

A Primary Care Multilevel mHealth Colorectal Cancer Screening Intervention (mCRC)

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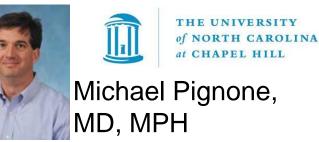
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Ayefōn LLC Don Babcock, PE

Multilevel barriers result in underutilization of CRC screening

Patient barriers

Concerns about tests (pain, messy, embarrassing, difficult)

Poor awareness of benefit of screening

Lack of self-efficacy

Low health literacy



Healthcare provider & system barriers

Time pressures

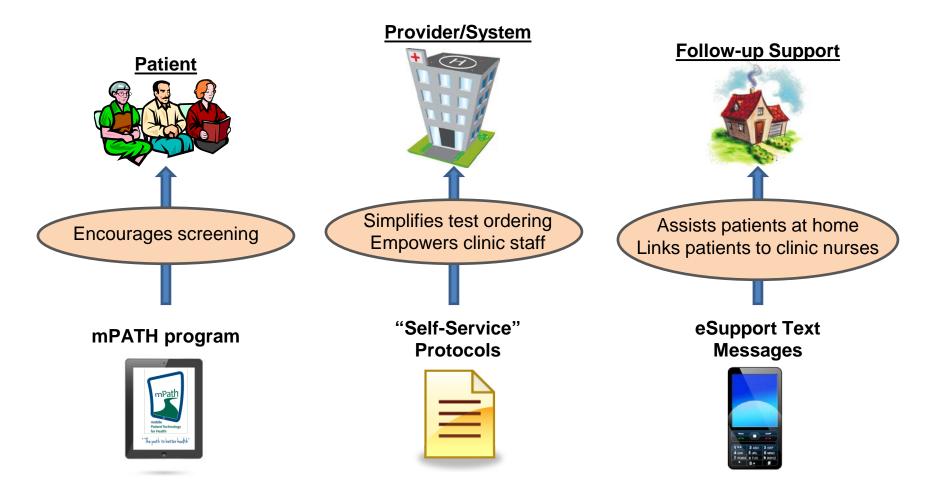
Multiple hand-offs in test ordering

Lack of post-visit support





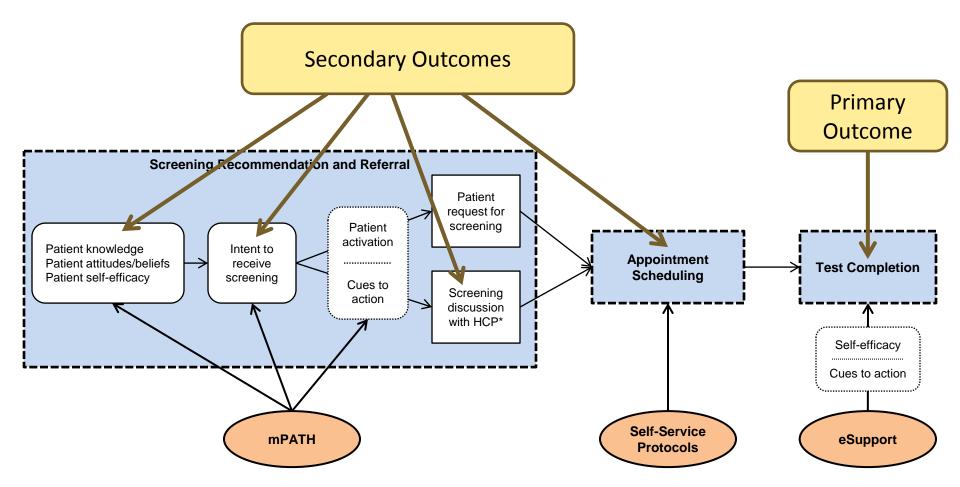
A potential mobile health, multilevel solution: mCRC



Specific Aims

- Test, in a patient-level RCT, the effect of the mCRC system on <u>CRC screening rates</u> among unscreened primary care patients
- 2) Determine whether mCRC improves intermediate outcomes, and whether these outcomes mediate the effects on test completion
- 3) Measure the <u>additional cost</u> of the mCRC system per patient screened

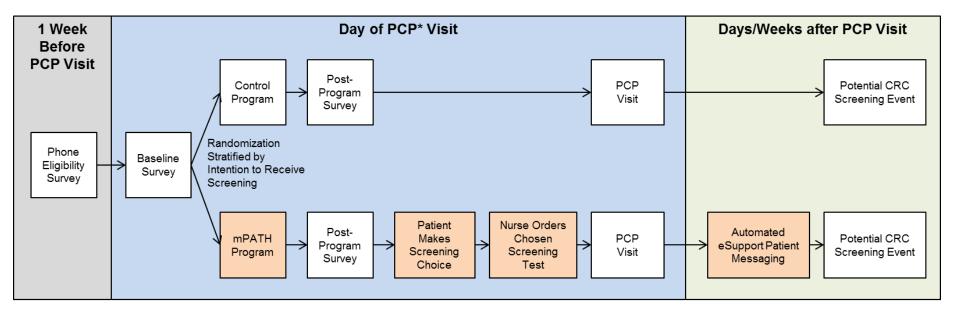
Mediation Model



*HCP = Healthcare provider

Study Design

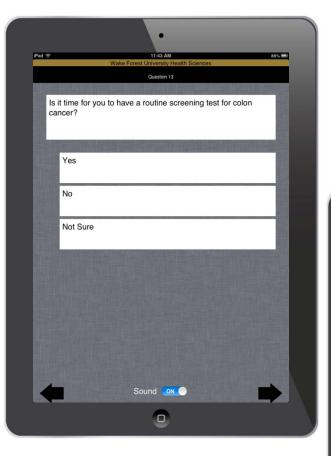
- Stratified RCT
- Sample size = 530
- 80% power to detect 12% difference in screening rates



*PCP = Primary care provider

Lessons Learned to Date

mPATH Pilot Testing







mPATH program was well received

	Patient Literacy Level	
	Low/Limited	Adequate
	(n=8)	(n=32)
Able to complete program with:		
1 episode of assistance or less	8 (100%)	28 (88%)
No assistance	7 (88%)	23 (72%)
Agreed with:		
Program was easy to understand	8 (100%)	32 (100%)
I learned something important	6 (85%)	30 (97%)
Questions were easy to read	8 (100%)	32 (100%)
Buttons were easy to touch	7 (88%)	30 (94%)
Preferred the program to a brochure	7 (88%)	26 (87%)*
CRC screening knowledge after mPATH		
program [†]		
Increased quiz score	5 (63%)	15 (48%)
No change in quiz score	3 (38%)	15 (48%)
Decreased quiz score	0 (0%)	1 (3%)

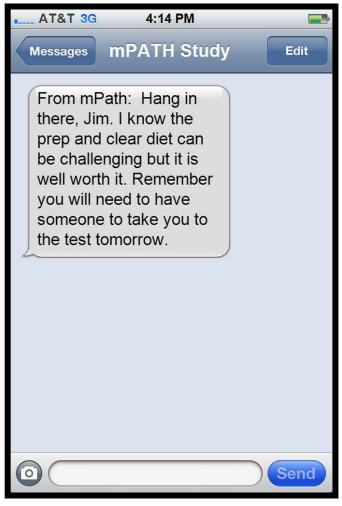
^{*2} participants answered "don't know" to the preference question †Knowledge assessed by 5-item quiz



"The path to better health"

eSupport Focus Groups

Participant Demographics (n = 27)		
Male, n (%)	10 (37%)	
Race Black White	17 (63%) 10 (37%)	
Age, range (mean)	50 – 73 years (56.6 years)	
Low health literacy	8 (30%)	
Overdue for screening	7 (26%)	



eSupport Focus Groups: Main Themes

Barriers to Screening

Having to drink the prep solution

Fear of the procedure

Features of Good Text Messages

Affirming ("glad you decided to be tested")

Supportive ("hang in there")

Informative

Potential Concerns about Text Messages

Confidentiality (i.e., someone else could read their texts)

No replies should be requested (i.e., texts should be unidirectional)

Avoid "nagging" or "paternalistic" texts

Desired eCommunication modalities

Important to have some choice (i.e., e-mail vs. text)

Next Steps

- Finalize specific eSupport messages and delivery process
- Start trial enrollment (spring 2014)

Questions/Comments?