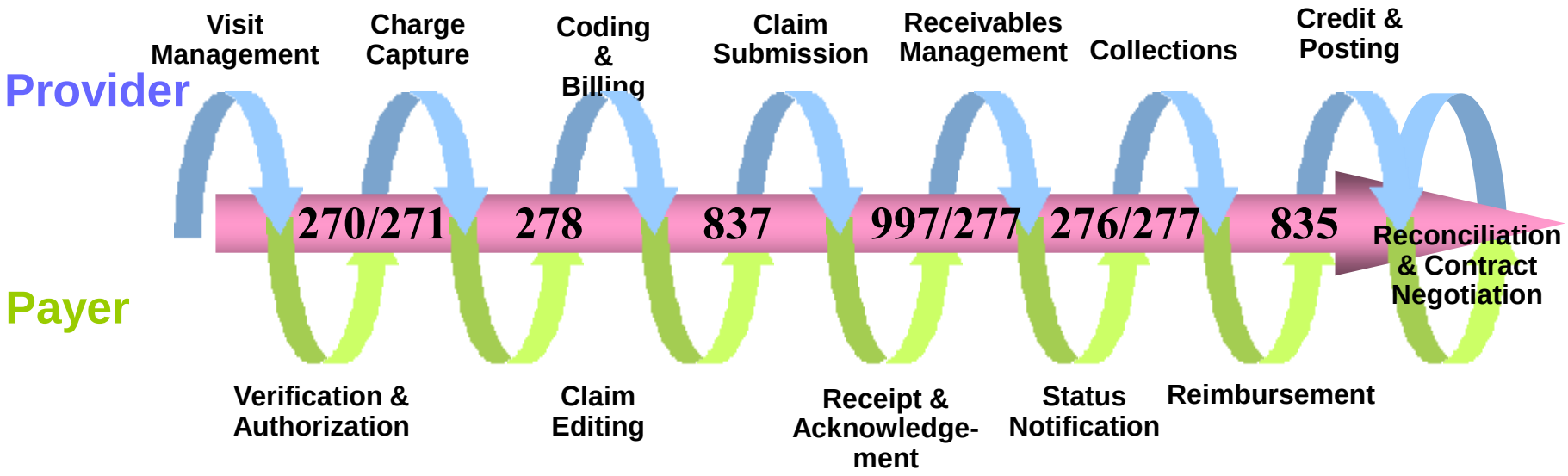
→ Simplified Administrative Processes

→ → Reduction in Administrative Costs Overall

→ → → Enhanced Process Quality

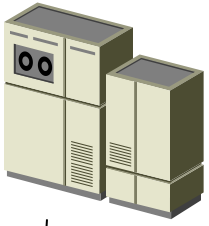
Collaboration Fundamentals

Providers and Payers Engage in Multiple "Exchanges" Throughout a Shared Process



Automation of these exchanges in a consistent and well managed method offers significant opportunity

NEHEN 'Classic' Technology Architecture



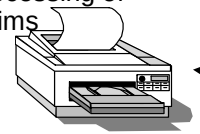
Provider-side

Batch Extracts and Real-Time Transactions

- Automatically transmitted to NEHEN e-Gateway for processing at payers and clearinghouses

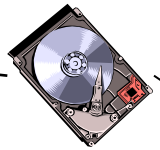
Hospital Information or Physician Practice Management System

- Integrated Lookup for some transactions
- Normal, familiar processing of bills and claims



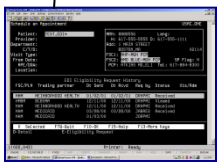
NEHEN Reports

- Eligibility Exceptions
- Claim Status



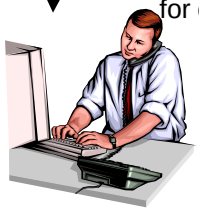
NEHEN Database

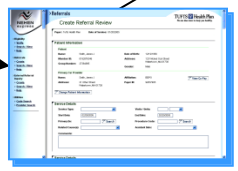
- Provides audit trail
- Available for ad hoc queries and custom reporting



Patient Accounts

- Uses whichever tool is appropriate
  - Regular processing system for claims and other integrated transactions
  - *NEHENExpress* or payer website for on-demand lookups, etc.





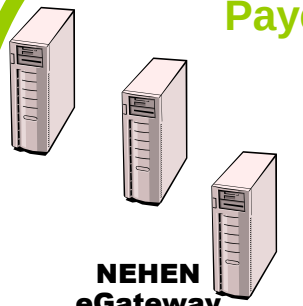
NEHEN Express

- Batch and Real-Time Transactions
- Ad Hoc / On-Demand
  - Verify Eligibility
- Request and verify Referral and Authorization
  - Check Claim Status
- Track submitted claims

NEHEN eGateway

Providers are directly connected with each payer or via NEHEN Hub

Payer-side



NEHEN eGateway

Installed at each Member payer & affiliate

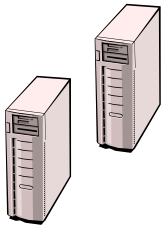
NEHEN Contract Affiliates

NEHEN Network

- Transactions are transmitted to NEHEN e-Gateways at other members
- Via private leased lines, virtual private network (VPN) or web transaction service (HTS) technology

NEHEN Payer Services

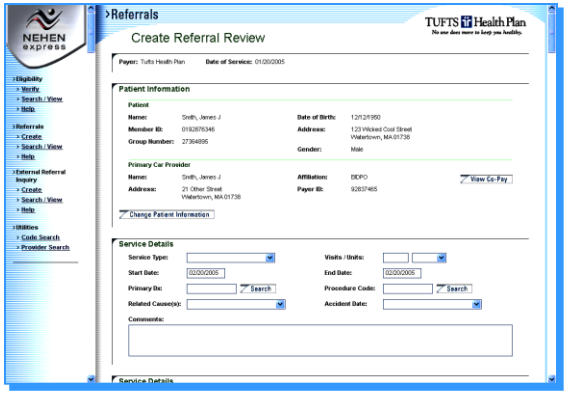
- Transactions are transmitted to non-NEHEN payers and clearinghouses
- Via proprietary arrangements



Non-NEHEN Payer

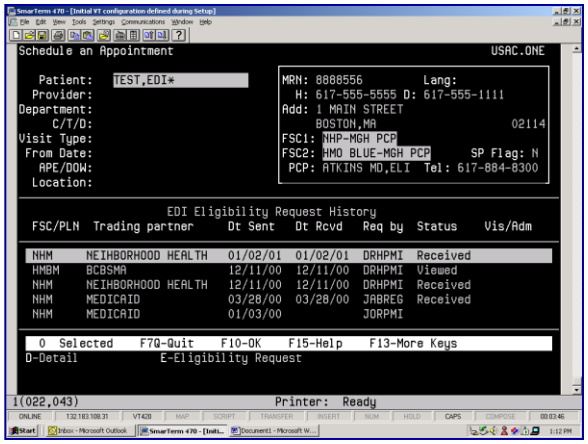
Non-NEHEN Clearinghouse

Flexible Implementation Options



NEHEN Express

Integrated
(Meditech, IDX, Epic, etc.)



- **Intranet version – *NEHEN Express***
  - Use when integrated EDI is unavailable in core system
    - Supports ad hoc business processes like collections
  - Provides means of acquiring early experience with process change (in parallel with core system integration)
  - Extends functionality to outlying practices and business processing areas

- **Integrated version – IDX, Meditech, Eclipsys, Epic & others**
  - Preferred method for workflow improvement in core business processes
    - Avoids double-keying / re-keying
  - Eases distribution and reduces training requirements for registration clerks, billing clerks, etc.

Hybrid
(NEHEN Express & integrated.)

- **Hybrid Integration version - use a combination of *NEHEN-Batch* and core system features**
  - **Cost effective and quicker integration method for Eligibility Verification**
    - **An extract file is built of all scheduled patients from core system and sent to NEHEN-Batch**
    - **NEHEN-Batch, builds the *inquiry* transactions and sends it to the payer**
    - **When *Eligibility Responses* are returned, they are written back into the patient's file *(in a comment field)* within the core system and Responses are made available within NEHENLite for online viewing or reporting**

NEHEN 'Classic' Functionality

As of October 2009

Transactions	Health Insurer 1	Health Insurer 2	Health Insurer 3	Health Insurer 4	Health Insurer 5	Health Insurer 6	Health Insurer 7	Health Insurer 8	Health Insurer 9	Health Insurer 10	Health Insurer 11	Health Insurer 12	Health Insurer 13	Health Insurer 14	Health Insurer 15	Health Insurer 16	Health Insurer 17	Health Insurer 18	Health Insurer 19
Eligibility	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Institutional Claim Submission	✓	✓	✓	✓	✓	✓	✓	✓	Planned	On Request	✓	On Request	Planned	Planned	Planned	Planned			
Professional Claim Submission	✓	✓	✓	✓	✓	✓	✓	✓	Planned	On Request	✓	On Request	Planned	Planned	Planned	Planned			
Claim Status Inquiry	✓	✓	Planned	✓	Planned	✓	✓	✓	✓		Planned		✓	✓	Planned	✓			
Electronic Remittance Advice	✓	✓	✓	✓	Ready to Test	✓	✓	Planned			✓		Planned	Planned	Planned	Planned			
Specialty Care Referral Request	✓	Ready to Test		✓		✓													
Outpatient Auth	✓	Ready to Test		✓		✓													
Pre-Certification	✓	Ready to Test		✓		✓													
Home Health Referral	✓			✓		✓													
Admission Notification									✓										
Referral Inquiry	✓			✓		✓													

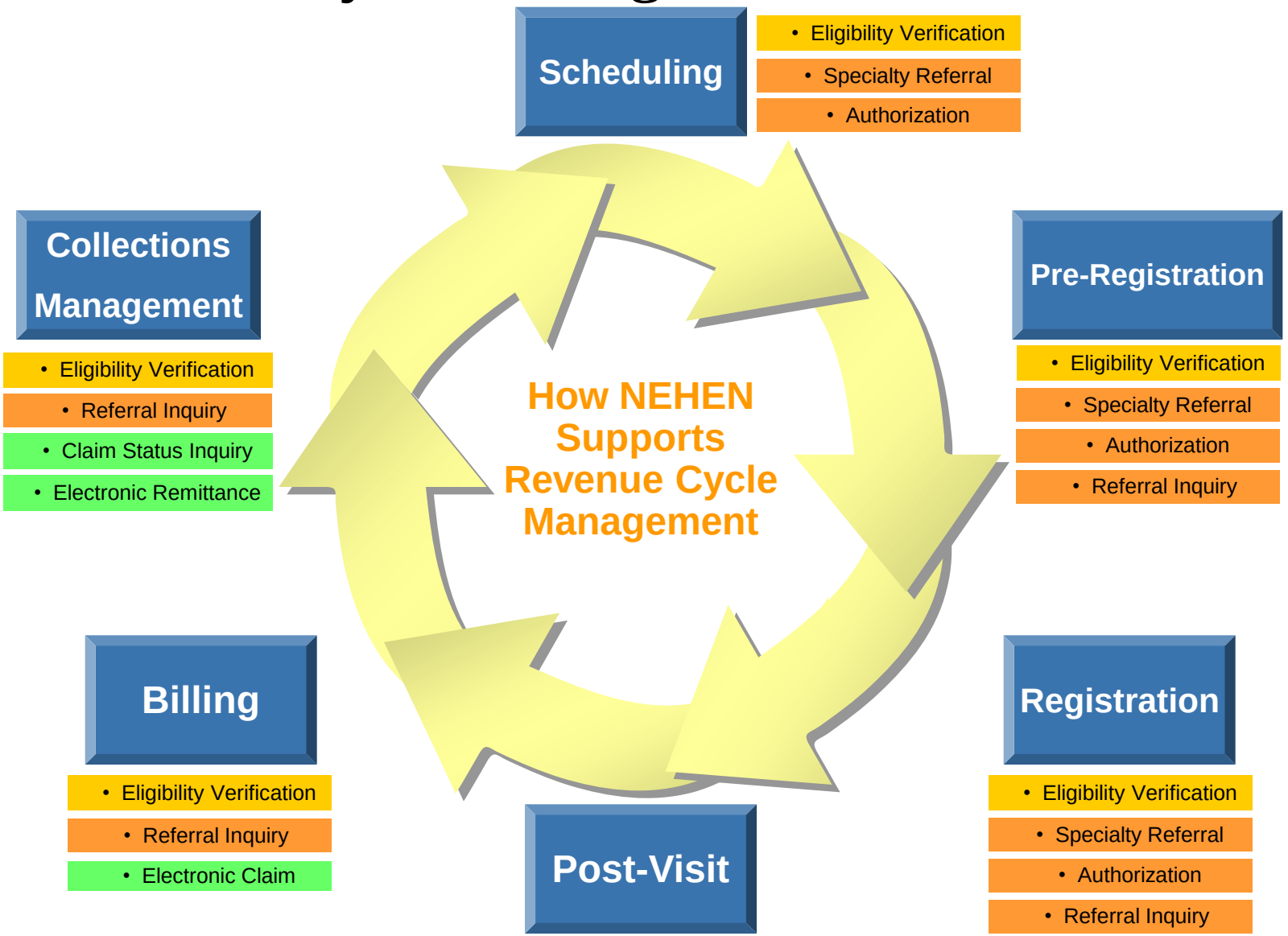
1 Available Direct with BCBSMA, including out-of-state BC plans

2 Inst for Anthem BC, Prof. for National Heritage

3 Available via NEHEN Hub, contact NEHEN Program Manager for more information

4 The chart is intended to depict functionality that health plans offer

Full Revenue Cycle Management with NEHEN



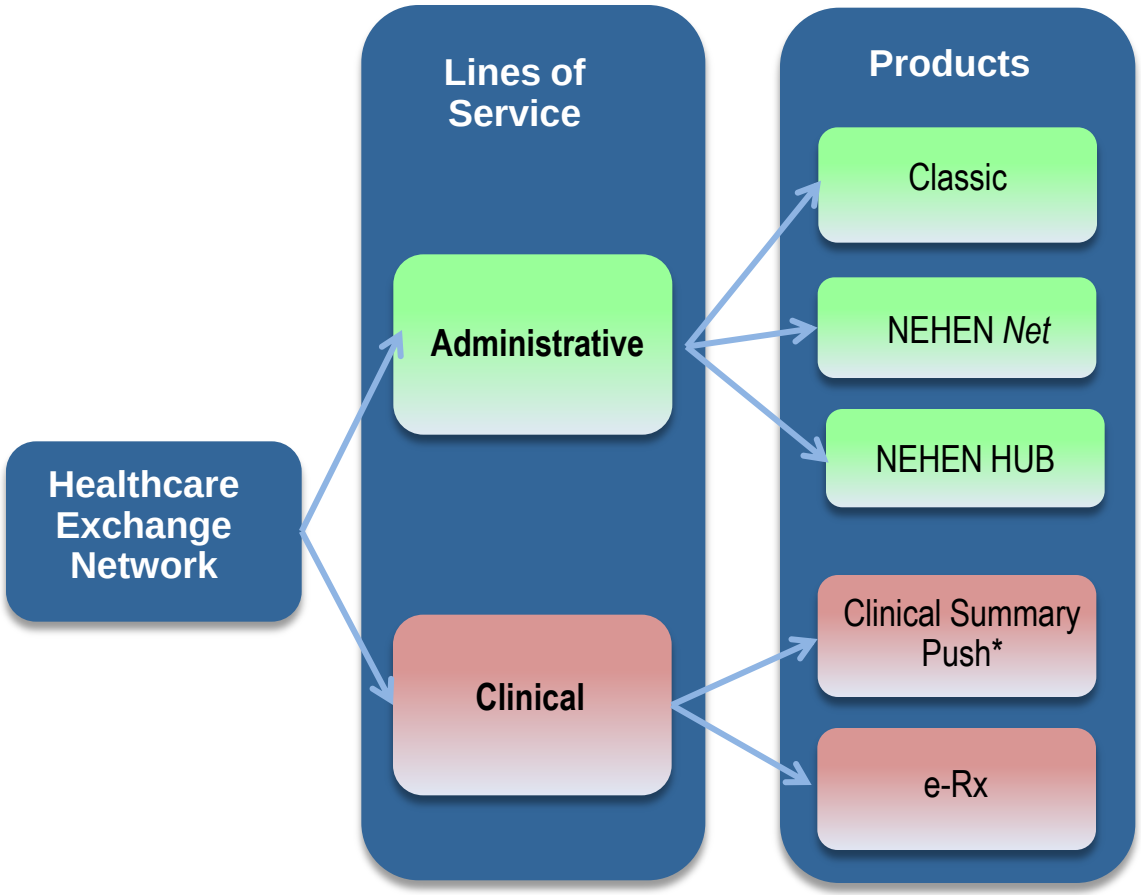
Clinical Data Exchange in MA

- 7 years ago, MA-SHARE (Massachusetts Simplifying Healthcare Among Regional Entities) was formed using the NEHEN technology to exchange clinical data between the same trading partners who were using NEHEN to exchange administrative (HIPAA) transactions

- Based on industry needs and wishes, MaSHARE began a pilot with e-Rx transactions and followed-up with a “push pilot” (i.e., increasing automation) to send discharge summaries between hospitals using the standard CCD format to structure the content into a machine usable form

- Concurrently, Harvard Pilgrim Health Care implemented an e-Rx service using certified connectivity channel in order to avoid the significant cost of using a clearinghouse to communicate member Rx data to providers

The Use Case Demonstrates Sustainability and Reliability of Health Information Exchanges



- Point-to-point Administrative Exchange, automated and integrated with core systems
- Hosted Administrative Exchange, software as a service, for small providers
- Hosted telecommunications Hub for Administrative transactions
- Point-to-point, clinical summary Push into EMRs and to secure email or fax. Anticipate expanding to delivery to payers
- Point-to-point e-Rx exchange with RxHub & Surescripts, integrated with core provider systems
- Direct e-Rx with HPHC

* Clinical exchanges leverage the centrally hosted infrastructure

Challenges of Process and Integration

- Over 1000 distinct Electronic Data Interchange (EDI) Trading Partners
- Direct Connects, Clearinghouses, Billing Vendors, Software Vendors, Federal and State Government Reporting and Exchanges, Enrollment Processing
- Multiple Back-end Processing Systems
  - Homegrown Development
  - Extremely Diverse Set of Applications and Development Platforms
  - Business Process “Silos”
- Lack of visibility into process status and error management
- Manual process and outcome controls
- Dial-up, Severe File Transport Protocol (SFTP), Frame Relay, SOAP/WSDL (i.e., Webservices), Portal File Transfer
- Software as a Service (SAAS)
- Cloud Computing

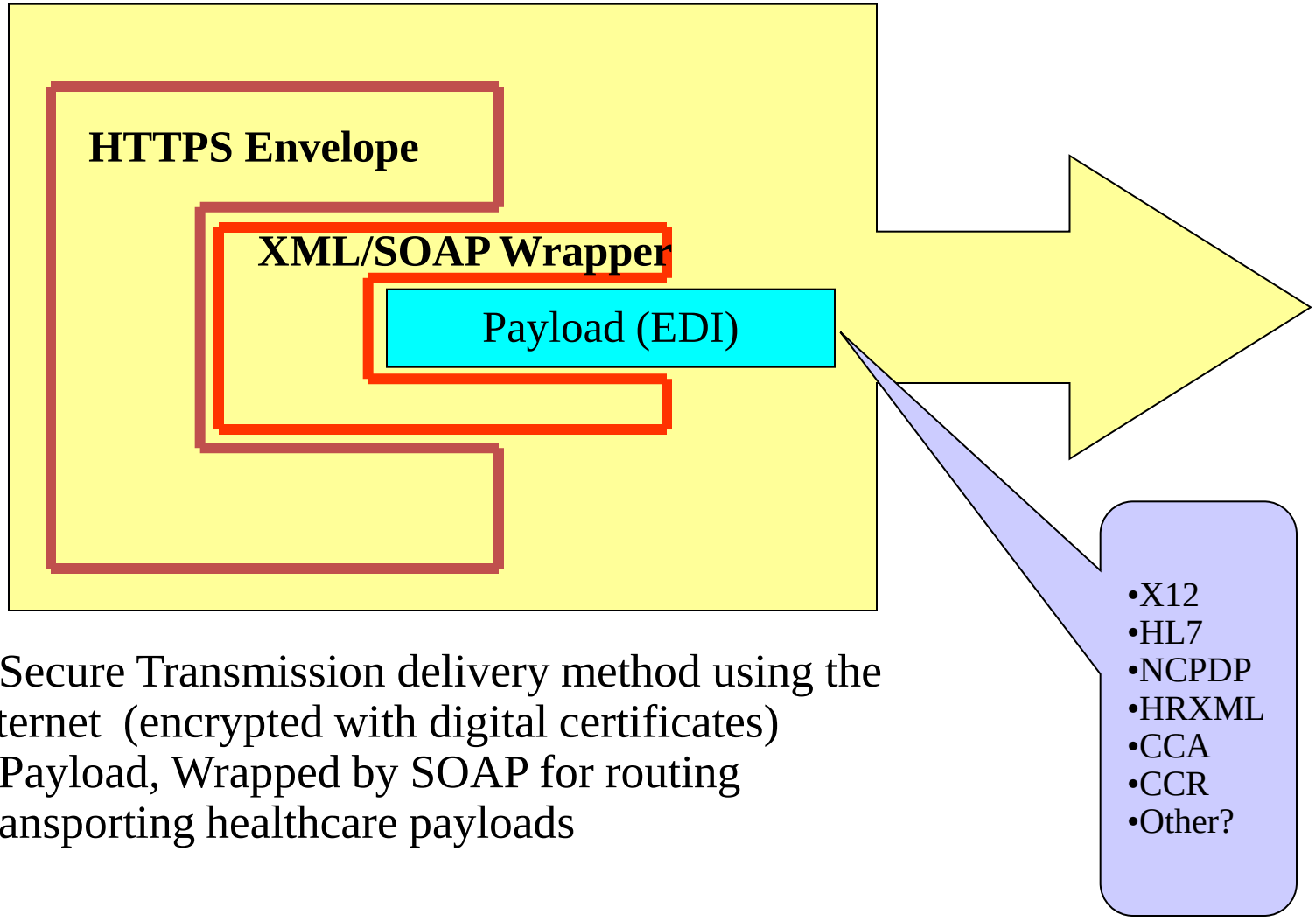
Process, Integration, and Benefits

- Improvements in cycle times (e.g., service-to-cash, encounter reporting, etc.)
- Business velocity optimization
- Huge reductions in cost of administration
- Satisfied providers with better business operations and more useful decision-support
- More capacity for accountability
- Lower medical expense trends
- New opportunities from better decision support tools for members and accounts
- Focus on eliminating duplication and inefficiencies
- Emphasis on collaboration
- Preservation of proprietary business knowledge
- Leverage standards and reduce cost/burden

Foundational Elements for Business Exchange

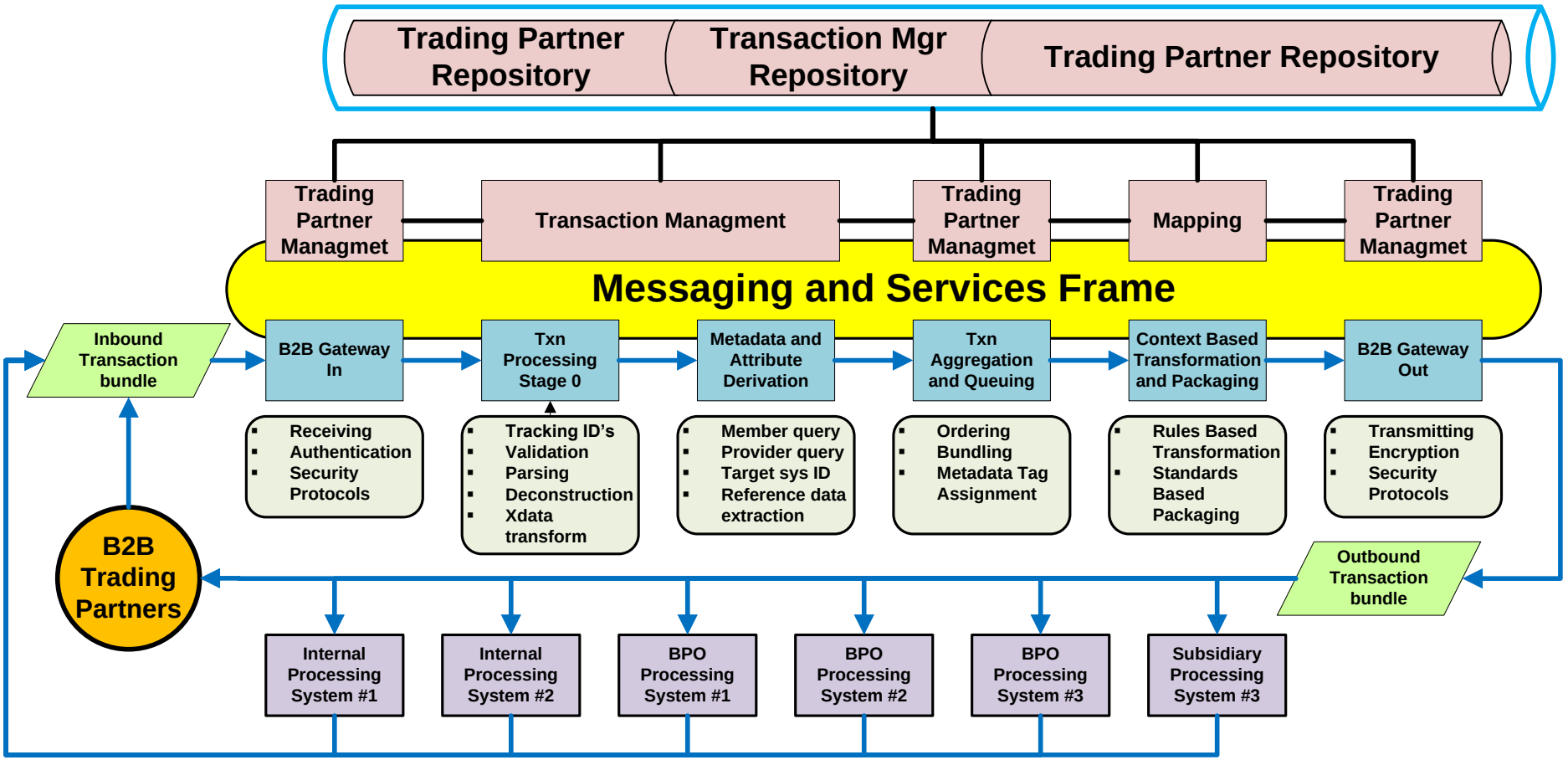
- Communication and Transport protocols
- Message choreography management
- Transaction processing engine(s)
- Database for request/response data sourcing
- Event logging capability
- Event tracking service
- Supply Chain Integration/Work With the Vendor Desktop
- Extra-enterprise Integration/Beyond the transactions and into the business processes of Payers and Providers
- Quid pro quo/Secure Communication Up & Down the Supply Chain
- Integrate Outside Boundaries in a Scalable Fashion

Why the ATM Model Cannot Be Used in Healthcare



- A Secure Transmission delivery method using the Internet (encrypted with digital certificates)
- A Payload, Wrapped by SOAP for routing
- Transporting healthcare payloads

Transactions and Practical Issues



Strategic Architecture

- Services Oriented Architecture
  - Web Services Exposed Internally/Externally
  - “Off the Shelf” Products
  - Enforced Governance (Technology and Process)
  - Re-Use of Functional Components
- Evolving to a Distributed Enterprise
  - Are enterprise processing systems dependable?
  - Will data be there when needed?
  - How can governance promote efficiencies and benefits?
  - What are the needs for a services oriented support organization?

Recommendations and Conclusions

- Health information can and should be kept private and secure in an HIE
- The use case evidences that information can be authenticated and secured at an organizational level without further organizational/HIE control
- Chain of trust models should be used and evaluated when possible
- Governance standards should be based on public/private collaborations with representation from all stakeholders and market success will be realized from a “council of equals” approach
- Payer and provider collaborations can deliver low cost, high quality services

Recommendations and Conclusions

- OCR and NIST should evaluate existing efforts to test and innovate privacy and security requirements and successful uses of private market initiatives

- OCR and NIST can be helpful in providing structured guidance to ensure new technologies can be understood and adopted rapidly

- While OCR and NIST should allow for flexible standards and approaches, prescriptive consistency based on the HIPAA privacy and security regulations is needed to ensure consistency for gaining and retaining the public's confidence

Recommendations and Conclusions

- OCR and NIST should strive to reach industry consensus around business needs and opportunities in current and future initiatives
  - "Meaningful use" requirements for EHRs
  - e-Rx support
  - Reporting on clinical quality measures
  - Reliable provider identification and routing
  - Successful implementation of health reform provisions in adequate timeframes for successful implementation and compliance
  - Public and private payer pay for performance incentives for EHRs, CPOE, and e-Rx

- Private entities need to understand a coordinated federal plan for privacy, security, health IT, health reform, and all related efforts (e.g., ICD-10 implementation, etc.)

- States should be allowed to have input into new health IT initiatives and requirements, but should not be allowed to establish requirements that can serve as barriers to progress or successful implementation

Recommendations and Conclusions

- It is essential for public and private sector entities to build on the HIPAA privacy and security framework
- We encourage OCR and NIST to work together with federal agencies to ensure consistency with the existing privacy and security requirements
- OCR and NIST should continue to work with the public and solicit public input into new regulations and guidance documents

Questions

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