



Transitioning Between EMR Systems: North York Family Health Team **“One EMR-One Server”** Project

AFHTO Conference

October 15, 2014

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Faculty/Presenter Disclosure

- Faculty: Michelle Greiver, Susan Griffis
- **Relationships with Commercial Interests: none**



Disclosure of Commercial Support

- This program has not received commercial financial support
- **Potential for conflict(s) of interest:** None
- Patient care recommendations in this program conform with recommended standards
- Recommendations are evidence-based where evidence exists



Agenda

- Building a new Information Management Infrastructure in Primary Care: the North York Family Health Team (NYFHT) experience
- Where we started and Why
- Restructuring our IT System:
 - **The One EMR One Server Project**



North York FHT

- 71 physicians
- 40 Allied Health Providers
- Over 220 EMR users

- **2 EMRs (Nightingale, Practice Solutions)**
- **6 servers, 6 databases**
- 18 sites

- **70,000 patients**





Where We Started

- **Individual** cases of Excellent Care in some practices, BUT:
Nearly every physician had **their own way** of entering data and doing things
 - No consistent reminders or alerts across many offices
 - Very difficult to build disease registries (example, diabetes)
 - Cannot produce accurate reports
- Allied Health Providers had to learn **different** ways of **doing the same thing**
 - Difficult to plan consistent programs or implement consistent approaches to care



IT Challenges: EMR

- **Structure of EMR**
 - Physicians (not FHT) own and manage EMR
 - FHT “piggybacks” on EMR applications for AHPs and FHT programs



Implications Of Having Multiple Databases

Physicians:

- limitations to cross coverage
- inability to have centralized after hours clinic
- duplication of services
- communication/connection issues



Implications Continued...

NYFHT Employees:

- require multiple EMR logins and user accounts
- inefficiency in 2 EMR systems
- time consuming



Barriers To Program Planning And Management

- Patient chart on 1 server and **duplicate chart** on another 'central' server
- AHPs with **6 logins**
- AHPs with **many inboxes**
- AHPs conforming to 6+ preferred **charting practices**
- Variability in data location in EMR (**where is the data?**)



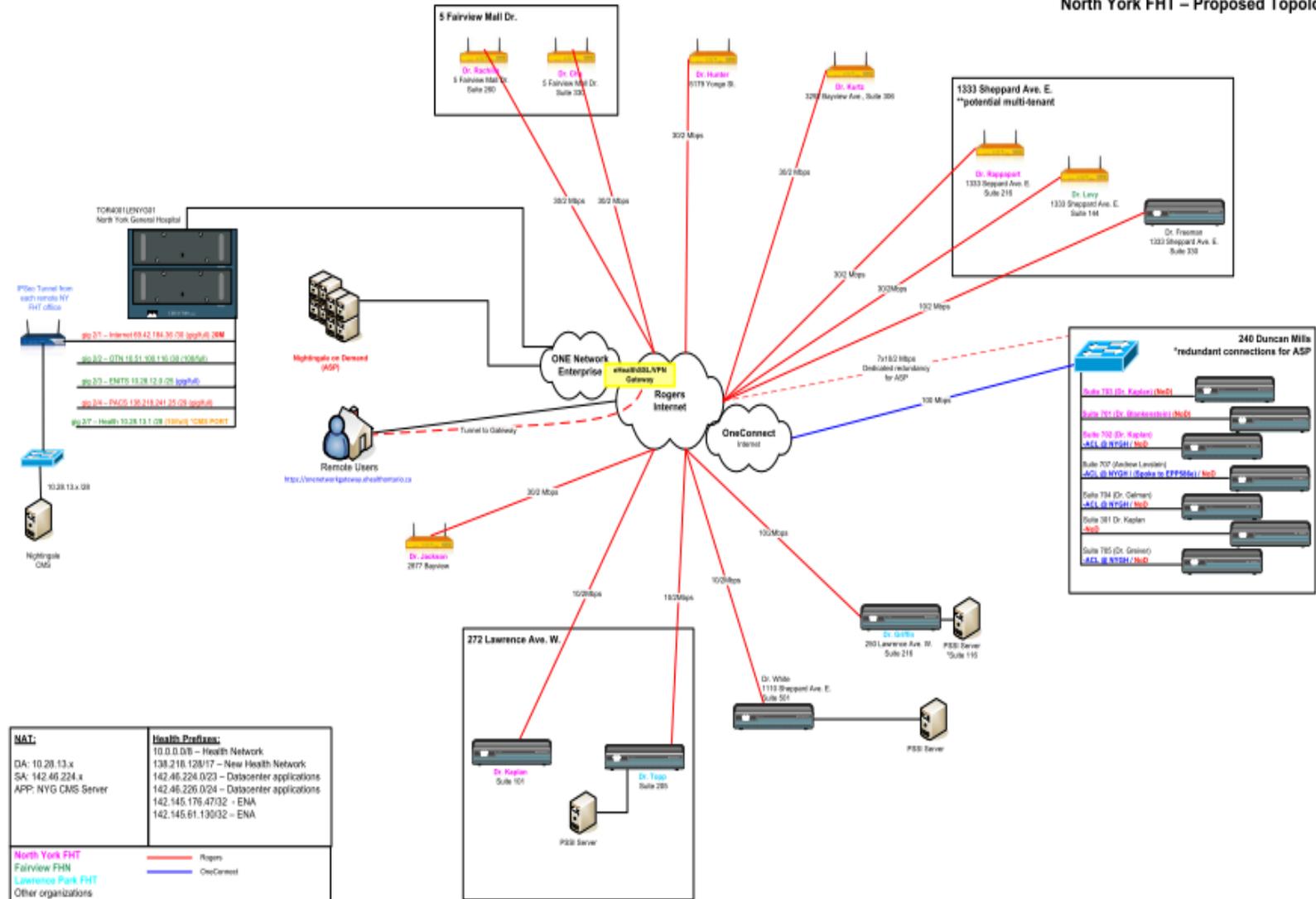
Current Challenges

- **Dissatisfaction** with the current EMR system
- Challenge in **data collection and management**
- Multiple systems are **unmanageable and frustrating**
- **Hinders progress and growth**
- **Barrier to improved quality of care**



MY VARIOUS COMPUTER HAMMERS

North York FHT – Proposed Topology



<p>NAT:</p> <p>DA: 10.28.13.x SA: 142.46.224.x APP: NYG CMS Server</p>	<p>Health Profiles:</p> <p>10.0.0.0/8 – Health Network 138.216.128/17 – New Health Network 142.46.224.0/23 – Datacenter applications 142.46.226.0/24 – Datacenter applications 142.145.179.47/32 – ENA 142.145.61.130/32 – ENA</p>
<p>North York FHT Fairview FHT Lawrence Park FHT Other organizations</p>	<p>— Rogers — OneConnect</p>

Project:	Migration Program	Date:	Sep. 28, 2011
Description:	North York General FHT	Rev.	02
Architect:	Kelly Martin		

Rev.	Date:	Initial:
01	Feb. 2011	SM
02	Sep. 2011	KM

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Current Challenges

EMRs as currently used are meant to **automate individual medical office processes** and not to serve as the **backbone of an Organization**



Reflections On Our FHT

- Are we truly working as a **Team**?
- Are we using **EMR to its full potential** or as an electronic paper chart??



Tackling Our Problems: IM IT Committee

- The committee will work to improve the **quality** of care, the **access** to care and **equity** of the care provided by the Family Health Team
- by **addressing issues** faced by the FHT around **information technology and information management**



IM IT Membership

- Membership reflects ‘team-based’ approach
 - Allied Health Providers
 - Administrative staff
 - Management
 - Physicians from every FHO



IM IT Tasks

- Review FHT **policies and procedures** regarding IT/IM
- Assess IT/IM **needs and gaps**
- Recommend **Changes and support Standardization** of IT/IM data and processes across the FHT
- Recommend and support development of **Information Management Systems** for the FHT
- **Liaise**, when and where appropriate, with **vendors**



Organizational Level

Team-based Approach

Information Management Infrastructure

Privacy Infrastructure



Reducing Unnecessary IT Complexity

- Reorganizing to decrease log-ins:
- **Single EMR, single database** for FHT?
 - Survey of 21,000 US physicians: 38% **dissatisfied** with EMR, 1/3 shopping for new EMR
 - **Large penalties** in US linked to lack of Meaningful Use
- Could we get consensus to go to a **One EMR One Server** FHT IT infrastructure??

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"Before you go any further, let me reiterate that I, for one, see nothing wrong with killing the messenger."



One EMR-One Server

- Exploration of process approved at IM IT
- EMR Task Force formed:
 - Comprehensive needs assessment survey
 - Sent to everyone in FHT: physicians, AHPs, support staff
- Understand requirements
- Explore readiness to change



Purpose

- Combination of a needs assessment (what we need in an EMR) and a readiness assessment

Needs assessment

- To improve physician and staff buy-in as the process moves forward
 - feedback opportunity for all involved people
 - sense of ownership and involvement
 - included readiness assessment

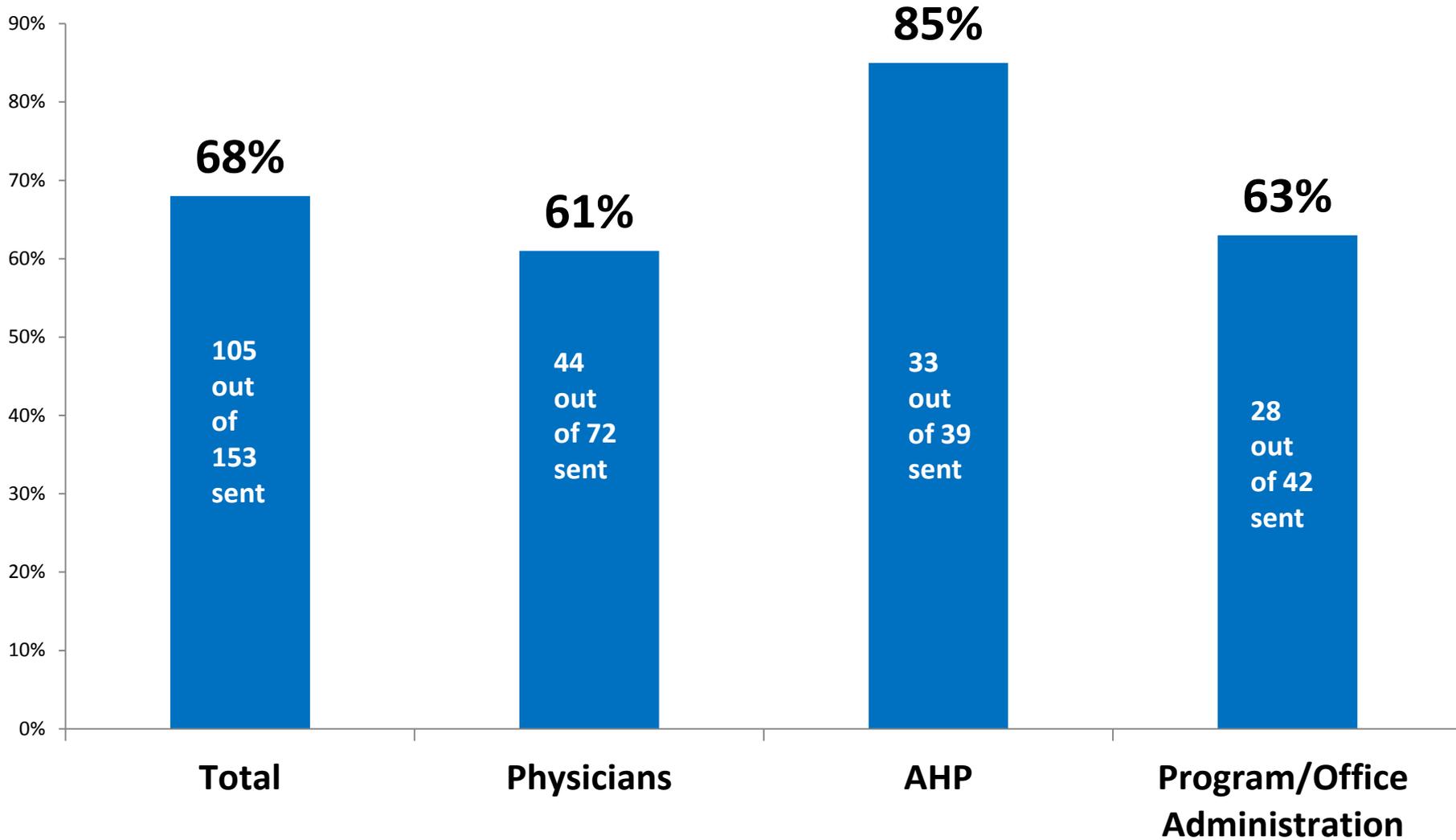


Needs Assessment Continued...

Method:

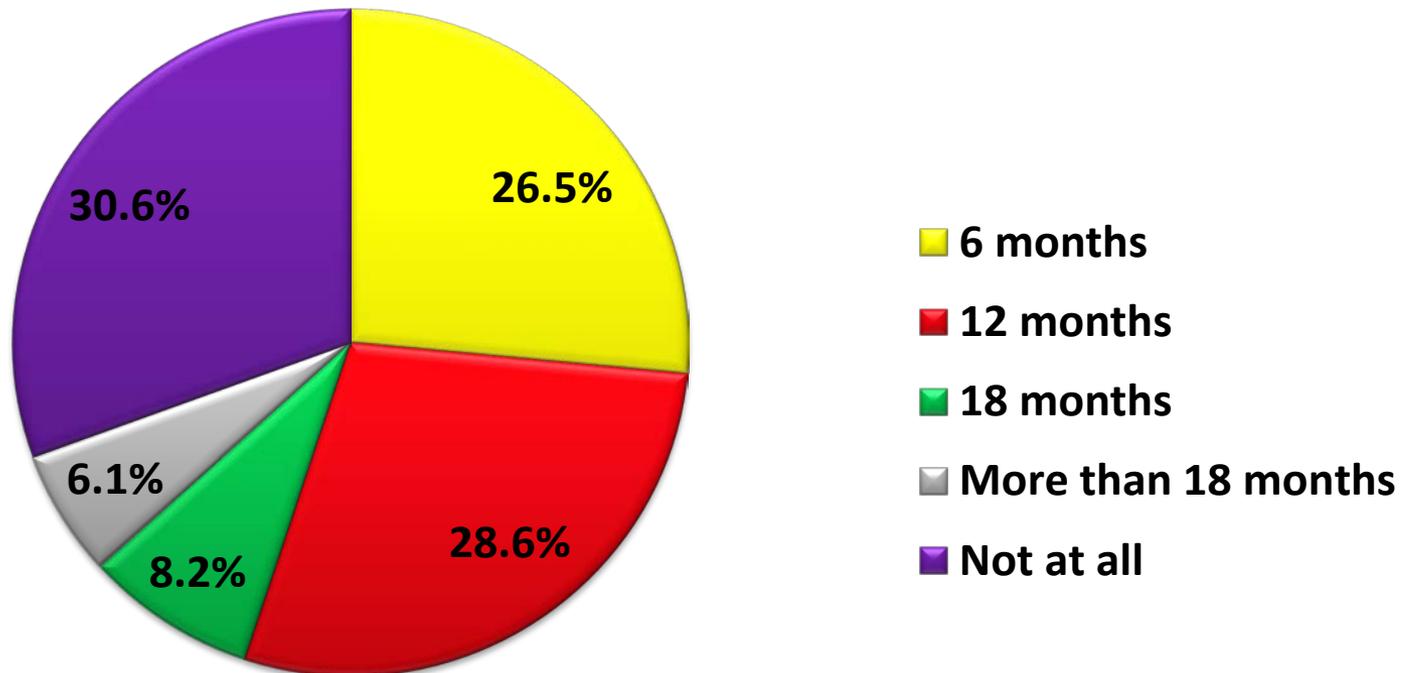
- developed and/or adapted questions from existing EMR documents
- piloted and approved by the working Committee and others
- administered through “Survey Monkey”
 - Physicians
 - AHP’s
 - Office/Administrative

of Surveys Completed by Grouping



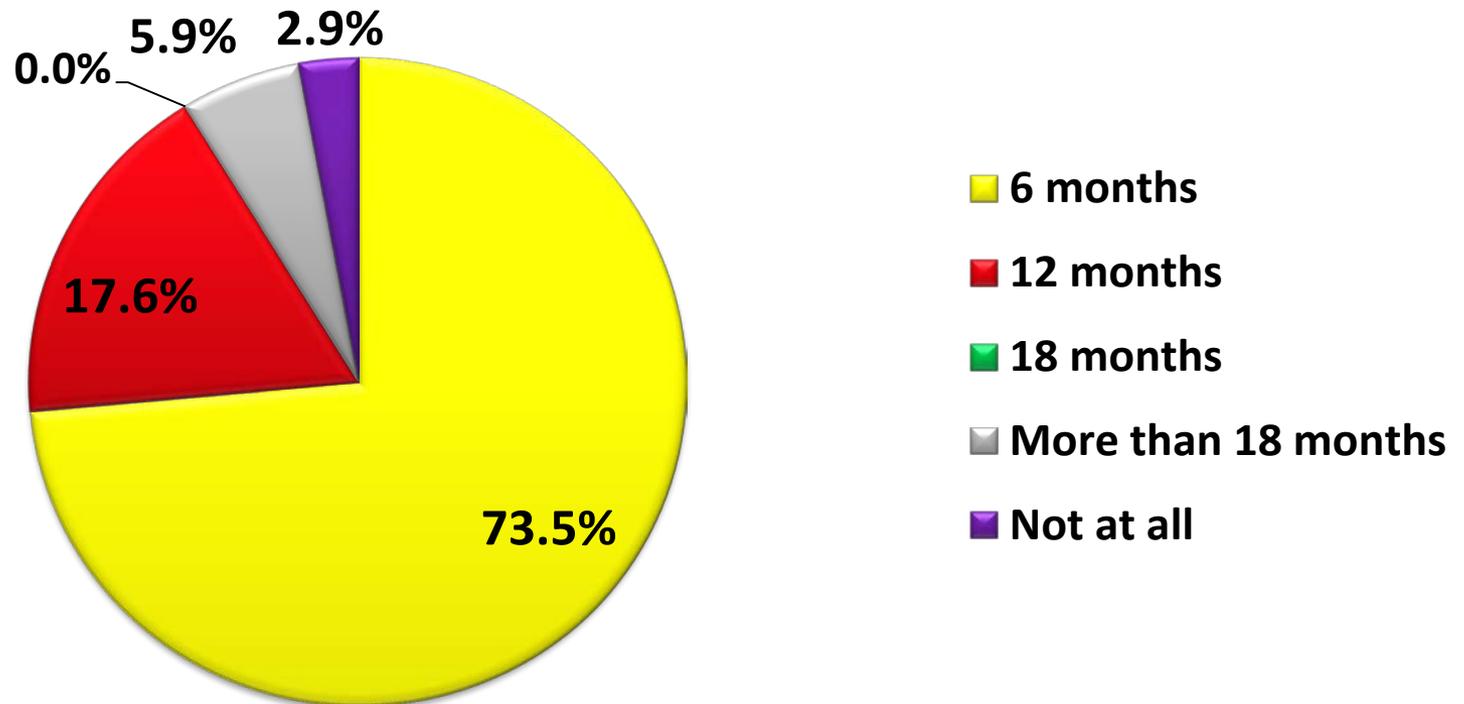
Willingness To change EMR: 51 Physician Responses

“If there will be an EMR that meets most of the needs of the offices and the organization, are you willing to switch your EMR in the next:”



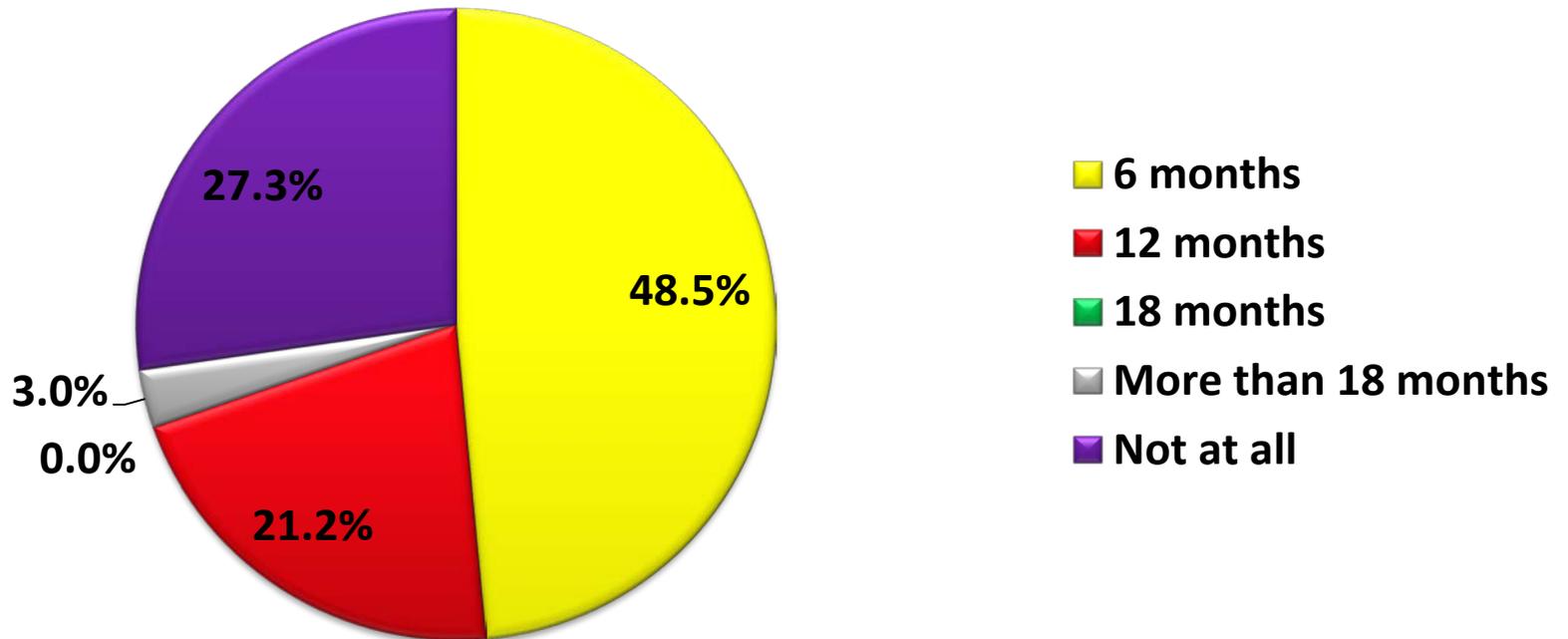
Willingness To Change EMR: 34 AHP Responses

“If there will be an EMR that meets most of the needs of the offices and the organization, are you willing to switch your EMR in the next:”



Willingness To Change EMR: 30 Office Responses

“If there will be an EMR that meets most of the needs of the offices and the organization, are you willing to switch your EMR in the next:”





Assumptions

- high response rate indicating an **interest in EMR systems**
- EMR users are **aware of their own priorities** but not necessarily of **the larger system needs**
- implementing and adopting an EMR is time-consuming and expensive



Findings

Showed:

- Some physicians **are willing** (70%) and some **are not willing** to change EMRs
- Some physicians are willing to change immediately
- we have comprehensive information for **vendor procurement**



Reviewing EMRs

- Requirements sent to top 4 vendors in Ontario
- Reviewed at IM IT
- 3 vendors met most of the requirements
- They were invited to present to NYFHT

Example of Vendor Summary

Information System Functionality SECTION 3(b) continued - with regard to result management, the following functionality must be provided:	Physician Responses (%)		Vendor Response			
	Absolutely necessary	Good to have	Indivica (Oscar)	QHR Tech (Accuro)	TELUS (PS)	Nightingale
Support configurable flow sheets for specialized results presentation	81%	13%	No, Requires development	Yes, currently available	Yes	Yes
Support the ability to automatically route results to a printer or a provider work list based upon result value (e.g. abnormal)	59%	28%	No	No with note¹	Yes	Yes

Vendor comments for Section 3b:

Oscar: Components identified as “can be added” are a minor develop enhancement

Accuro: While Accuro does not currently have the means to route only abnormal flags labs to the inbox, it does provide the means for physicians to filter and sort labs and documents meant for review. This achieves the goal of the requirement, which is to provide the means for physician users to review and take action on prioritized items.

PS: No comment; **Nightingale:** No comment



Requirements

- Some requirements:
 - Access **single EMR database** from multiple remote locations
 - **Database with robust support for transactional processes:** maximal uptime, maximal efficiency
 - Enable Enterprise **data warehousing for analytics:** **full access to a complete copy of our EMR database** at times of our choosing, without vendor constraints or vendor controlled processes



Process

- Presentation to FHO leads, key physicians, NYFHT data management team from each vendor
 - Complex patient scenario (DM or Heart Failure) provided to Vendor ahead of time
 - Data analytic discussion
- Presentations open to all of NYFHT
- Hands on sessions to test drive the EMR products
- Costing template and formal quotes



Process

- Decision at IM IT on process for choosing:
 - Example: one vote per physician, EMR with largest number of votes is chosen
- Exploration of IT infrastructure (server, software required) and costs by our IT team
 - Contacted several other Teams
- Exploration of additional funding sources
- Process ongoing



From Another FHT

"I can tell you without hesitation, that **merging the EMR** in our neck of the woods was the ***single biggest revolution*** in medical record keeping in my career.

Nothing else comes even close to improving inter office communication, improving reminders for our regular screening, and getting more timely results.

Nothing else that we've done has resulted in as much of a lift to improved patient care"



NYFHT One EMR One Server

Thank You!!!

Questions?



North York Family Health Team

Our Vision

"Enhance primary healthcare, interdisciplinary learning, and clinical research to improve the health of North York Family Health Team's diverse patient population."

Our Mission

"To provide accessible, patient-focused, and family-centred primary healthcare through an interdisciplinary team committed to transforming health knowledge into best practices."

Our Values

"Patient and family centred care - Teamwork – Continuous Learning – Communication"

Visit us at www.nyfht.com