# Interactive Demonstrations

### **Wendy Angst**

-Cap Med

#### **Gloria Austin**

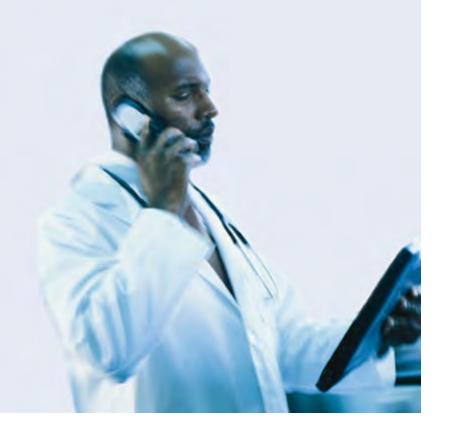
-Brown and Toland

#### C. Martin Harris

-The Cleveland Clinic Foundation

### **Stephen Downs**

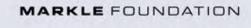
-Robert Wood Johnson Foundation



#### **Connecting Americans to Their Health Care**

Empowered Consumers, Personal Health Records and Emerging Technologies

2005





#### **Interactive Demonstrations:**

**Wendy Angst** 

Cap Med



# Personal Health Management Solutions

### CapMed

A Division of Bio-Imaging Technologies Inc.

Presented by: Wendy Angst

www.CapMed.com

# Who is CapMed

CapMed is the leading provider of interactive patient outreach solutions for the healthcare industry.

- CapMed Personal Health Record<sup>TM</sup>
- CapMed Personal HealthKey<sup>TM</sup>
- ½ Million PHRs distributed



Division of Bio-Imaging

Technologies (NASDAQ: BITI)



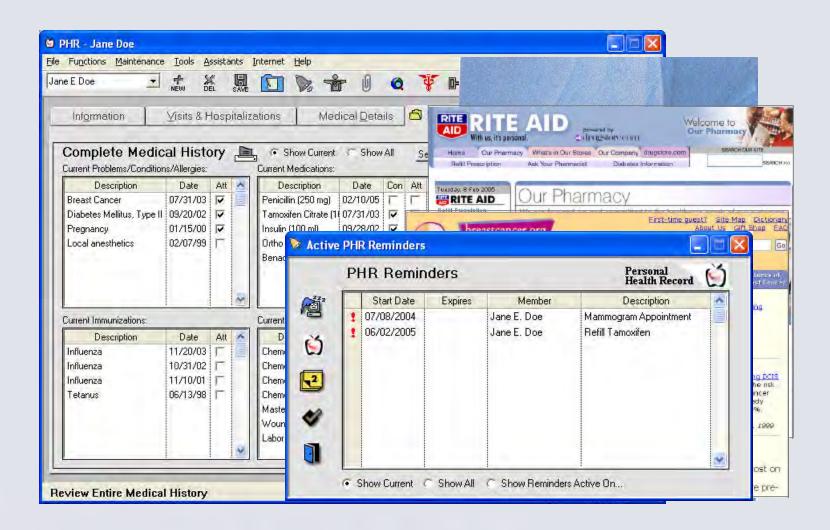
# CapMed Personal Health Management Solutions

- Private and Secure Consumer-Centric Quicken® Model
- A leader in Interoperability
  - Claims data
  - Aggregate data from multiple EMRs
    - TEPR 2004 CCR Interoperability Showcase
    - HIMSS 2005 IHE Interoperability Showcase
  - Home monitoring devices
  - Self-entered information through wizards and pick lists
  - Trigger automatic reminders based on data input

# CapMed Solutions Capabilities

- Enable users to track and manage all facets of health and wellness
- Easily communicate information
  - Secure online exchange
  - Printed reports
  - USB transfer with Personal HealthKey
  - Call Center back up (available through MedicAlert partner)
- Interaction
  - Direct links to custom content
  - Automatic desktop reminders
  - Medication interaction checkers
  - Personalized alerts to values in PHR

# Personal Health Manager



# Reach your patients. Reach your goals.

CapMed is committed to improving the quality of care for patients by empowering them to take an active role in managing their health.

# CapMed

A Division of Bio-Imaging Technologies, Inc.

Wendy Angst

wangst@bioimaging.com

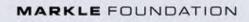
267.757.3315

www.CapMed.com

#### **Connecting Americans to Their Health Care**

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2005







#### **Interactive Demonstrations:**

**Gloria Austin** 

**Brown and Toland** 



# Brown & Toland Medical Group and the iHealthRecord





PHR Conference
Gloria Austin, Chief Executive Officer
Brown & Toland Medical Group
October 11, 2005



### Brown & Toland iHealth Strategy

- Brown & Toland Medical Group, based in San Francisco, is a clinically integrated physician network of 1,500 doctors serving close to 200,000 patients.
- ☐ iHealthRecord, in conjunction with the medical group's electronic health record, differentiates Brown & Toland from the competition.
- ☐ Helps establish Brown & Toland as the health care technology leader in the Bay Area.

#### **Brown & Toland and Innovation**

- Brown & Toland Medical Group launched its electronic health record (EHR) in November 2004.
- ☐ The iHealthRecord integrates with the TouchWorks EHR.

The iHealthRecord will eventually offer the option of patient/clinician *secure e-mail and online consultation*.

# Strategic Imperative: Information Technology Initiatives must Enhance the Value/Quality Equation for Purchasers and Consumers



### Why iHealth and Why Now?

- The majority of patients and physicians are now online.
- Improves quality and health by providing targeted health care information to consumers and important health information to providers (during an emergency).
- Poor medication adherence and poor care management are now seen as a national problem that dramatically increases health care costs.

### Brown & Toland iHealthRecord Provides a PHR and Communication Service

#### **Manufacturers**

Product-specific education and adherence programs

AMA/Societies, Government and **National Experts** 

Patient Education and Warnings







Physicians, Hospitals and **Medical Groups** 

Provide iHealth Services to Their Patients

### **Payors and Employers**

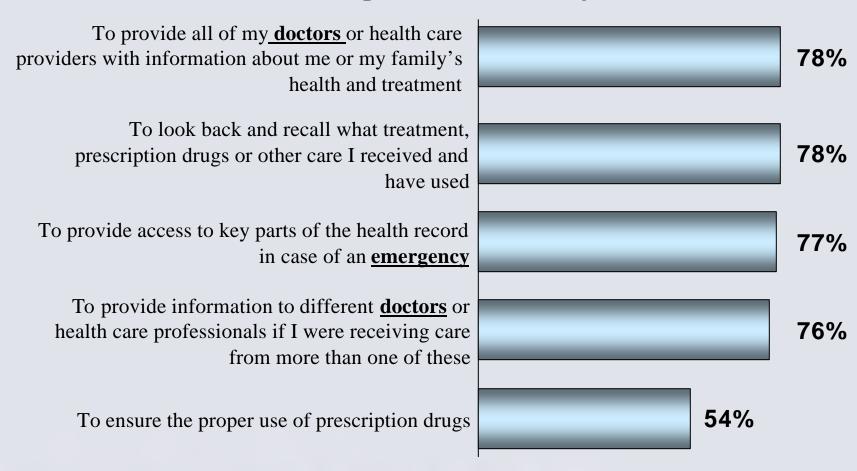
Disease Management and Patient Education and PHR Data Updates

#### **Patients/Caregivers**

Receive a PHR and Patient/Practice Secure E-mail and Education

# Patients Want iHealth and Want it From Their Own Doctors

"Reasons to have a personal or family health record?"

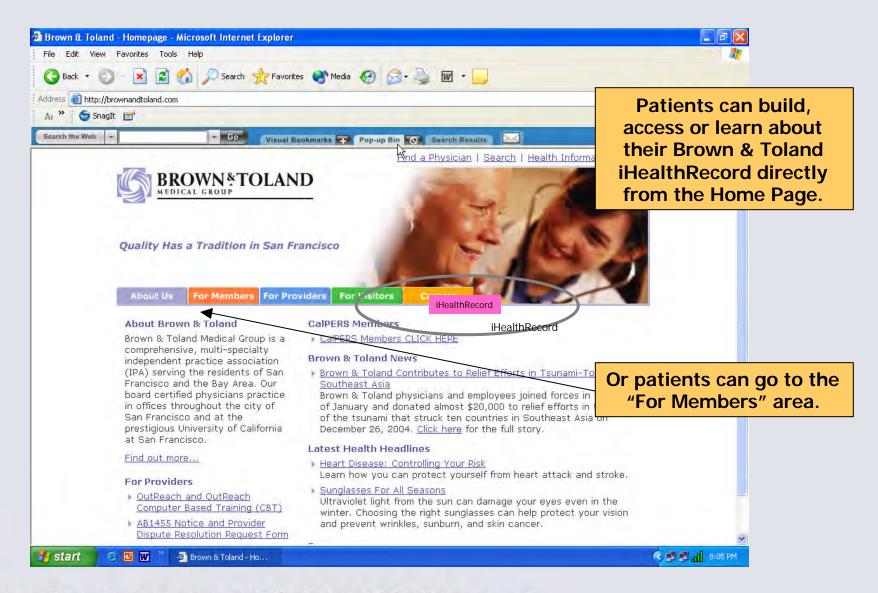


Base: All Adults 2004 Harris Interactive Inc.

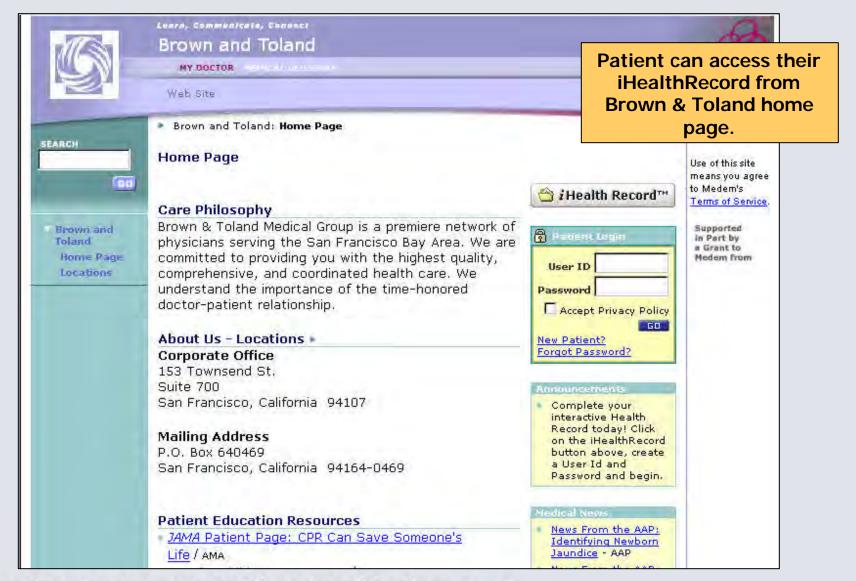
#### Brown & Toland and iHealth Services Defined

- ☐ Brown & Toland and iHealthRecord services:
  - a secure and standards-based *personal health record*, available via the Internet and under the control of Brown & Toland patients.
  - patient's ability to grant viewing privileges to their health record to physicians, or in the case of an emergency, emergency clinicians.
  - automated patient education messages and reminders written by national experts including the AMA, FDA, AHA and CDC.
  - patient safety warnings and product recalls specific to the patient's medications.
  - integration and pre-population from TouchWorks EHR.
  - custom built Web sites for all Brown & Toland physicians.

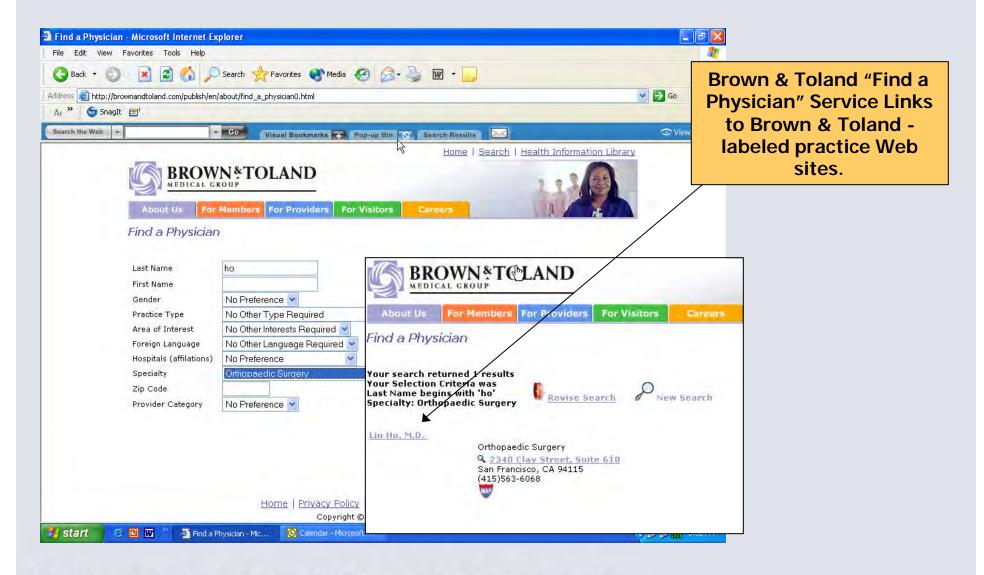
#### Brown & Toland Patient Visits Web site



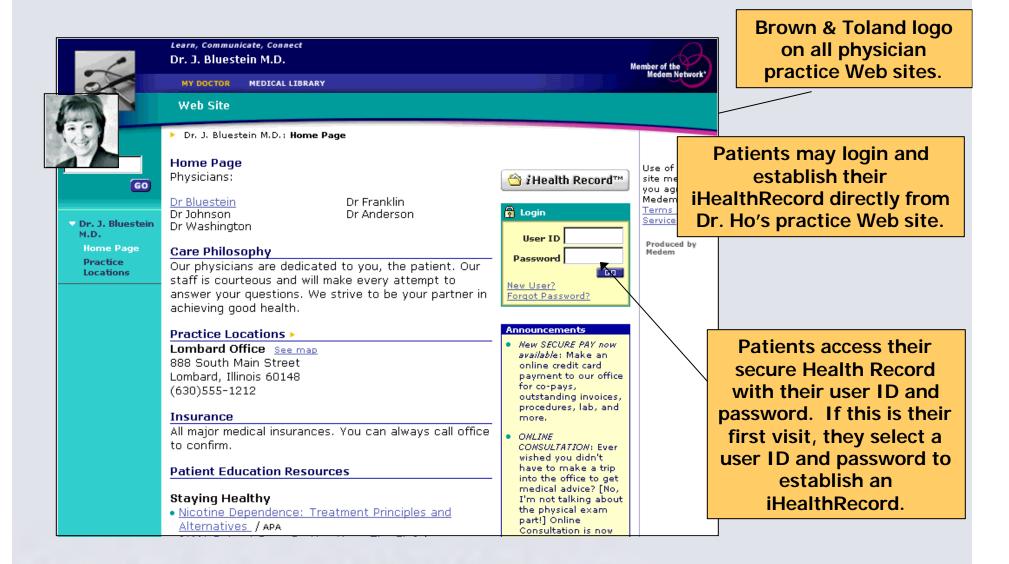
# If Patient's Physician Does Not Yet Offer the iHealthRecord, Brown & Toland Provides it Directly



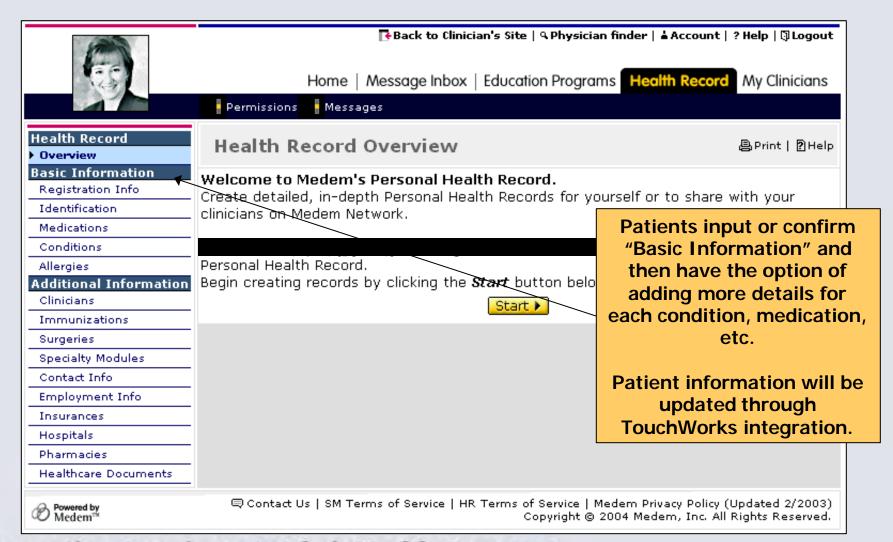
# Brown & Toland Patient Searches for a Physician and is Linked to His Practice Site



# iHealthRecord is Accessed by Patient from Dr. Ho's Practice Web site



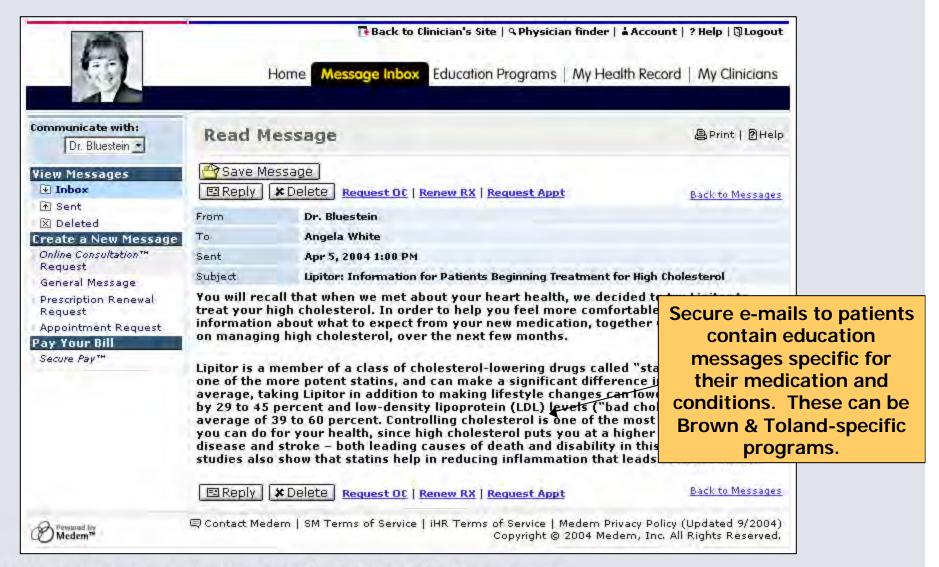
### First Time Brown & Toland iHealthRecord Users are Taken Through an Online Setup Wizard



# User Select Conditions and Medications from Lists or Drop-down Menus

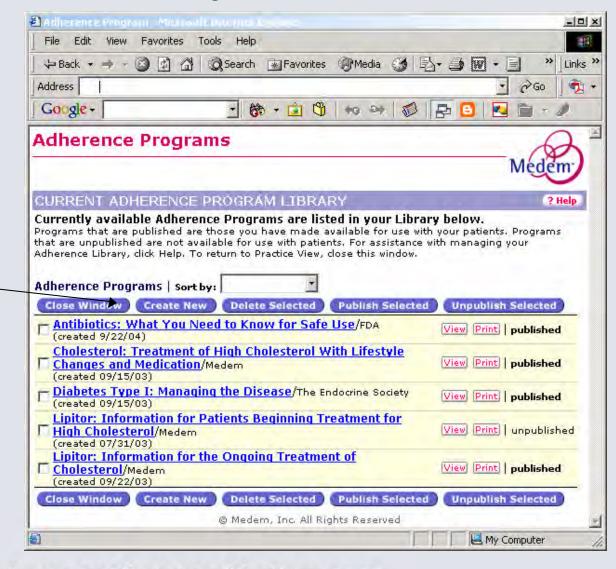
	Home   N		Man Carlo and	My Health Record My Clinicians
Health Record Overview	Add Conditions and Med History			Patients select, or confirm, conditions that apply to them
Basic Information Registration Info	« instructional text goes here »			from a pre-defined list, or
Identification  Medications	Add and Continue Skip Frewious Add and Continue Skip Frewious			
Conditions/Med History Allergies	Add Conditions and Medical History List of Common Conditions / Medical History Diagnoses:			A subsequent screen will
Additional Information	☐ Abdominal Pain	□ ADHD / ADD	AIDS / HIV	allow the patient to enter in
Clinicians		- Trock of the County		additional details. This is the
Immunizations	Alzheimer's Disease	I Anemia	¥ ☐ Angina	
Surgeries/Procedures	☐ Asthma	☐ Atherosclerosis	Athlete's Fo	same format for medications
Specialty Modules	- Blood Clotting	E	F 8	and allergies.
Emergency Contact	Disorder	Breast Lumps	☐ Bronchitis	
Caregiver Info	Carpal Tunnel Syndrome	Cataracts	Cellulitis	Chickenpox
Employment Info	Syndrome	40.7	Chronic Obs	tructive
Insurance	Chlamydia Chlamydia	Chronic Constipation	Pulmonary I (COPD)	Disease Chronic Pain
Hospitals	- 500	-	Congestive	Heart — Coronary Artery
Pharmacies	Colitis	Colon Polyps	Failure	Disease
Legal Documents	Crohn's Disease	☐ Depression	☐ Diabetes Ty	pe 1 Diabetes Type 2
Access Privileges	E Brooker	E postavia	E been	July Trustania
Saved Messages	☐ Diarrhea	Dizziness	Drug Depen	dency 🗆 Ear Infection
19	Eczema and	F Frankrisen	C Seilesen	T Euro Drobless

# Patients are auto-enrolled in education programs for their medications and conditions

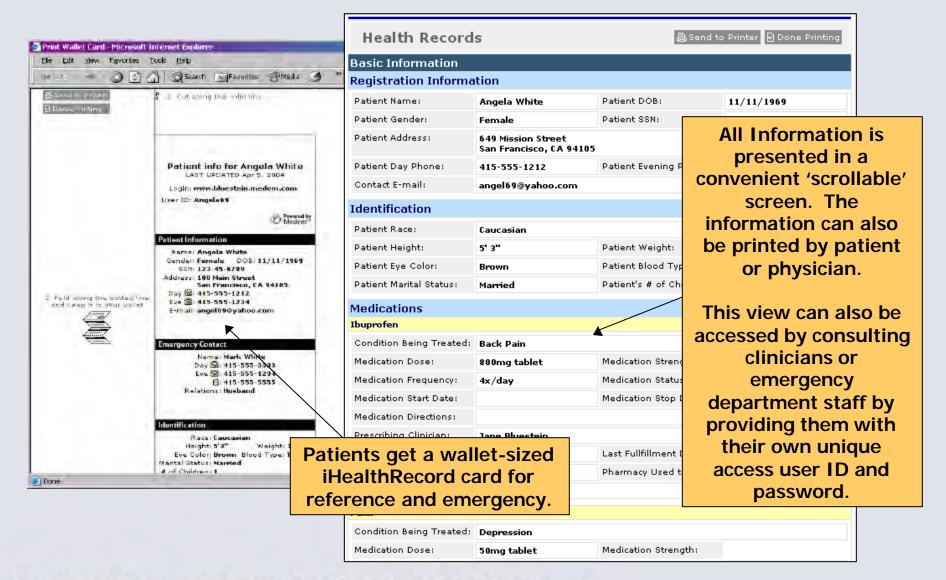


### Brown & Toland Physicians May Add or Edit Adherence Programs for Their Patients

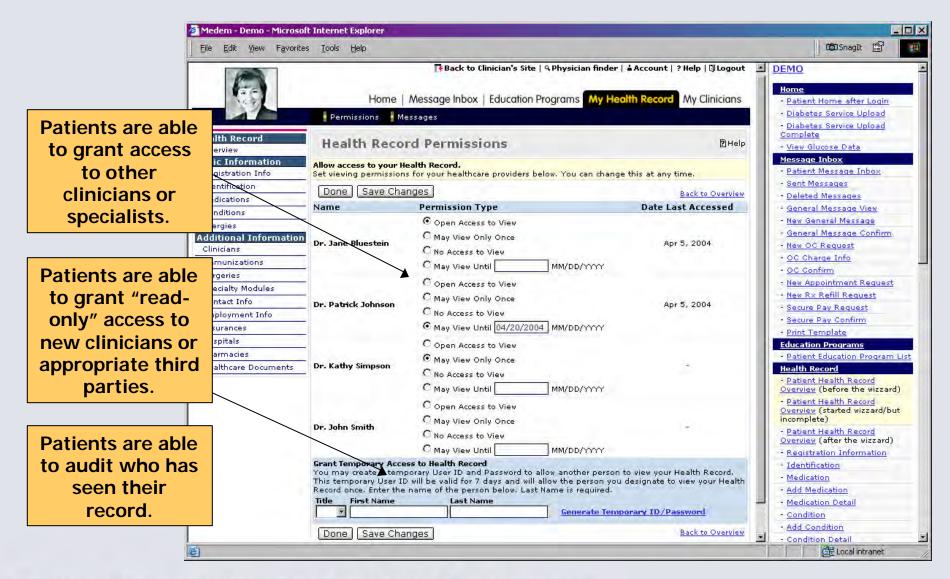
Clinician or
Brown &
Toland may
create new
programs by
clicking on
Create New
button.
Clinicians can
enable or edit
existing
Adherence
Programs by
clicking on a
Program Title.



#### Patients and Brown & Toland Clinicians May View or Print the Entire Health Record or Portions



# Users May Grant Privileges to Their Health Record for Consultations or in Emergencies



# Brown & Toland Marketing the iHealthRecord



- ☐ Publicized internally in physician newsletter and one-on-one by medical group's Physician Relations Department.
- Physician offices will receive information packet and training program.
- External advertising program, using radio, newspaper, and outdoor (San Francisco city buses), and the Internet (Yahoo and Google) targeted females 25 to 49.
- ☐ iHealthRecord kiosk, with Internet connection, at Marketing events. Brown & Toland employees are there to assist.

# Positioning Brown & Toland with technology and innovation.

Brown & Toland created iHealthRecord advertising based in part on 2005 survey of 2,000 iHealthRecord subscribers.

- ☐ 66 percent female
- ☐ Average age is 45
  - ☐ Those who responded like the fact that they can:

Store all health information in one convenient place; have access to health information in case of an emergency; and can improve communication with the doctor

# KEY POINT

Females overwhelmingly drive household health care decisions.



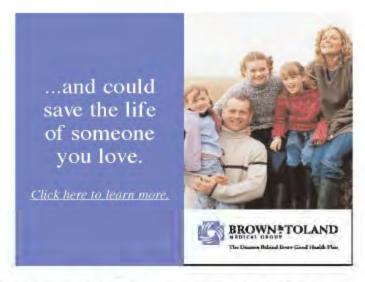
Outdoor Ads on 100 San Francisco Buses.



Newspaper Ads in the San Francisco Chronicle.

#### Brown & Toland Banner Ad - 300x250





Internet Advertising on Google, Yahoo, and SFGate.com.

The text and image in the banner ad on the right dissolves into the ad on the left. Click here to learn more is a link to the Brown & toland website (www.brownandtoland.com).

30-second and 60-second radio spots on AM and FM stations with high numbers of female listeners.

### **Advertising/Publicity Results**

- Web site activity up 36 percent immediately after iHealthRecord launch and overall Web activity up a little more than 30 percent for the year.
- ☐ To date, more than 1,300 users have clicked through our Web site to complete a iHealthRecord.
- Close to 50 separate mentions of Brown & Toland and the iHealthRecord in the press. Overall press activity up close to 300 percent over 2004.

# Brown & Toland iHealth is In Sync with National Focus on PHRs and Patients

"Next Step Toward Digitized Health Records"

Wall Street Journal, 9 May, 2005

"The goal is to have the medical clipboard become a thing of the past."

HHS Secretary Leavitt, 7 June, 2005

PHRs have the potential not only to improve personal and family health but also to support national objectives for health care quality, safety, efficiency and ultimately, health outcomes.

CMS RFI July 2005

"Every American should have an electronic Personal Health Record" Bush / Frist / Clinton / Gingrich 2005

"Every patient taking any medication should be enrolled in an automatic education program for that medication; an electronic package insert for patients."

Mark McClellan, M.D. FDA Commissioner 2002

# **An End to Medical Forms?**

CIO Magazine August 2005

# Brown & Toland iHealth: The Path Forward Strategy

- Expanded integration with EHR
- Expanded use of iHealth for Disease Management
- Increased use of iHealth by physicians and patients
- Collaboration with RHIOs and other data-sharing initiatives

## Brown & Toland Medical Group and the iHealthRecord





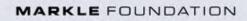
PHR Conference
Gloria Austin, Chief Executive Officer
Brown & Toland Medical Group
October 11, 2005



## **Connecting Americans to Their Health Care**

Empowered Consumers, Personal Health Records and Emerging Technologies

2005







### **Interactive Demonstrations:**

C. Martin Harris

The Cleveland Clinic Foundation







# **Cleveland Clinic**

# MyChart<sup>®</sup>: Your Personal Health Connection

C. Martin Harris, M.D.

Chief Information Officer, The Cleveland Clinic Executive Director, eCleveland Clinic, eHealth Services Program



# Our Challenge

• To meet the expectations of our patients by creating environment wherein our patients are **known** by the medical professionals providing their care, wherever their treatment takes place.

# We will meet the expectations of our patients by...

• Connecting: All our clinicians, nurses and administrative staffs

 Connecting: Our patients to the personal health information they need, where and when they need it

# **Electronic Medical Record**

#### **Cleveland Clinic User and Encounter Statistics**

Physicians	=	1,607
Residents/Fellows	=	1,265
Pharmacists	=	123
Other End Users	=	12,387
Patients in the EMR	=	3,521,925
Prescriptions	=	8,508,238
Orders	=	8,528,779
Encounters	-	8,812,563
<b>Total Results</b>	=	133,277,794





























# MyPractice Functionality

- Workflow
- Computerized physician order entry
- Messaging
- Results review
- Orders management
- Documentation
- Best practice alerts

We will meet the expectations of our patients by...

MyPractice

MyChart



# Patient Services

- ? View medical information
- ? View health reminders
- ? View schedule
- ? Appointment request
- ? Prescription renewal



### Welcome to MyChart

#### June 17, 2005 Welcome MyChart User

#### Back MyChart Home Help Log Out

#### My Health Record

Health Summary
Medications
Test Results
Health Reminders
Recent Visits

#### My Messages

<u>Inbox</u> <u>Outbox</u> <u>Request Rx Renewal</u> Contact Us

#### Appointments

Future Appointments Request A New Appt

#### My Administrative Info

Name and Address
Personal Preferences
Change Password
Change Address
Terms and Conditions

#### **Health Summary**

Printer Friendly Page

The Health Summary provides you with a convenient summary of important information in your health record. Your summary includes up-to-date information concerning your current health issues, medications, allergies, immunizations, and health reminders.

#### Help with Hyperlinks

Name Medical Record Number Primary Physician Clinic

Alan M. Weiss, MD Cof Main Campus

Current Health Issues	0	
Enter Search Keyword:	Search	
Health Issue		Date Noted
Hypertension (High Blood Pressu	ire)	
Elevated Cholesterol		05/20/2005

Medications		
Name	Instructions	Provider
GLUCOPHAGE 500 MG ORAL TAB	Take One(1) Tablet Three(3) Times Daily.	EpicCare Test MD

Health Reminders			
<u>Name</u>	Due Date	Status	Last Done
Plasma Glucose Check	02/23/2007		02/23/2004
Cholesterol & Ldl Check M	04/11/2010		04/11/2005
Tetanus	03/15/2014		03/15/2004

If you would like to find out more information on your Health Reminders, click here:

Back to the previous page...

#### Hypertension

#### What is high blood pressure?

Blood pressure is the force of blood pushing against blood vessel walls. The heart pumps blood into the arteries (blood vessels), which carry the blood throughout the body. High blood pressure, also called hypertension (high-per-TEN-shun), means the pressure in your arteries is above the normal range. In most cases, no one knows what causes high blood pressure.

#### How is blood pressure recorded?

Blood pressure is written as two numbers, such as 118/72. The first number is the systolic (sis-TOL-ik) pressure. This is the pressure in the arteries when the heart beats and fills them with blood. The second number is the diastolic (dye-a-STOL-ik) pressure. This is the pressure in the arteries when the heart rests between beats.

#### What is a normal blood pressure reading?

Type of blood pressure reading	Normal blood pressure	Prehypertension	Stage 1 hypertension	Stage 2 hypertension
Systolic	less than 120	120-139	140-159	160 and above
Diastolic	less than 80	80-89	90-99	100 and above

#### How will I know if I have high blood pressure?

Your health care provider can tell you if you have high blood pressure by checking your blood pressure with a special meter. You usually cannot feel high blood pressure—many people who have high blood pressure don't know they have it. You should have your blood pressure checked once a year to make sure you don't have high blood pressure. Do not rely on drug store measurements. These may not be good enough.



June 17, 2005 Welcome MyChart User

Back MyChart Home Help Log Out

#### My Health Record

Health Summary
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Health Reminders
Recent Visits

#### Medications

This page displays your current medications and their dosage instructions. Click on the medication name to display more in-depth information on its uses and effects.

Help with Hyperlinks

#### My Messages

<u>Inbox</u> <u>Outbox</u> <u>Request Rx Renewal</u> <u>Contact Us</u>



GLUCOPHAGE 500 MG ORAL TAB

#### Instructions Provider

Take One(1) Tablet Three(3) Times <u>EpicCare Test MD</u>
Daily.

#### Appointments

Future Appointments Request A New Appt

#### My Administrative Info

Name and Address
Personal Preferences
Change Password
Change Address
Terms and Conditions

To request a prescription renewal from your physician, simply mark the checkbox beside each medication that you wish to renew and click the **Request Rx Renewal** button. You may only request a prescription on this list.

Request Rx Renewal

Back to the previous page...\

## Welcome to MyChart

June 17, 2005 Welcome MyChart User

Back MyChart Home Help Log Out

#### My Health Record

Health Summary
Medications
Test Results
Health Remin
Recent Visits

#### Test Results

This page displays your lab tests together with the authorizing physician and the status of any test results. If your physician has provided any test results for your review, you can view them by clicking on the result status of the test. Click on the lab name to display more in-depth information for that test.

#### My Messages

Inbox Outbox Request Rx Renewal Contact Us

#### Appointments

Future Appointments Request A New Appt

#### My Administrative Info

Name and Address
Personal Preferences
Change Password
Change Address
Terms and Conditions

Refresh | Next Page

Status	Date	Test	<b>Authorizing Provider</b>	Result Status
Read	04/11/2005	LIPID PANEL BASIC	Alan M. Weiss, MD	Final result
Read	07/12/2004	SHOULDER AP/TRUE AP + AXILLARY	Michael Walker, MD	Final result
Read	03/15/2004	LIPID PANEL BASIC	Alan M. Weiss, MD	Final result
Read	03/15/2004	LDL CHOLESTEROL DIR	Alan M. Weiss, MD	Final result
New	03/15/2004	TETANUS	Alan M. Weiss, MD	****
Read	02/24/2004	STRESS EXERCISE REG	Sharon Mace, MD	Final result
New	02/23/2004	CK TOTAL AND CK-MB	Sharon Mace, MD	Final result
New	02/23/2004	TROPONIN T	Sharon Mace, MD	Final result
New	02/23/2004	COMPLETE ECG	Ccf Provider	Final result
New	02/23/2004	CK TOTAL AND CK-MB	Sharon Mace, MD	Final result

Refresh | Next Page

Back to the previous page...

# Welcome to MyChart

June 17, 2005 Welcome MyChart User

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Printer Friendly Page

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Terms and Conditions

#### **Test Details**

Test: LIPID PANEL BASIC [SQLIPB]

Order Number: 41610423 Quantity:

Sample: Blood Date Collected: 4/11/2005 4:51 PM
Result Status: Final result Resulted Date: 4/11/2005 7:59 PM

Provider Status: Reviewed

#### Component Results

Component	Value	Flag	Low	High	Unit
Triglyceride	201	ļ	30	149	mg/dL
Cholesterol	198		100	199	mg/dL
HDL Cholesterol	70		>45		mg/dL
VLDL Cholesterol	40		6	40	mg/dL
LDL Cholesterol	88		60	129	mg/dL
Fasting Time	14				hrs
TC:HDL Ratio	2.83		1.00	5.00	
LDL:HDL Ratio	1.26		0.50	3.55	

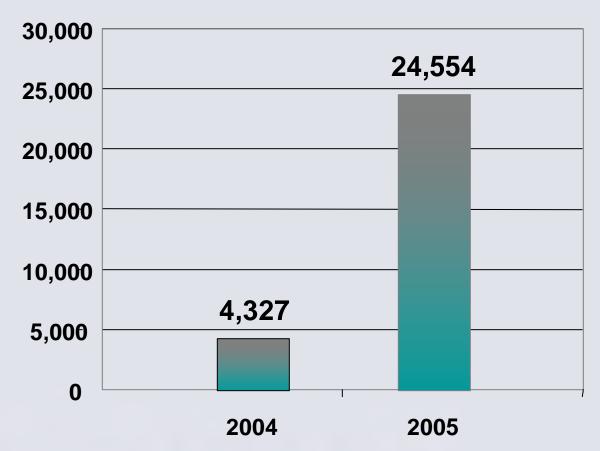
Back to the previous page...

## **Patient views result**

# Consumer Marketing Campaign

- Began June 14, 2005
- Reaches approximately one million northeast Ohio residents per month
- Utilizes print (newspaper and magazines), radio and television

# My**Chart** Account Requests per Year 2002 – 2005 (YTD, September)



Total MyChart Users, YTD, September, 2005, 29,304 Connecting Americans to Their Health Care 2005

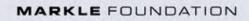
# What eHealth Services Offer the Contemporary Healthcare Consumer

- Empowered patients with enhanced and convenient access to personalized and reliable health-related information.
- A whole new way of requesting and receiving a variety of health-related services anytime, anywhere.

## **Connecting Americans to Their Health Care**

Empowered Consumers, Personal Health Records and Emerging Technologies

2005







## **Interactive Demonstrations:**

**Stephen Downs** 

**Robert Wood Johnson Foundation** 



# A Broad Range of PHR Models: Technology

- Internet browser-based
- Desktop-based
- Portable memory devices

# A Broad Range of PHR Models Suppliers

- Dot-coms
- Physicians Integrated delivery networks
- Health plans
- Retail pharmacy and pharmacy benefit managers
- Employers
- Device manufacturers
- Disease management companies
- Government (e.g., DoD, VA)

# Broad Range of PHR Models Data population

- Patient sourced
- Clinician sourced
- Claims data
- Monitoring device data
- ... and combinations of the above

# **Emergency Response**



HOME LOGIN CONTACTUS FAQS

Helping Save Lives Since 1956

Join Now!

E-HealthKEY

Health Enhancement System

Advance Directives

TravelPlus SM

#### E-HealthKEY Demo (Flash required)

This MedicAlert® E-HealthKEY carries the famous MedicAlert® logo that is instantly recognized by medical personnel, and first responders.



The MedicAlert® E-HealthKEY, coupled with the online network at MedicAlert®, immediately gives a provider access to a patient's critical medical information.

For more information, contact MedicAlert® 1(888)ALERT 90

visit www.medicalert.org/E-Health

RESTART

Protect Yourself with the Nation's Leading Emergency Medical Information Service - The MedicAlert® E- HealthKey

#### FEATURED ITEMS

See How the E-HealthKEY Works (Flash - 140k)

<u>Click here</u> for Prices and Member Plan comparisons.

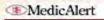
If you have any questions please contact us.

ehealth@medicalert.org

E-HealthKEY White Paper

(PDF - 450k)

E-HealthKEY Emergency Splash Screen







# **Retail Pharmacy**

#### Pharmacy > Pharmacy **Confidential Health History** Your Tools Order Prescriptions Once you have entered your PIN, this feature will update your personal health history to your existing ▶ View Rx History Walgreens pharmacy profile. ▶ Print Rx Records ► Update Health History For more information on privacy and security, please see our Security and Privacy Policies. ► E-mail Reminders Additional Medications Drug Information Indicate the vitamins, herbals, supplements and over-the-counter medications you take on a Check Drug Interactions regular basis. You may also include prescriptions you've had filled at pharmacies other than Ask a Pharmacist Walgreens. ☑ IBUPROFEN 200MG TABLETS WALGREENS ExpressPay PROCHLORPERAZINE 25MG SUPP Health Info Card ADD MEDICATIONS Medicare Assignment Custom Labels Specialty Pharmacy Health Conditions Immunizations Indicate your current health conditions. ✓ STOMACH/DUOD DISORDERS ✓ VERTIGO ADD CONDITIONS 6 Drug Allergies Indicate your current drug allergies. SULFA DRUGS ADD ALLERGIES

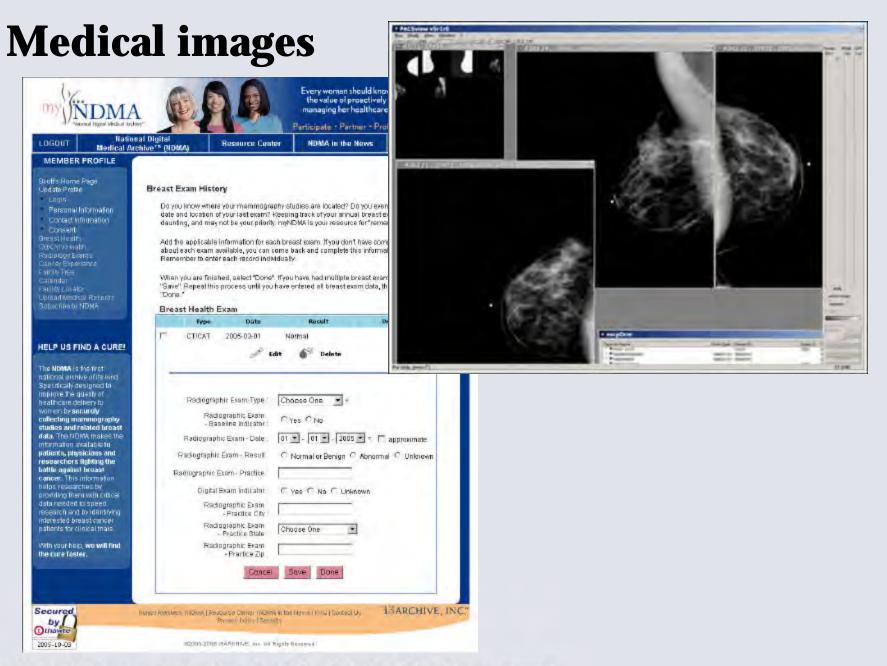
#### Miscellaneous

Would you like easy-open caps on your prescription bottles?

# Targeting specific conditions

Glucose Calculations (mg/dL)	Breakfast	Lunch	Dinner	Overall
Average	122	123	206	150
Low	77	88	90	77
High	189	199	HIGH***	HIGH***
Standard Deviation	31.9	31.4	143.6	96.9
% Within Target (80-140)	80	90	60	77
% Above Target (140)	0	10	40	17
% Below Target (80)	20	0	0	7
Device Out-of-Range ***HIGH values are assigned a val	0 ue of 601 for calc	0 ulation purposes.	1	0
***HIGH values are assigned a val	ue of 601 for calc	ulation purposes.	Dinner	0
***HIGH values are assigned a val	ue of 601 for calc		Dinner 188*, 191*	0
***HIGH values are assigned a values are assigned a values are assigned a values (mg/dL) SUNDAY 10/08/2004  Edt	ue of 601 for calc	Lunch	Dinner 188*, 191* 210*	0
***HIGH values are assigned a values are assigned a values are assigned a value Glucose Results (mg/dL) SUNDAY 10/08/2004 Edit MONDAY 10/09/2004 Edit	Breakfast 100*, 80*	Lunch 88*	188*, 191*	U
***HIGH values are assigned a value of the control	Breakfast 100*, 80* 150*, 120*	Lunch 88* 97*, 123*	188*, 191* 210*	U
****HIGH values are assigned a values are assigned a values are assigned a value of the second secon	Breakfast 100*, 80* 150*, 120* 111*	Lunch 88* 97*, 123* 145*	188*, 191* 210* 115*	U
***HIGH values are assigned a value Glucose Results (mg/dL) SUNDAY 10/08/2004 Edit MONDAY 10/09/2004 Edit TUESDAY 10/10/2004 Edit WEDNESDAY 10/11/2004 Edit	Breakfast 100*, 80* 150*, 120* 111*	Lunch 88* 97*, 123* 145*	188*, 191* 210* 115* 90, 111	U



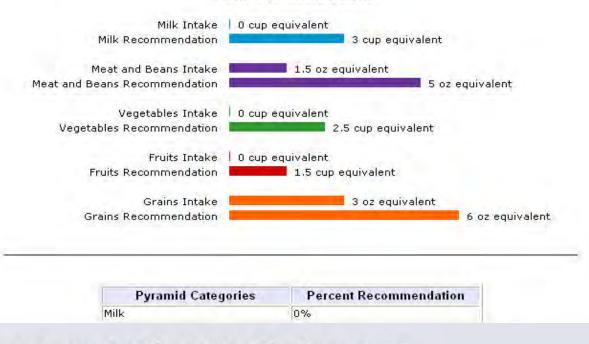


# USDA – MyPyramidTracker



#### Comparison of Your Intake with MyPyramid Recommendations for Check It Out user

#### Your Pyramid Stats



# Thank You