

Case Study: How we finished HIPAA in New England

New England Health EDI Network

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Chief Information Officer, CareGroup
Associate Dean, Harvard Medical School*



- NEHEN Overview and Status
- Administrative Structure and Governance
- Sample Functionality
- Administrative Budget
- Real and Potential Benefits
- Implementation Scenarios and Requirements



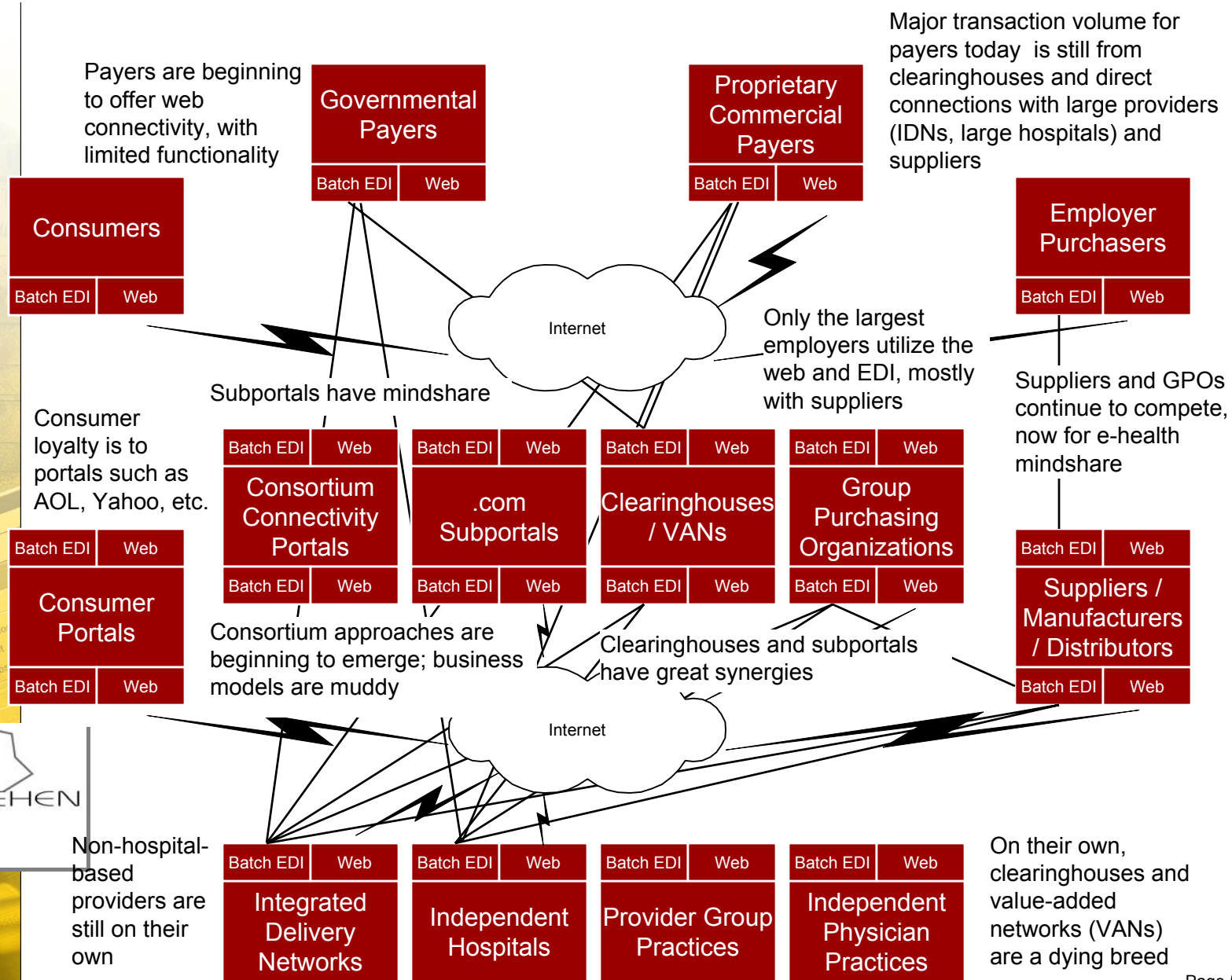
- Top-ranked and world-renowned hospitals and physicians
- Leading managed care market - for better or worse
 - #1, #2 and #3 HMOs in the country
- Limited access to funds
 - Non-profit organizations dominate
- Insular
 - Regional players dominate at the expense of national players
- Expensive
 - Average healthcare premiums are 20% higher than national norms
- Extreme cost pressures
 - At or near the bottom nationally in operating margins (negative)



- Healthcare has traditionally been slow to adopt electronic document interchange (EDI)
 - Lack of inter-enterprise standards
 - Payers offer unique solutions requiring multiple technologies and processes in providers
 - ✓ POS, Dial-up, IVR, paper, phone, etc.
 - Clearinghouse approach is expensive and limited
 - Identification issues abound
 - ✓ Patient, Member, Provider, Payer
 - Limited and weak software vendor support
- Recent changes are resulting in increased adoption
 - IDN scale makes the ROI for bulk EDI more attractive
 - Increased cost pressure - payers and providers are losing money and are motivated to reduce administrative costs
 - Healthcare Insurance Portability and Accountability Act (HIPAA) is providing a catalyst



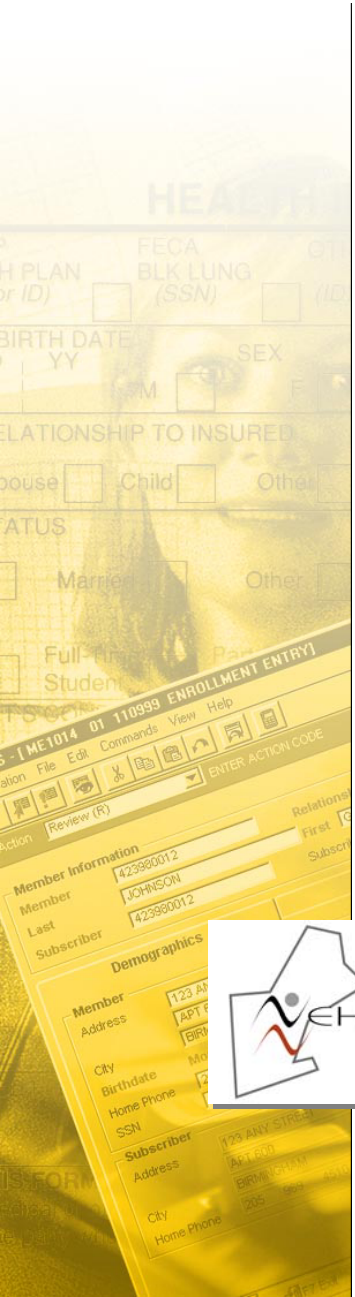
As with the Natural World, e-Health tends Toward Chaos



There are many options in the market...



POINTSHARE™
Online Healthcare Solutions

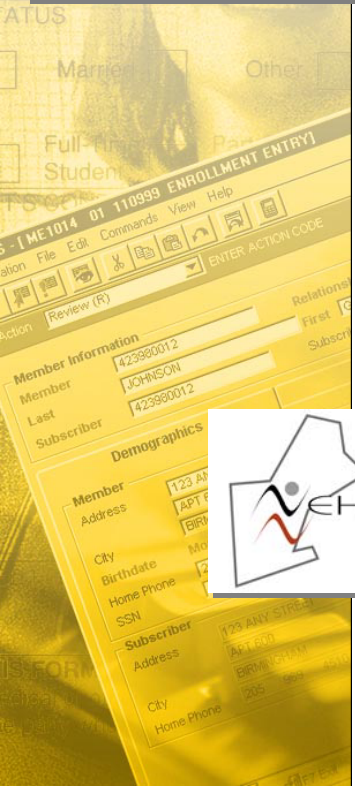
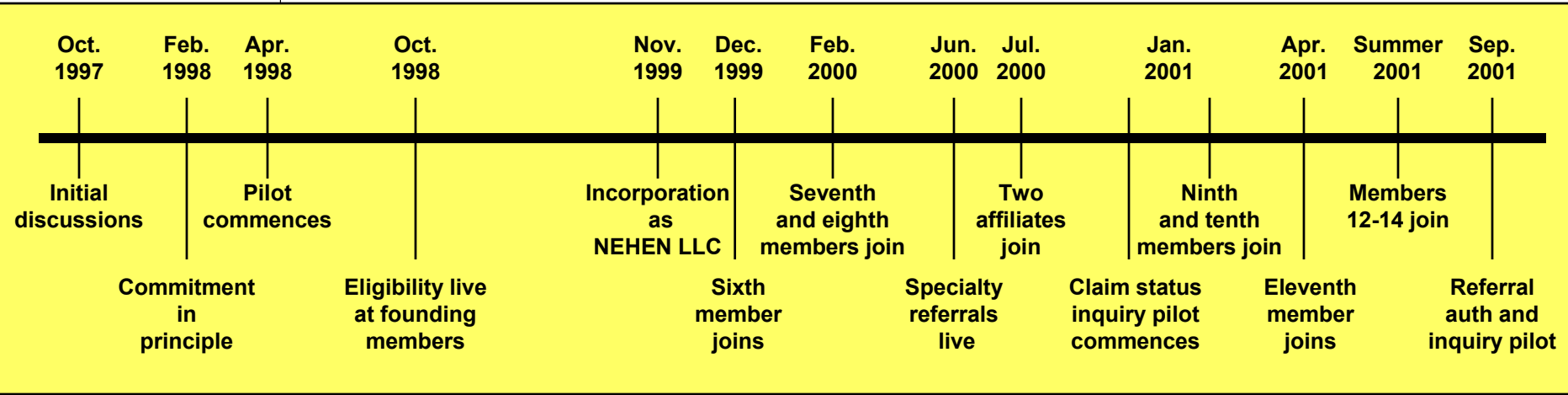


- The New England Healthcare EDI Network (NEHEN LLC) is a consortium of payers and providers in Massachusetts.

**NEHEN
Membership,
Oct. 2001**

<p><i>NEHEN Founding Partners</i></p>	<p>Contract Affiliates</p>	<p>Non-Member Payers with Secondary Connectivity Solutions</p> <ul style="list-style-type: none"> • BC/BS of Massachusetts • Massachusetts Medicaid • Medicare
<p>Additional Members</p>		

NEHEN Update – Brief History and Membership



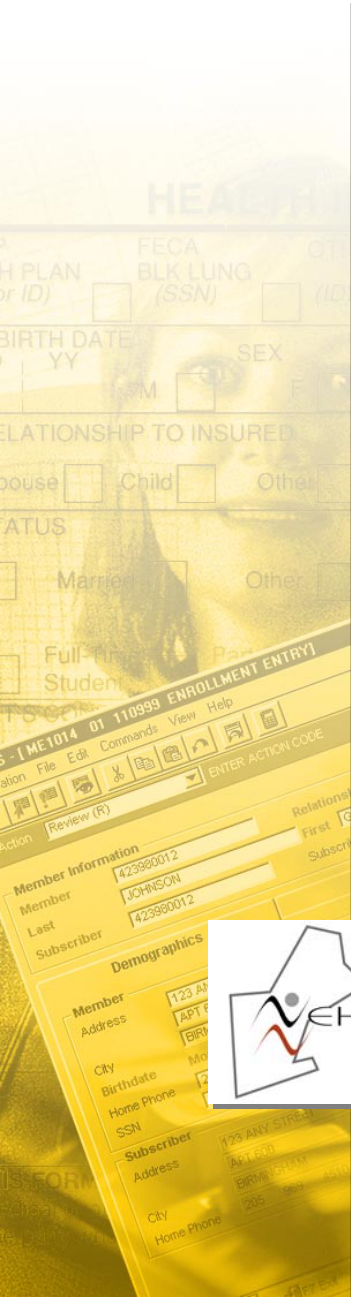
- Current membership represents

- 40 Hospitals
- Over 7,500 licensed beds
- Over 5,000 affiliated physicians
- ~2 million covered lives (not including Medicare and Medicaid)

- Expanding membership interest

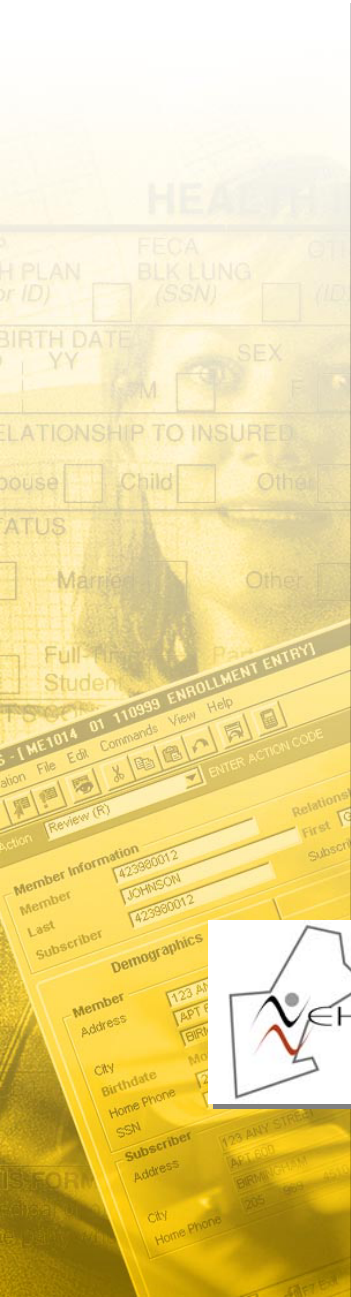
- Additional integrated delivery networks
- Smaller payers
- Smaller community/specialty hospitals
- Multi-specialty practices and their business partners (i.e., third-party billing companies, practice management software vendors)
- State agencies and task forces

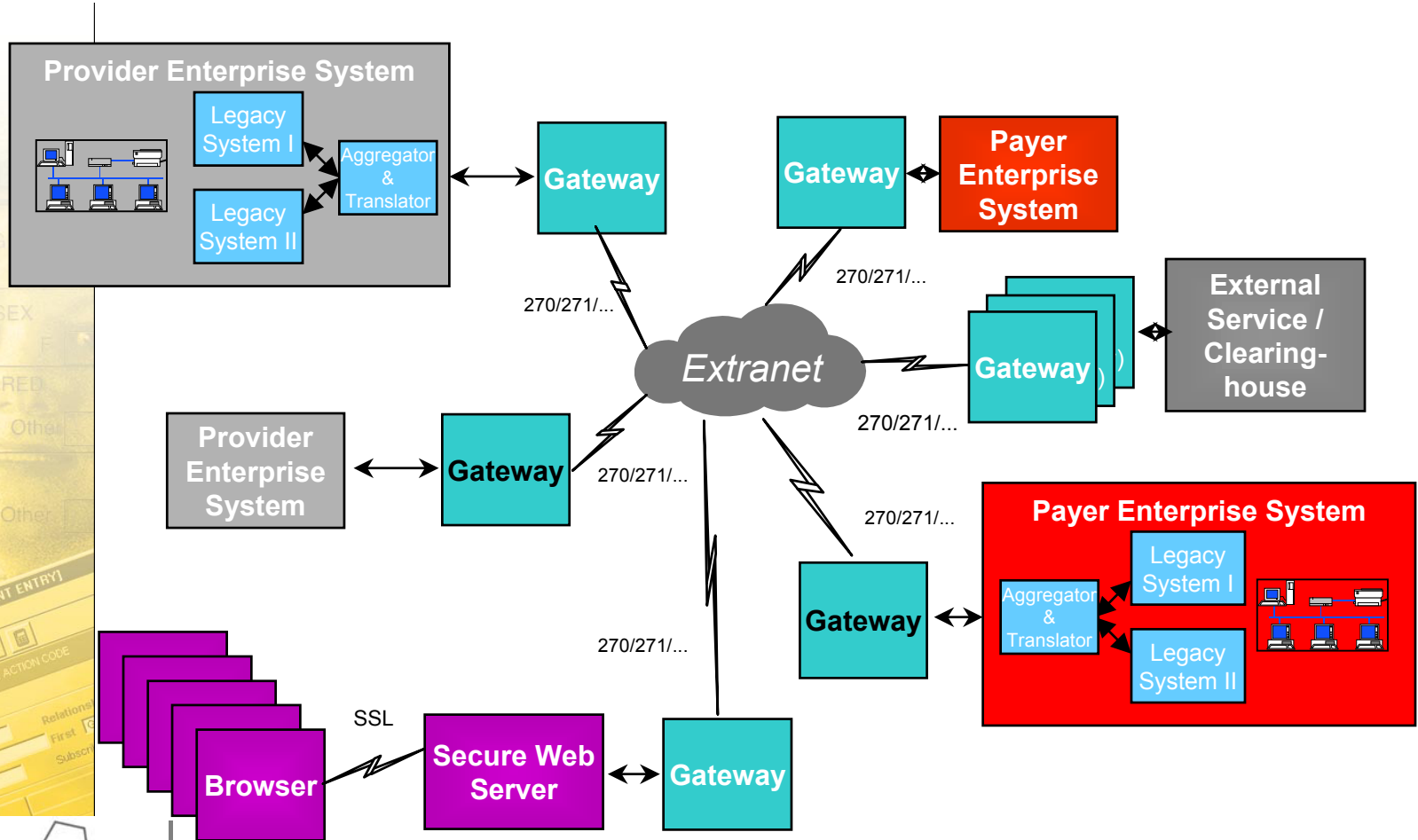
Declaration of Interdependence



Signing Ceremony — NEHEN LLC — October 1999

- Gateway
 - Middleware for routing & managing EDI transactions
 - C++ NT multi-threaded Service
 - Transactions (Current 6,000 per day, Tested 20,000)
 - Multiple transport modules supported
 - ✓ Existing: Direct socket, ftp, command
 - ✓ Prototype: XML over HTTP
 - HTML control interface (monitoring)
 - ✓ Configuration, Transaction throughput, Trading Partner status
- Extranet
 - TCP/IP frame-based network
- NEHENLite





- There is no central server or database.
- The system does not currently make use of any public network.
- Each member connects directly to each other via private frame-relay connection.

- NEHEN has adopted a strict security architecture in response:
 - No central database - all patient-identifiable data is transitory in nature
 - Use of private network rather than the Internet
 - ✓ Recognizes public concerns around security and confidentiality
 - ✓ Security planning takes into account, however, that data may one day be carried over the Internet, or at minimum a public network
 - Signed agreements among participants safeguarding other parties' data



Process / Transaction*	Status	Planning Start Date	Pilot Date	General Availability
Eligibility Verification	Complete	Complete	Complete	10/98
Specialty Referral	Complete	Complete	Complete	6/1/99
Claim Status Inquiry	Complete	Complete	Complete	6/1/00
Referral Authorization	In pilot	Complete	9/1/2001	11/2001
Referral Inquiry	In pilot	Complete	9/1/2001	11/2001
Electronic Remittance Advice	Initial discussion	8/1/01	11/1/01	5/02
Claim Submission - Institutional	Initial analysis	TBD	5/1/02	9/02
Claim Submission – Professional	Initial analysis	TBD	5/1/02	9/02
Claims Attachment	TBD	TBD	TBD	TBD
First Report of Injury and Discharge Notice	TBD	TBD	TBD	TBD
Claim Submission – Dental	No plan to implement at this time	No plan to implement at this time	No plan to implement at this time	No plan to implement at this time

* Listed in preliminary order of priority

Member Priorities for Remaining Transactions

Process / Transaction	Potential Benefits	Potential Issues / Comments	Priority
Electronic Remittance Advice	<ul style="list-style-type: none"> Reduce 3rd party transaction fees Reduce labor and non-labor processing costs 	<ul style="list-style-type: none"> Payers must be able to generate HIPAA compliant remittances To maximize benefit, providers must integrate remittance into financial systems 	High
Claim Submission - Institutional	<ul style="list-style-type: none"> Reduce 3rd party transaction fees Reduce labor and non-labor processing costs 	<ul style="list-style-type: none"> Providers must be able to generate and payers must be able to receive HIPAA compliant claims 	High
Claim Submission – Professional	<ul style="list-style-type: none"> Reduce 3rd party transaction fees Reduce labor and non-labor processing costs 	<ul style="list-style-type: none"> Payers must be able to receive HIPAA compliant claims Institutional and independent physicians must be able to generate HIPAA compliant claims 	High
Claims Attachment	<ul style="list-style-type: none"> Reduce labor and non-labor processing costs 	<ul style="list-style-type: none"> Not mandated by HIPAA Requires electronic or optically scanned medical record 	Medium
Admission and Discharge Notice	<ul style="list-style-type: none"> Reduce labor and non-labor processing costs 	<ul style="list-style-type: none"> Not mandated by HIPAA 	Medium
First Report of Injury	<ul style="list-style-type: none"> Reduce labor and non-labor processing costs 	<ul style="list-style-type: none"> Not mandated by HIPAA 	Low
Claim Submission – Dental	<ul style="list-style-type: none"> Reduce 3rd party transaction fees Reduce labor and non-labor processing costs 	<ul style="list-style-type: none"> Low volume associated with NEHEN members 	Low

Commercial Payer Plans for Remaining HIPAA Transactions

Process / Transaction	Payer Pilot / Date	General Availability Date
Remittance Advice	HPHC - Nov '01 THP - Mar '02 NHP - Mar '02	HPHC - Feb '02 THP - May '02 NHP - May '02
Claims Submission - Institutional	HPHC - Feb '01 THP - Mar '02 NHP - Mar '02	HPHC - Apr '02 THP - May '02 NHP - May '02
Claims Submission - Professional	HPHC - Feb '01 THP - Mar '02 NHP - Mar '02	HPHC - Apr '02 THP - May '02 NHP - May '02

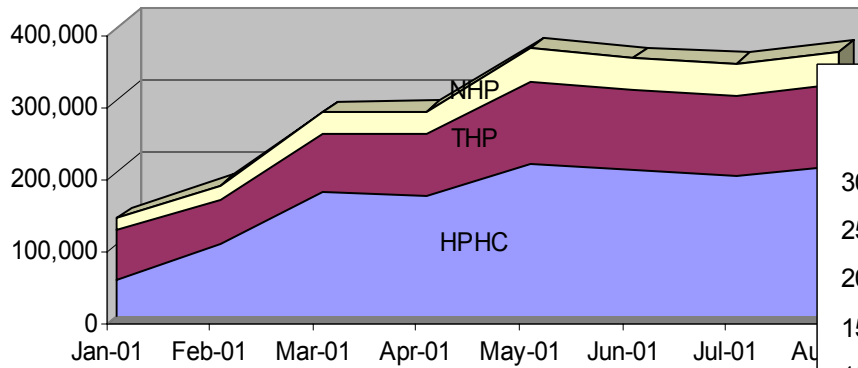


Claims Submission & Remittance : Implementation Options

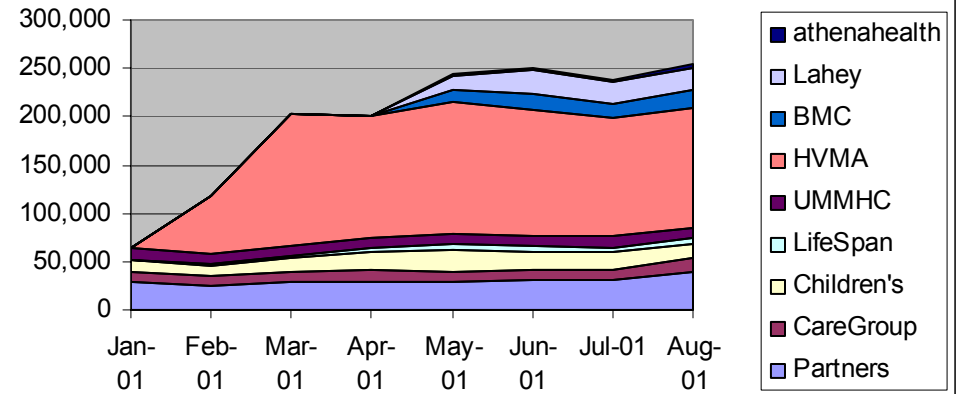
Option	Description	Business Implications	Technical Implications	Governance Implications	Cost Implications
1. Translation by Each Member	Each member is responsible for generating and receiving HIPAA compliant claims	<ul style="list-style-type: none"> • Avoid clearinghouse transaction charges 	<ul style="list-style-type: none"> • Members must buy or build HIPAA compliant claims capabilities • eGateway upgrade • Frame upgrade 	<ul style="list-style-type: none"> • Expand program management to include claims 	<ul style="list-style-type: none"> • Integration and frame cost for each member • eGateway ~ 2-2-3 months x 2 FTEs
2. Translation by NEHEN-Owned and Operated Clearinghouse (Insource)	Providers send claims to central NEHEN-operated clearinghouse where they are translated into HIPAA format and routed to payers	<ul style="list-style-type: none"> • Members must change clearinghouse relationships • NEHEN becomes clearinghouse, subject to privacy and security regulations 	<ul style="list-style-type: none"> • Members submit and receive claims from a newly built central service center • Simplify current architecture to centralized model • eGateway upgrade • Frame upgrade 	<ul style="list-style-type: none"> • Need to determine oversight and pricing structure for members using the service 	<ul style="list-style-type: none"> • Build and support centralized service center • eGateway ~ 2-2-3 months x 2 FTEs
3. Translation by NEHEN-Selected Clearinghouse (Outsource)	Providers send claims to NEHEN selected vendor where they are translated into HIPAA format and routed to payers (e.g., Envoy, NDC, MedUnite CSC)	<ul style="list-style-type: none"> • Members must change clearinghouse relationships • NEHEN acts as collective bargainer to lower costs 	<ul style="list-style-type: none"> • Members submit and receive claims from a new, remote entity • Simplify current architecture to centralized model • eGateway upgrade • Frame upgrade 	<ul style="list-style-type: none"> • Need to determine oversight and pricing structure for members using the service 	<ul style="list-style-type: none"> • Volume-based cost • eGateway ~ 2-2-3 months x 2 FTEs
4. Claims Not Submitted via NEHEN	Continue with non-NEHEN affiliated clearinghouses	<ul style="list-style-type: none"> • Current cost and structure of business 	<ul style="list-style-type: none"> • eGateway upgrade for true batch EDI for eligibility, claims status inquiry 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Current transaction costs

NEHEN Transaction Volumes (2001 YTD)

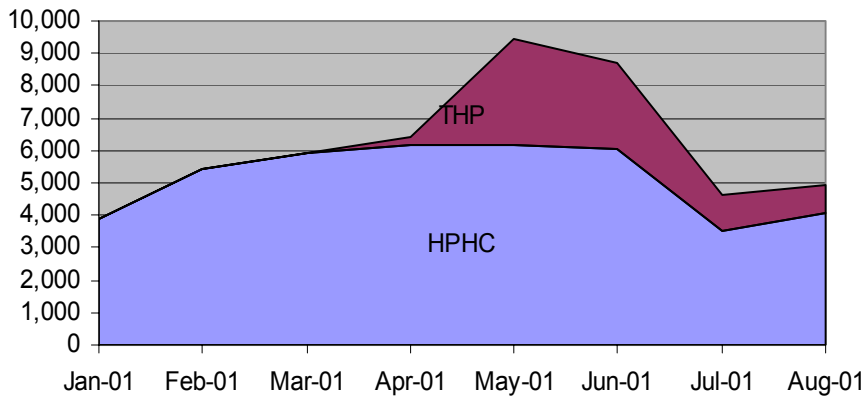
NEHEN Payer Monthly Eligibility Volumes



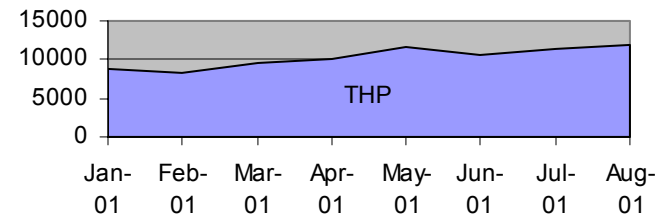
Detailed HPHC/NHP Eligibility Volumes



NEHEN Payer Monthly Claim Status Volumes

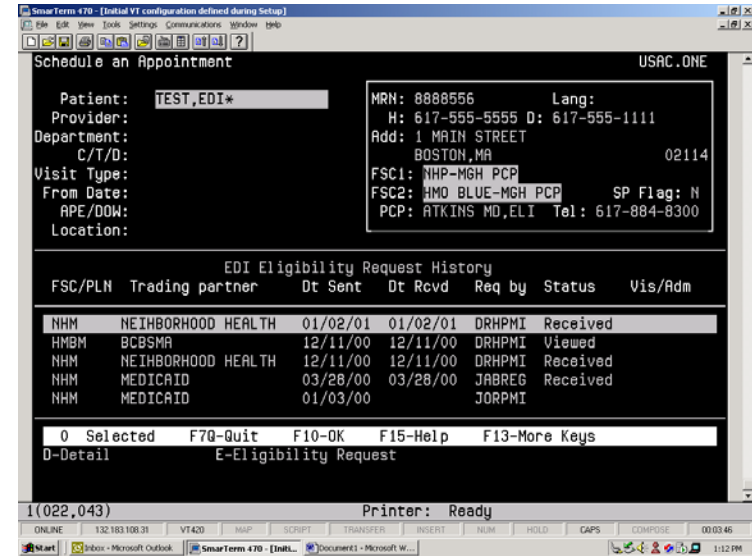
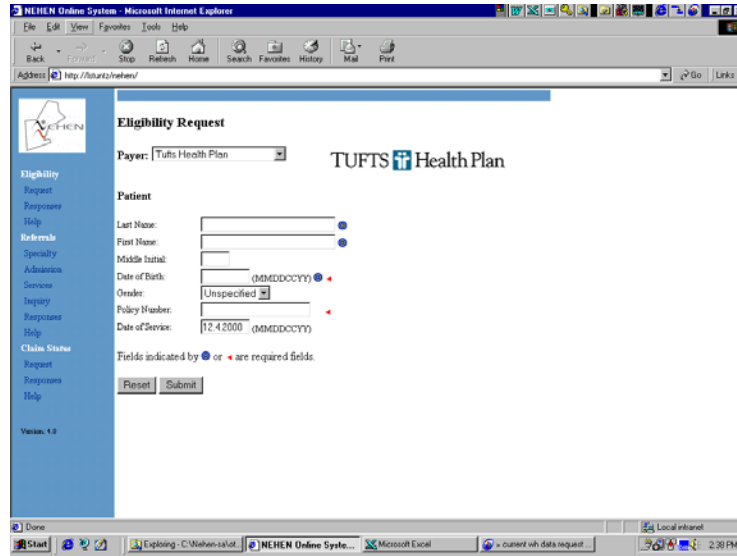


NEHEN 2001 Referral Volume



NEHEN at Our Institutions





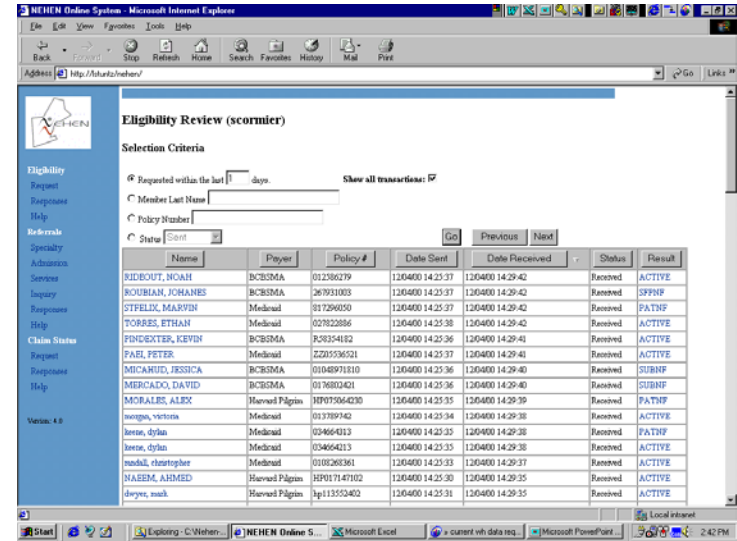
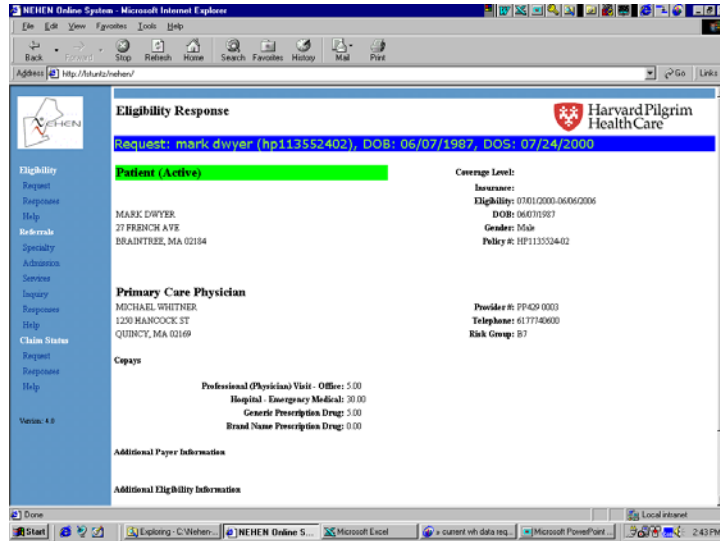
Intranet version – NEHENLite

- 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, 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.



Interactive submission and review

- Eligibility
 - ✓ At point of registration or scheduling (or both)
- Referral Submission
 - ✓ Complete online form rather than paper form and submit directly to plan
 - ✓ Response usually not required real-time (can be asynchronous)
- Claim Status Inquiry
 - ✓ Efficiency tool for billing and collections


Batch submission and review

- Eligibility
 - ✓ Submit all appointments scheduled for the next day and “work” the 20-30% of problem cases (patient not found, wrong date of birth, patient inactive, etc.)
 - ✓ Can be used in conjunction with and in addition to real-time request at point of registration or scheduling (i.e., no-cost double-checking)
- Claim Status Inquiry
 - ✓ Submit inquiries for all claims more than 10 days old and review the results



NEHEN Online System - Microsoft Internet Explorer

Address: http://stuntz/neh/en/



Specialty Referral

Payer: Tufts Health Plan

Eligibility

[Request](#)

[Responses](#)

[Help](#)

Referrals

[Specialty](#)

[Admission](#)

[Services](#)

[Inquiry](#)

[Responses](#)

[Help](#)


Claim Status

[Request](#)

[Responses](#)

[Help](#)

Version: 4.0



Patient

Policy Number:

Last Name:

First Name:

Date of Birth: (MMDDCCYY)

Diagnosis: (ICD-9)

Referring Provider

Provider ID: (Payer)

Last Name:

First Name:

SSN:

Referred to Provider

Provider ID: (Payer)

Last Name:

First Name:

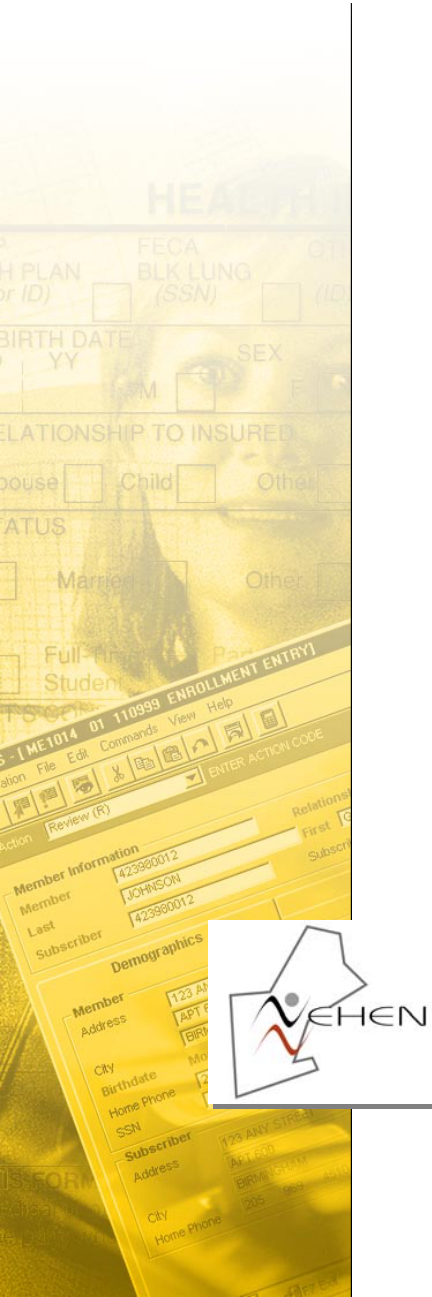
Authorization

Service Level: Normal

Date: 12/4/2000 Visits: 1

Service Type: Consultation

Procedure Code: (CPT-4)




NEHEN Online System - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print

Address <http://stuntz/neh/en/> Go Links >>



Eligibility

Request

Responses

Help

Referrals

Specialty

Admission

Services

Inquiry

Responses

Help

Claim Status

Request

Responses

Help

Version: 4.0

Claim Status Request


Payer: Harvard Pilgrim Healthcare
Harvard Pilgrim Healthcare
Tufts Health Plan

Service Provider

Institution or Last Name:

First Name:

Provider ID: (Payer)



Harvard Pilgrim HealthCare

Patient

Last Name:

First Name:

Policy Number:

Date of Birth: (MMDDCCYY)

Gender: Unspecified

Claim

Account Number:

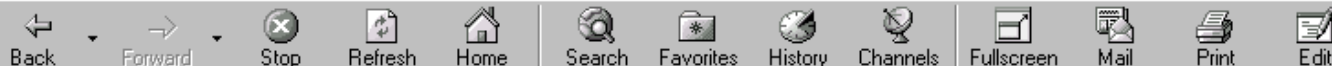
Payer Claim ID:

Dates of Service From: - To:

Claim Amount:

Fields indicated by Ⓢ or ◀ are required fields.





ELIGIBILITY

[Inquiry](#)

AUTHORIZATIONS

[Quick Search](#)

[General Search](#)

[Request Referral](#)

[Request Admission](#)

[Request Service](#)

REPORTING

[Activity](#)

OTHER

[Provider Directory](#)

[Help](#)

[Logout](#)

Member ID:

Plan:

[SEARCH](#)

Referring PCP:

[SEARCH](#)

[CUSTOMIZE](#)

Provider Details

Member P

Admission

Admission

Admission

Admission

Type of Ad

Admission Category:

Primary Admission Dx:

[SEARCH](#)

Secondary Admission Dx:

[SEARCH](#)

Reason for Admission:

Select to route this request to your CareGroup PSN Case Manager:

Liability and Recovery:

ICD9 Search - Microsoft Internet Explorer

ICD9 Search

Search for ICD9 codes about:

[CUSTOMIZE](#)

[CUSTOMIZE](#)

Telephone



Out-Of-Network Requested?

ELIGIBILITY

[Inquiry](#)

AUTHORIZATIONS

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[Request Referral](#)

[Request Admission](#)

[Request Service](#)

REPORTING

[Activity](#)

OTHER

[Provider Directory](#)

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This referral is to an out-of-network provider, which will trigger a review.
If you make use of a network provider, your referral will be auto-approved.

- Option 1: [Modify referral request](#)
- Option 2: Request out-of-network referral

Justification:

Comments:

Request Out-of-Network



Temporary Tracking Number **A682432**

ELIGIBILITY

[Inquiry](#)

AUTHORIZATIONS

[Quick Search](#)

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[Request Referral](#)

[Request Admission](#)

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OTHER

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Patient Details

Member ID:	0277883612	Plan:	BCBSMA
Name:	Carter, John	Product:	HMO Blue
Referring PCP:	Taussig, Helen	PSN ID:	16351
Risk Unit:	BIDMC		

Provider Details

Refer To Provider:	Woo, John	PSN ID:	12786
Risk Unit:	BIDMC		

Referral Details

Start Date:	10-07-1998		
End Date:	12-31-1998		
Services Requested:	Consult only	Visits:	1
Reason for Referral:	Worsening symptoms over the past 5 days. Patient complaining of severe chest pain and shortness of breath.		

Diagnosis

Primary Diagnosis:	413.1	Description:	Prinzmetal Angina
Secondary Diagnosis:		Description:	

This referral is

Welcome to

PatientSite®

Healthcare you can connect with

Sign In

First Time Here?

Take a Tour

Want to Join?

Register Now!



Check Benefits/Elibility  Help Sign Out**IGNACIO GENDE: Eligible**

Service Date: 9/16/00

Patient Demographics

Name:	GENDE, IGNACIO	Member ID:	HPCG01648-00
Sex:	M	Date Of Birth:	19651205
Address:	27 NUT RD AUBURN NH 03032		
Start Date	4/1/00	End Date	4/1/01

Primary Care Provider Info

PCP Name:	CAMPO,RAFAEL	PCP Plan ID:	65095BI 0010
Address:	330 BROOKLINE AVE BOSTON MA 02215		
PCP Phone:	6176672422		

Benefits

Plan:	HPHC	Product:	
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Copay Info

Professional (Physician) Visit - Office	\$5.0000/Visit
Hospital - Emergency Medical	\$40.0000/Visit
Generic Prescription Drug	\$10.0000/Visit
Brand Name Prescription Drug	\$0.0000/Visit

Medical Record Audit Report - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Audit Lookups of Kermit Frog

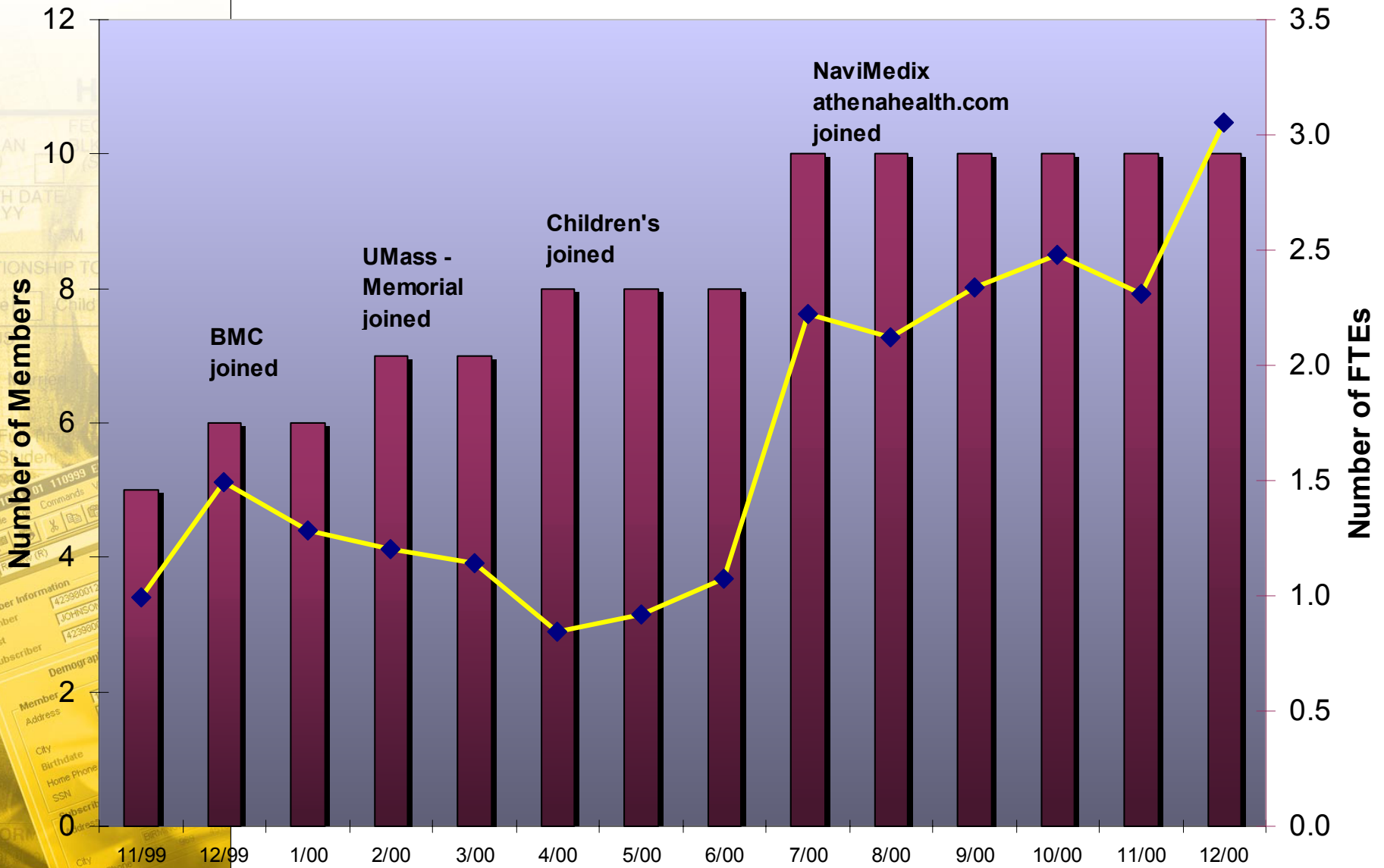
Date/Time	Person	Location	Record
1/25/2002 5:43 PM	Blumberg, Jonathan	BIDMC	Problem List
1/25/2002 4:43 PM	Quinn, Thomas	Mt Auburn	Visits
1/25/2002 4:42 PM	Quinn, Thomas	BIDMC	Visits
1/25/2002 4:42 PM	Quinn, Thomas	BIDMC	Allergies
1/25/2002 4:42 PM	Quinn, Thomas	BIDMC	Medications
1/25/2002 4:42 PM	Quinn, Thomas	BIDMC	Problem List
1/25/2002 3:16 PM	Parker, Richard B.	BIDMC	Problem List
1/25/2002 3:16 PM	Parker, Richard B.	BIDMC	Problem List
1/25/2002 11:44 AM	Parker, Richard B.	BIDMC	Problem List
1/25/2002 11:43 AM	Parker, Richard B.	BIDMC	Problem List

Next 10 ►

Administrative Budget



Program Management Effort (by FTE) & Membership Count



Common program management

- Create Strategy & Direction
- Organize and support participant meetings and discussions
- Develop and pilot core technology
 - eGateway
 - NEHENLite
- Coordinate implementation plans
- Resolve implementation issues
- Recruit new members
- Provide impetus and momentum - keep the ball moving down the field (AKA “herding cats”)

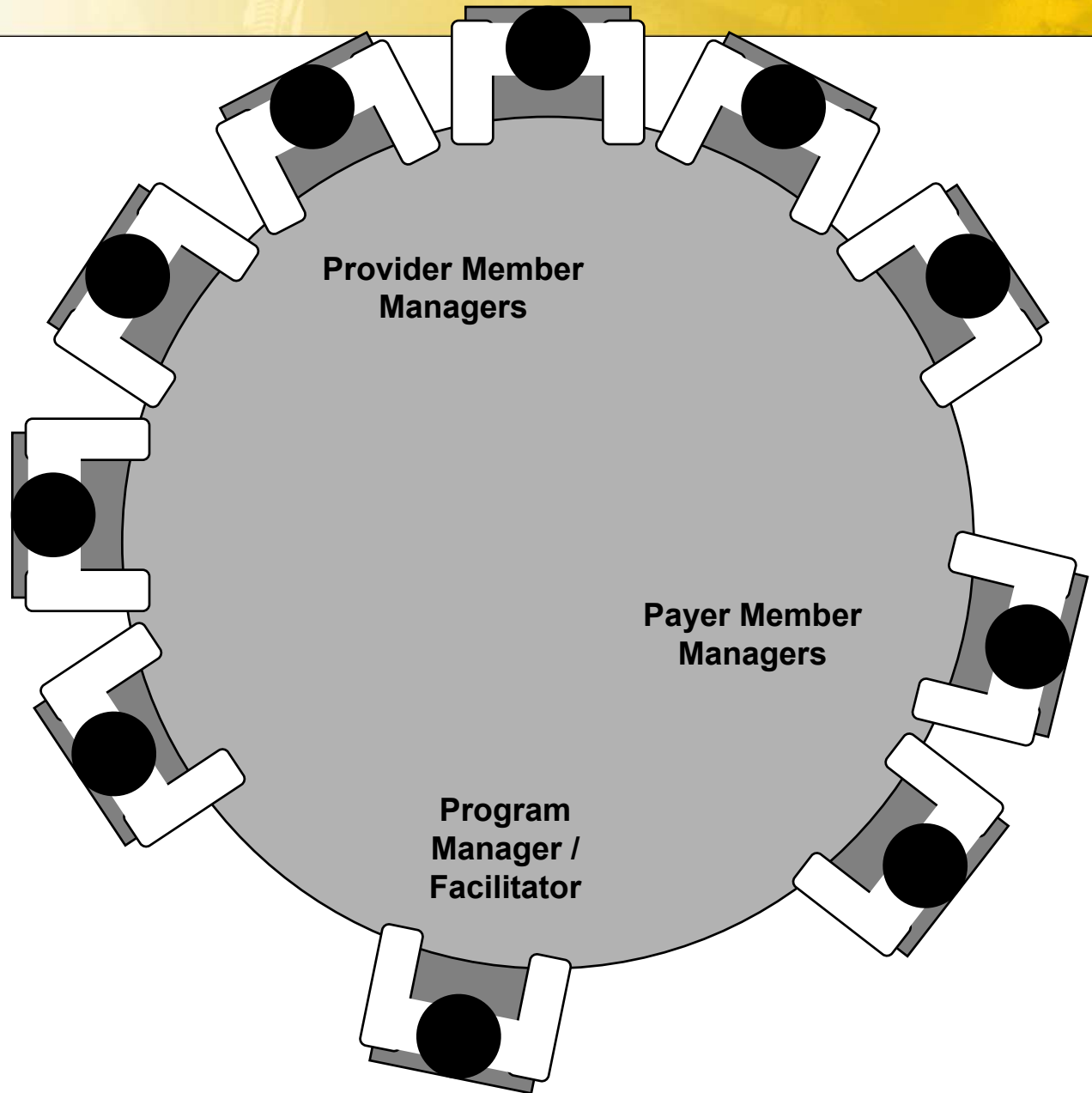


Each organization is responsible for:

- Implementation costs
- Network expenses
- Monthly program management fee
- The quality of their data
- Security
- Generating and accepting HIPAA compliant transactions



- One member, one vote
- Some managers have additional responsibilities
- Contract affiliates are not at the table



- Principles

- Open (participants, standards, etc.)
- Low intrusion into individual participants IT agenda
- Participant value derived from transactions sent & received
- Data ownership retained by participant organizations
- Stay focused to avoid CHIN mistakes
- Keep it Simple

- Key Objectives

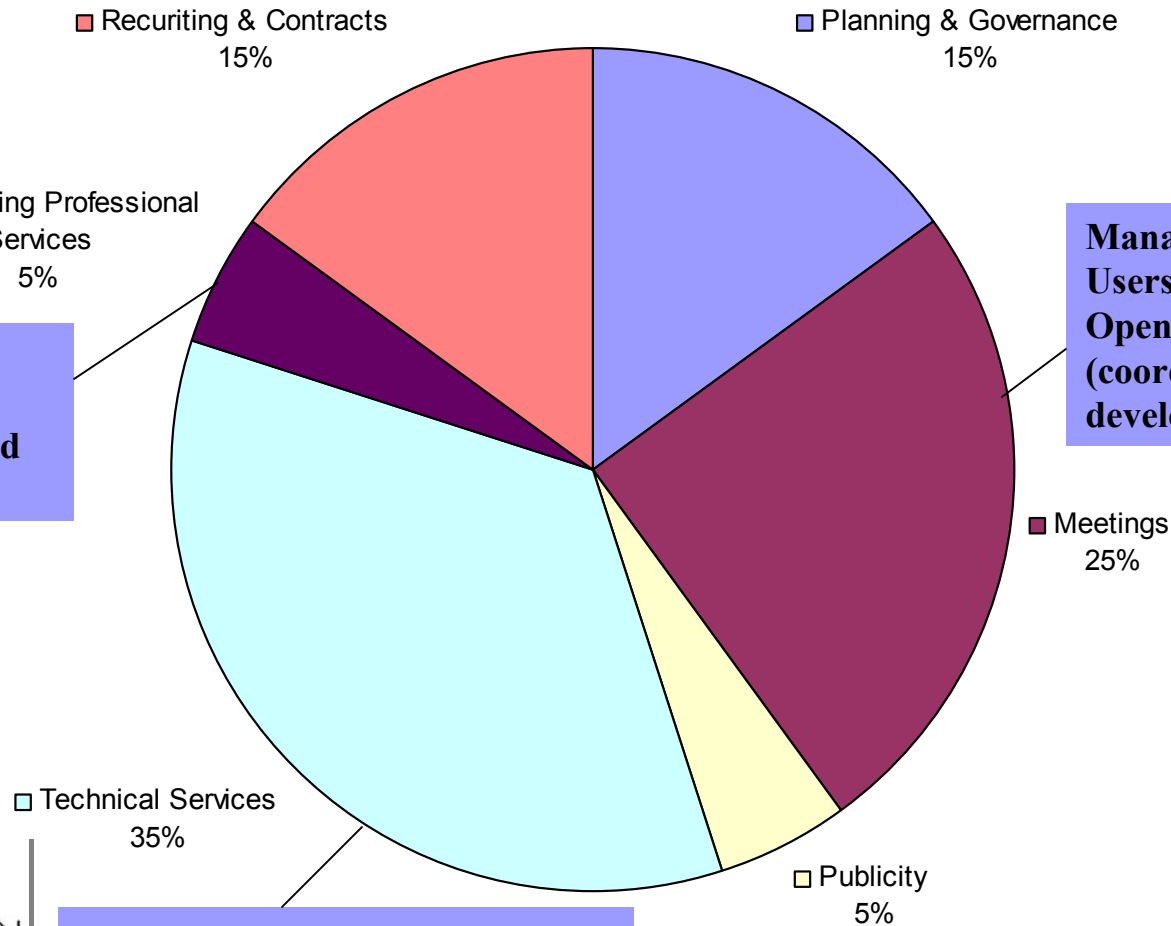
- Address upcoming HIPAA compliance issues.
- Reducing bad debts and other financial exposures by improving service efficiencies through EDI
- Shorten the elapsed time to achieve EDI at scale.
- Reduce the cost of EDI implementation through coordination and standardization



Internal Approach for Leveraging NEHEN's Value



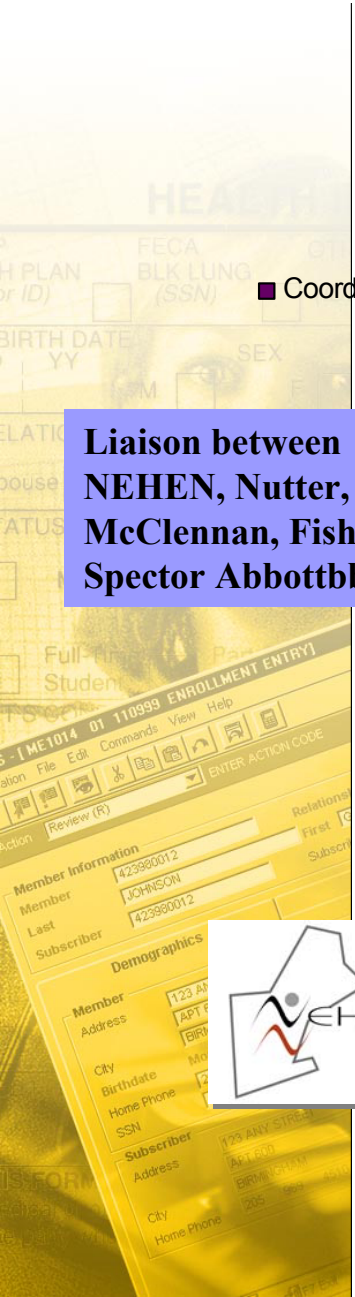
Scope of Services - How do we spend our time?



Liaison between NEHEN, Nutter, McClennan, Fish and Spector Abbottbb

Managers, Business Users, Implementors, Open Forum (coordination, content development, etc.)

- New member setup
- Additional payer connectivity
- Support & development of NEHENLite, eGateway
- Overall IT agenda coordination



Real and Potential Results

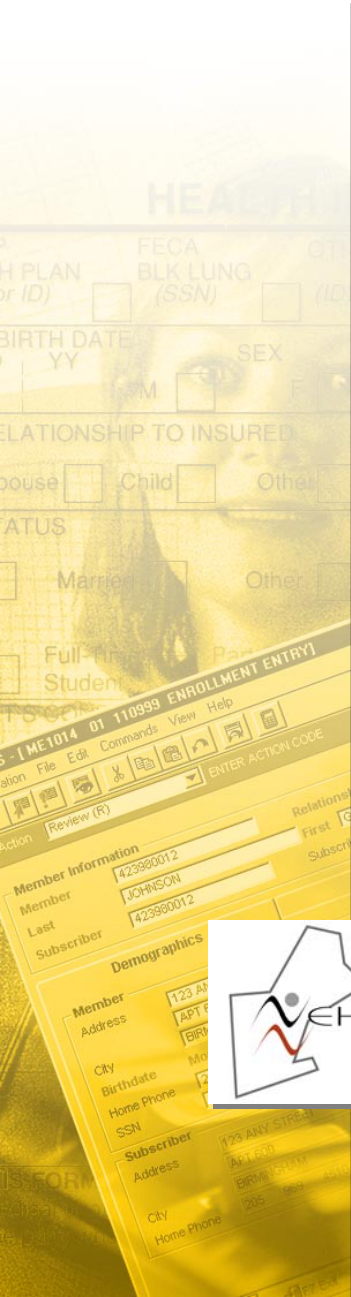


Before

- Prior to NEHEN, little eligibility verification performed
 - POS or Phone
 - EDI was initiated to develop eligibility transactions with Medicaid, Medicare, BCBSMA, Tufts and Harvard

After

- IDX; >80,000 transactions monthly
- NEHENLite; >9,800 transactions monthly
- ~60% compliance rate
- Decrease in Denials and Rejections
 - Ineligible Service Date
 - No Referral
 - Incorrect PCP
- Reduction in Denial Reserves
- Heightened Awareness

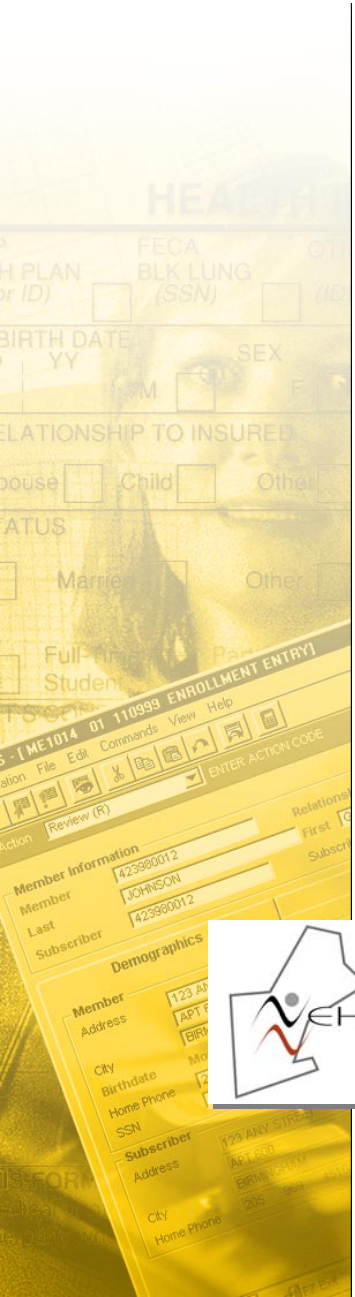


- Time to Process Batch

Carrier	# Visits	MinOfDate Sent	MaxOfDate Received	Time to Process
TUFTS	628	6:00:09 AM	6:42:27 AM	0:42
HP	876	6:00:09 AM	6:45:52 AM	0:45
MEDICAID	112	6:00:12 AM	6:13:33 AM	0:13
MEDICARE	1125	7:00:03 AM	8:50:07 AM	1:50
NHP	68	6:00:24 AM	6:44:51 AM	0:44

- Processing Results

Carrier	Ttl Sent	Ttl Active	Ttl Requiring Followup	% Requiring Followup
TUFTS	628	548	80	12.7%
HP	876	779	97	11.1%
MEDICAID	112	95	17	15.2%
MEDICARE	1125	1074	51	4.5%
NHP	68	55	13	19.1%
Grand Total	2809	2551	258	9.2%

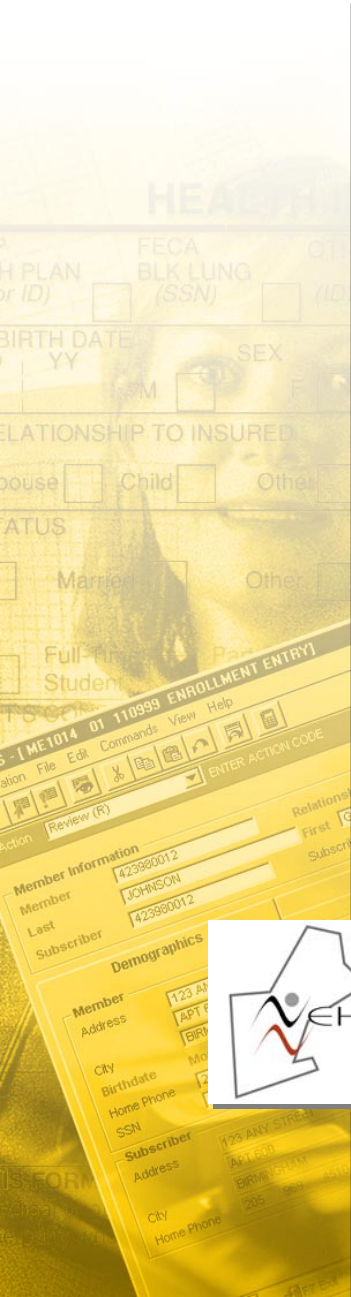


Before

- Prior to Claim Status Inquiry using NEHENLite
 - 3 Collections reps
 - Working all accounts greater than \$750
 - 225 Accounts per FTE
 - Telephone follow-up for claim status on accounts
 - 75% of time spent on the phone
 - Denials posted when EOP received (45 to 60 days)

After

- After Claim Status Inquiry with NEHENLite
 - 2 Collections reps
 - Working all accounts - no minimum
 - 350 Accounts per FTE
 - 10% of time spent on the phone
 - Denials posted immediately (8 to 10 days)
- Additional benefits
 - Claim Number is provided
 - Reduced need to pull EOP's
 - Rejections worked immediately
 - Training is quick and easy
 - Claims status already waiting when rep arrives for work
 - If a call needs to be made the collection rep is prepared
 - 5 day reduction in HPHC AR
 - 90+ A/R aging improved from 21% to 11%



Children's Hospital
Boston

Estimated Financial Opportunities (\$ in '000's)

- There is significant opportunity to reduce denial reserves at both hospitals
- Optimizing the referral / authorization and eligibility processes show the greatest financial potential
- Performing electronic claims status inquiry shows significant labor savings opportunity (currently requires ~100 FTEs)

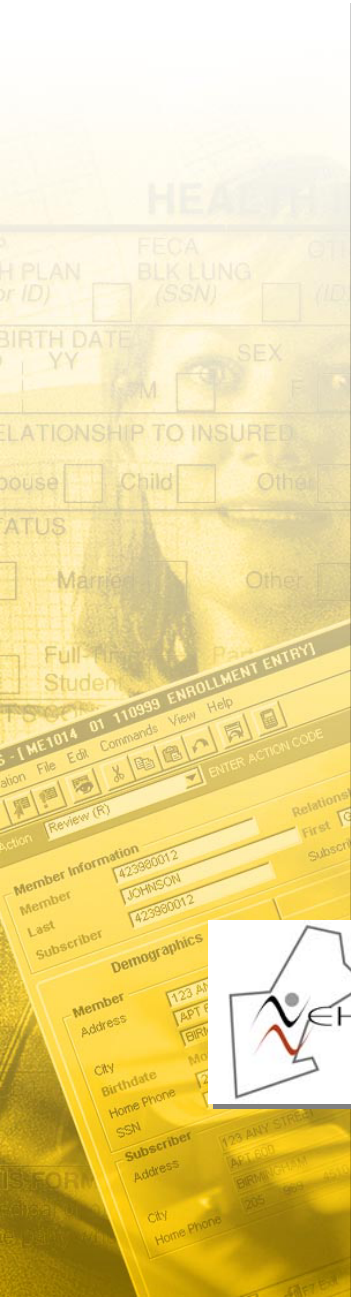


	Denial Reserve Reduction	Interest on Cash Acceleration	Labor Efficiency	TOTAL ANNUAL BENEFIT	ONE-TIME CASH ACCELERATION
Hospital I					
Eligibility Verification	\$ 1,147	\$ 41	\$ 68	\$ 1,256	\$ 516
Referrals/Authorizations	2,516	91	41	2,648	1,259
Claim Submission	-	31	15	46	389
Claim Status Inquiry	-	35	597	632	435
Claim Remittance	-	-	45	45	-
Subtotal Hospital I	\$ 3,663	\$ 198	\$ 765	\$ 4,626	\$ 2,599
Hospital II					
Eligibility Verification	\$ 848	\$ 39	\$ 15	\$ 903	\$ 492
Referrals/Authorizations	2,406	112	14	2,532	1,550
Claim Submission	-	69	32	101	859
Claim Status Inquiry	-	35	540	575	439
Claim Remittance	-	-	41	41	-
Subtotal Hospital II	\$ 3,255	\$ 255	\$ 642	\$ 4,152	\$ 3,340
Both Hospitals					
Eligibility Verification	\$ 1,995	\$ 81	\$ 83	\$ 2,159	\$ 1,008
Referrals/Authorizations	4,923	202	55	5,180	2,810
Claim Submission	-	100	47	147	1,248
Claim Status Inquiry	-	70	1,136	1,206	874
Claim Remittance	-	-	86	86	-
Total Both Hospitals	\$ 6,918	\$ 453	\$ 1,407	\$ 8,778	\$ 5,940

- Service Tracking And Referral System (STARS)
 - 100% of CareGroup PCPs (535)
 - 268 Specialists
 - Real time leakage data
 - Referral Management
 - ✓ 100% of leakage is pended
 - ✓ 100% of therapies after 6 visits is pended



- Web-based eligibility checking
- CCC Integration
- Meditech Integration in October 2001



- STARS – Risk adjusted referrals to specialists compared over two years

	Encounters/1000	\$PMPM
Before STARS	1457	\$8.01
After STARS	1316	\$6.64

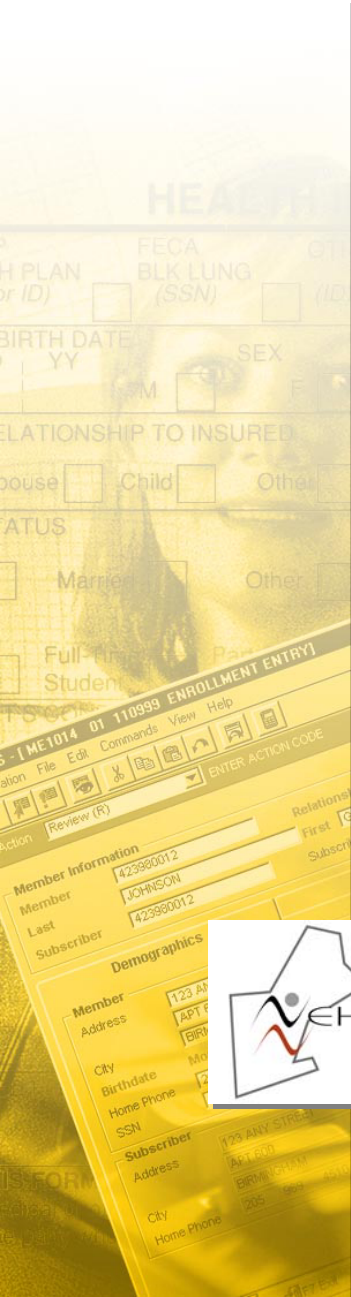
- \$6.2 million dollars in savings



- Leakage before and after STARS

BID	20.8%	17.5%
DGL	29.5%	26.2%
DWA	19.6%	12.6%
NEB	20.8%	17.9%
MTA	23%	23%

- \$4 million dollars in savings



Implementation Requirements

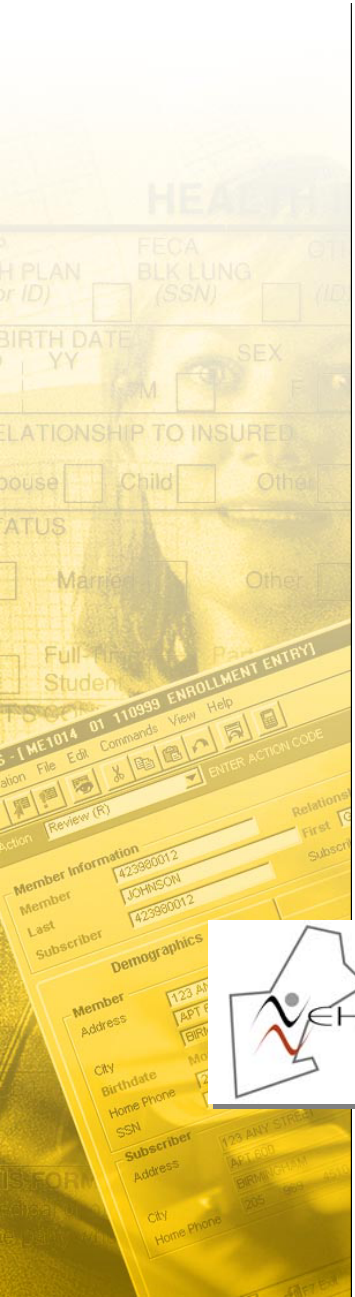


- Build the business case
 - Estimate your opportunity for savings
 - ✓ Data gathering - process, financial, technical
 - ✓ Workshop to develop pro forma ROI
 - Align your organization
 - ✓ Secure high level sponsorship
 - ✓ Process change will be significant
 - Plan for technology integration
- Implement
 - NEHEN membership
 - Acquire infrastructure
 - Integrate with core systems
 - Training and rollout



- From Children's Hospital Boston

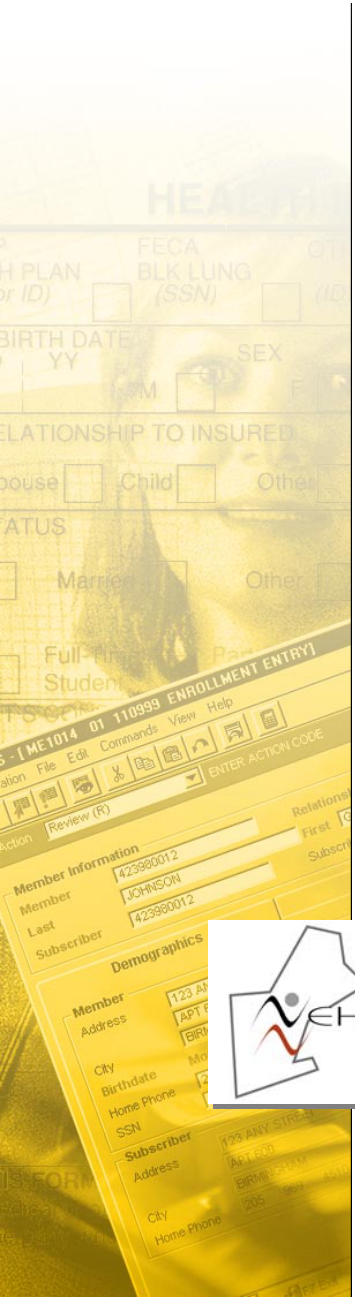
Activity	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Implement core NEHEN connectivity software										
Implement additional payer connectivity solutions										
Develop core system integration										
Site-specific enhancements to NEHEN software										
Conduct System and User Test										
Training and Rollout for initial site										
Training and Rollout for additional sites										



- Small team with healthcare process, revenue management, EDI / e-commerce, and HIPAA expertise
 - Project manager from IS, Finance, or Patient Operations
 - Technical resources - application and networking
 - HIPAA team
- Investment in integration effort
 - Commitment of internal resources
 - ✓ Administrative and project management
 - ✓ Technical
 - ✓ Training
 - External consulting / vendor resources
- Minimal component costs
 - Gateway server
 - Router(s) and other network components
 - Leased line installation
- Ongoing costs
 - Program management fees
 - Minimal support costs

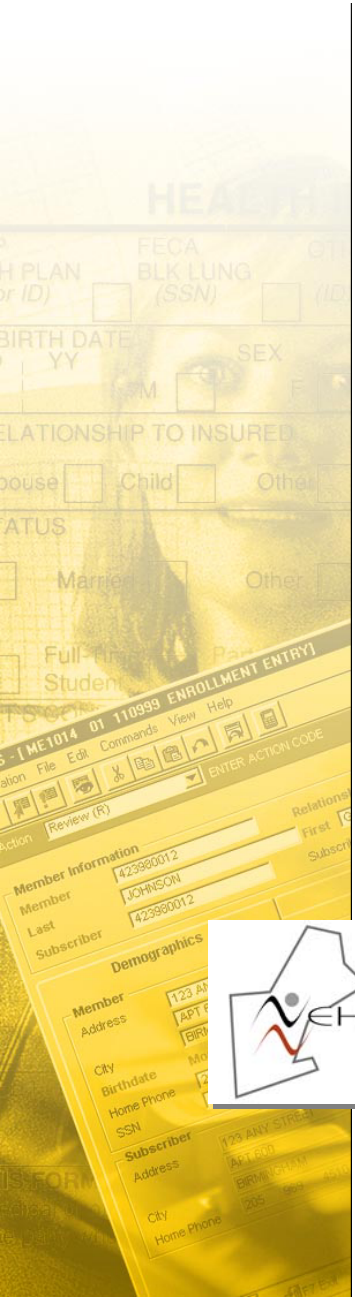


Sample Implementation Costs: Mid-sized Hospital



		Implementation		2/1/2001
		Estimated Cost		
		Low range	High range	Notes
Initial Investment				
Hardware				
	2 Windows NT Servers - (Production & Test)	\$ 15,000	\$ 40,000	based on current prices for an appropriate Compaq ProLiant DL360 - price is total for both servers.
Software				
	Operating System and Web Server (for test & production)	\$ 3,400	\$ 8,000	\$4000 per copy for Enterprise Edition which you may or may not need, depending on your standard server configuration
	Microsoft SQL Server	\$ 10,000	\$ 30,000	prices range from \$5000 - \$15000 per server if you need a new copy of the database or NEHENLite can run on an existing copy if you have space => These prices are list from Microsoft's web site - you may get better prices through a Open License agreement, if you have one
	Attachmate eVantage SDK 2.5	\$ 1,000	\$ 1,200	Screen scraping software to support the Medicare connection
	Development environment for support use	\$ 500	\$ 1,000	<i>example:</i> MS Visual Studio
	<i>Core Application</i> EDI module	\$ 5,000	\$ 15,000	For full integrated solution with your core application such as: Meditech, IDX
	NEHENLite Software for eligibility, referral, and claim status inquiry request	\$ -	\$ -	free to NEHEN members
	NEHEN eGateway routing Software	\$ -	\$ -	free to NEHEN members
	NEHEN Medicaid eligibility service Software	\$ -	\$ -	free to NEHEN members
	NEHEN Medicare eligibility service Software	\$ -	\$ -	free to NEHEN members
	NEHEN BCBSMA eligibility service Software	\$ -	\$ -	free to NEHEN members
	Total for Hardware & Software	\$ 34,900	\$ 95,200	
Installation				
	NEHEN-supplied Software - installation and initial configuration	\$ -	\$ -	Included as part of NEHEN program management services
	Core application EDI Module - installation and configuration	??	??	Call your application representative
	Optional: Systems Integration services from CSC or another vendor.	\$ -	\$ 100,000	These services could include Project Management, rollout and training, enhancements to the core NEHEN software for your business use, and development of reports to help track compliance and ensure that you receive optimum value from the NEHEN investment.
	Total Initial Investment	\$ 34,900	\$ 195,200	

Ongoing Costs			
Telecommunications			
Connections to payers - frame relay	\$ 270	\$ 750	NEHEN can leverage existing connections to payers if they are there. The Medicaid service can use a modem to reduce cost, but increase response time.
NEHEN Membership			
Program Management	\$ 6,000	\$ 6,000	
Other business expense	\$ 150	\$ 250	Accounting & Legal fees
Total Ongoing Monthly Cost	\$ 6,420	\$ 7,000	
Total Annual Ongoing Cost	\$ 77,040	\$ 84,000	



- Collaborative
 - Shared development
 - Shared intellectual property
- Standards- based
 - Internet-technologies and HIPAA (ANSI X.12)
- Secure
 - Extranet of private lines connecting the participants
- Cost-saving, rather than revenue-generating business model
 - Zero transaction-based charging
- Integrated with enterprise applications
 - Avoid double-keying
 - Integrate with existing workflows and processes
 - Minimal intrusion into enterprise strategies and architecture
- Insourced model
- NEHENLite alternative
- Non-intrusive



Questions?

