Regional Approaches to HIPAA Compliance
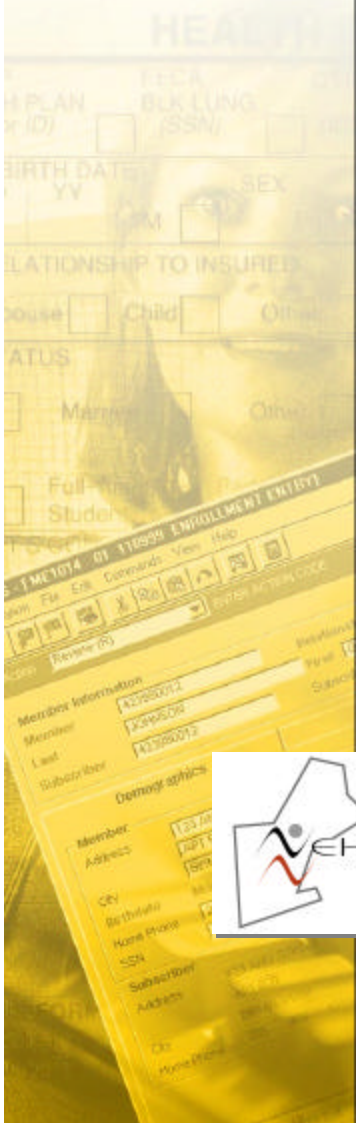
New England Health EDI Network

John D. Halamka MD
Chief Information Officer, CareGroup
Associate Dean, Harvard Medical School

Greg DeBor
Partner
Computer Sciences Corporation

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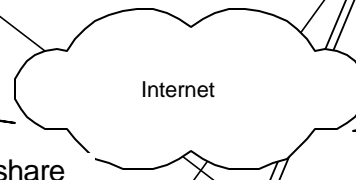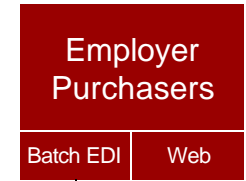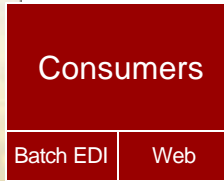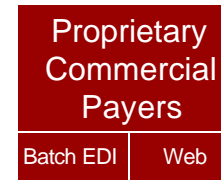
As with the Natural World, e-Health tends Toward Chaos

CSC

CAREGROUP HEALTHCARE SYSTEM

Payers are beginning to offer web connectivity, with limited functionality

Major transaction volume for payers today is still from clearinghouses and direct connections with large providers (IDNs, large hospitals) and suppliers
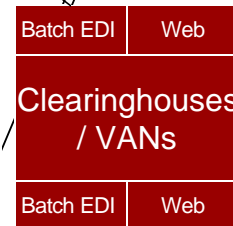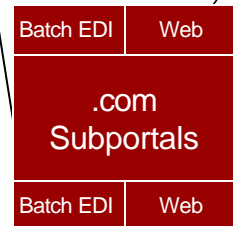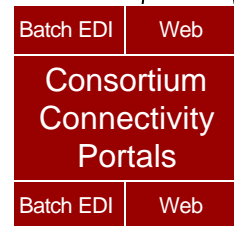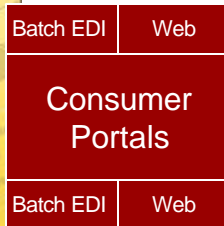
Governmental Payers
| Batch EDI | Web |

Proprietary Commercial Payers
| Batch EDI | Web |

Consumers
| Batch EDI | Web |

Employer Purchasers
| Batch EDI | Web |

Internet

Only the largest employers utilize the web and EDI, mostly with suppliers

Consumer loyalty is to portals such as AOL, Yahoo, etc.

Subportals have mindshare

Suppliers and GPOs continue to compete, now for e-health mindshare

| Batch EDI | Web | | Batch EDI | Web | | Batch EDI | Web | | Batch EDI | Web |

Consortium Connectivity Portals

.com Subportals

Clearinghouses / VANs

Group Purchasing Organizations

| Batch EDI | Web |

Consumer Portals
| Batch EDI | Web |

| Batch EDI | Web | | Batch EDI | Web | | Batch EDI | Web | | Batch EDI | Web |

Suppliers / Manufacturers / Distributors
| Batch EDI | Web |

Consortium approaches are beginning to emerge; business models are muddy

Clearinghouses and subportals have great synergies

Internet
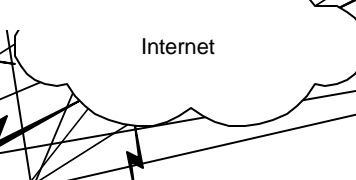
NEHEN

Non-hospital-based providers are still on their own
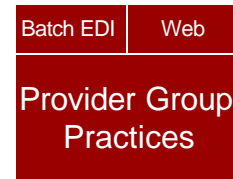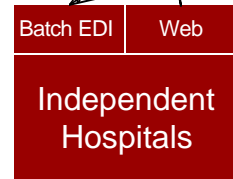
On their own, clearinghouses and value-added networks (VANs) are a dying breed

| Batch EDI | Web | | Batch EDI | Web | | Batch EDI | Web | | Batch EDI | Web |

Integrated Delivery Networks

Independent Hospitals

Provider Group Practices

Independent Physician Practices

CSC

CAREGROUP
HEALTHCARE SYSTEM

NEHEN

HDX

MedUnite

WebMD

ECARE
eCare   eCare
eCare   eCare

POINTSHARE
Online Healthcare Solutions

NEHEN

claimsnet.com

E CLAIMS.com

CSC

CAREGROUP
HEALTHCARE SYSTEM

NEHEN Membership, Oct. 2001

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

NEHEN Founding Partners	Contract Affiliates	Non-Member Payers with Secondary Connectivity Solutions
CAREGROUP HEALTHCARE SYSTEM, Harvard Pilgrim Health Care, TUFTS Health Plan, PARTNERS HEALTHCARE SYSTEM, Lifespan — The best names in health care.	athenahealth.com	• BC/BS of Massachusetts • Massachusetts Medicaid • Medicare

Additional Members

UMassMemorial   DANA-FARBER CANCER INSTITUTE

BOSTON MEDICAL

Lahey CLINIC   Neighborhood Health Plan   Massachusetts Eye and Ear Infirmary

Children's Hospital Boston

SOUTHCOAST HEALTH SYSTEM   NORTHEAST HEALTH SYSTEMS

NEHEN Update – Brief History and Membership

CSC

Oct. 1997	Feb. 1998	Apr. 1998	Oct. 1998	Nov. 1999	Dec. 1999	Feb. 2000	Jun. 2000	Jul. 2000	Jan. 2001	Apr. 2001	Summer 2001	Sep. 2001

Above timeline:
- Initial discussions (Oct. 1997)
- Pilot commences (Apr. 1998)
- Incorporation as NEHEN LLC (Nov. 1999)
- Seventh and eighth members join (Feb. 2000)
- Two affiliates join (Jul. 2000)
- Ninth and tenth members join (Jan. 2001)
- Members 12-14 join (Summer 2001)

Below timeline:
- Commitment in principle (Feb. 1998)
- Eligibility live at founding members (Oct. 1998)
- Sixth member joins (Dec. 1999)
- Specialty referrals live (Jun. 2000)
- Claim status inquiry pilot commences (Jan. 2001)
- Eleventh member joins (Apr. 2001)
- Referral auth and inquiry pilot (Sep. 2001)

- 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)
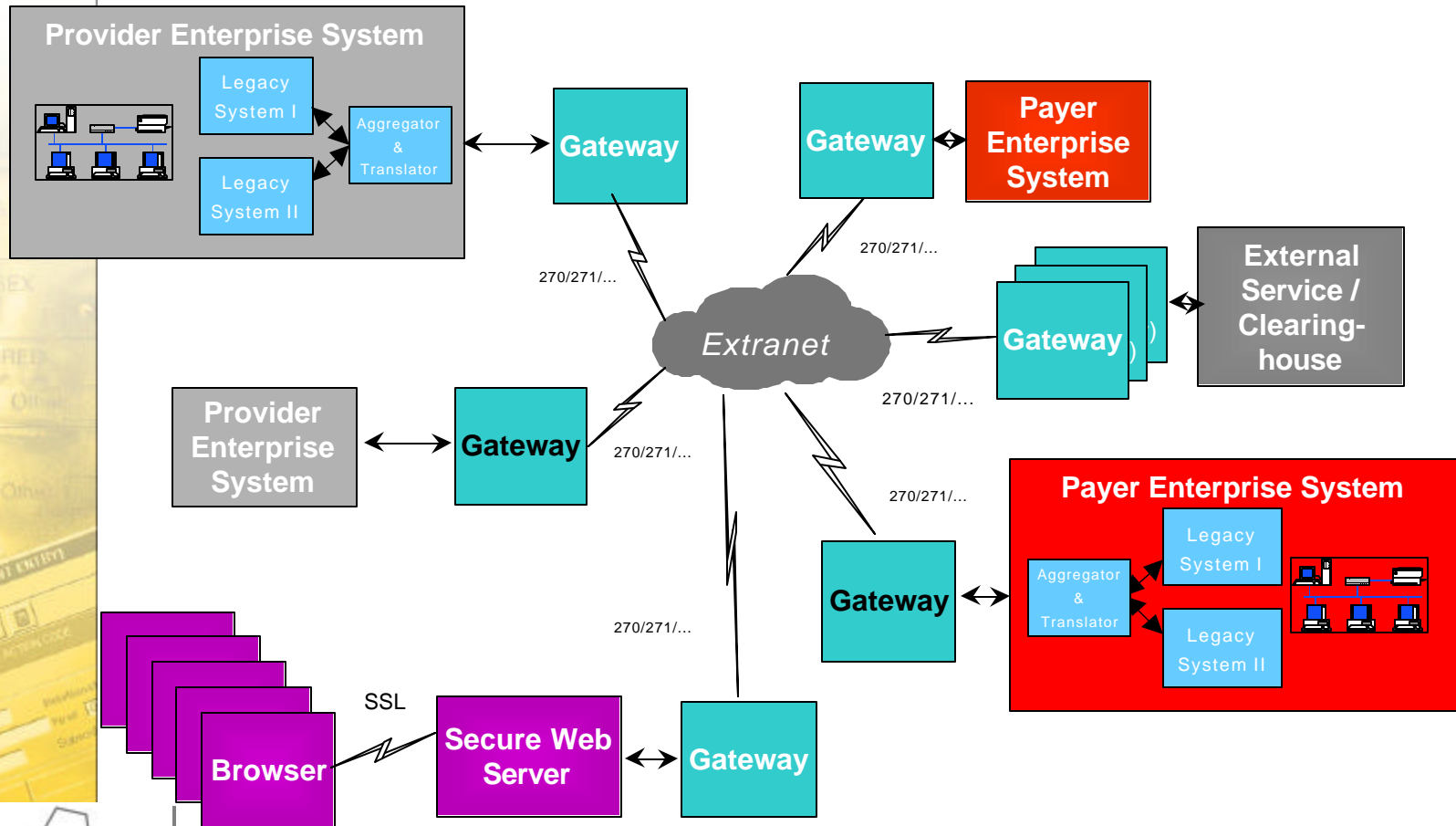 - State agencies and task forces

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

CSC

CAREGROUP
HEALTHCARE SYSTEM

Provider Enterprise System

Legacy System I

Legacy System II

Aggregator & Translator

Gateway

Gateway

Payer Enterprise System

270/271/...

Extranet

Gateway

External Service / Clearing-house

270/271/...

Provider Enterprise System

Gateway

270/271/...

270/271/...

Gateway

Payer Enterprise System

Aggregator & Translator

Legacy System I

Legacy System II

270/271/...

Browser

SSL

Secure Web Server

Gateway

NEHEN

- **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	2/1/02	5/02
Claim Submission – Professional	Initial analysis	TBD	2/1/02	5/02
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

Process / Transaction	Potential Benefits	Potential Issues / Comments	Priority
Electronic Remittance Advice	• Reduce 3rd party transaction fees • Reduce labor and non-labor processing costs	• Payers must be able to generate HIPAA compliant remittances • To maximize benefit, providers must integrate remittance into financial systems	High
Claim Submission - Institutional	• Reduce 3rd party transaction fees • Reduce labor and non-labor processing costs	• Providers must be able to generate and payers must be able to receive HIPAA compliant claims	High
Claim Submission – Professional	• Reduce 3rd party transaction fees • Reduce labor and non-labor processing costs	• Payers must be able to receive HIPAA compliant claims • Institutional and independent physicians must be able to generate HIPAA compliant claims	High
Claims Attachment	• Reduce labor and non-labor processing costs	• Not mandated by HIPAA • Requires electronic or optically scanned medical record	Medium
Admission and Discharge Notice	• Reduce labor and non-labor processing costs	• Not mandated by HIPAA	Medium
First Report of Injury	• Reduce labor and non-labor processing costs	• Not mandated by HIPAA	Low
Claim Submission – Dental	• Reduce 3rd party transaction fees • Reduce labor and non-labor processing costs	• 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 - * NHP - Mar '02	HPHC – Feb '02 THP - * NHP - May '02
Claims Submission - Institutional	HPHC – Feb '01 THP - * NHP - Mar '02	HPHC – Apr '02 THP - * NHP - May '02
Claims Submission - Professional	HPHC – Feb '01 THP - * NHP - Mar '02	HPHC – Apr '02 THP - * NHP - May '02

Schedule to be published by Nov '01

Claims Submission & Remittance : Implementation Options

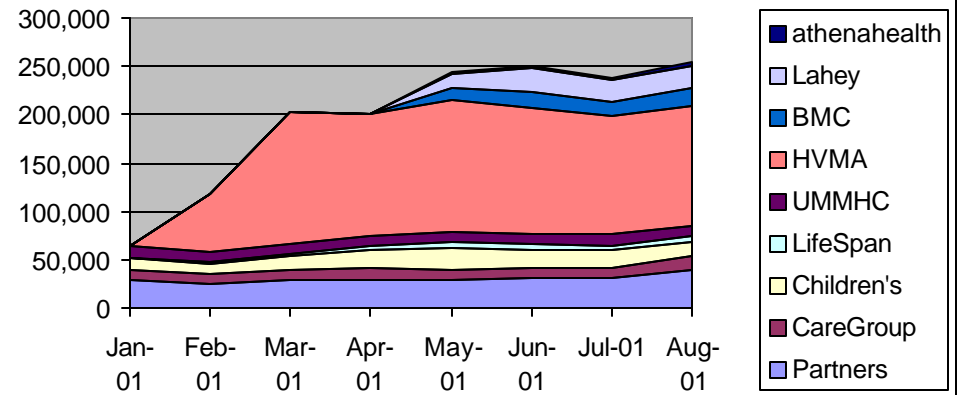| Option	Description	Business Implications	Technical Implications	Governance Implications	Cost Implications
1. Translation by Each Member	Each member is responsible for generating and receiving HIPAA compliant claims	• Avoid clearinghouse transaction charges	• Members must buy or build HIPAA compliant claims capabilities • eGateway upgrade • Frame upgrade	• Expand program management to include claims	• 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	• Members must change clearinghouse relationships • NEHEN becomes clearinghouse, subject to privacy and security regulations	• Members submit and receive claims from a newly built central service center • Simplify current architecture to centralized model • eGateway upgrade • Frame upgrade	• Need to determine oversight and pricing structure for members using the service	• 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)	• Members must change clearinghouse relationships • NEHEN acts as collective bargainer to lower costs	• Members submit and receive claims from a new, remote entity • Simplify current architecture to centralized model • eGateway upgrade • Frame upgrade	• Need to determine oversight and pricing structure for members using the service	• Volume-based cost • eGateway ~ 2-2-3 months x 2 FTEs
4. Claims Not Submitted via NEHEN	Continue with non-NEHEN affiliated clearinghouses	• Current cost and structure of business	• eGateway upgrade for true batch EDI for eligibility, claims status inquiry	• None	• Current transaction costs

CSC

NEHEN Payer Monthly Eligibility Volumes

NHP
THP
HPHC
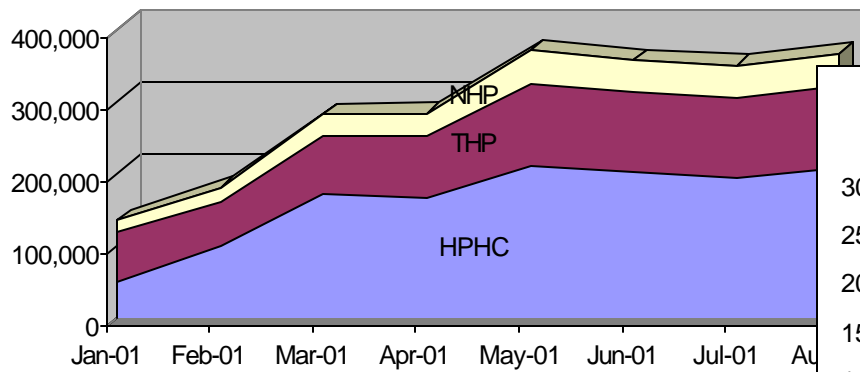
Detailed HPHC/NHP Eligibility Volumes

Legend:
- athenahealth
- Lahey
- BMC
- HVMA
- UMMHC
- LifeSpan
- Children's
- CareGroup
- Partners

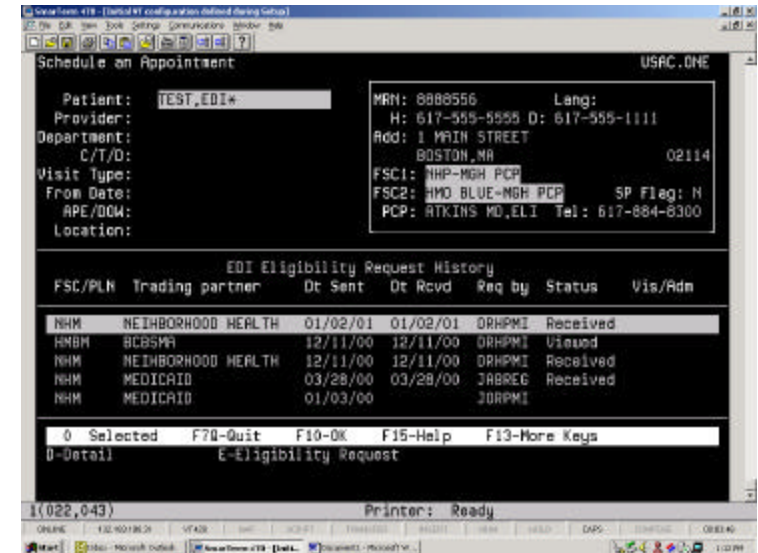### NEHEN Payer Monthly Claim Status Volumes

THP
HPHC
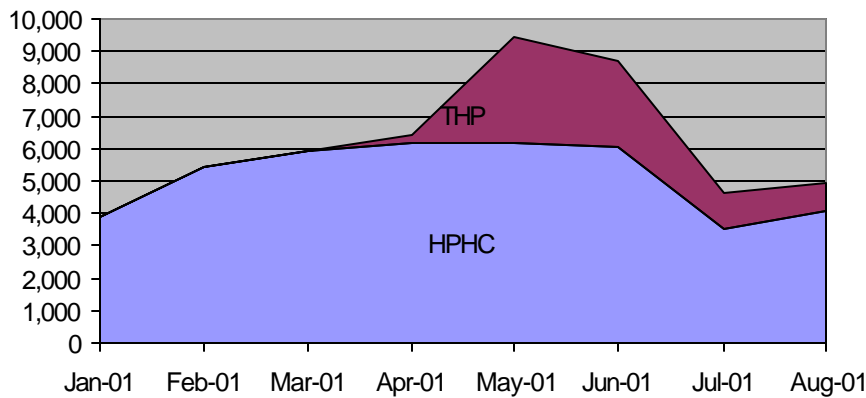
NEHEN 2001 Referral Volume

THP
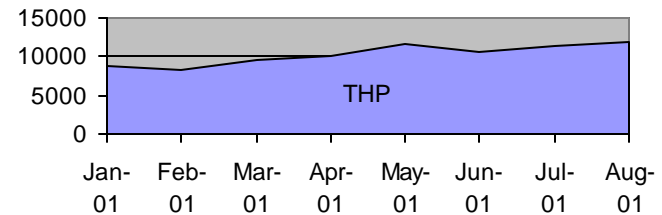
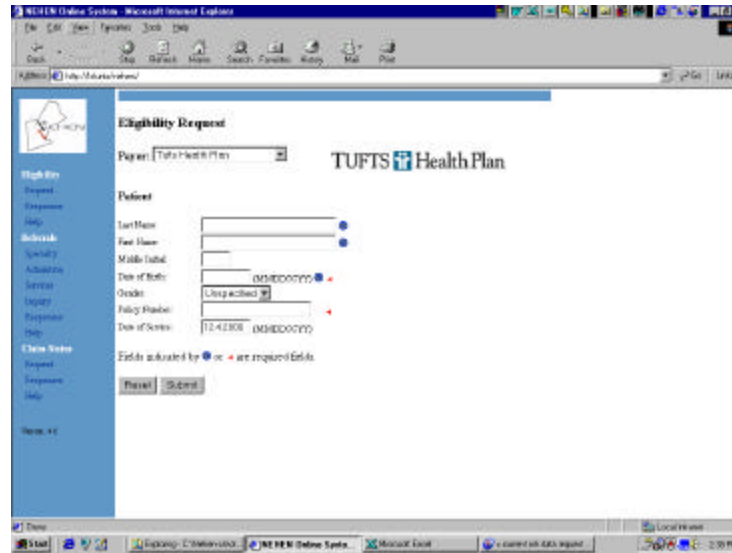# NEHEN at Our Institutions

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)
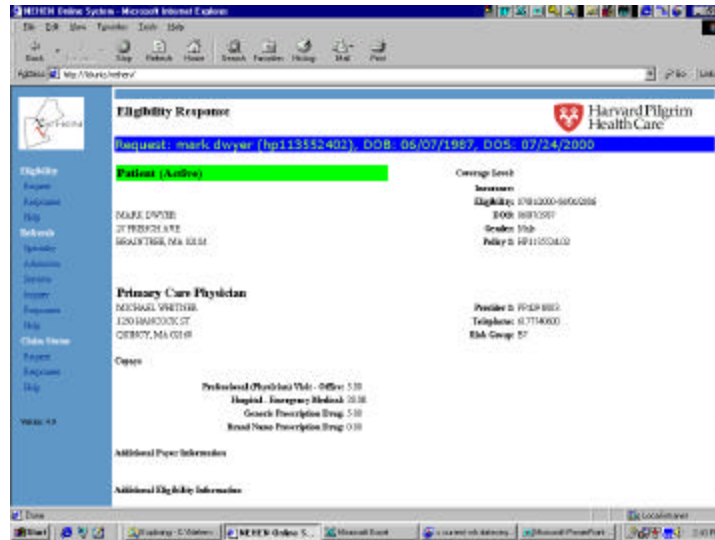- Extends functionality to outlying practices and business processing areas

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.
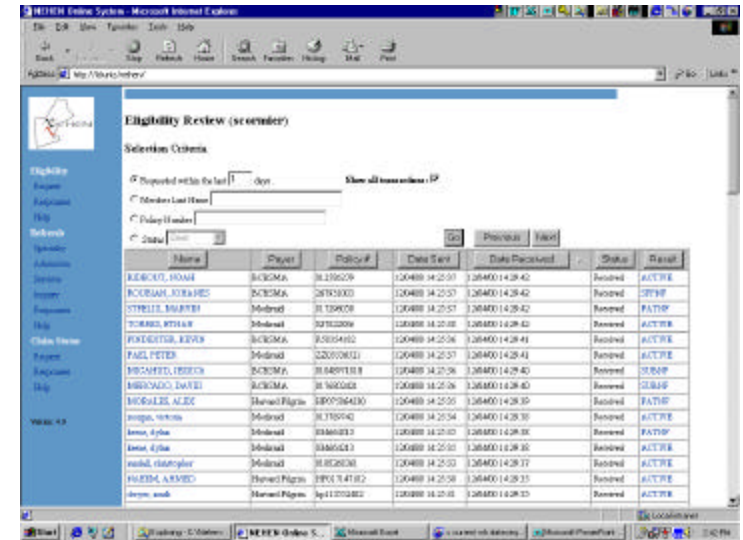
Interactive submission and review

- 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

Page 20

NEHENLite – Specialty Referral Submission

Back   Forward   Stop   Refresh   Home   Search   Favorites   History   Channels   Fullscreen   Mail   Print   Edit

Address C:\WINDOWS\DESKTOP\Prototype-981108\top.html   Links

PROVIDER SERVICE NETWORK
Affiliated with CAREGROUP

ELIGIBILITY
Inquiry

AUTHORIZATIONS
Quick Search
General Search
Request Referral
Request Admission
Request Service

REPORTING
Activity

OTHER
Provider Directory
Help
Logout

Member ID: Plan: | select a plan   ▼ | SEARCH

Referring PCP: | Select One   ▼ | SEARCH   CUSTOMIZE

Provider Details

Member P[CUSTOMIZE

Admission[CUSTOMIZE

Admission[

ICD9 Search - Microsoft Internet Explorer

ICD9 Search

Search for ICD9 codes about:

| _____ | Search |

Telephone

Admission[

Admission[

Type of Ad[

Admission Category: | Medical   ▼ |

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: | Select One   ▼ |

Request Admission

File   Edit   View   Go   Favorites   Help

Back   Forward   Stop   Refresh   Home   Search   Favorites   History   Channels   Fullscreen   Mail   Print   Edit

Address C:\WINDOWS\DESKTOP\Prototype-981108\top.html   Links

PROVIDER SERVICE NETWORK
Affiliated with CAREGROUP

ELIGIBILITY

Inquiry

AUTHORIZATIONS

Quick Search

General Search

Request Referral

Request Admission

Request Service

REPORTING

Activity

OTHER

Provider Directory

Help

Logout

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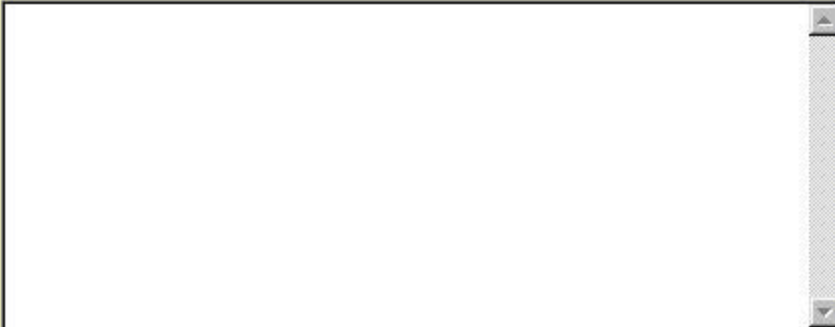
This referral is to an out-of-network provider, which will trigger a review.
If you make use of a network provider, your referral will be auto-approved.

- Option 1: Modify referral request

- Option 2: Request out-of-network referral

Justification: Patient request

Comments:

Request Out-of-Network

Done   My Computer

File   Edit   View   Go   Favorites   Help

Back   Forward   Stop   Refresh   Home   Search   Favorites   History   Channels   Fullscreen   Mail   Print   Edit

Address C:\WINDOWS\DESKTOP\Prototype-981108\top.html   Links

PROVIDER SERVICE NETWORK
Affiliated with CAREGROUP

ELIGIBILITY

Inquiry

AUTHORIZATIONS

Quick Search

General Search

Request Referral

Request Admission

Request Service

REPORTING

Activity

OTHER

Provider Directory

Help

Logout

Temporary Tracking Number A682432

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

Done   My Computer

Welcome to PatientSite

CareGroup HealthCare System implemented PatientSite to give patients the opportunity to communicate with their physicians through the Web. It is secure and free for all CareGroup patients. PatientSite should NOT be used for emergencies.

Please enter your Username and Password to login.

If you are not a registered patient of PatientSite, click on "Take a Tour" and see what it has to offer you, or go directly to registration by clicking on "Register Now"!

Take a Tour

Register Now!

Forgot Password?

Username:

Password:

Login

Check Benefits/Elibility ✕ Exit

❓ 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:	

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

Transaction time:2 Seconds

Audit   ☒ Exit   **Return to List Choices**   ❓ Help   ☒ Sign Out

Date	Time	Person	Function	Location
9/5/00	5:31:00 PM	Gende, Ignacio	labs	10.150.60.126
9/5/00	5:31:03 PM	Gende, Ignacio	lab_detail	10.150.60.126
9/7/00	4:18:50 PM	Gende, Ignacio	/myhealth.asp	207.16.63.250
9/7/00	4:34:20 PM	Gende, Ignacio	/mailbox.asp	207.16.63.250
9/7/00	4:34:32 PM	Gende, Ignacio	/myrecord.asp	207.16.63.250
9/7/00	4:39:42 PM	Gende, Ignacio	/services.asp	207.16.63.250
9/7/00	4:43:13 PM	Gende, Ignacio	/search.asp	207.16.63.250
9/7/00	4:43:35 PM	Gende, Ignacio	/services.asp	207.16.63.250
9/9/00	10:09:15 AM	Halamka, John	/ccclabs.asp	10.150.60.126
9/9/00	10:09:15 AM	Halamka, John	labs	10.150.60.126
9/9/00	10:11:44 AM	Halamka, John	/ccclabs.asp	10.150.60.126
9/9/00	10:11:44 AM	Halamka, John	labs	10.150.60.126
9/9/00	10:17:30 AM	Halamka, John	/ccclabs.asp	10.150.60.126
9/9/00	10:17:30 AM	Halamka, John	labs	10.150.60.126
9/9/00	10:38:22 AM	Gende, Ignacio	/myhealth.asp	10.150.60.126
9/9/00	10:38:24 AM	Gende, Ignacio	/myrecord.asp	10.150.60.126
9/9/00	10:38:26 AM	Gende, Ignacio	/cccxrays.asp	10.150.60.126
9/9/00	10:38:26 AM	Gende, Ignacio	xrays	10.150.60.126
9/9/00	10:38:32 AM	Gende, Ignacio	/cccxrays.asp	10.150.60.126
9/9/00	10:38:32 AM	Gende, Ignacio	xrays	10.150.60.126
9/9/00	10:42:18 AM	Gende, Ignacio	/cccxrays.asp	10.150.60.126

Administrative Budget

Program Management Effort (by FTE) & Membership Count
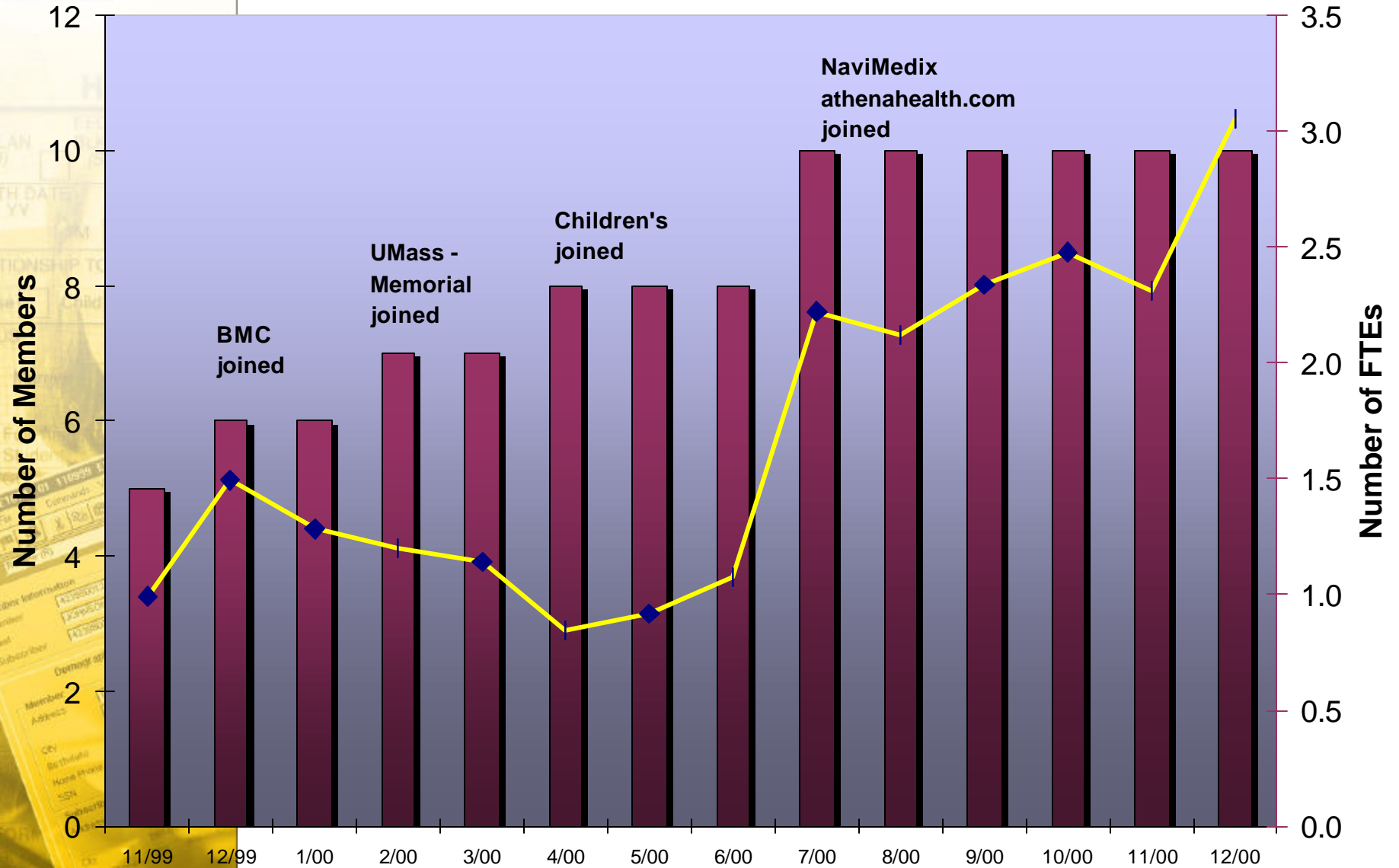
Common program management

- Create Strategy & Direction
- Organize and support participant meetings and discussions
- Develop and pilot core technology
  - eGateway
  - NEHENLite
- Coordinate implementation plans
- Resolve implementation issue
- 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

Provider Member Managers

Payer Member Managers

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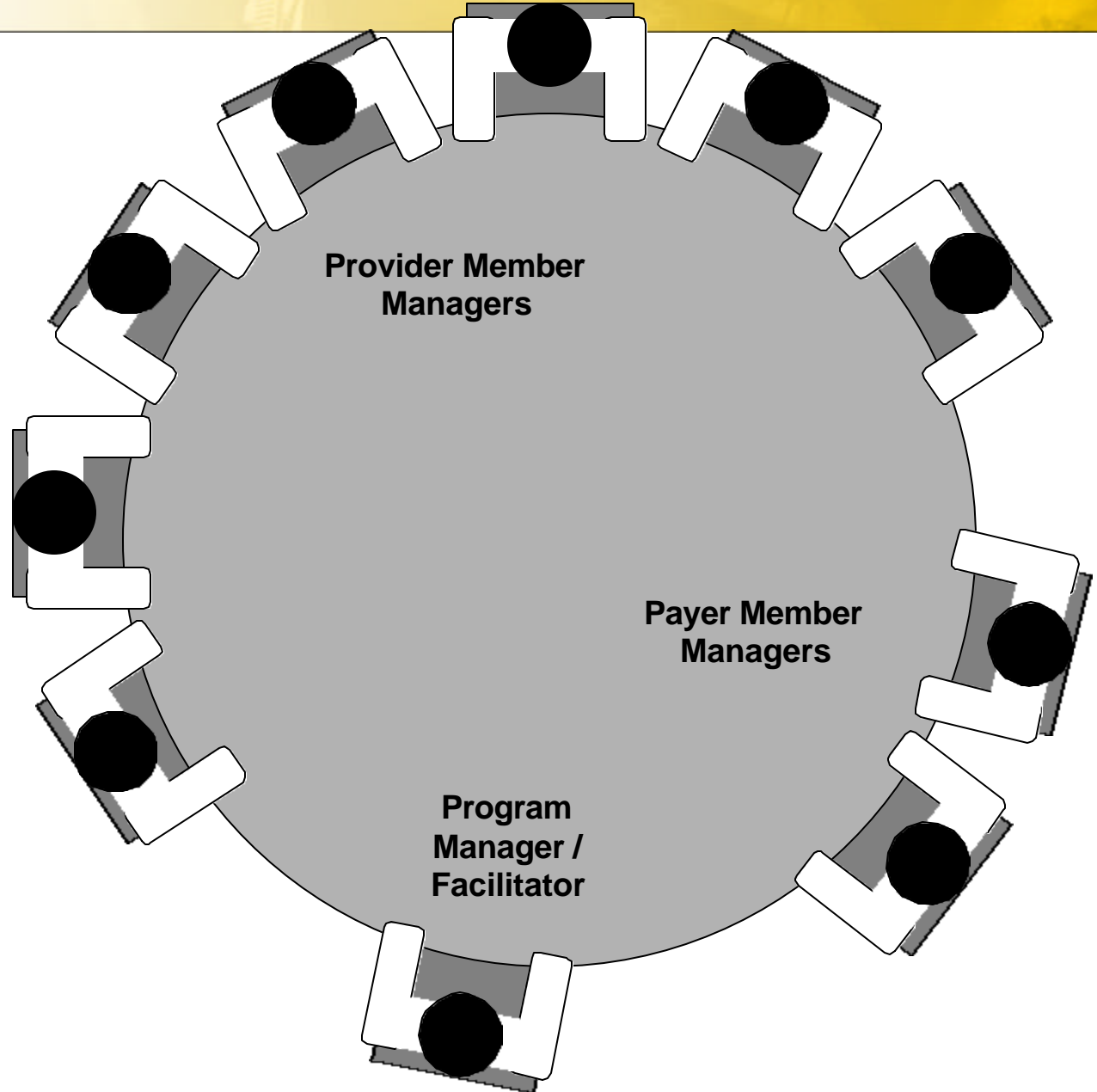
- Principles
    - Open (participants, standards, etc.)
    - Low intrusion into individual participants IT agenda
    - Participant value derived from transactions sent & received
    - Data ownership retained by participant organizations
    - Stay focused to avoid CHIN mistakes
    - Keep it Simple

- 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

Educate	**Communicate Existing and Potential NEHEN Capabilities to Finance, Operations, and Individual Entities**	• **Group presentations and individual meetings**
Discover	**Collect Business Metrics, Process Details, and Additional Detail on Information Systems Capabilities and Requirements**	• **Individual meetings and prepared documentation**
Target	**Identify Best Practice Approach, Determine Feasibility, and Define Solution**	• **Facilitated workshops and interviews**
Model	**Identify Gaps, Model Return on Investment (ROI), and Establish Improvement Targets**	• **Facilitated workshops, individual meetings, and independent analysis**
Plan	**Define and Prioritize Business and Technical Projects and Plan for Process Change Management**	• **Independent analysis and preparation**
Budget	**Define and Prioritize Business and Technical Projects and Plan for Process Change Management**	• **Independent analysis and preparation**

Recuriting & Contracts
15%

Planning & Governance
15%

Coordinating Professional
Services
5%

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

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

Meetings
25%

Technical Services
35%

Publicity
5%

- 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%

Estimated Financial Opportunities ($ in '000's)

	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**

- 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)

- **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

		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	*example:* MS Visual Studio
	Core Application 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 redue 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?