



My Six Year Love Affair with Health-IT (the good, the bad and the ugly!)

eHealth Initiative Summit
March 29, 2007
Joe Heyman, MD
AMA Trustee





HIT Happens!



- January 2001
- April 2001
- Fear
- Courage





Why EMR a must for me



- Cost
- Efficiency
- Image







Why?



- Cost

- Office Equipment
- Rent
- Employees
- Patient notification



- Reassurance to patients

- Up to date
- Unique





What?



- Medical Record Program

- Two Desktops
- Scanner
- Laser Printer



- Medical Website

- Library of info
- Encrypted email
- Personal Health record (Just added)



- Distant Access Software





How?



- Bo!
- Network Router
- DSL (\$42 per month)
- Inexpensive Clearing House
(recommended by my EMR software company – just \$90 a month)





Disaster!



- March 5, 2002
- A terrible day
- The Agony
 - Paper . . . yuch!
 - A hard day's night
 - Cynthia
 - ActionFront.com
 - The Cuban Missile Crisis, October 26 and 27, 1962
 - Office Insurance
- The Ecstasy





RAID systems



- Extra drives
- All data saved in duplicate
- No need to restore from backup tapes or drives (sometimes complicated)





Second disaster (January 2006)



- Server drive dies
- Computer service representative suggests I not just rebuild drive
- Sends new drive and a technician
- Representative installs drive and runs a rebuild on new drive that lasts all night after he leaves.
- Next morning all data gone!
- 3 days on paper!
- \$2300 to restore all data
- Oleg: “You idiot, why didn’t you call me first?!”





My System



- Digital filing of everything
 - EOBs
 - Contracts
 - Invoices
 - Receipts
 - Correspondence
 - CME certificates
 - Fee Schedules





My system

- ePrescribing





Select Patient
Manage Meds
Manage Allergies

Prescription Report
Charges
Additional Options

Help / Contact Us
Members / Log Out
Refresh / Clear

Practice: Joe Heyman, MD, PC User: Joseph Heyman [\[Schedule\]](#) [\[Messages\]](#)
Patient: Joseph Heyman [\[Prescribe\]](#) [\[Demographics\]](#) [\[Pharmacy\]](#)
Patient DOB: 05/21/1942 LOV: 06/26/2004 [\[Visit Today\]](#) Phone: (978) 363-2228 (home) (978) 388-1259 (work)
Pharmacy: Brooks #527 (15 Haverhill Road) Formulary: not in use

Prescribe a Medication

Prescription 1794819 for Betagan (levobunolol hcl) for Joseph Heyman was created.

Select Medication for Prescription.

Name:

Favorites: Aviane (levonorgestrel-ethinyl estrad) Tablet 0.1-20 mg-mcg 1 once a day #28

Medications: [\(Detail\)](#) [\(Mini\)](#) [\(PBM History\)](#) [\[Refill Selected\]](#)

- Betagan (levobunolol hcl) (Solution 0.5%) 1 drop once a day Disp. 15 Rfl #4 (last: 02/23/2005) [\[Refill\]](#) [\[Prescribe\]](#) [\[Stop\]](#)
- Keflex (cephalexin) (Capsule 500 mg) 1 capsule four times a day Disp. 20 NR (last: 11/23/2004) [\[Refill\]](#) [\[Prescribe\]](#) [\[Stop\]](#)

Allergies: No known drug allergies (NKDA).

Problems: None.



My System



- Website

- Interactive Health Record
- Appointments
- Prescription refills
- Online Consultations



Learn, Communicate, Connect

Dr. Heyman's Practice Member of the Medem Network*

MY DOCTOR **MEDICAL GLOSSARY**

Web Site

▶ Joe Heyman, MD: - Home Page, Joe Heyman, MD ,

Home Page

Care Philosophy
 I am here to serve you with respect, privacy and genuine regard for your concerns and needs. I believe you should always be in control of your own body and health care.

Practice Locations ▶
Joe Heyman, MD -- Caring for Women [See map](#)
 Amesbury Health Center
 24 Morrill Place
 Amesbury, Massachusetts 01913
 (978) 388-1259

Available Services ▶
 Gynecology
 Birth control including sterilization
 Menopause
 Annual check-ups
 Infertility

SEARCH

GO

▼ Joe Heyman, MD

- Home Page, Joe Heyman, MD ,
- Practice Locations
- How I can meet your needs
- Looking inside the uterus for problem bleeding.
- Microscopic cervix examination for problem Paps.
- Key-hole surgery (Laparoscopy)
- Eliminating uterine lining

iHealthRecord
 In Partnership with America's Physicians

Patient Login

User ID

Password

Accept Privacy Policy **GO**

[New to Our Site?](#)
[Forgot Password?](#)

Announcements

- I'm proud to announce that our practice is now offering an exciting new service: A free and secure interactive health record for all my patients. By clicking the "iHealthRecord"

Use of this site means you agree to Medem's [Terms of Service](#).

Supported in Part by a Grant to Medem from



My System

- Banking and Paying Bills





My System

- Payroll





My System

- Scheduling



ity
 Heyman, MD, PC
 Day Work Week Month

August 2005 Today

Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6
8	9	10	11	12	13
15	16	17	18	19	20
22	23	24	25	26	27
29	30	31			

Source Type
 All

- DerocheDNU, Lani J
- Heyman, Joseph M
- Weiner*, Janice L

Time	L.J. DerocheDNU - 08/02	J.M. Heyman - 08/02
7a :00		
7a :30		
8 :00		
8 :30		
9 :00		
9 :30		
10 :00		F48 ME EARMAR0001
10 :30		F56 SMS SHESUZ0001
11 :00		F61 KM MELKAT0001
11 :30		F36 WLW WHIWEN0001
12p :00	Out of office	Out of office
12p :30		
1 :00	OV	*F55 DM MORDEB0002
1 :30	OV	F54 KL LIPKAR0001
2 :00	OV	F40 SMP WEZSUZ0001
2 :30	EMRG	F37 CM MONCYN0001 OV Preop
3 :00	OV	*F15 SW WEESTE0001
3 :30	OV	
4 :00	OV	F46 SMO OCOSHA0001
4 :30	OV	F39 RS STAROB0001 OV LEEP
5 :00		
5 :30		
6 :00p		
6 :30		

Heyman, Joseph M

7/18/2005 4:22 PM



My System

- Medical Record



Health Summary

band Collapse Inc. Font Dec. Font

- Current Problems
- ✓ Allergies
- ✓ Current Medications
- ✓ PMH/FMH/SH
- ✓ Tobacco/Alcohol/Supplements
- Substance Abuse History
- ✓ Mental Health History
- Communicable Disease History

Doctor's Note

Inc. Font Dec. Font Print Preview FastForms

Detl ▶ Aristo- Cats, Aristo 01/01/1950 ◦
 Office/Outpatient Visit ◦
CC ▶ **Visit Date:** Mon, Jul 18, 2005 04:05 pm ◦
HPI ▶ **Provider:** Joseph Heyman, M.D. (Supervisor: Joseph Heyman, M.D.) ◦
ROS ▶ **Location:** Joe Heyman, MD, PC ◦

SUBJECTIVE:

- CC
- History
- Physical
- Review
- Past Visit
- Shortcut
- Save note as shortcut

Vital ▶ Past Medical History / Family History / Social History: ◦

Exam ▶ Current Problems: ◦

Labs ▶ **Allergies:** ◦
 Penicillins: hives ◦
 Sulfas: ◦

Prcdr ▶ **Current Medications:** ◦
 Yasmin 30mcg/3mg Tablet Take 1 tab(s) po qd as directed. ◦
 Levoxyl 0.15mg Tablet 1 tab(s) po qd ◦
 Levoxyl 0.15mg Tablets 1 tablet(s) po qd #30 Tablets ◦

OBJECTIVE:

Vitals:

Historical: ◦

Current: ◦

Repeat: ◦

Exams: ◦

Health Summary

Expand Collapse Inc. Font Dec. Font

Current Problems

- 25.3 Dysmenorrhea
- 88.1 Dysuria
- 24.8 Other symptoms referable to back
- 88.41 Urinary frequency

Allergies

Allergies / Adverse Rxn NKDA

- Penicillins : hives
- Sulfas :

Current Medications

Current Medications Current Past

- Yasmin Tablet Take 1 tab(s) po qd as d
- Levoxyl 0.15mg Tablet 1 tab(s) po qd #
- Macrobid 100mg Capsules 1 cap(s) po bid #6 (

Doctor's Note (Contains past visit)

Inc. Font Dec. Font Print Preview FastForms

Detl ▶ NEUROLOGICAL: cranial nerves, motor and sensory function, reflexes, gait and coordination are all intact; ◦
CC ▶ PSYCHIATRIC: appropriate affect and demeanor; normal speech pattern; grossly normal memory; ◦

Lab/Test Results: ◦

Procedures: ◦
Dysmenorrhea ◦

Procedure Note: Colposcopy
 ◦ Verbal informed consent was obtained. ◦ There are no identified relative contraindications such as pregnancy, bleeding disorder or current anti-coagulant therapy. ◦ Colposcopy is performed using acetic acid prep. ◦ Epithelium demonstrates mosaicism. ◦ Transformation zone is seen. ◦ While carefully observing sterile technique, biopsy is performed. Total number of biopsies is 2. ◦ Biopsy locations: at the 2 o'clock position and at the 7 o'clock position. ◦ Endocervical curettage is performed. ◦ Hemostasis is achieved with Monsel's solution. ◦

Urinary frequency ◦

Dysuria ◦

Flank pain ◦

ASSESSMENT: ◦

- 625.3 **Dysmenorrhea** ◦
DDx: ◦
- 788.41 **Urinary frequency** ◦
DDx: ◦
- 788.1 **Dysuria** ◦
DDx: ◦
- 724.8 **Flank pain** ◦
DDx: ◦

PLAN: ◦ I'll write patient with results ◦

Dysmenorrhea ◦

Reference Tools
 File Find View Help
 Prescribe Check RX Delete QP Consult Med List Help Exit
 Drug: Prescriber:
Quick Picks **Scripts Written**

Brand	Strength	Sig	Dispensed	Refills

Print Warning On Script
Warning
 You have the following Warning(s):
 Messages
 ⚠ Atorvastatin Calcium interacts with Cyclosporine
 Resulting In: Rhabdomyolysis
 Concomitant use of Atorvastatin Calcium and Cyclosporine can potentiate some adverse effects.
 Recommendations: Carefully monitor patients receiving these two drugs concomitantly.
 ⚠ Cyclosporine interacts with Estrogens
 Resulting In: Cyclosporine toxicity
 Estrogens can increase the serum levels of Cyclosporine and increase the risk of toxicity.
 Recommendations: Avoid this combination if possible. Monitor CYCLOSPORINE level and renal and hepatic functions. Adjust CYCLOSPORINE dose as needed.
 Ignore
 Ignore w/ Notes
 Cancel

Drugs *
 Drug Name
Neoral

Allergies / Adverse Rxn NKDA
 ⚠ Penicillins : hives
 ⚠ Sulfas :

start
 5:09 P
 Monday

ination, flank

is, fever, flank
 that this is the

d belching).



My System

- Billing



Invoice & Payment (Aristo- Cats, Aristo)

Facility: Joe Heyman, MD, PC
 Default Date: 7/18/2005
 Invoice Date: 02/19/2005
 Service Date: 02/19/2005

Symptom Date: / /
 Symptom Date Indicator:
 Invoice No: 4357
 Invoice: \$2,506.00
 Pay&Adjust: \$0.00
 Balance: \$2,506.00
 Superbill No:

Financial Grp: CHP
 DOS Provider: Heyman, Joseph
 Supervisor: Heyman, Joseph M
 Guarantor: Aristo- Cats, Aristo
 Referral:

Print HCFA on Save
 Include Text?
 Status:

Charges:
 Payment:
 Insurance:
 Title:

Diagnosis:

 Primary ICD in Bold

218.1 Uterine leiomyoma, intramural

CPT:

PANEL:

Code	Description	M1	M2	M3	M4	SDOS	POS	TOS	Unit Fee	Unit	Fee Amount	ICD 1	ICD 2
58180	Subtotal hysterectomy					02/19/2005	21	02	\$2,506.00	1	\$2,506.00	218.1	

Primary CPT in Bold
 CCI Check
 CPT/HCPCS Functions
 Invoice Total: \$2,506.00

Posting (Patient Na

ent

o- Cats, Aristo

voices **Title:**

w Invoice... Edit Invoice

voice #	FC
4357	CHP
4191	CHP
4122	CHP
4116	CHP
4098	CHP
4095	CHP
4094	CHP
4092	CHP
4091	CHP
4090	CHP
4089	CHP
4087	CHP

Zero(0) Balance

ments

ient Payment... Insura

ie Posted Paymer

Total Payment: \$0.00

Demographics Posting Claims Reg

Posting Patient Prov

Invoice

Posting (Patient Na

ent

o- Cats, Aristo

voices Title:

Facility: Joe

Symptom Dat

Financial Grp

Charges P

Diagnosis

CPT

Code

58180 S

Primary CPT

Zero(0) Balance

ments

ient Payment... Insura

re Posted Paymer

HEALTH INSURANCE CLAIM FORM

1. MEDICARE MEDICAID CHAMPUS CHAMPVA GROUP HEALTH PLAN OTHER

2. PATIENT'S NAME (Last Name, First Name, Middle Initial)
Aristo- Cats, Aristo

3. PATIENT'S BIRTH DATE
01 01 1950 M F

4. INSUREE'S NAME (Last Name, First Name, Middle Initial)
Aristo- Cats, Aristo

5. PATIENT'S ADDRESS (No., Street)
X

6. PATIENT RELATIONSHIP TO INSURED
SELF SPOUSE CHILD OTHER

7. INSUREE'S ADDRESS (No., Street)
X

CITY STATE
Newburyport MA

8. PATIENT STATUS
Single Married Other

9. INSUREE'S CITY STATE
Newburyport MA

ZIP CODE TELEPHONE (Include Area Code)
01950 (978)555-1212

10. IS PATIENT'S CONDITION RELATED TO
Employed Student Full-Time Part-Time

11. INSUREE'S POLICY GROUP POP FICA NUMBER
12345

12. OTHER INSUREE'S NAME (Last Name, First Name, Middle Initial)
Aristo- Cats, Aristo

13. OTHER INSUREE'S POLICY OR GROUP NUMBER
MTP123456789

14. EMPLOYMENT? (CURRENT OR PREVIOUS)
 YES NO

15. INSUREE'S DATE OF BIRTH
01 01 1950 M F

16. AUTO ACCIDENT? (PLAC EST)
 YES NO

17. EMPLOYER'S NAME OR SCHOOL NAME

18. INSURANCE PLAN NAME OR PROGRAM NAME
Blue Cross Blue Shield (Blue Card)

19. IS THERE ANOTHER HEALTH BENEFIT PLAN?
 YES NO If yes, return to and complete items 9 and 10.

SIGNED DATE 03/27/2005

14. DATE OF CURRENT ILLNESS (First by Accident or Injury (Accident) OR PREGNANCY (LMP))
02 19 2005

15. IF PATIENT HAS HAD SAME OR SIMILAR ILL GIVE FIRST DATE
N/A

16. DATES PATIENT UNABLE TO WORK IN CURRENT OCCUPATION
FROM TO

17. NAME OF REFERRING PHYSICIAN OR OTHER SOURCE
Bean, S. Mark

17a. I.D. NUMBER OF REFERRING PHYSICIAN
B76651

18. HOSPITALIZATION DATES RELATED TO CURRENT SERVICES
FROM 02 19 2005 TO 02 19 2005

19. RESERVED FOR LOCAL USE

20. OUTSIDE LAB? \$CHARGES
 YES NO

21. DIAGNOSIS OR NATURE OF ILL OR INJURY (RELATE ITEMS 1, 2, 3, OR 4 TO ITEM 24 BY LN)
1. 218.1

22. MEDICAID RESUBMISSION ORIGINAL REF NO

23. PRIOR AUTHORIZATION NUMBER

DATE(S) OF SERVICE		Rate of Service	Type of Service	PROCEDURES SERVICES, OR SUPP (Explain Unusual Circumstances) CPT/HCPCS I MODIFIER	DIAGNOSIS CODE	\$ CHARGES	DAYS (ESU) OR UNITS (Rgn)	ENG	COB	RESERVED FOR LOCAL USE
From MM YY	To MM YY									
02 19 2005	02 19 2005	21	02	58180	1	2506.00	1	N	N	

25. FEDERAL TAX I.D. NUMBER SSN EIN
04-3548598

26. PATIENT'S ACCOUNT NO.
ARIARI0001

27. ACCEPT ASSIGNMENT? (For gov't plans see bk)
 YES NO

28. TOTAL CHARGE
2506.00

29. AMOUNT PAID
0.00

30. BALANCE DUE
2506.00

31. SIGNATURE OF PHYSICIAN OR SUPPLIER INCLUDING DEG REBS OR CREDENTIALS (Specify that the statements on the reverse are true)

32. NAME AND ADDRESS OF FAC WHERE SERVICES WERE RENDERED (If other than home or office)
LOWELL GENERAL HOSPITAL

33. PHYSICIAN'S SUPPLIER'S BILLING NAME ADDRESS ZIP CODE & PHONE
Joe Heyman, MD, PC

Help Exit

Date 02/19/2005

Ill No

Find...

Find...

by ICD in Bold

Set Prim. CPT

Unit	ICD 1	ICD 2
06.00	218.1	

Total \$2,506.00

Total Payment: \$0.00

Edit View Favorites Tools Help

Back Search Favorites

Address bar: <https://mailbox.transactions.mckhbc.com/> Go Links Ama Web Portal BOT Website

Google Search 18 blocked ABC Check AutoLink AutoFill Options

MCKESSON **Transaction Solutions Hub** **Electronic Mailbox Facility**

- Logon
- Upload
- Download
- Directory
- Help

Upload

To upload a file to the Electronic Mailbox Facility, fill in the fields below and click Upload.

Data Format: Binary ASCII

Local File:

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Discussions Discussions not available on <https://mailbox.transactions.mckhbc.com/>

one

Symantec pcAnywhere MASSACHUS... announceme...

https://mailbox.transactions.mckhboc.com/cehttp/servlet/MailboxServlet?operation=DOWNLOAD&mailb - Microsoft Internet Explorer p

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites Recycle Mail Print Mailbox Address Book Bluetooth People

Address https://mailbox.transactions.mckhboc.com/cehttp/servlet/MailboxServlet?operation=DOWNLOAD&ma Go Links Ama Web Portal BOT Website

Google Search 18 blocked Check AutoLink AutoFill Options

PROCESSING DATE: 07/20/2005 02:06:37

332000-E-MDS CLAIM BILLING DATE: 07/20/2005

332030-JOE HEYMAN MD

NO EXCLUSION CLAIMS TO REPORT FOR THIS CLAIM BILLING DATE

332030 TOTALS:	EXCLUDED	0	0.00	0
	ACCEPTED	9	1,504.00	0
		*****	*****	****
	TOTAL-INPUT	9	1,504.00	0
		*****	*****	*****
	(A) ELECTRONIC TO PAYER	9	+ 0 =	9
		*****	*****	*****

Discussions Discussions not available on https://mailbox.transactions.mckhboc.com/

Done Internet

2030.htm Symantec MASSACHUS...
pcAnywhere announceme...



My System



- Electronic record
 - Scheduling
 - Documenting
 - Receiving reports
 - Scanning
 - Coding
 - Billing





Performance



- Transcription Elimination
- Reduced paper management (chart pulls)
- More usable office space per square foot
- Error-free legible prescriptions
- Improved coding





Performance



- Lab Interfaces
- Referral Management
- Guideline Compliance
- Quality Reporting
- Search by diagnosis, procedure, drug





Performance



- Increased office efficiency
- Patients' happiness
- Lower costs
- Accessibility





MAeHC



- Newburyport, Massachusetts

- 116 physicians in 42 practices
- 17 solo
- 18 in groups of 2-5
- 7 in groups of 6-10



- Progress report after 18 months

- Usage – successes; problems
- Community Network Organization





Lessons Learned



- Difficult for fully running practice
- Easy business case for someone starting out.
- Difficult business case for community network organization -- so far





Lessons Learned



- Backup!
- Backup!!



- **BACKUP!!!**



