



Personal Health Records

Not so scary after all

Dr. David Chan

Anubha Sant



- Web-based, standalone, interoperable, **patient-controlled electronic Personal Health Record** connecting relationships and information for better health
- Consolidated record of health information, “cradle to grave”
- Individual sets access permissions for viewing or modifying/updating for **full circle of care**

Available Services:

- Data Sharing
- Secure Messaging
- On-line Booking
- Manage Dependents’ Record(s) / POA
- Access to Health and Wellness Apps

- BOOK APPOINTMENT
- NEW MESSAGE
- ADD CONNECTION

Home

Chart **2**

Calendar **8**

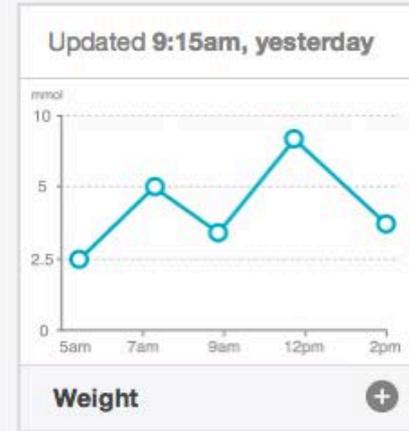
Mailbox **1**

Connections **2**

Wellness Apps

Discussion Groups

Health Trackers



Wellness Apps



Bant Type 1



Breathe



Nike+ Fuel



<30 Days

Chart

 John Smith ▼

 BOOK APPOINTMENT

 NEW MESSAGE

 ADD CONNECTION

Home

Chart 2

Calendar 8

Mailbox 1

Connections 2

Wellness Apps

Discussion Groups



John Smith

Born May 1, 1973 (42y)
Gender Male
Username john.smith

Contact Information ▼

- Summary
- Diagnosis
- Medications
- Allergies
- Health Trackers
- Immunisations
- Docs

Current Diagnosis

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

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[View All](#) >



 John Smith ▼

 BOOK APPOINTMENT

 SEND MESSAGE

 ADD CONNECTION

Home

Chart

Calendar 8

Mailbox 1

Connections 8

Wellness Apps

Discussion Groups

Connections Updates

Sarah Smith added pollen to list of allergies. Today

McMaster Family Practice changed their opening hours. Today

Sarah Smith downloaded Bant. Yesterday

Ken Smith added a new medication. 3 days ago

Sarah Smith added Mary Smith as a connection. 1 week ago

John Smith added Nike+ Fuel to his Wellness Apps. 1 week ago

[View Activity Log](#) >

Connection Request(s)

 **Mary Smith**
Family/Friend

Accept

Decline

 **Thomas Wright**
Family/Friend

Accept

Decline

 Add Connection

Frequently Contacted

Healthcare Providers

Dependents

Family & Friends

All Connections



Kent Smith
Family/Friend



Leah Smith
Daughter
Dependent



Patricia Kelly
Family/Friend



Lisa Smith
Family/Friend

Connection Request



John Smith



Mary Smith
Family/Friend

Mary Smith is my

Mary Smith is allowed:

- Chart access
Permission to either view my chart or, view and edit my chart (you can specify which sections in the next step)
- Full account management access
Permission to manage my account on my behalf with full access to edit all information within my Chart, Calendar, Mailbox, Connections, Wellness Apps and Discussion Groups.

Next

Connection Request



John Smith
Family/Friend



Mary Smith
Family/Friend

No access

View only

View & Edit

Select All

Select All

Select All

Diagnosis	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Medications & Immunizations	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Allergies	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Health Trackers - Blood Glucose	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Health Trackers - Blood Pressure	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Health Trackers - Weight	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Documents	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

< [Back](#)

[Next](#)

 John Smith 

 BOOK APPOINTMENT

 NEW MESSAGE

 ADD CONNECTION

Home

Chart 2

Calendar 8

Mailbox 1

Connections 2

Wellness
Apps

Discussion
Groups

 New Message

Search Mailbox 

Inbox (19) Sent

   Mark as 1-30 of 31  

The message has been sent 

<input type="checkbox"/>	 Sarah Smith	Update Thank you for your concern	10:17am
<input type="checkbox"/>	 Sarah Smith	Re: Update Thank you for your concern 	May 1
<input type="checkbox"/>	 Lisa Smith, Kevin...	This is the subject Lorem ipsum dolor sit amet, consecetetur adi...	Mar 30



Inbox (19)

Sent

John Smith

BOOK APPOINTMENT

NEW MESSAGE

ADD CONNECTION

Home

Chart 2

Calendar 8

Mailbox 1

Connections 2

Wellness
Apps

Discussion
Groups

New Message

To [Add CC](#)

From **John Smith**
 Send on behalf of

Subject

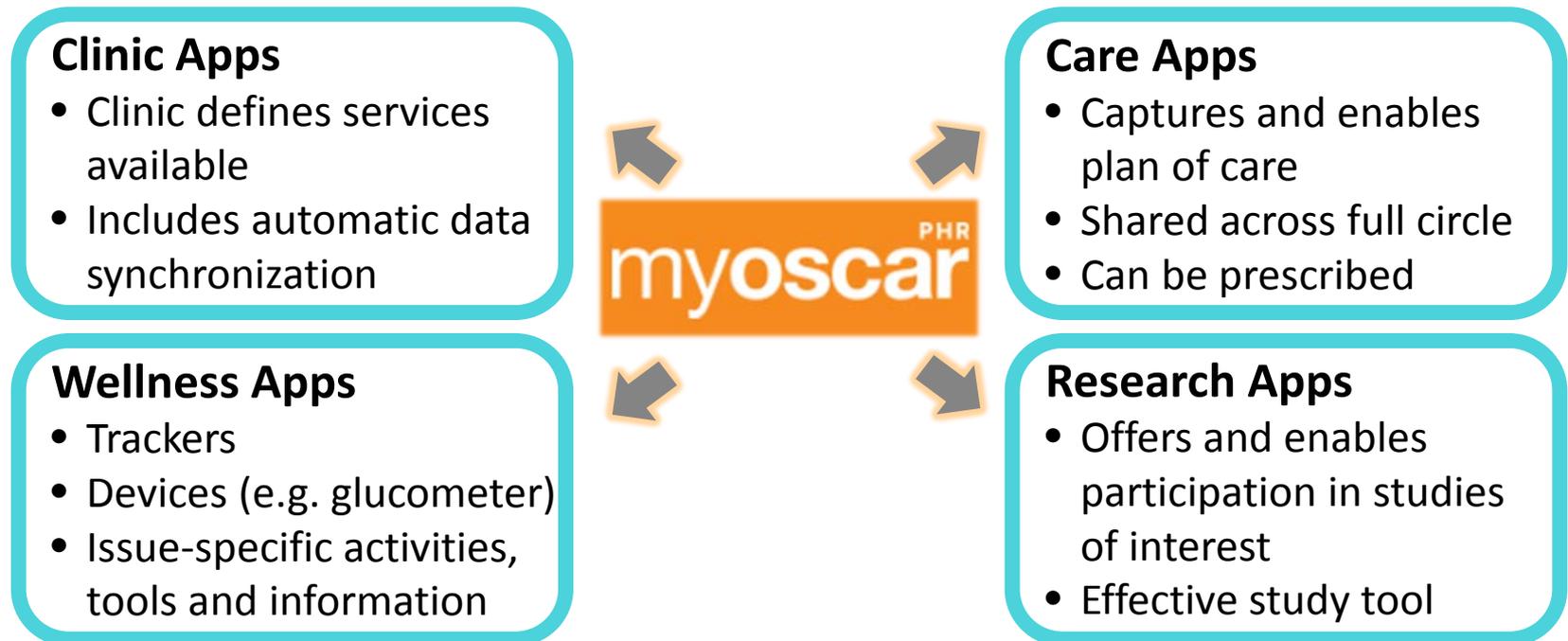
[Add Attachment](#)

[Cancel](#)

[Send](#)

MyOSCAR Apps

Through MyOSCAR, patients can subscribe to a variety of Apps to enhance their healthcare experience and management of their own health.



Current Deployments

- McMaster Family Health Team (Stonechurch Family Health Centre and McMaster Family Practice Unit)
- Queen's Family Health Team
- Community of Chilliwack (BC)
- Select clinic-based deployments in BC and Quebec

Personal Health Records-

Not so scary after all!

Mark A. Fraser BSc(Hon) MD CCFP FCFP

WCFHT- Patient Health Portal

- Development in partnership with Anyware Corp.
- A successful foray into personal health record territory
- 2nd place overall in category - Canada Health Infoway- "ImagineNation" Challenge 2013

WCFHT Context

- 17,127 active patients
- Semi-rural location: Carp, west of Ottawa
- 11 FP's (approx. 8 FTE)
- 5 NP's (3 FTE)
- 1 PA
- Pharm, Diet, PAC, MSW, Psych, RN's
- Database programmer

The Portal: Patients love it

- Providers are learning to like it
- Patients respect the "increased access" to providers afforded by the Portal.

Features

- Health Maintenance Plan – due dates for Pap, mammogram, FOBT, FFS, Colonoscopy, BMD, PFT, BP,
- opportunity for personal goal setting
- self-monitoring by access to selected EMR chart data
- Lab results and Vitals - 10 yr graphs

Features-2

- Immunization record
- Upcoming appointments
- Active Medications List
- Medication reconciliation process

Features-3

- Smoking status flag/cessation history survey
- Individualized surveys
- Patient entry of BP, Wt, Waist directly to EMR
- Remote appointment booking

Labs Results & Vitals



Health Factor

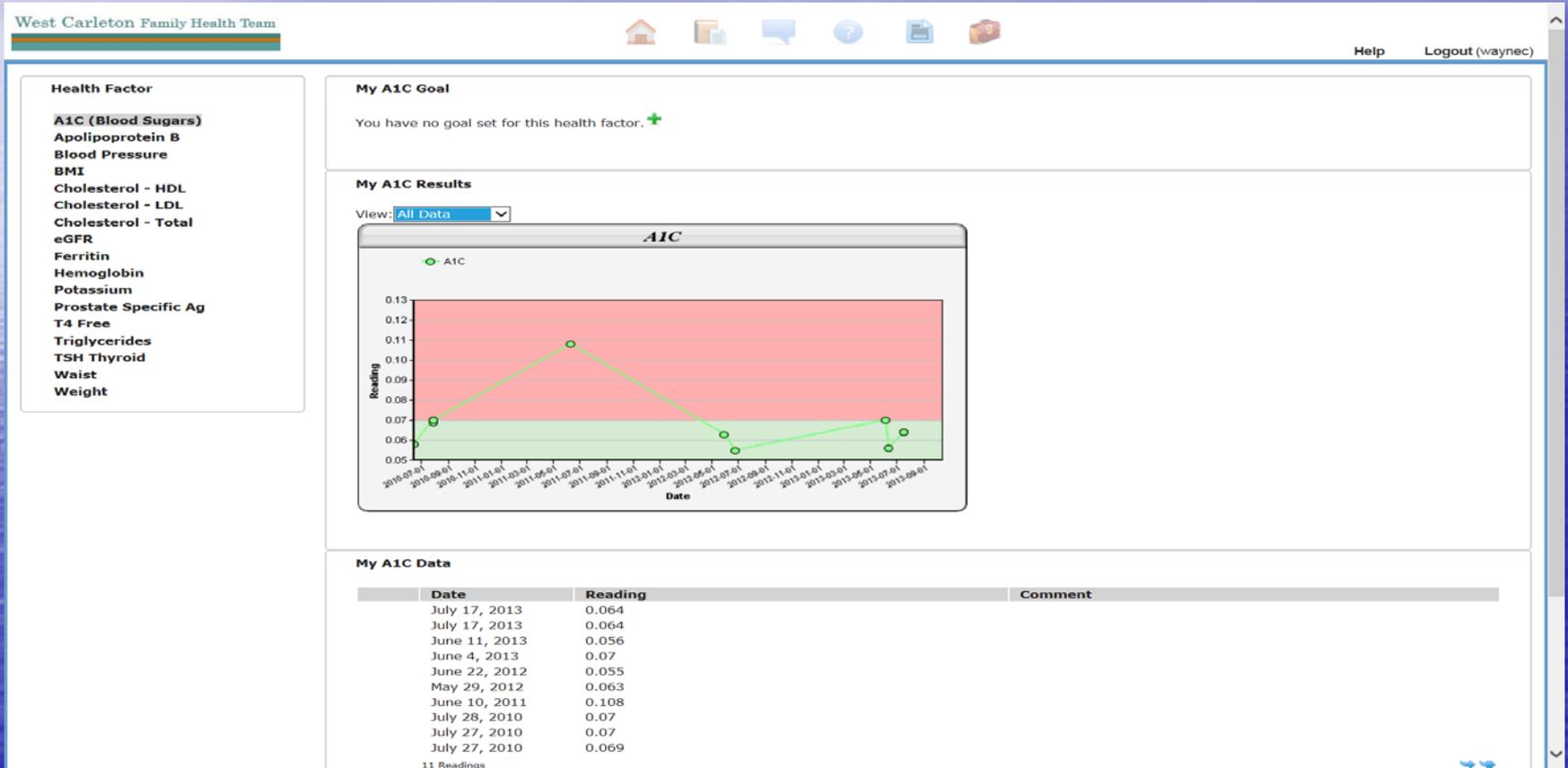
A1C (Blood Sugars)
Apolipoprotein B
Blood Pressure
BMI
Cholesterol - HDL
Cholesterol - LDL
Cholesterol - Total
eGFR
Ferritin
Hemoglobin
Potassium
Prostate Specific Ag
T4 Free
Triglycerides
TSH Thyroid
Waist
Weight

Welcome to your logbook!

Please begin by selecting a Health Factor from the left side of the screen.

At this time, your provider has only authorized the Laboratory test results shown in the menu to be published on the Patient Health Portal. Laboratory test results can be meaningless or misleading in the absence of other findings by your healthcare provider. In addition, the law prevents us from releasing results if there is a reasonable likelihood that doing so could lead to injury (including the possibility of self-medicating). For all of these reasons, you will need to obtain any other laboratory test results directly from your healthcare provider.

HbA1c History



Blood Pressure History

West Carleton Family Health Team Help Logout (waynec)

Health Factor

- A1C (Blood Sugars)
- Apolipoprotein B
- Blood Pressure
- BMI
- Cholesterol - HDL
- Cholesterol - LDL
- Cholesterol - Total
- eGFR
- Ferritin
- Hemoglobin
- Potassium
- Prostate Specific Ag
- T4 Free
- Triglycerides
- TSH Thyroid
- Waist
- Weight

My Blood Pressure Goal

Goal Title	Target	Target Date	Status
better manage bp	160 / 110	December 9, 2015	✔

My Blood Pressure Education

[Hypertension Canada](#)

My Blood Pressure Results

View: Three Months

Blood Pressure

Target Systolic Range (120 - 140)
Target Diastolic Range (70 - 90)

My Blood Pressure Data

Date	Reading	Comment
September 9, 2013	158 / 90	
September 9, 2013	120 / 80	
September 4, 2013	120 / 80	
July 30, 2013	180 / 90	
July 23, 2013	115 / 77	
July 23, 2013	121 / 78	
July 22, 2013	117 / 78	
July 21, 2013	124 / 81	
July 21, 2013	122 / 81	
July 20, 2013	127 / 85	

350 Readings

Active Medication List

West Carleton Family Health Team

Home, Documents, Chat, Help, Print, Logout (waynec)

Help Logout (waynec)

Health Management

Immunizations

Medications

This is your medication list. Please select the medication review icon  or the print to PDF icon  at the bottom of the screen.

Name	Strength	Form	Signa
ACETYLSALICYLIC ACID	150 Mg	RECTAL	1 twice daily
ACETYLSALICYLIC ACID	200 MG	TABLET, DELAYED	1 daily for 100 day(s)
ACETYLSALICYLIC ACID	325 Mg	ORAL	1 tablet(s) daily
B12		cap	1 daily
CALCIUM	1000 mg		1 three times a day
CIPROFLOXACIN HCL/DEXAMETH	0.3 %-0.1%	bottles	3 drops each canal twice daily for 10 days
FLUTICASONE	125 mcg/puf	puffer	twice daily
HYDROCHLOROTHIAZIDE	12.5 mg	Tablets	daily
OMEPRAZOLE	20 mg	CAPSULE, DELAYED	1 daily
OMEPRAZOLE MAGNESIUM	20 Mg	TAB	1 daily
PANTOPRAZOLE SODIUM	40 Mg	ORAL	1 daily
SALBUTAMOL SULFATE	100 Mcg	inh	2 puffs four times a day as needed

Immunization History/due dates

West Carleton Family Health Team

Home | Documents | Messages | Help | Logout (waynec)

Health Management

Immunizations Medications

Immunizations

Immunization	Due Date	Done Date
# 1 Penta (DPTP & Act Hib)		December 9, 2003
Prevnar #1		October 10, 2012
Prevnar #2		October 10, 2012
Prevnar #3		October 10, 2012
Prevnar #4		October 10, 2012
# 3 Pediacel (DPTP & Hib)		November 15, 2012
# 3 Penta (DPTP & Act Hib)		December 3, 2003
Chickenpox had when child		January 1, 1975
FLUVIRAL 11/12 OTHER		January 9, 2012
FLUVIRAL 2012-2013		November 13, 2012
MMR #2 (PRIORIX)		January 1, 1999
Prevnar #2		September 17, 2013
Td		December 18, 2008
Td		December 3, 1985
Td		September 17, 2013
Vaxigrip Lot# C1595AA		January 8, 2003
Td		March 3, 2003
Fluviral Lot # 3FV16711		November 4, 2003
Fluviral Lot # 3FV17321		December 9, 2003
Engerix-B		May 27, 2005
27 Immunizations		

Links to Resources



Being Well, Exercise and Nutrition



Canada Food Guide
Canada's Physical Activity Guide for Older People
Canada's Physical Activity Guide
Ottawa Region Walking, Biking, Running Trails

Diabetes Management



Diabetes Facts
Managing your Blood Glucose
Physical Activity and Diabetes
Type 1 Diabetes - The Basics
Type 2 Diabetes - The Basics

Health Portal Guides

User Guide
August 2012 New Features
Health Maintenance Plans
Health Portal Communications

Smoking Cessation



Quitting Smoking - Ottawa Heart
UOHI - Quit Smoking Program
Where to Start

Understanding Heart and Stroke



Coping with Stress
Get Your Blood Pressure Under Control
Heart Healthy Living Guide
Living with Cholesterol
Lower your Risk

Other Helpful Resources

Canadian Diabetes Association
Heart Disease, Stroke and Healthy Living - - Heart and Stroke
Foundation of Ontario
Heart and Stroke Resources
ParticipACTION

Ask a question/ reply securely



Ask A Question

[Question](#)
[View Questions and Answers](#)

Disclaimer: Please note that this feature is for non-critical type questions only. In case of emergency, contact your doctor or local hospital emergency department

Ask a New Question

Subject:

Diarrhea

Question:

I am having diarrhea 6 times a day since increasing the metformin dose. What should I do?

Submit Question

Clear Form

Secure Messaging from provider to patient

 To Do Task 

       **To Do Task - Modify** 

Entered By		Patient Name		
Mark		Tester, Burt 		
DOB	Age	Home Phone #	Work Phone #	Cell Phone #
31/12/1949	63	(613) 555-1234	(613) 839-3271 Ext.1234	(613) 862-9351

Send To  **Category**  Recall Pull Chart

Send To: Patient **Category**: Miscellaneous

Due Date	Due Time	Priority	Description
13/10/2013	02:36 PM	6 	Metformin effects

Note

Hello Burt,
Some patients may experience diarrhea at higher doses of metformin.
Please reduce back to 500 mg twice daily. If the diarrhea continues, you should let me know on the Portal.
Thanks,
MF MD

Done
 In progress



My Status



Blood Pressure

Last reading: 158 / 90
Goal: 160 / 110



BMI

Last reading: 2.5
Goal: 20.0



Waist

Last reading: 60 inches
Goal: 42 inches



Weight

Last reading: 17.64 lbs
Goal: 131 lbs

My Pharmacy

City/Town

Name

If you cannot find your pharmacy, you can request it be added. Use the following button to do so. After you submit your request, it could take 2 business days before the pharmacy appears in the list.

My Smoking Status

Smoking Status

Edit My Info

[View / Edit My Demographic Info](#)

My Preferences

[Change Your Password](#)
[Change Your Secret Question/Email Settings](#)

My Appointments

This appointment feature is for our Weekend Urgent Care Clinic only. The Urgent Care Clinic hours are from 10:30 AM to 12:30 PM on Saturday and Sunday.

If you need Urgent care and can not attend the Urgent Care Clinic, please call Telehealth at 1-866-553-7205 or you may reach our on-call physician at 613-769-1286.

The Urgent Care Clinic is for registered patients of the West Carleton Family Health Team and who have urgent medical conditions. Please do not come to the Urgent Care Clinic for prescription renewals. This scheduling feature allows you to pre-book a time slot which should minimize your wait time. Patients are taken in the order that they have been registered for that day.

Start Date

End Date

Please describe in a few words your health issue



My Messages

[Inbox](#) | [Delete](#)

Message	
From	noreply@wcfht.ca
Subject	Metformin effects
Date	2013/10/13 06:40
Priority	Normal
Message	<p>Hello Burt,</p> <p>Some patients may experience diarrhea at higher doses of metformin. Please reduce back to 500 mg twice daily. If the diarrhea continues, you should let me know on the Portal.</p> <p>Thanks, MF MD</p>
Link	

News

Software Upgrades 09/03/2013

Some of the basic software on the Portal servers will soon be upgraded. Highlights:

- Java 1.5 is no longer supported

- The Java Checker on the login page will no longer pass when users have Java 1.5
- MAC OSx 10.5 will no longer be supported

Users with these older technologies will have trouble accessing our servers. We recommend that users upgrade their Java to the latest release (1.7_u25) or upgrade their MAC to 10.8.

Using Mobile Devices with the Health Portal 08/26/2013

The Health Portal is not configured as a "mobile" site, therefore it may not display properly on "mobile" devices. It does seem to function on a number of tablets but clicking on the icons may be a challenge.

Understanding Lab Test Results 08/09/2013

Each of the Lab Test Graphs is colour coded Green (good range) and Red (needs improvement). If the **long term*** trend is from Green towards

Places Of Interest

Here are a few sources of information that we feel may be of interest to you.

- [Canadian Cancer Society](#)
- [Champlain LHIN](#)
- [College of Family Physicians of Canada](#)
- [Community Diabetes Education Program of Ottawa](#)
- [Diabetes and You](#)
- [Eat Right Ontario](#)

My Health Maintenance Plan

Activity	Due Date
Smoking Cessation Counseling	November 28, 2013
Blood Pressure Reading	December 9, 2013
CHF Review +10min	January 23, 2014
Sigmoid Recall	March 7, 2014
OBSP	September 17, 2015
Tetanus Booster	November 28, 2022

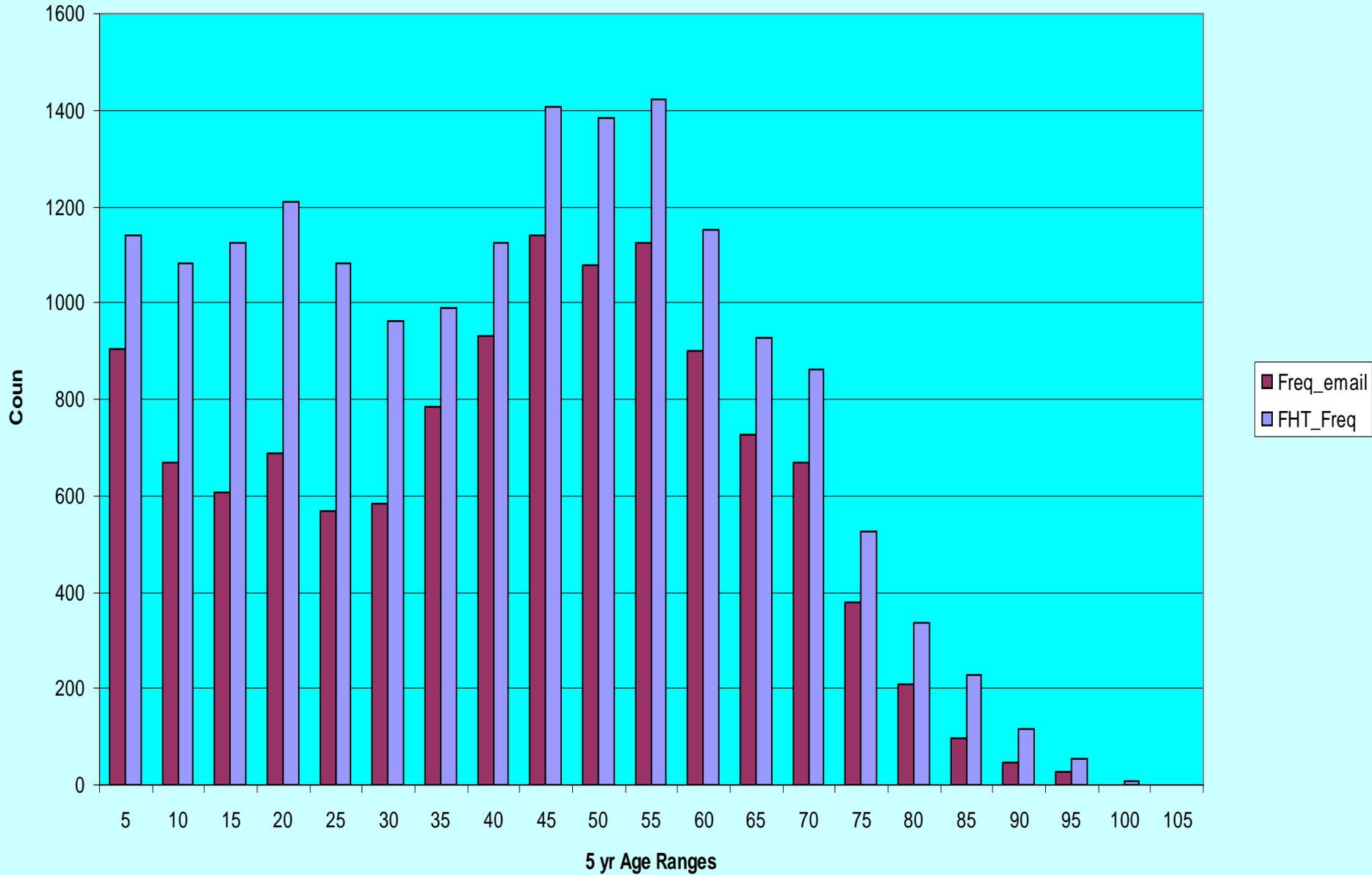
Usage Statistics

- 4167 Registered users Oct.13/2013
- Linear growth ~30 per week
- 1600-2000 hits per month

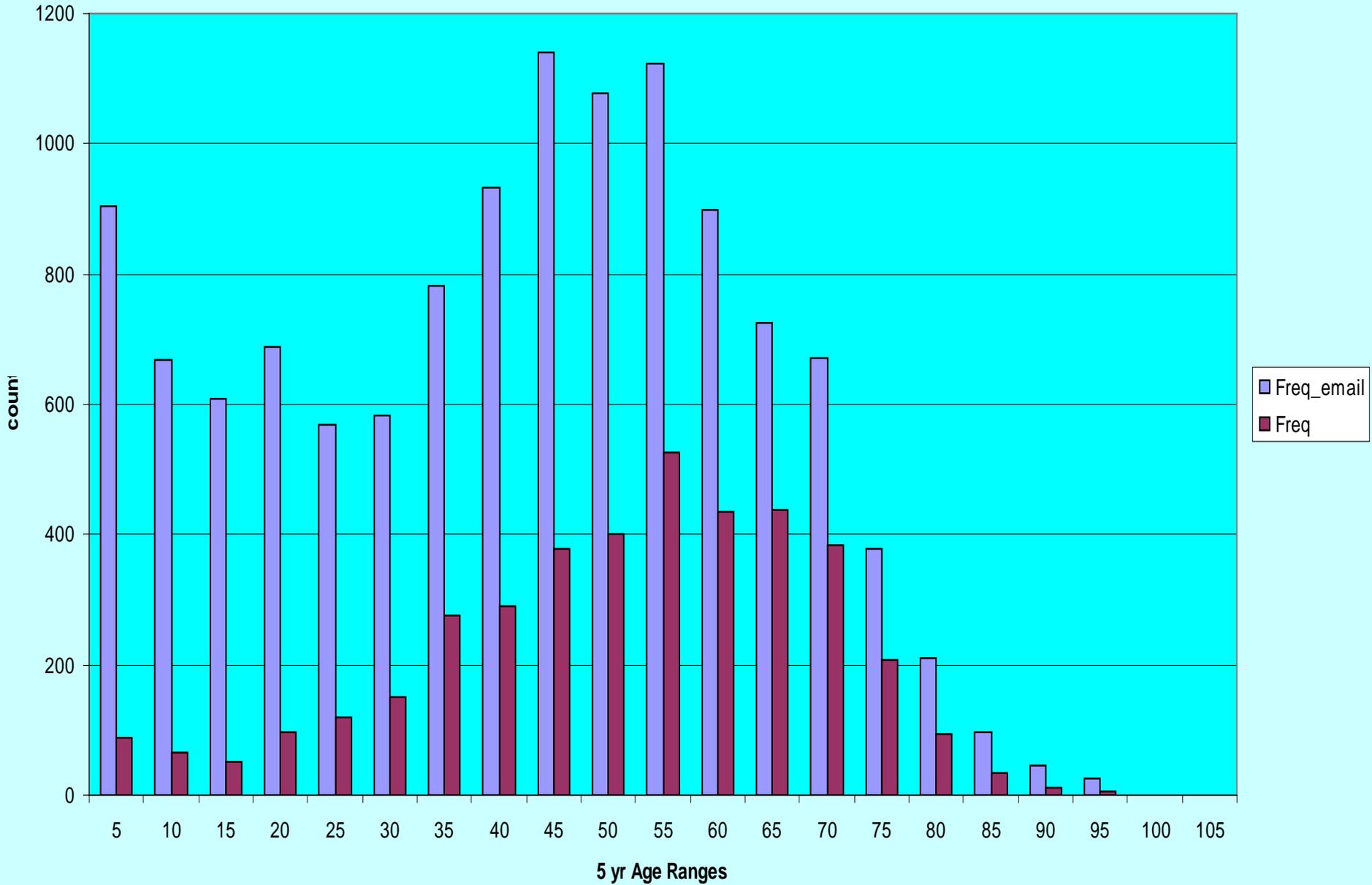
Who are the Portal Users?

- Email Access = potential users
- Age Distribution

eMAIL Coverage of FHT Population



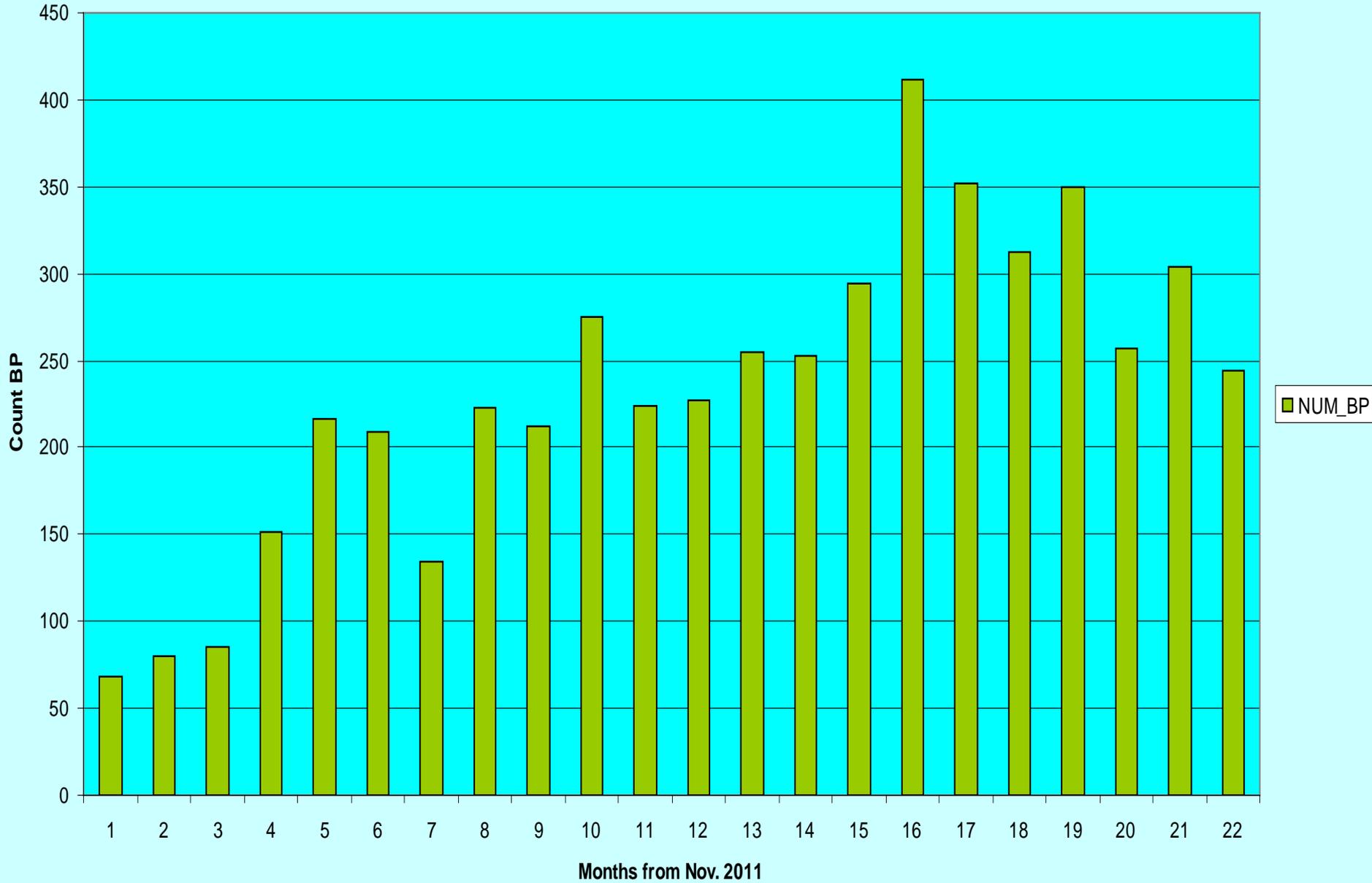
Email Users On Portal



Home BP Monitoring

- ~5300 readings entered over last 22 mo.
- Integrated with EMR
- Compare alongside office measurements

BP readings entered by month



COLLECTN_DATE	A1C	FBS	CHOL	TG	HDL	LDL	RR
2013-09-20 00:00:0...	0.058						
2013-08-26 00:00:0...		6.1	3.4	1.13	1.15	1.73	3.0
2012-01-30 00:00:0...	0.059	5.6	3.11	1.18	0.96	1.61	3.2
2009-05-05 00:00:0...	0.055	5.2	3.06	0.83	0.87	1.81	3.5
2008-08-06 00:00:0...							
2008-05-01 00:00:0...	0.051	5.6	3.74	1.32	0.89	2.2	4.2
2007-02-28 00:00:0...			3.86	1.49	0.88	2.3	4.4
2006-11-17 00:00:0...	0.053		5.94		0.8		
2006-01-25 00:00:0...	0.053	5.5	5.57	1.23	1.12	3.89	4.97
2004-10-26 00:00:0...	0.052	5.2	4.88	1.62	0.98	3.16	4.98
2003-11-18 00:00:0...							
2003-11-10 00:00:0...		5.6	5.58	1.25	1.0	4.01	5.58

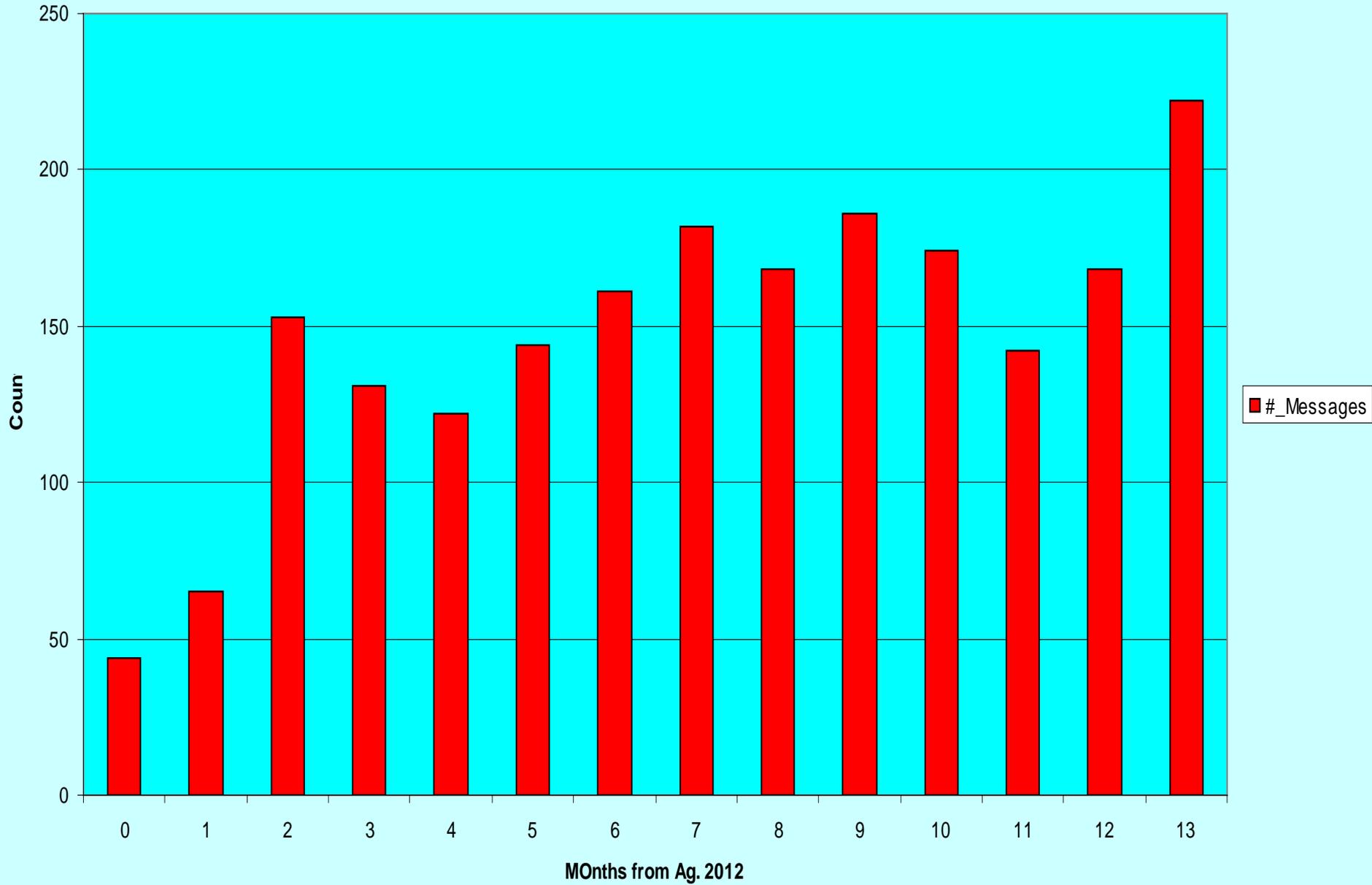
DATE	BMI	WTkg	WAIST	HTm	SYSHOM	DIASHOM	BPSYS	BPDIAS	Risk
2013-09-24 ...	30.9				130	90			1.4
2013-09-24 ...					124	91			
2013-09-24 ...					122	87			
2013-09-20 ...							134	91	
2013-09-20 ...							138	90	
2013-09-20 ...							140	90	
2013-08-22 ...							137	89	
2013-08-22 ...	30.8	98.4					122	88	
2013-01-17 ...							132	90	
2013-01-17 ...							126	88	
2013-01-17 ...							128	85	
2012-02-13 ...	31.1	99.3	114.3	1.78			132	85	
2012-02-13 ...							127	87	
2012-02-13 ...							126	86	
2011-10-18 ...							132	91	
2011-10-18 ...							117	83	
2011-04-19 ...							145	95	
2011-04-19 ...							113	82	
2011-04-19 ...									
2011-02-16 ...									
2010-04-22 ...	29.5	94.7		1.79					
2010-02-11 ...	31.1	97.1	111	1.77			124	91	
2010-02-11 ...							121	86	

DATE
2013-09-21 00:00:00.0
2013-09-21 00:00:00.0
2013-08-27 00:00:00.0
2013-08-27 00:00:00.0
2012-02-01 00:00:00.0
2012-02-01 00:00:00.0
2009-05-07 00:00:00.0
2009-05-06 00:00:00.0
2008-08-08 00:00:00.0
2008-08-08 00:00:00.0
2008-05-02 00:00:00.0
2006-11-20 00:00:00.0
2004-10-27 00:00:00.0
2004-10-27 00:00:00.0

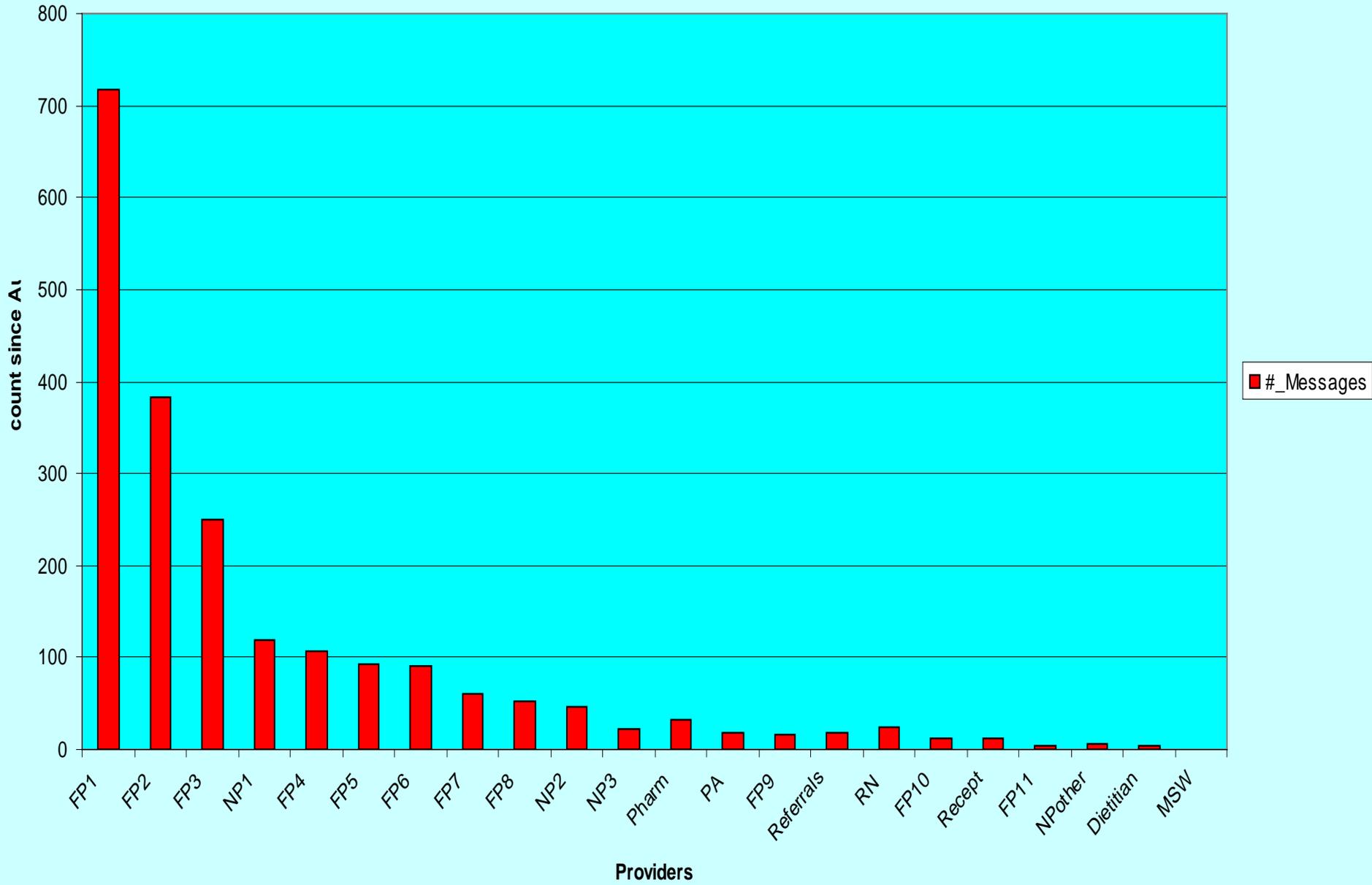
Secure Messaging

- ~25-30 patient-initiated questions or responses per week answered by RN
- 2086 outgoing messages from providers over 14 months

Provider Messages Sent by month from Aug. 2012



Messages sent by Provider



Challenges

- Change management
- Mobile platform?
- Funding continued feature development
- Rural Internet service
- Some patients will never be digitally connected
- Privacy fears

Next Steps

- Accelerate patient uptake
- Measure impact on quality/efficiency of care

Next Steps-2

- Close the loop with patients on all test results
- Facilitate Patient's sharing of their Portal data within circle of care
- Streamline the ongoing process of Medication reconciliation to handle the huge volume

Next Steps-3

- Extend patient access to more EMR data
- Extend opportunities for patients to assess accuracy of EMR data and to provide updates on Family , Social Hx, etc.
- Provide meaningful estimates of Risk for conditions where contributing factors are amenable to self-care and clinical intervention(CVD, DM, some cancers, etc.)