

# Toward Quality Care

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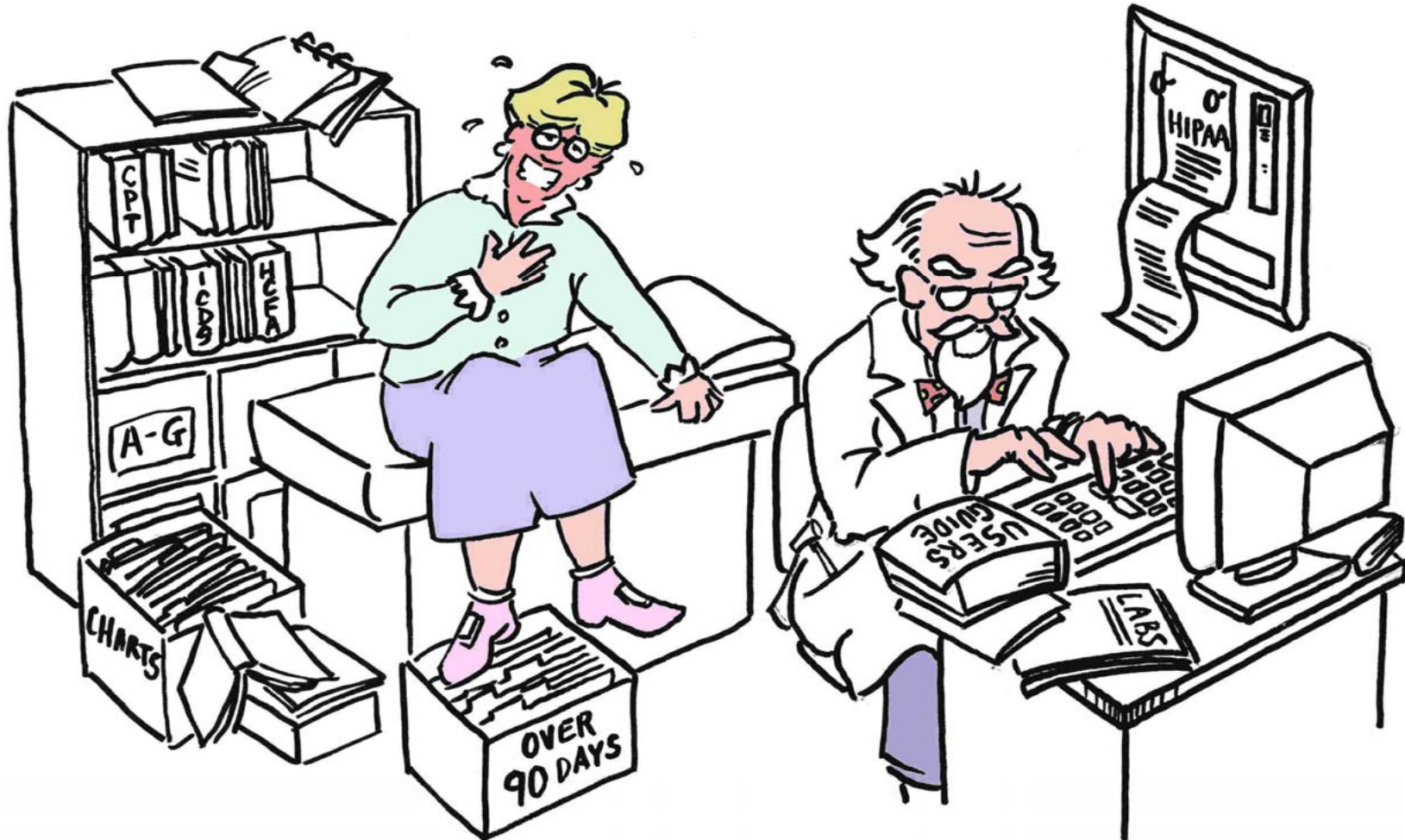
# Metcalfe's Law

*“The value of a network increases as the square of the number of users on it.”*

Robert Metcalfe

Inventor of the Ethernet

Yes, yes Mrs. Jones... we'll talk about your chest pain in a minute! Right now, I'm trying to remember my password.



# North Fulton Family Medicine

1998

2006

|     |                   |      |
|-----|-------------------|------|
| 2   | Offices           | 4    |
| 4   | Physicians        | 11   |
| 0   | Mid-Level (PA-C)  | 11   |
| 1   | Registered Nurses | 2    |
| 0   | Administrator     | 1    |
| 0   | Business Manager  | 1    |
| 1   | Office Managers   | 4    |
| 100 | Daily Encounters  | 400+ |

# North Fulton Family Medicine

1998

2001-'06

**4.7 FTE's 2.8**

per provider

# Why Did We Succeed?

- A strong physician desire to initiate change
- A need to bring costs under control
- A good implementation team
- An implementation specialist who cared about our needs
- A company who puts service above everything else

# Why did we really succeed?

Return

On

Investment

# Our ROI

**Based on 100 patients per day**

- Chart handling: 100 charts managed/day; 625 mins @\$11/hr = \$29,791/yr
- New chart formation: 19.6/day @ 10 mins per chart; 196 mins @ \$11/hr = \$9,342/yr



# Our ROI

- Chart searches: 330 mins/day @ \$11/hr = \$16,456/yr
- Transcription: transcribing, filing, managing: ~ 20 lines per note @ \$0.10/line = \$110,000/yr

# Our ROI

- **Lab Results: Logging, delivering, attaching results @ 45 draws/day = 315 min @ \$12/hr = \$16,380/yr**
- **Referral Letters: Dictation and transcription = \$32,640/yr**
- **Chart Supplies: encounter forms, progress notes, lab sheets, history forms, problem lists = \$24,480/yr**

# Our ROI

- Represents a savings of 44 hours per day or 11,440 billable staff hours per year
- Total saved (year) = \$239,089 (at 100 patients per day)
- At 400+ patients per day the savings = REAL MONEY

# The Bottom Line

## Cost Per Patient Visit

Paper

\$112.47

EHR

\$79.32

Savings

\$33.15/visit

# **Access Access Access**

- **Allows patients to**
  - **Message us securely, quickly**
  - **View lab results**
  - **View medication lists**
  - **View problem lists**
  - **Request refills, referrals, appointments**
  - **Manage their care better**



# North Fulton Family Medicine, P.C.

Thursday, April 14, 2005  
 Welcome, Jmorrow

**My Health Portfolio**

- [Messages](#)
- [Appointment](#)
- [Medication Refills](#)
- [Lab Results](#)**
- [Vital Signs](#)
- [Personal Information](#)
- [Insurance](#)
- [Office Visits](#)
- [Change Password](#)
- [Logout](#)

**Links**

[Back To NFFM website](#)

Select range:  Year(s)

| Profile/Panel/Test                  | Value                          | Units        | Range      |
|-------------------------------------|--------------------------------|--------------|------------|
| <b>PSA, TOTAL</b>                   | Collect: 1/31/2005 10:48:00 AM |              |            |
| PSA, TOTAL                          | 1.1                            | NG/ML        | < OR = 4.0 |
| <b>TRIGLYCERIDES</b>                | Collect: 2/13/2004 9:07:00 AM  |              |            |
| TRIGLYCERIDES                       | 135                            | MG/DL        | <150       |
| <b>CHOLESTEROL, TOTAL</b>           | Collect: 2/13/2004 9:07:00 AM  |              |            |
| CHOLESTEROL, TOTAL                  | 174                            | MG/DL        | <200       |
| <b>HDL CHOLESTEROL</b>              | Collect: 2/13/2004 9:07:00 AM  |              |            |
| HDL CHOLESTEROL                     | 39                             | MG/DL        | > OR = 40  |
| <b>LDL-CHOLESTEROL</b>              | Collect: 2/13/2004 9:07:00 AM  |              |            |
| LDL-CHOLESTEROL                     | 108                            | MG/DL (CALC) | <130       |
| <b>CHOL/HDLRATIO</b>                | Collect: 2/13/2004 9:07:00 AM  |              |            |
| CHOL/HDLRATIO                       | 4.5                            | (CALC)       | <5.0       |
| <b>COMPREHENSIVE METABOLICPANEL</b> | Collect: 2/13/2004 9:07:00 AM  |              |            |
| GLUCOSE                             | 83                             | MG/DL        | 65-109     |
| UREA NITROGEN (BUN)                 | 19                             | MG/DL        | 7-25       |
| CREATININE                          | 1.3                            | MG/DL        | 0.5-1.4    |
| BUN/CREATININE RATIO                | 15                             | (CALC)       | 6-25       |
| SODIUM                              | 140                            | MMOL/L       | 135-146    |
| POTASSIUM                           | 5.0                            | MMOL/L       | 3.5-5.3    |

# Limiting Access/Securing PHI

- Data is secured
  - Three levels of passwords necessary to access the data
  - Passwords change regularly
  - Never a pre-determined password
  - Firewall/Antivirus/Backup

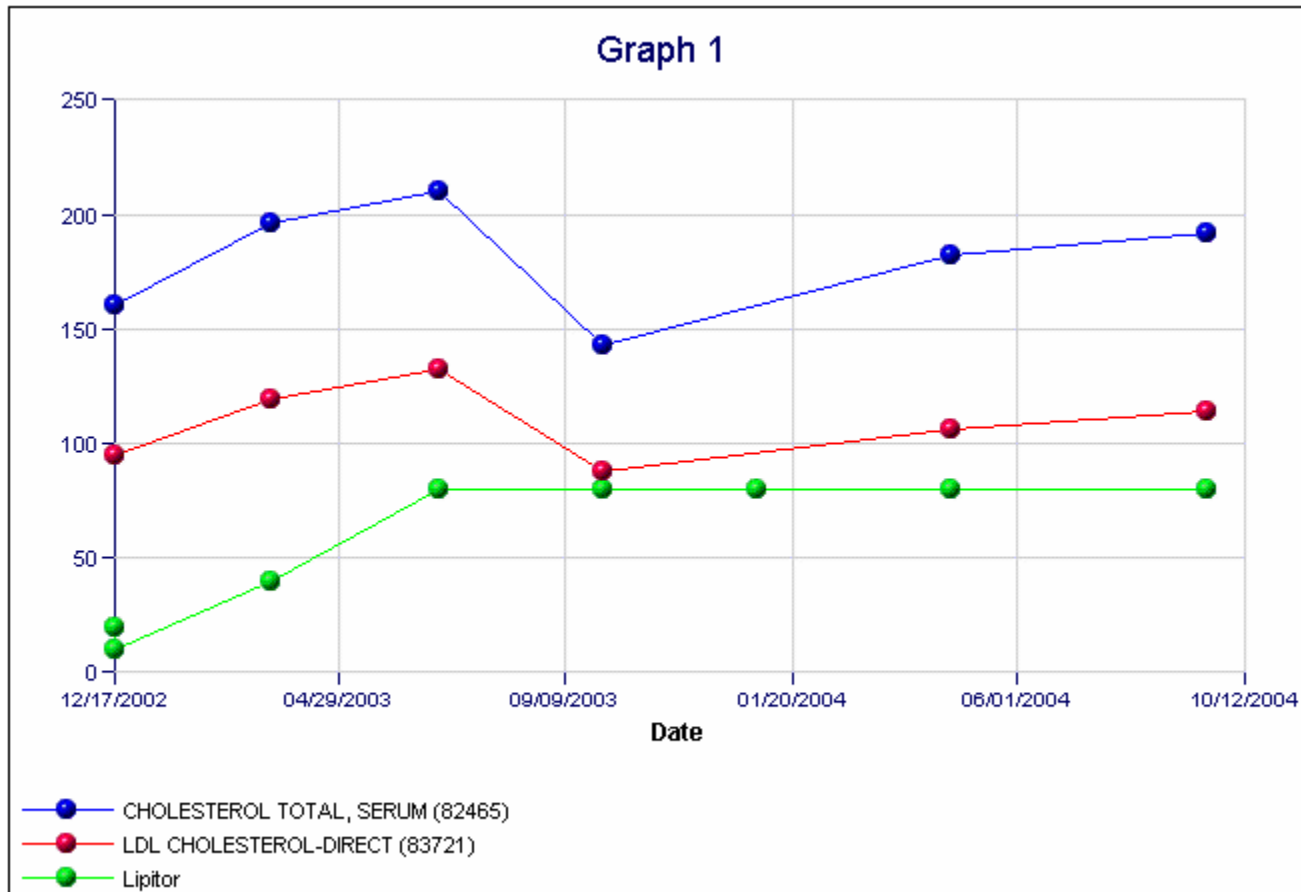
**What Does All  
This HIT Do For  
Us and Our  
Patients?**



# Outcomes Are The Real Rewards

- We can now affect and track quality of care at an outcomes level
  - Track HgbA1c's, LFT's, PT's, PSA's, cholesterol, blood pressure levels
  - Monitor compliance rates of routine screenings (colonoscopy, mammography, bone density, exercise stress testing, etc)

# Visual Reinforcement



# External Connectivity

- Now we receive reports
  - securely
  - electronically
  - legibly, and
  - much more quickly from area hospitals.

# Connected

**Edit Transcription**

File Edit Navigation Caregiver

A toolbar containing icons for file operations (save, print), navigation (back, forward, home), editing (undo, redo, delete), and text formatting (bold, italic, underline, list, bullet).

Patient: \_\_\_\_\_ Status: Submitted  
Date of Birth: \_\_\_\_\_ Dictated: 04/04/2005  
Transcribed: 04/04/2005

Index | Comment | General

CT SCAN OF THE CHEST WITH CONTRAST 04/04/05

I do not have any comparison studies.

CLINICAL HISTORY- Chest swelling and mass.

TECHNIQUE- Transaxial images are obtained through chest. The patient received 95 cc of intravenous nonionic contrast material without complications. The risks, benefits and alternative of the contrast media were discussed with the patient after which informed consent was signed. The patient was given an opportunity to ask questions.

FINDINGS- Imaging of the mediastinum fails to show any evidence of significant adenopathy. Heart, pericardium, great vessels and esophagus all appear normal. Both hila appear normal.

Imaging of the lung parenchyma show at least three nonspecific small nodules on the right. The first is in the right upper lobe peripherally and measures 5.2 mm. The second is in the right lower lobe superior segment peripherally 6.0 mm and the third is in the right middle lobe anteriorly abutting the pleura measuring 5.9 mm. All of these appear to be noncalcified. Malignancy cannot be excluded. Close interval follow-up or PET scan may be helpful. There is no evidence of pleural effusion. There is some mild atelectasis in both lower lobes posteriorly.

# Tracking Tests and Procedures

- Ability to monitor practice compliance
  - Search for labs not yet resulted or reviewed
  - Search for procedures not yet resulted or reviewed

# **What Can Doctors Do to Assist in this Paradigm Shift?**

***And Why Should They?***

# Physician Perspectives: Recent Data

- **Physician Attitudes**
  - **84% agree that computers improve quality**
  - **78% think computers have beneficial effect on interactions within the health care team**



# Physician Perspectives: Recent Data

- Attitudes vs. Intentions
  - 85% believe doctors should computerize writing prescriptions, yet 49% do not intend to do so
  - 89% believe doctors should computerize recording patient summaries, yet 48.5% do not intend to do so
  - 83% believe doctors should computerize recording treatment records, yet 48.7% do not intend to do so

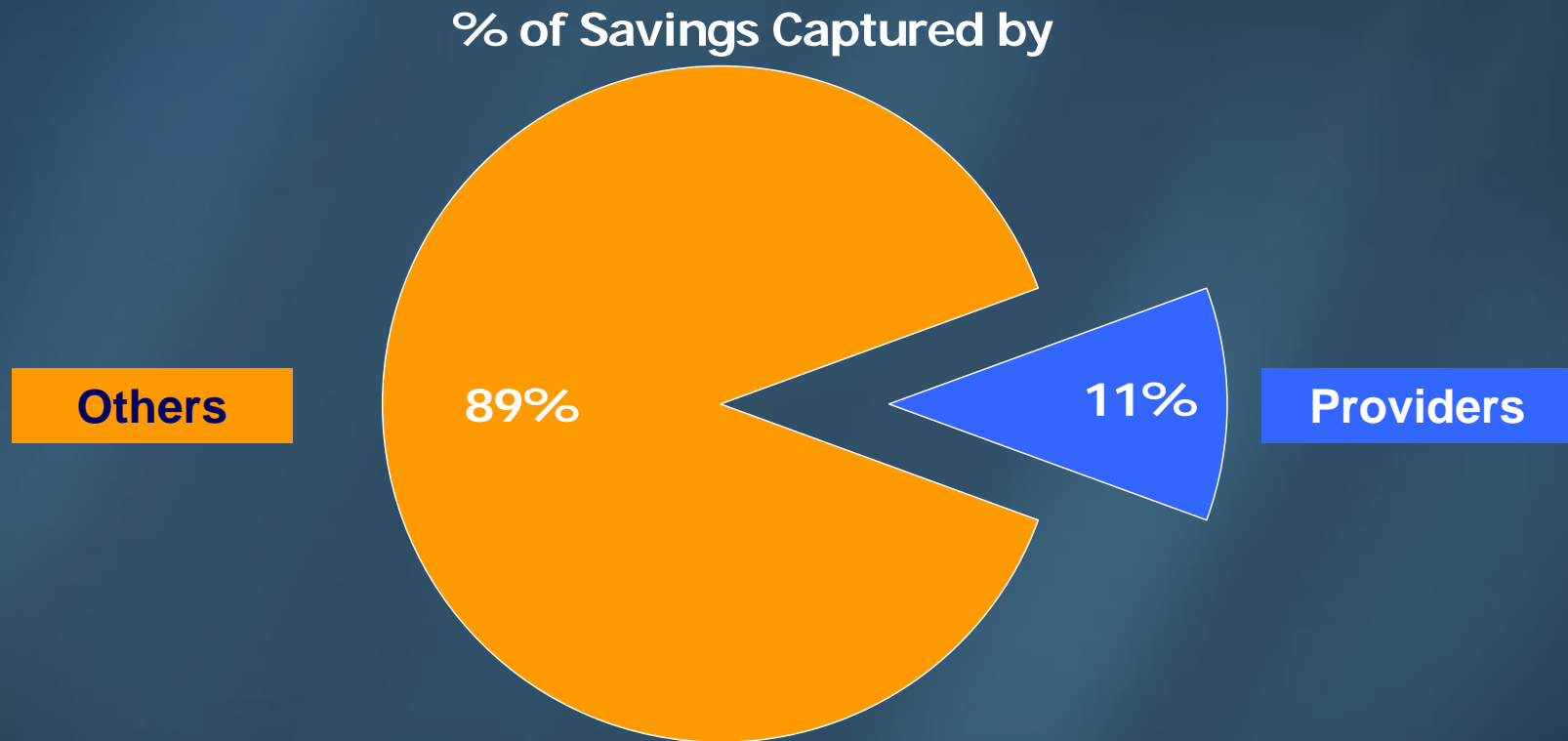
# Top Reasons for Disconnect

- Initial capital cost
- Time investment
- Security concerns
- Maintenance costs

**What Can Others Do to  
Assist in this Paradigm  
Shift?**

***And Why Should They?***

# Misaligned Incentives



**Ambulatory Computer-based Provider Order Entry**

Source: Center for Information Technology Leadership, 2003

# Plans and Hospitals Can...

- Provide financial incentives to practices to implement EHRs.
- Implement or widen Pay for Performance incentives.
- Reduce the roadblocks to providing quality care.

# **Plans and Hospitals Can...**

## **Assist In...**

- **Financial analysis**
- **Cost analysis**
- **Workflow analysis**
- **Introducing vendors**
- **Defining hardware needs**
- **Creating an implementation team**

## **\$\$ = the main roadblock to adoption**

- **Plans and Hospitals can...**
  - **Help practices understand finances**
  - **Clarify financing options**
  - **Provide electronic registries**
  - **Maintain electronic med lists and share that data**
  - **Assist in electronic prescribing**



# Conclusion

- Success depends on you
- The evolution of IT and healthcare is upon us now
- The return on your investment can be measured in real dollars
- The ultimate ROI is job satisfaction, a sense of accomplishment, and success in today's changing world

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