

Leveraging Convergence of Healthcare Delivery, Business Dynamics, and Technology Advancements to Advance Collection and Utilization of Meaningful COPD Patient Data

Dr. Greg Armstrong

Dr. Doug Kavanagh

Stephen Graper

Presenters Disclosure

Presenters	Relationships with Commercial Interests
<i>Dr. Greg Armstrong</i>	<i>None</i>
<i>Dr. Doug Kavanagh</i>	<i>Medical Director and Co-Founder, CognisantMD Inc. (Ocean provider) - shareholder</i>
<i>Stephen Graper</i>	<i>President and Founder, Healthcare Together Ltd - shareholder</i>

Disclosure of Commercial Support

- The COPD program has received external implementation support from CognisantMD, founder of the Ocean platform and Healthcare Together Ltd. which provides support for the adoption and utilization of the Ocean platform.
- The Couchinching Family Health Team has received financial support from Boehringer Ingelheim (Canada) Ltd. in the form of a restricted grant.
- This presentation has not received any external financial support.
- Potential for conflict(s) of interest:**
 - The Ocean platform, developed by CognisantMD will be discussed in this program.

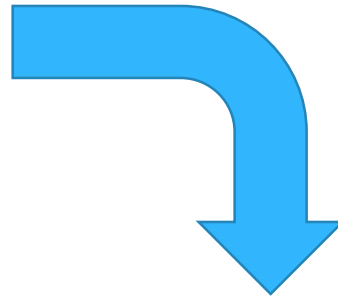
Mitigating Potential Bias




- Dr. Greg Armstrong, Couchiching Family Health Team lead physician will be presenting the results of the program.

Prior State

- Time consuming patient demographic updates
- No collection of patient email address
- Patient smoking status in CPP outdated
- Billing opportunities for smoking cessation counselling missed
- CFHT smoking cessation program not well utilized
- Inconsistent use of CLHT & no consistent screening process for COPD
- Patient questionnaires (PHQ-9, Nipissing etc) done on paper, scored and scanned into the EMR (time and resource consuming)

Ocean Platform



-  **PHIPA Compliance**
-  **EMR Integration**
-  **Secure data**

Sep 24, 2015

SG/Ocn

Changing smoking status from 'never smoked' to 'smoker - 30-40 cigarettes/day'.

Consent: [@EmailConsentLongForm](#): **Granted** - The patient provides informed consent to communicate clinical information using email.

The email address to use is: steve.graper1@gmail.com

CFHT Email Confirmation

Steve.graper1@gmail.com

Smoking Screen: Your Smoking Status

Currently smoking. Cigarettes/day: **30-40**

How soon after you wake up do you smoke your first cigarette? **5-30 minutes**

Urged patient to quit. Smoking cessation counseling provided according to the "5 A's" protocol. **Bill E079 code if eligible; book follow up appt for smoking cessation.**

The patient is interested in participating in the smoking cessation program. Provide a copy of the Smoking Cessation Program Invite or email information if email consent given

Canadian Lung Health Test

Do you cough regularly? **"Yes"**

Do you cough up phlegm regularly? **"Yes"**

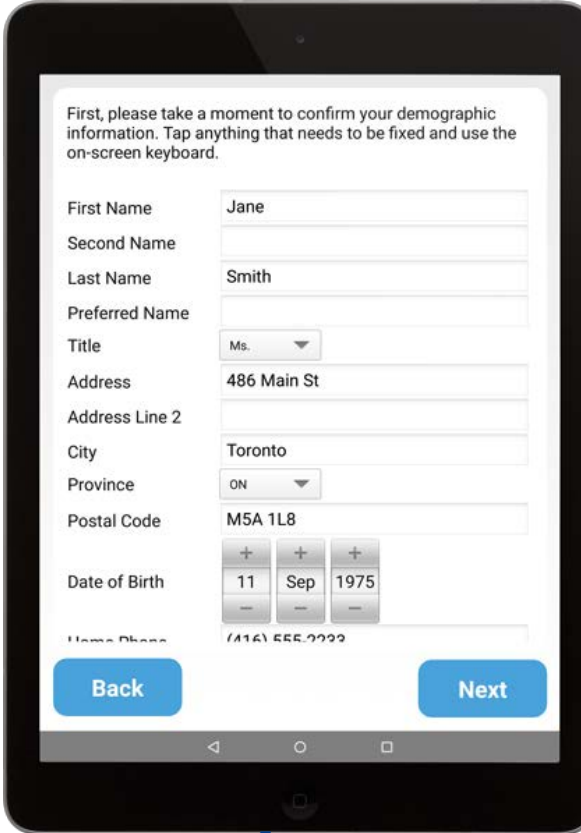
@CLHT: 2

Positive screen: spirometry indicated to screen for COPD

MRC Dyspnea Scale @MRC: 4

(Stops for breath after walking 100 yards)

Step 1: All patients over age 14 given tablet to complete demographic review

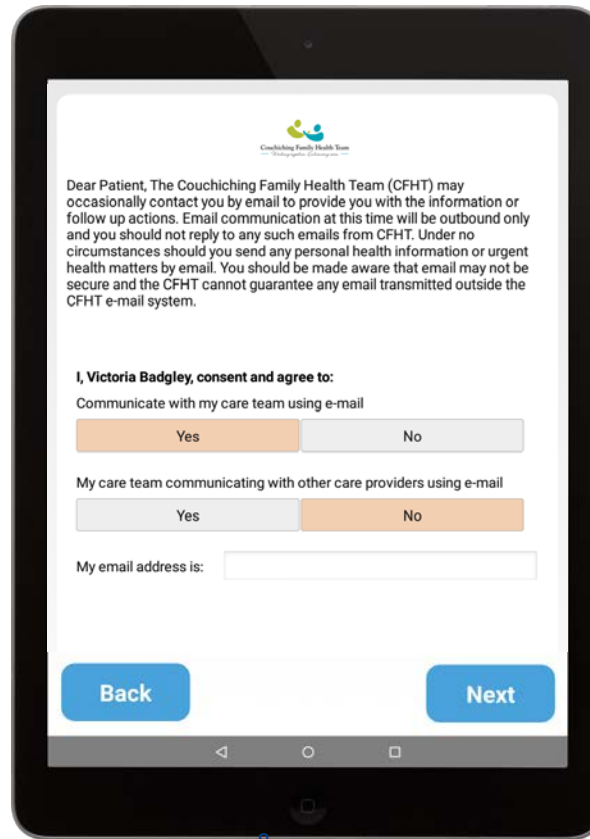



First, please take a moment to confirm your demographic information. Tap anything that needs to be fixed and use the on-screen keyboard.

First Name	Jane									
Second Name										
Last Name	Smith									
Preferred Name										
Title	Ms. ▾									
Address	486 Main St									
Address Line 2										
City	Toronto									
Province	ON ▾									
Postal Code	M5A 1L8									
Date of Birth	<table><tr><td>+</td><td>+</td><td>+</td></tr><tr><td>11</td><td>Sep</td><td>1975</td></tr><tr><td>-</td><td>-</td><td>-</td></tr></table>	+	+	+	11	Sep	1975	-	-	-
+	+	+								
11	Sep	1975								
-	-	-								
Home Phone	(416) 555-2222									

[Back](#) [Next](#)

Step 2: Patients are asked about email consent




Couchiching Family Health Team
www.couchiching.ca

Dear Patient, The Couchiching Family Health Team (CFHT) may occasionally contact you by email to provide you with the information or follow up actions. Email communication at this time will be outbound only and you should not reply to any such emails from CFHT. Under no circumstances should you send any personal health information or urgent health matters by email. You should be made aware that email may not be secure and the CFHT cannot guarantee any email transmitted outside the CFHT e-mail system.

I, Victoria Badgley, consent and agree to:

Communicate with my care team using e-mail

Yes No

My care team communicating with other care providers using e-mail

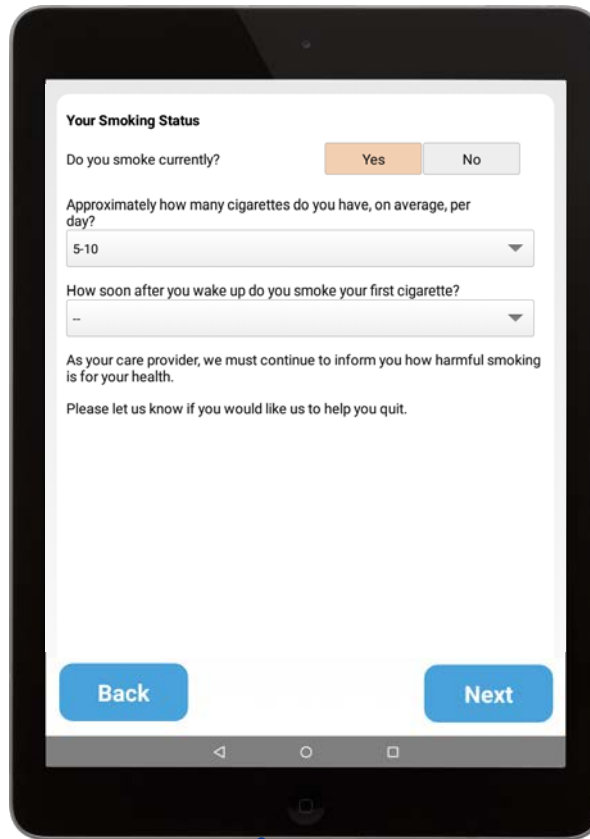
Yes No

My email address is:

Back

Next

Step 3: Patients are asked about smoking status



Your Smoking Status

Do you smoke currently? Yes No

Approximately how many cigarettes do you have, on average, per day?

5-10

How soon after you wake up do you smoke your first cigarette?

--

As your care provider, we must continue to inform you how harmful smoking is for your health.

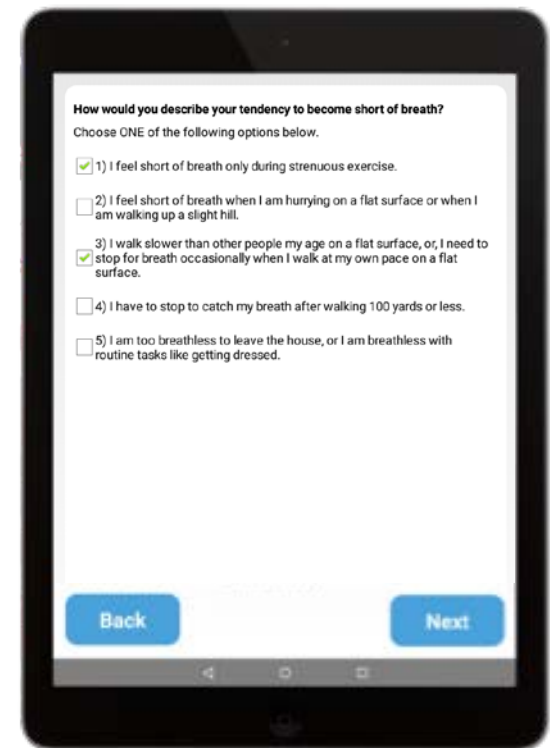
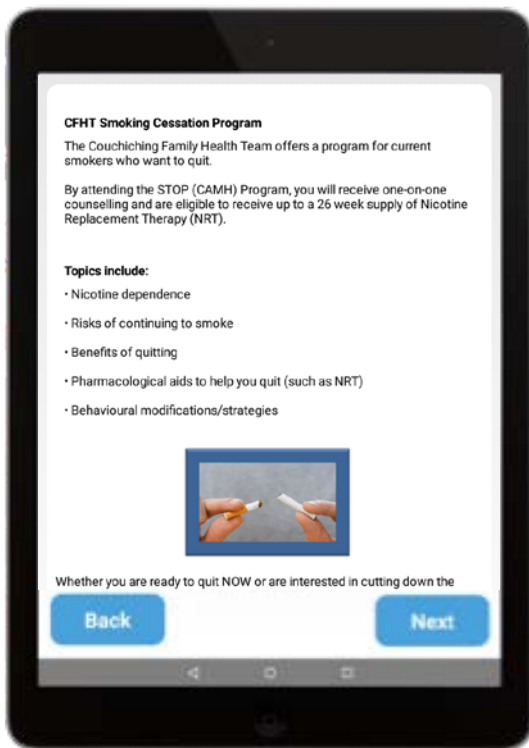
Please let us know if you would like us to help you quit.

[Back](#) [Next](#)

Current smokers are invited to smoking cessation program.

Hx of smoking, >40, no COPD Dx
→show CLHT;

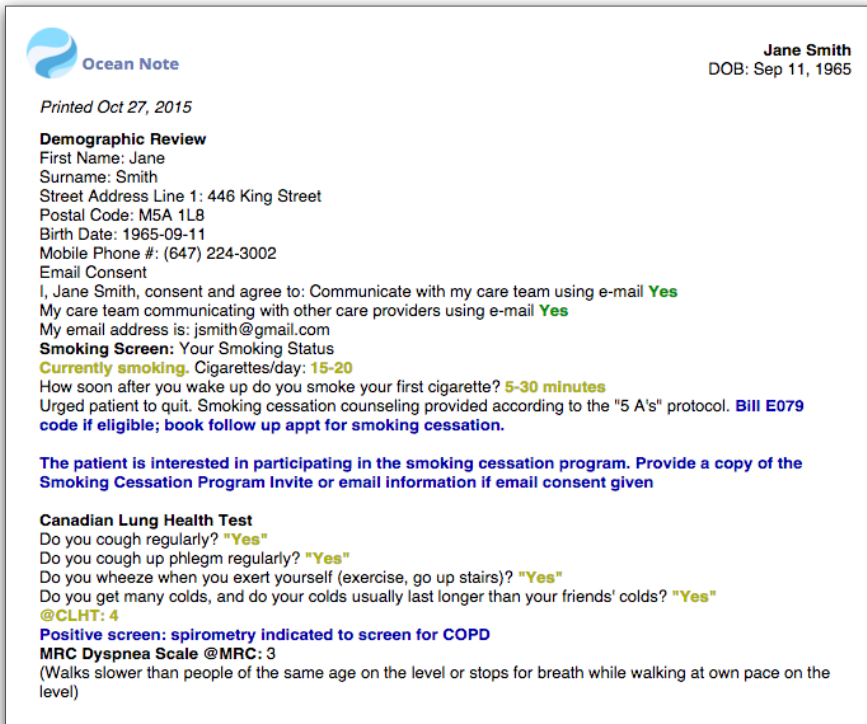
Score >0, display MRC Dyspnea




Note appears in patient record in the EMR

Additional automated tablet functions include:

- Smoking status updated
- Demographics updated
- Email consent collected



 **Ocean Note**

Jane Smith
DOB: Sep 11, 1965

Printed Oct 27, 2015

Demographic Review
First Name: Jane
Surname: Smith
Street Address Line 1: 446 King Street
Postal Code: M5A 1L8
Birth Date: 1965-09-11
Mobile Phone #: (647) 224-3002
Email Consent
I, Jane Smith, consent and agree to: Communicate with my care team using e-mail **Yes**
My care team communicating with other care providers using e-mail **Yes**
My email address is: jsmith@gmail.com

Smoking Screen: Your Smoking Status
Currently smoking. Cigarettes/day: **15-20**
How soon after you wake up do you smoke your first cigarette? **5-30 minutes**
Urged patient to quit. Smoking cessation counseling provided according to the "5 A's" protocol. **Bill E079 code if eligible; book follow up appt for smoking cessation.**

The patient is interested in participating in the smoking cessation program. Provide a copy of the Smoking Cessation Program Invite or email information if email consent given

Canadian Lung Health Test
Do you cough regularly? **"Yes"**
Do you cough up phlegm regularly? **"Yes"**
Do you wheeze when you exert yourself (exercise, go up stairs)? **"Yes"**
Do you get many colds, and do your colds usually last longer than your friends' colds? **"Yes"**
@CLHT: 4
Positive screen: spirometry indicated to screen for COPD
MRC Dyspnea Scale @MRC: 3
(Walks slower than people of the same age on the level or stops for breath while walking at own pace on the level)

Solutions

Family Physician:

- Saves time documenting in EMR, providing more time to interact with patients
- More robust EMR with opportunity to increase E079 billing code utilization

Administrative Support:

- Saves time checking/collecting demographics
- Eliminate time required to print and scan documents into EMR

Patients:

- Increased satisfaction with healthcare
- Increased comfort when dealing with “hard topics”

Team-Based Implementation

FHT:

- Time on behalf of committee dedicated to a transparent, process driven implementation based on specific, agreed upon objectives

Resources and Partnerships:

- Tablets, Ocean license, technical support, training support

Budget:

- Cost considerations – tablet, monthly tablet license fee (\$50), training & technology support varies depending on capacity

Sustainability

Time:

- Administrative/operational investment low, tablets automate many time consuming tasks

Capacity:

- Follow through on results is required for this initiative to be successful

Change Management:

- Integration of new patient engagement process for all staff involved

Budget:

- Cost neutral or revenue generator by leveraging platform

Patient Satisfaction

- Engagement
- Early identification
- Comfort when answering difficult questions
- Increased time with physician
- Information on FHT programs, health education videos, and handouts
- Increased self-efficacy

Reported Results

Global Results

- Average time of 4 minutes with tablet
- 3+ demographic updates per patient plus email consent and address collection
- Data imported directly to EMR = more face-to-face time, systematic screening
- Positive patient feedback and uptake

Specific Results

- ~ 3000 patients screened, 432 current smokers identified
- 33 % ↑ smoking cessation program referrals
- 445 % ↑ smoking cessation counseling billing
- CLHT administered to 1300 patients vs. 45 in previous year
- ~ 500 patients at risk for COPD with positive CLHT identified

Acknowledgements

BICL Healthcare Affairs Team provided valuable support to recognize the needs of the Couchiching FHT and to connect expert groups to meet their needs in COPD which can make a difference to patients and processes.

The Couchiching FHT physicians and staff piloting Ocean have been supportive in adopting and utilizing the technology.

Authors

Greg Armstrong, MD Couchiching FHT

Doug Kavanagh, MD, Founder of CognisantMD

Stephen Graper, President, Healthcare Together Ltd.

Stephanie Kersta, Health Promoter, Couchiching FHT

Liz McCormick, IT Manager, Couchiching FHT

Lynne Davies, Executive Director, Couchiching FHT

Cory Keenan, Healthcare Affairs Manager, Boehringer Ingelheim (Canada) Ltd.

Contact Information

Dr. Greg Armstrong	Couchiching FHT	j.g.armstrong@cfht.ca
Dr. Doug Kavanagh	CognisantMD	dkavanagh@cognisantmd.com
Steve Graper	Healthcare Together Ltd.	stephen.graper@healthcaretogether.ca
Cory Keenan	Boehringer Ingelheim	cory.keenan@boehringer-ingelheim.ca