

# 2<sup>nd</sup> Annual Healthcare Connectivity Summit

May 20, 2005

Portland, OR

## *The Patient-Centered Practice*



Charles M. Kilo, MD, MPH, FACP, Fellow, Institute for Healthcare Improvement  
CEO, GreenField Health, Portland, OR

503-292-9560

[Chuck.Kilo@GreenFieldHealth.com](mailto:Chuck.Kilo@GreenFieldHealth.com)

# GreenField Health

- **Primary care practice founded in 2001**
- **Research and development on delivery system design**
- **An innovative network of practices serving as a resource for those interested in improving health care**
- **Participate in local and national improvement initiative and advisory positions (e.g., IHI, AAMC, AAFP, DOQ-IT, etc.)**

## **Services:**

- 1. GreenField Health – 5 physicians**
- 2. Practice management services**
- 3. Consulting in practice performance improvement**
- 4. Advising to health care IT companies**

# GreenField's IT System

1. **GE Centricity EHR (Logician)**
2. **GE Centricity PMS**
3. **Kryptiq's DocuTrak scanning**
4. **Kryptiq's Clinical Messenger secure messaging**
5. **Kryptiq Care Catalyst web portal with patient access to records**
6. **Kryptiq's Rosetta Stone Gateway for hospital interface for lab, x-ray, etc.**
7. **MS Access disease registry**
8. **Brentwood ECG – PC-based and integrated**
9. **Midmark Spirometer – PC-based and integrated**
10. **Clinical Content – encounter forms**
11. **GreenField web site**
12. **Vertical Response – patient newsletter**
13. **Networking hardware & software**
14. **Knowledge sources: Epocrates, UpToDate, PubMed**
15. **Remote access to hospital IS**
16. **Remote access to practice IS**
17. **Network faxing**
18. **Network with backup, antiviral, antispam, and security software**
19. **Telecommunications – phone system, cell phones**

# Practice Transformation...

## We Have the Knowledge and the Technology

**Due to a recent and ongoing convergence of knowledge and technology ...**

**... we have an unprecedented opportunity to fundamentally rethink and redesign care.**

# Idealized Design of Clinical Office Practices

*“They give me exactly the help I want (and need) exactly when I want (and need) it.”*

ACCESS	INTERACTION	RELIABILITY	VITALITY
Open Access	Customized Communication	Knowledge Management	Research and Development
Continuous Flow	Interaction Technology	Population Management	Staff Development
<b>Alternatives to 1:1 Visits</b>			
<b>Optimized Care Team/Master Schedule</b>			
<b>Leadership/Measurement Systems/Financial Management</b>			

[www.ihl.org/idealized/](http://www.ihl.org/idealized/)

# Chronic Care Model

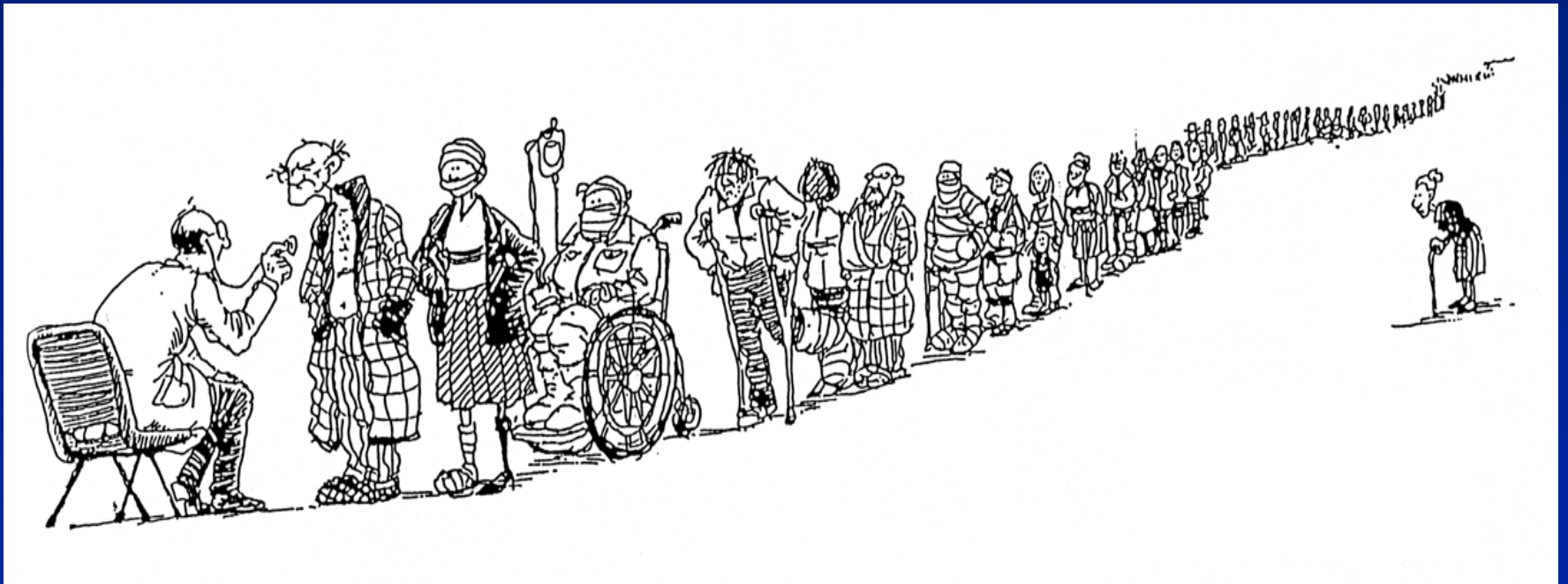
<http://www.improvingchroniccare.org>



improving  
chronic  
illness care

# Patient Centered Care... Key Concept: Care Does Not Equal Visits

1. Optimal care is based on deep, trustful relationships between practice and patients
2. Great relationship demands that we go far beyond visits in delivering care to patients

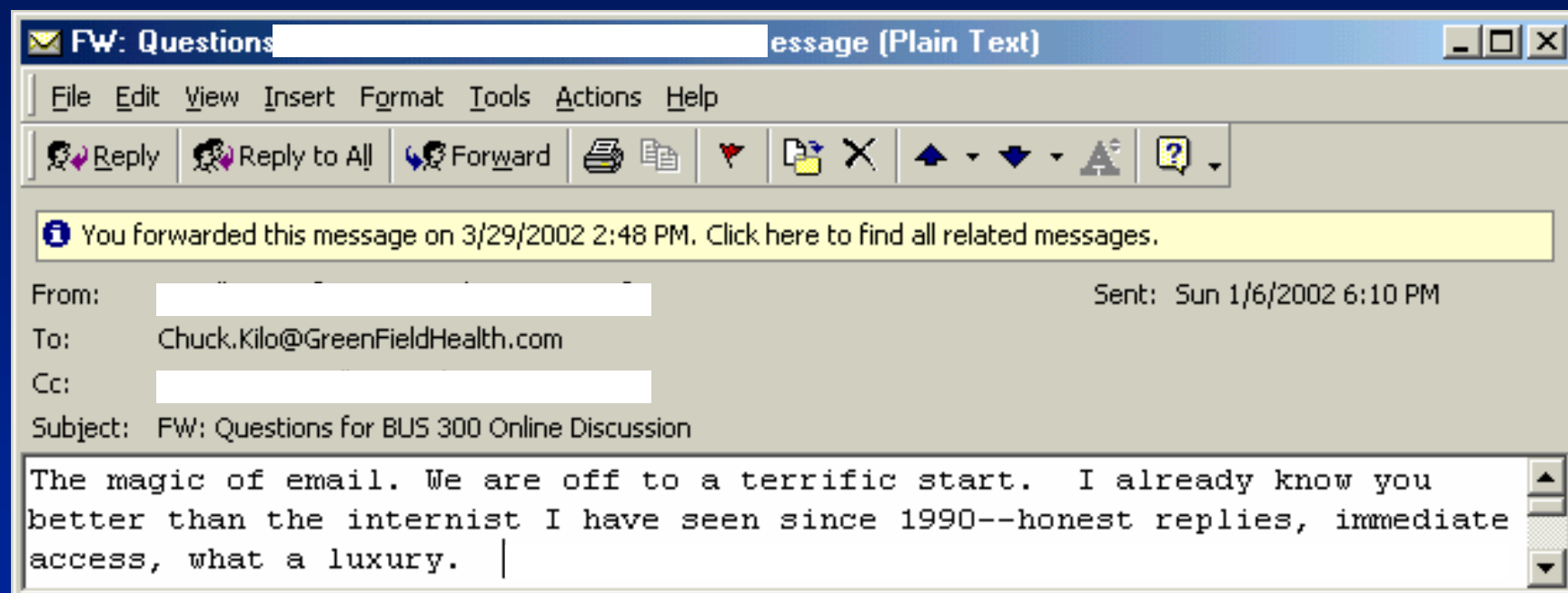


# What do people want from their health care...

## 1. Relationships

(for you guys in the audience, that means communication...)

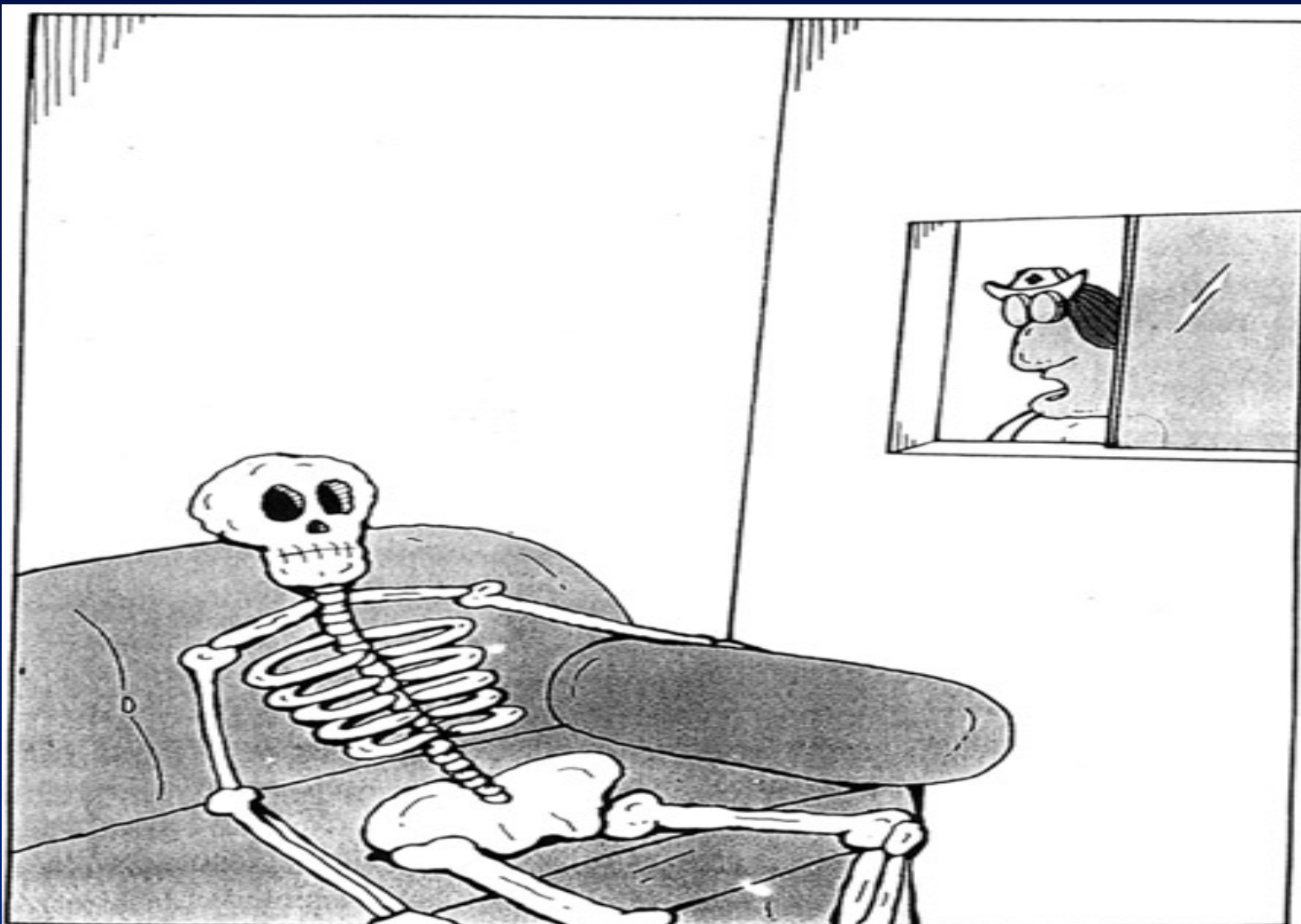
# Patient Centered (Relationship-Based) Care



# What do people want from their health care...

## 2. Service

**(that means communication without a visit, and a lot less waiting in general – during visits, for test results, for referrals, for refills, etc)**



**“The doctor will be with you  
in just five more minutes.”**

**DOONESBURY** by Garry Trudeau



# INVOICE

DATE \_\_\_\_\_, 19\_\_

To: Dr. \_\_\_\_\_  
 NAME \_\_\_\_\_  
 STREET \_\_\_\_\_  
 CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

My appointment was at \_\_\_\_\_ : \_\_\_\_\_

I was actually seen at \_\_\_\_\_ : \_\_\_\_\_

For \_\_\_\_\_ unrecoverable hours  
 wasted in your waiting room

@ \$ \_\_\_\_\_ per hour \$ \_\_\_\_\_  
 tax \$ \_\_\_\_\_  
 total \$ \_\_\_\_\_

Please remit payment to:

NAME \_\_\_\_\_  
 STREET \_\_\_\_\_  
 CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

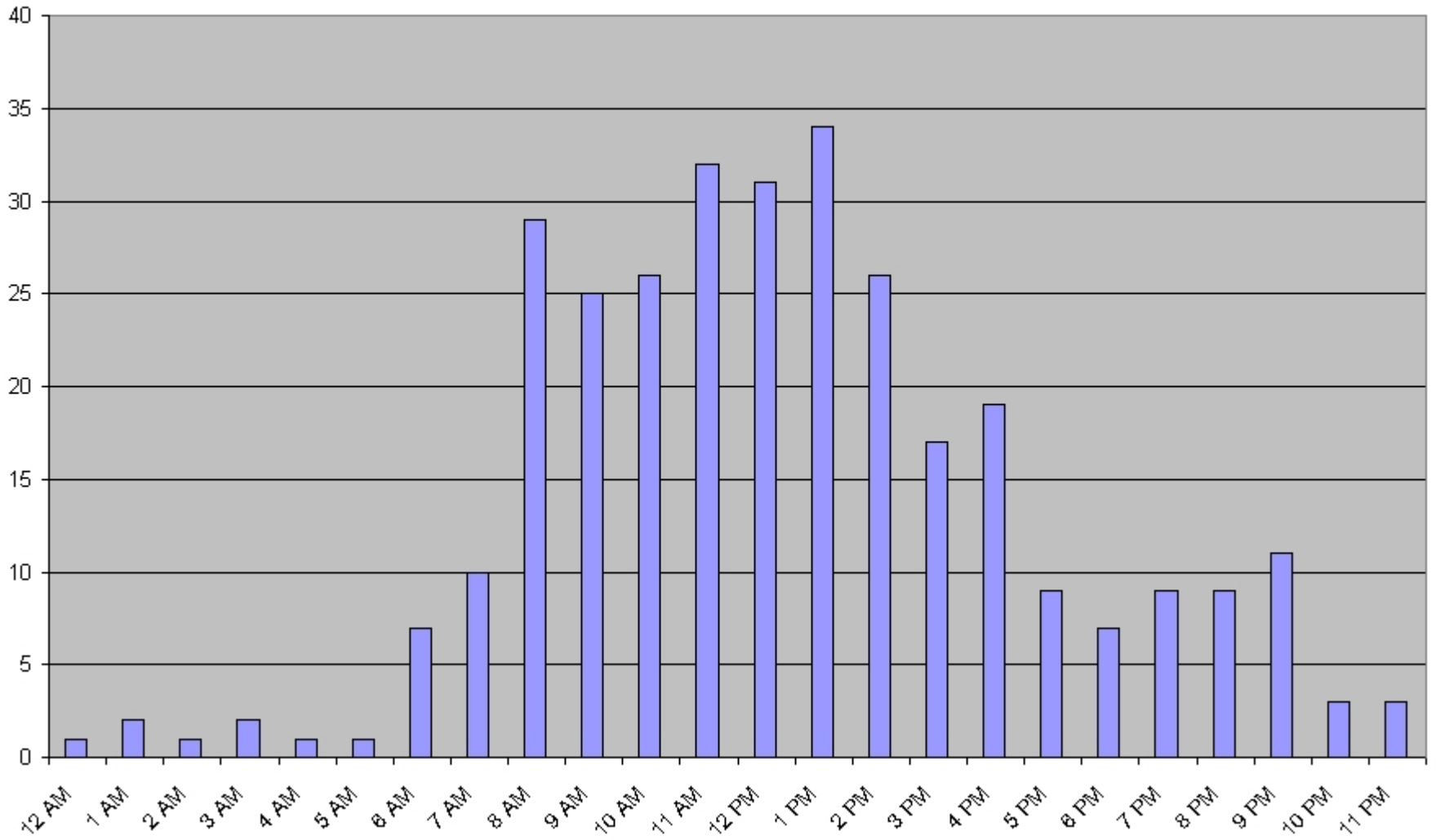


# GreenField Health: Distribution of Patient Encounters

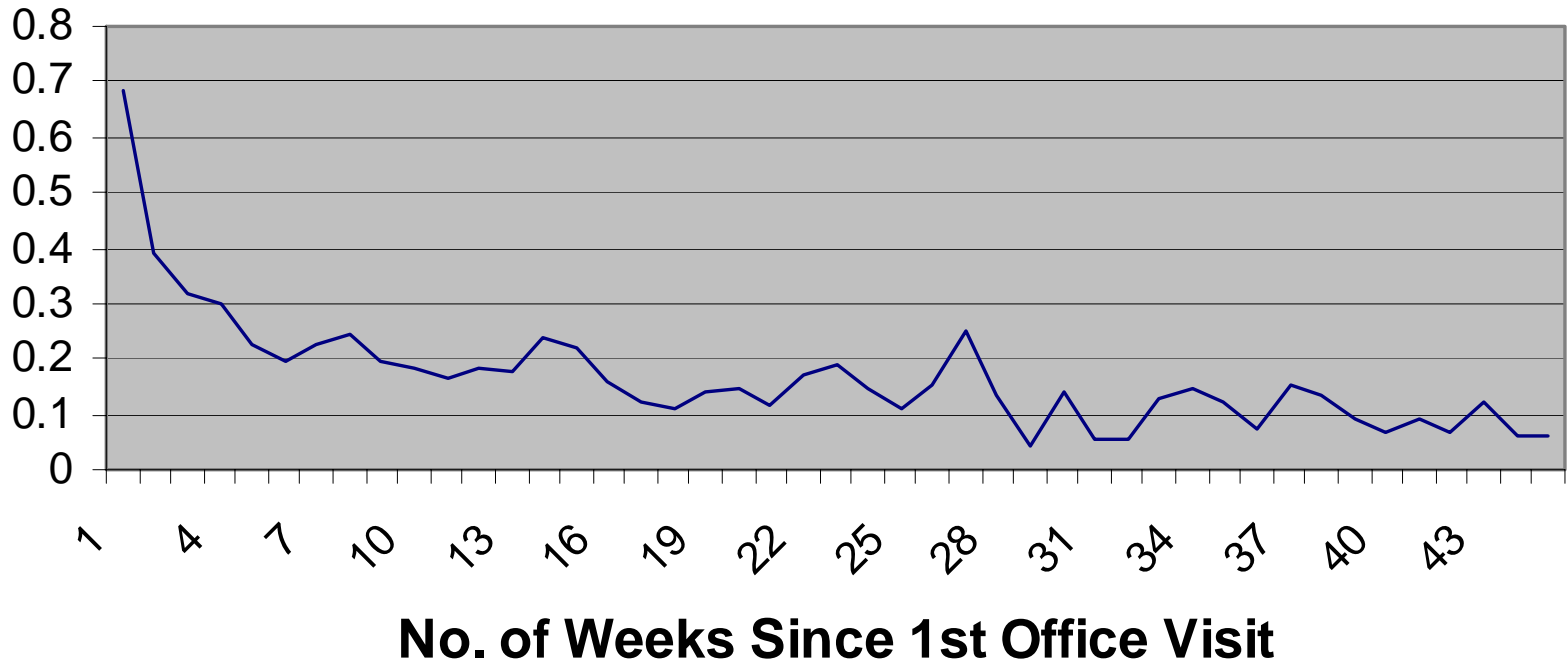
Number of Encounters by Type per Patient per Year



## Patient Email by Time of Day



# Average Emails per patient per week



1. Improved patient-practice relationship
2. Reduce need for follow-up visits by >50%

Greenfield Secure Email - Microsoft Internet Explorer

Address <https://securemail.greenfieldhealth.com/mc10/Outbox.aspx?manage=1&key=o54yr2wr>

Links AmEx ET Stifel Kplan G GF S-Mail GF WebMail GreenField Prov Net UpToDate ePocrates PubMed Medline + Healthnotes IHI ACP PIER Center for Health Trans CSPI

Back Forward Stop Home Search Favorites

# GreenField Secure Email

health system

**Manage Message** Logged in [ chuck.kilo@greenfieldhealth.com ]

Messages **Delete** **Recall** **Refresh** **Reply** **Reply All** **Forward** **Save To >>** **Print**

Received Messages  
Sent Messages  
Draft Messages  
New Message

User  
Out of Office  
Logout

Manage  
Users >>  
Groups >>  
Domains >>

From: chuck.kilo@greenfieldhealth.com Sent: Thu 5/19/2005 10:05 AM  
Subject: labs  
Attachments: Rpt-Electrophor,Urine(HNSP) O=KILO, CHARLES .txt 2 KB ; Rpt-Electrophor, Serum(HNSP) O=KILO, CHARLES .txt 3 KB ; Rpt-Hemoglobin A1c(P) O=KILO, CHARLES .txt 2 KB ; Rpt-Ceruloplasmin (ARUP) O=KILO, CHARLES .txt 2 KB

Status Recipient  
To: fxs@nwna.com

**Track** **Message**

Frank: I hope that you've been well.

Your labs are attached.

1. Your A1c is now 5.8 which is fantastic.
2. Your serum and urine electrophoresis are both negative - so neither explain the proteinuria
3. Your Ceruloplasmin is normal, so copper overload is not the cause of your elevated LFTs.

While we don't have any clear answers for either the liver or the proteinuria yet Frank, I feel good that we have undergone a thorough evaluation of both of them. I'm assuming that you'll have a follow-up visit with Dr. Steven and that you will also be seeing the renal folks again.

Keep up the great work on the diabetes, and send me a note to let me know what you've been doing in that regard, and how much glucotrol you're on.

-- Chuck

Start | H:\My Documents\Green... | OHSU DMICE 5-05.ppt | Kilo - Connectivity Summi... | Inbox - Microsoft Outlook | Greenfield Secure Em... | 5:32 PM

# What do people want from their health care...

## 3. Reliability

(that means coordination of care between providers... or communication...)

# Referral Care

✉ RE: Chart Notes on Steven [REDACTED] Message (Plain Text)


File Edit View Insert Format Tools Actions Help

Reply Reply to All Forward [Print] [Attachments] [Navigation] [Help]

**i** You replied on 11/13/2001 3:28 PM. [Click here to find all related messages.](#)

From: [REDACTED] Sent: Tue 11/13/2001 2:32 PM  
To: 'Chuck Kilo'  
Cc:  
Subject: RE: Chart Notes on Steven [REDACTED]

Chuck-  
Steve has completely epithelialized both wounds. Please see my note which is attached.

  
011113 FU  
Left Sh.....

Echocardiogram - James Wilson - Message (HTML)

File Edit View Insert Format Tools Actions Help

Reply Reply to All Forward Print Reply All X Undo Redo A<sup>2</sup> a<sup>3</sup> a<sup>4</sup>

You forwarded this message on 5/12/2005 8:58 AM.

From: Amy [amy@mednettranscription.biz] Sent: Thu 5/12/2005 5:14 AM  
To: Chuck Kilo  
Cc:  
Subject: Echocardiogram - James Wilson  
Attachments:  [redacted]\_eko\_5-10-05.PDF (118 KB)

Have a nice day, thanks, Amy.

<b>Amy Anderson</b> MT II  amy@mednettranscription.biz <a href="http://www.mednettranscription.biz">http://www.mednettranscription.biz</a>	<b>MedNet Transcription</b> 17786 NW Elkcrest Court Portland, OR 97229 tel: (503) 706-8485 fax: (503) 614-8554
--	--

Signature powered by Plaxo

Add me to your address book...


Want a signature like this?

Body Imaging Radiology Secure Email - Microsoft Internet Explorer


File Edit View Favorites Tools Help Address <https://securemail.bodyimagingradiology.com/mc10/login.aspx> Go

Links AmEx ET Stifel Kplan G GF S-Mail GF WebMail GreenField Prov Net UpToDate ePocrates

Back Search <https://securemail.greenfieldhealth.com/>

 **BODY IMAGING RADIOLOGY** *Secure Messaging*

**User Login**

 Please enter your secure email address and password.

Secure Email Address

Secure Password

Remember my email address [what's this?](#)

[I forgot my password.](#)

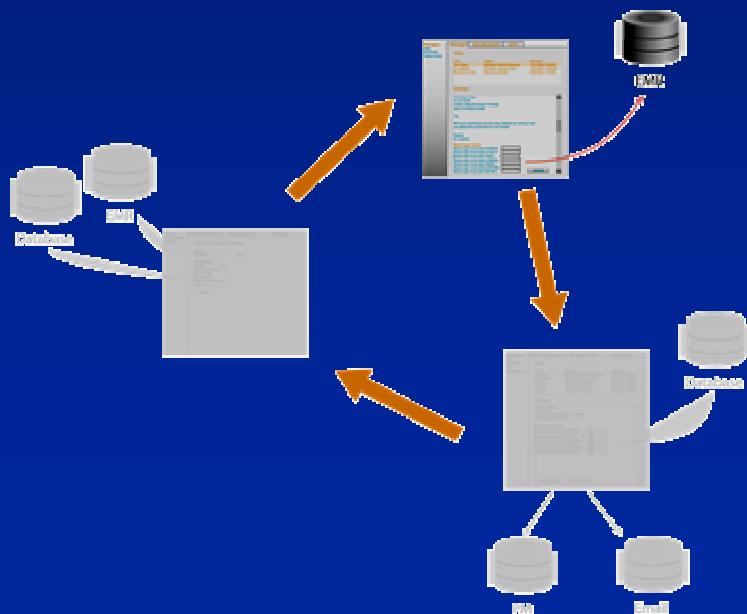
Note: Your secure password may be different than the password you use for logging into your computer or for receiving non-secure email.

For questions or technical support: [support@kryptiq.com](mailto:support@kryptiq.com)

Done Internet

# Practice-based Disease Management via Email (i.e., Diabetes)

1. E-Form aggregates patient specific information
2. Form emailed to the patient
3. Patient reviews and adds to form and submits
4. Data may be reviewed by clinic staff and automatically updated to existing systems EMR



Messages: [Inbox](#) [Sent Items](#) [Address Book](#)

Messages [AboutMyHealth](#) [eVisit](#)

**Inbox**

From	Subject	Received
<b>Your Clinic</b>	<b>Diabetes Online Checkup</b>	<b>12/4/2004 2:34PM</b>
Dr. Landholt	RE: eVisit - stomach pain	10/2/2004 10:34AM
Mary Smith, CNA	Blood Test Results	9/30/2004 3:45PM

**Message**

From: Your Clinic  
To: Joe Smith  
Subject: Diabetes Online Checkup  
Sent: 12/4/2004 2:34PM

Joe,

We're just checking to see how your diabetes are doing. Could you please fill out this form for us? Thanks!

Regard,  
Dr. Landholt

**Blood Sugar Levels:**

Blood sugar levels while FASTING:

Blood sugar levels before LUNCH:

Blood sugar levels after LUNCH:

Blood sugar levels before DINNER:

Blood sugar levels after DINNER:

Blood sugar levels before BEDTIME:

Blood sugar levels after BEDTIME:

# The Patient-Centered Practice

➤ **Relationship**

➤ **Service**

➤ **Clinical Reliability**



**Simple, efficient  
connectivity**