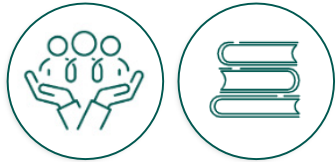


Prevention in Focus Webinar Series



Welcome and Happy Health Literacy Month!

We will begin shortly.



Say “Yes!” to Health Literacy in Cancer Prevention and Control



Cathy Meade, Ph.D.
Moffitt Cancer Center



Clement K. Gwede, Ph.D.
Moffitt Cancer Center

Prevention in Focus Webinar Series



October is Health Literacy Month!



Say “Yes!” to Health Literacy in Cancer Prevention and Control



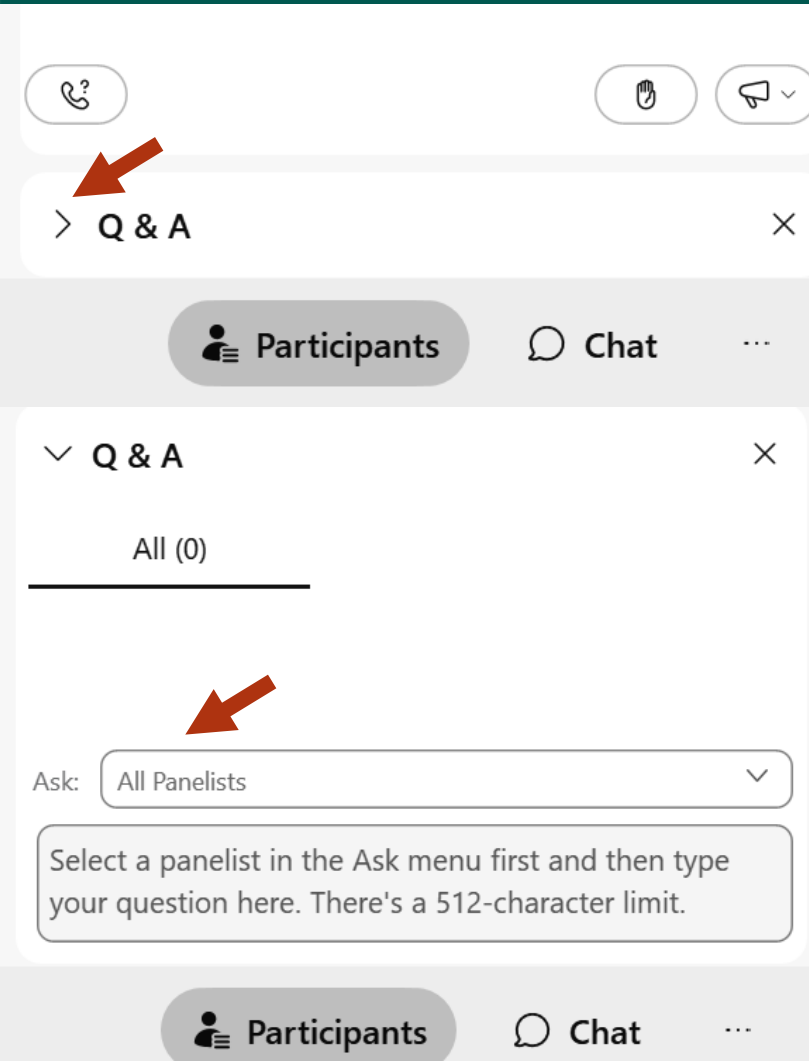
Cathy Meade, Ph.D.
Moffitt Cancer Center



Clement K. Gwede, Ph.D.
Moffitt Cancer Center

Introduction by Dr. Elizabeth Sarma, Ph.D., Program Director
National Cancer Institute

Prevention in Focus Webinar Series



Upcoming Q&A Session

Please send us your questions
via the **Q&A pod** directed to
All Panelists

Please use the Chat pod to request technical assistance

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Say “Yes!” to Health Literacy in Cancer Prevention and Control

NIH Office of Disease Prevention and the NIH Health Literacy
Working Group – Prevention in Focus Webinar
October 26, 2022



**Cathy D. Meade, PhD, RN,
FAAN, FSBM, FAACE
Moffitt Cancer Center
Division of Population Science
Cathy.meade@moffitt.org**

**Clement K. Gwede, PhD, MPH,
RN, FAAN, FAACE, FSBM
Moffitt Cancer Center
Division of Population Science
Clement.gwede@moffitt.org**

Objectives



HEALTH LITERACY

Underscore the importance of **health literacy** + culture for optimizing health benefits.

1



COMMUNITY-ACADEMIC PARTNERSHIPS to FURTHER COMMUNICATIONS

Unpack the role of community partnerships as a springboard to address cancer concerns.

2



ADVANCING HEALTH EQUITY

Highlight strategies for infusing health literacy in CRC screening studies & share lessons learned.

3





Health Disparities

No single cause

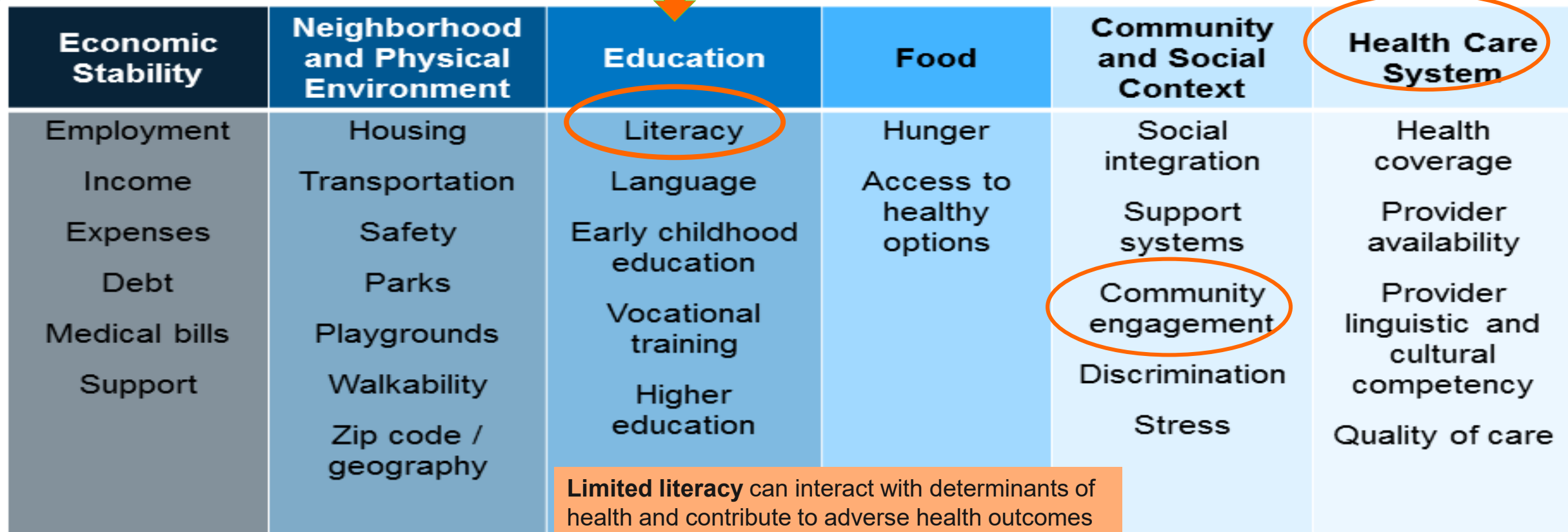
... No single solution





Figure 1

Social Determinants of Health



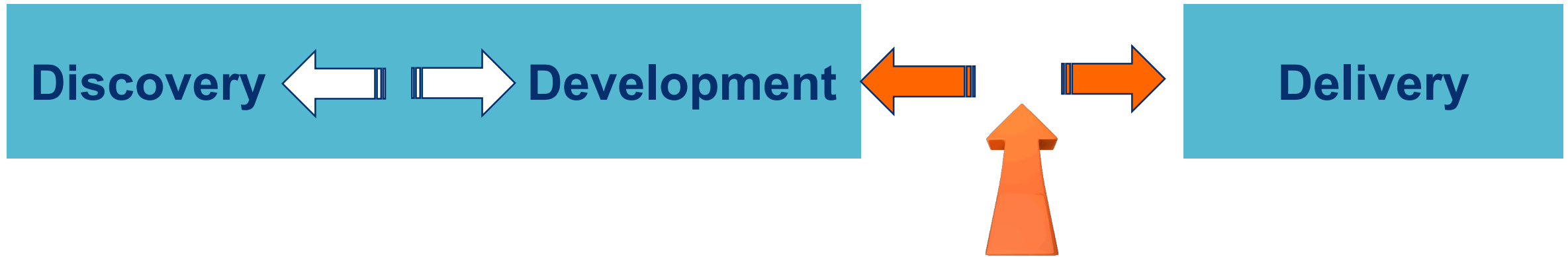
Economic Stability	Neighborhood and Physical Environment	Education	Food	Community and Social Context	Health Care System
Employment Income Expenses Debt Medical bills Support	Housing Transportation Safety Parks Playgrounds Walkability Zip code / geography	Literacy Language Early childhood education Vocational training Higher education	Hunger Access to healthy options	Social integration Support systems Community engagement Discrimination Stress	Health coverage Provider availability Provider linguistic and cultural competency Quality of care

Limited literacy can interact with determinants of health and contribute to adverse health outcomes

Health Outcomes

Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations

Discovery-Development-Disconnect



Critical Disconnect

This '*discovery to delivery disconnect*' is a key determinant of the unequal burden of cancer.

Cancer Prevention is Key!



- In 2022, ~1.9 million people will be diagnosed with cancer in US.
- Healthy lifestyles and screenings can reduce one's risk **and** lower the risk of cancer recurrence and improve treatment outcomes.
- **CRC cancer is 2nd most common cause of cancer deaths when numbers for men and women are combined.**
- **>60% of deaths from CRC could be prevented by regular screening (CDC)**



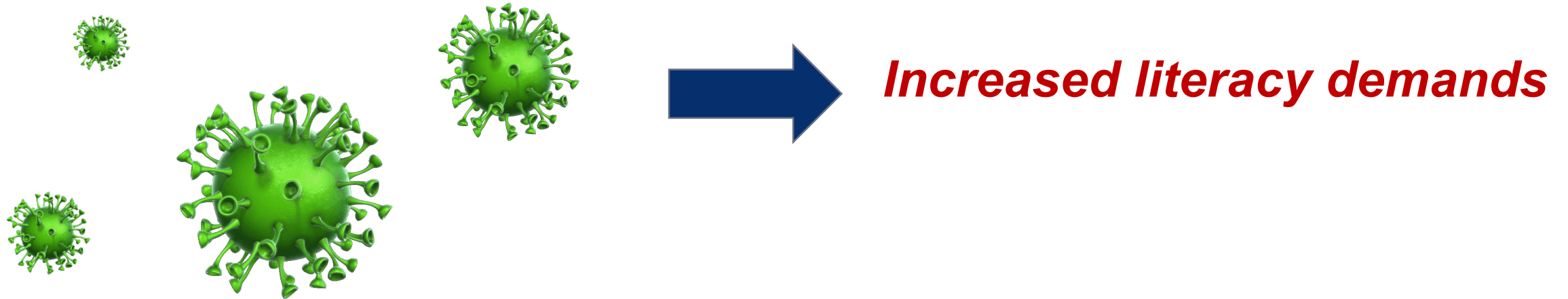
Prevention offers a cost-effective long-term strategy for the control of cancer. National policies and screening programs are needed to raise awareness, to reduce exposure to cancer risk factors, and to ensure that people are provided with needed ***information and support***.



Changing Health Literacy Landscape



- Rapidly changing demographics
- Greater social internet network penetration
- Healthcare and technological advancements
- Growing need for 'rapid' response to new information



Get your GPS out! Healthcare System Maze

Language/linguistics

Transportation

Location of Facility

Employment/
Loss Wages

Problems with
Scheduling

Insurance

Fear

Perceptions,
Attitudes &
Beliefs

Disability

Racism/biases

Child/Adult Care

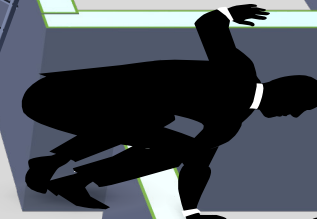
Communications
With providers

Comorbidities

literacy

CULTURE

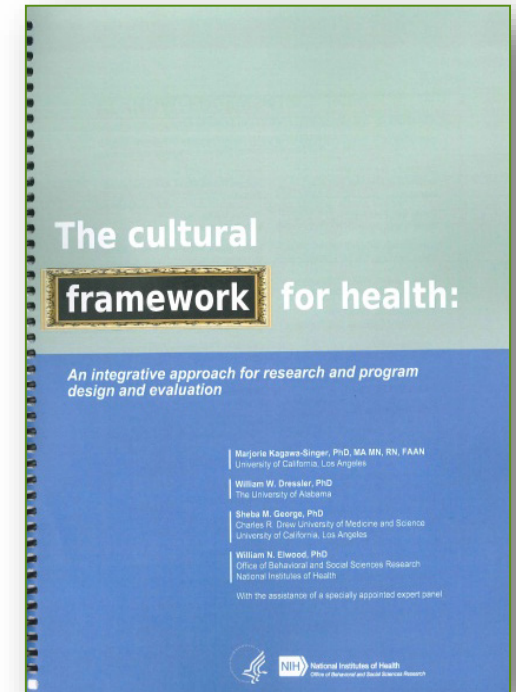
inclusion



Culture and Literacy



Fundamental for effective communication for an increasingly diverse population is attention to ***culture*** and ***literacy*** and intersectional perspectives which inform and advance health equity and give *context to messages*



Collins PH & Blige S (2016) Intersectionality. Malden, MA: Polity Press; Kagawa-Singer M, Dressler WW, George SM, Elwood WN, with the assistance of a specially appointed expert panel. (2015). *The cultural framework for health: An integrative approach for research and program design and evaluation*. Bethesda: NIH Office of Behavioral and Social Sciences Research. http://obssr.od.nih.gov/pdf/cultural_framework_for_health.pdf; Kleinman (1978). Culture, illness and care: Clinical lessons from Anthropological and Cross-Cultural Research; Meade CD. (2005) Cancer, culture and literacy: critical next steps in improving care for diverse populations. *Cancer Control: CCL Supp* 12;4-5.

Health Literacy – Healthy People 2030



Personal health literacy - the degree to which individuals have an ability to find, understand, and use information and services to inform health-related decisions & actions for themselves and others.

Organizational health literacy - the degree to which organizations equitably enable individuals to find, understand, and use information and services to inform health-related decisions and actions for themselves and others.

- Emphasizes people's ability to *use* health information *rather* than just understand it.
- Focuses on ability to make “well-informed” decisions rather than “appropriate” ones.

Health Literacy Definitions Evolve



- What is clear is that **beyond** the individual - equal attention must be given to organizational, healthcare & governmental systems for accurate and accessible information (need to expand our influence and redesign strategic and operational planning processes).
- Multisectoral engagement is critical **and** harmony among many sectors is needed.

Christie GP, Ratzan SC. Beyond the Bench and Bedside: Health Literacy Is Fundamental to Sustainable Health and Development. *Stud Health Technol Inform.* 2020 Jun 25;269:544-560. doi: 10.3233/SHTI200061. PMID: 32594020.; **Jones D, Lyle D, McAllister L, Randall S, Dyson R, White D, Smith A, Hampton D, Goldsworthy M, Rowe A.** The case for integrated health and community literacy to achieve transformational community engagement and improved health outcomes: an inclusive approach to addressing rural and remote health inequities and community healthcare expectations. *Prim Health Care Res Dev.* 2020 Dec 2;21:e57. doi: 10.1017/S1463423620000481. PMID: 33263268; PMCID: PMC773717; **Khoong EC, Schillinger D.** A Direction for the Next Decade of NIH-Funded Health Literacy Research. *Health Lit Res Pract.* 2020 Nov 6;4(4):e208-e211. doi: 10.3928/24748307-20200923-01. PMID: 33170286; PMCID: PMC8330441.

Communications: Health Disparities Pathways

- Less informed.
- Less access to information.
- Poses obstacles to navigation
- Diminishes self-efficacy.
- **Power/Privilege**



Connect culturally & literacy appropriate information to health care to improve access *and* acceptability (**context**)

Creating Research Partnerships for Health & Equity



A Community-Academic Model of Engagement

Tampa Bay Community Cancer Network (TBCCCN)



Four Working Groups

1. Screening
2. Survivorship
3. Youth
4. HIV/Cancer

2017 - present

Institutionally Supported

2010-2017

**U54 TBCCCN (Meade/Gwede MPIs)
Community Network Program Center**

2005-2010

**U01 TBCCCN (Meade PI)
Community Network Program (CNP)**

U54 CA153509

Before 2005

**Community Education &
Outreach Projects**



4 Key TBCCN Questions . . .



? What are community concerns?

? How is community involved?

? What/how do we do it?

? What are the outcome(s)?



What's Common in all our CRC Studies ?

INGREDIENTS:

- ✓ CBPR – 4 key questions that drive our work
- ✓ Attention to SDOH, Culture, and Health Literacy
- ✓ Theoretical underpinnings
- ✓ Community Advisory Committee (CAB)
- ✓ Formative research
- ✓ Easy-to-understand language specific education *plus* FIT
- ✓ Focus on community benefit



PLUS:

“An engaged community-academic research team”

Transformational Community Engagement

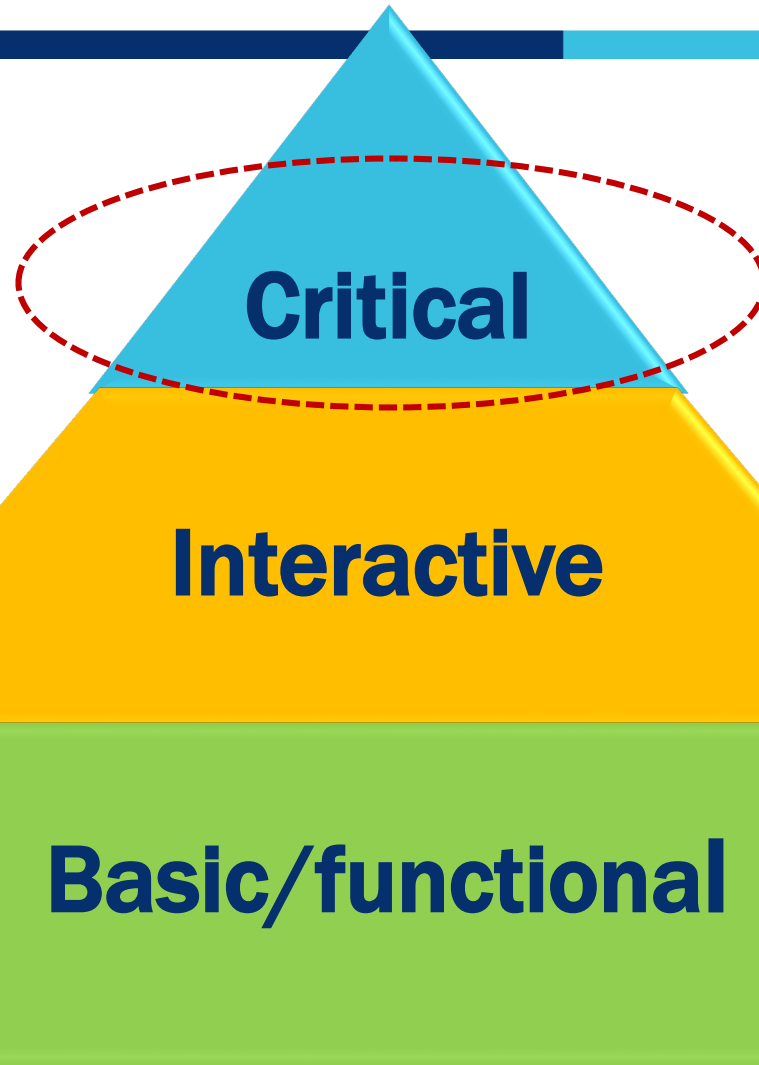


- Create new paradigms to unpack health disparities.
- Move from description, detection and correlational to intervention-driven research.
- Invest in health and **community literacy** that aligns individual context with community knowledge, skills and resources.





Levels of Health Literacy



- Cognitive & social skills to ***critically*** analyze information to action
- More advanced cognitive and ***interactive*** skills to extract information.
- Transmission of ***basic*** health facts.

How do you Measure?



- Informal measures

- Formal measures

- REALM
- SILS
- eHealth Literacy Scale (eHEALS)
- New Vital Sign (NVS)
- Health Literacy Questionnaire
- TOFHLA/STOFLHA (Spanish)
- WRAT III
- SAHSLA (Lee, Bender et al., 2006) -
Short Assessment of Health Literacy for Spanish-speaking Adults
- CLOZE
- T/F, multiple choice, open/closed ended
- NUMI

The Health Literacy Tool Shed
Database of health literacy measures (n=217)
<https://healthliteracy.bu.edu>



REALM-R EXAMINER RECORD



- ☐ Fat
- ☐ Flu
- ☐ Pill
- ☐ Allergic
- ☐ Jaundice
- ☐ Anemia
- ☐ Fatigue
- ☐ Directed
- ☐ Colitis
- ☐ Constipation
- ☐ Osteoporosis

**Fat, Flu, and Pill are not
scored (total score 0-8)**

**Score of 6 or less are at risk
for low health literacy**

(SILS) Single Item Literacy Screener



Do you think that most information on health is:

☐ Easy to understand

☐ Hard to understand?

When you fill out forms at the doctor's office, is filling out the forms easy or difficult for you?

☐ I have no difficulty

☐ Sometimes it is difficult

☐ Very difficult

☐ Never tried

How confident are you in filling out health forms by yourself? ★

☐ I am very confident

☐ I am somewhat confident

☐ I am not confident

☐ I usually get help to fill out health forms

eHeals: eHealth Literacy Scale



What does it Measure? Patient's knowledge, comfort and perceived skills level to find, evaluate, and apply electronic health information to health problems.

Item	Strongly Disagree 1	Mildly Disagree 2	Uncertain 3	Mildly Agree 4	Strongly Agree 5
I know what health resources are available on the Internet	☐	☐	☐	☐	☐
I know where to find helpful health resources on the Internet	☐	☐	☐	☐	☐

Our Team's Tools and Techniques

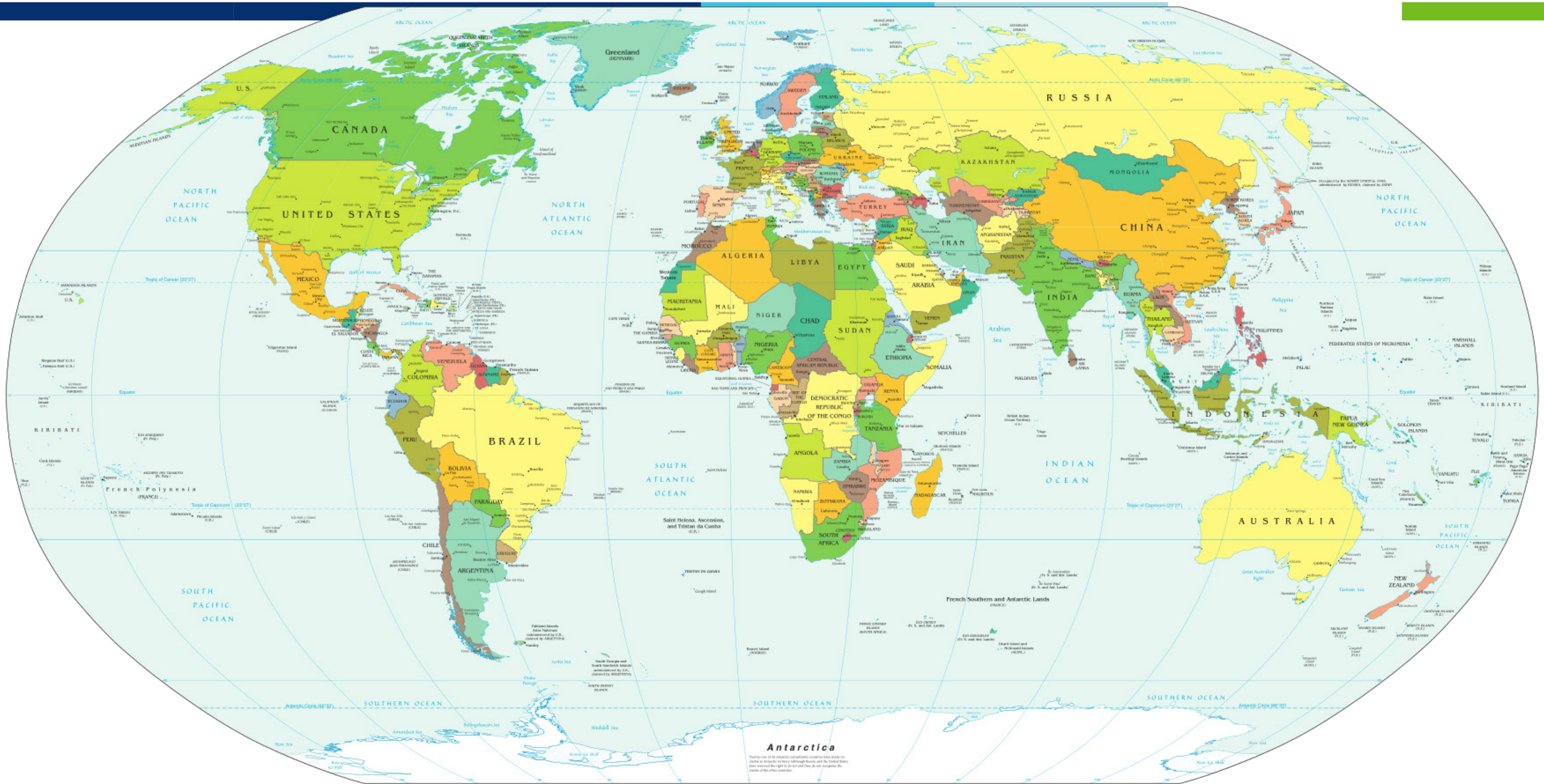


- Know your audience
- Get the R.E.A.L. mindset
- Be systematic in approach
- Formative research: engage learners
- Transcreation
- Learner verification (LV)
- Deconstruct & chunk = Simplify
- Build in feedback loops



formative

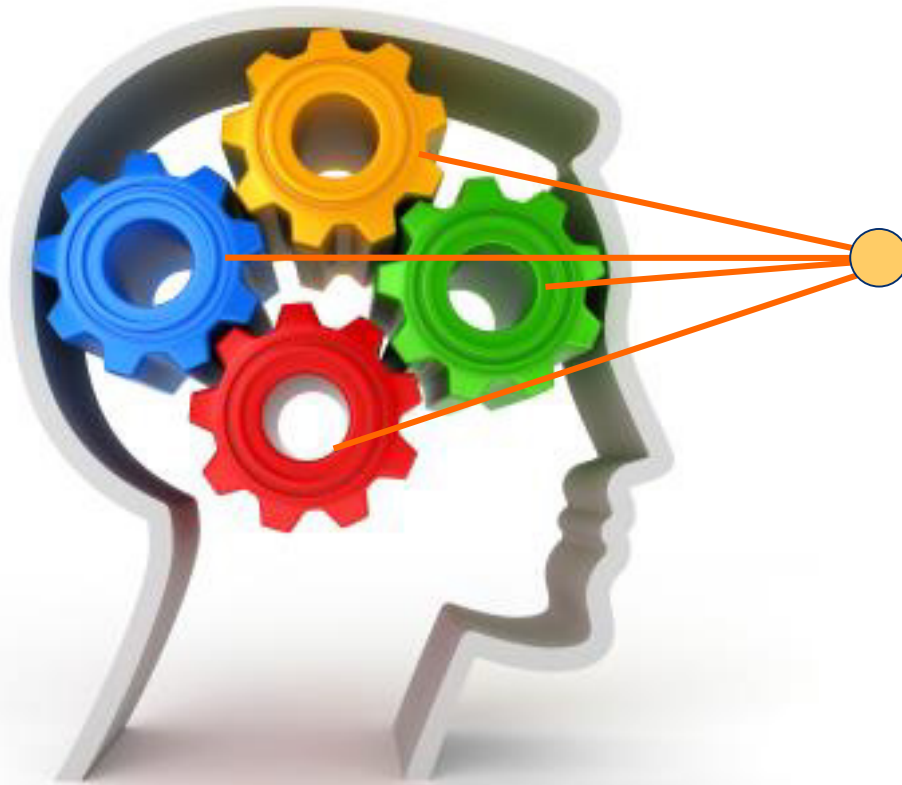
Know your Audience



Know your Audience



Get the R.E.A.L. Mindset



Relatable
Engaging
Actionable
Literacy
Friendly



[Spanish](#) Booklet

Be Systematic - Developmental Phases

COMMUNITY ADVISORY BOARD

Formative Research

- Low CRC knowledge
- Limited screening
- High receptivity FIT test
- Providers liked the idea of a clinic-based program –
- Thought it was feasible!

Most common reason:
“My doctor never talked to me about it!”

Pretesting
Iterations
X 3

Tools

- ***Colorectal Cancer:
Prevention Begins at Home
(Photonovella/DVD)***



Intervention Developmental Processes



- **Formative findings** inform a creative brief (blueprint for action), which infuses content, cultural nuances and theoretical constructs.
- Key messages incorporated in outlines and storyboards that advance drafts of educational interventions (booklet/video).



Sample: Construct Mapping

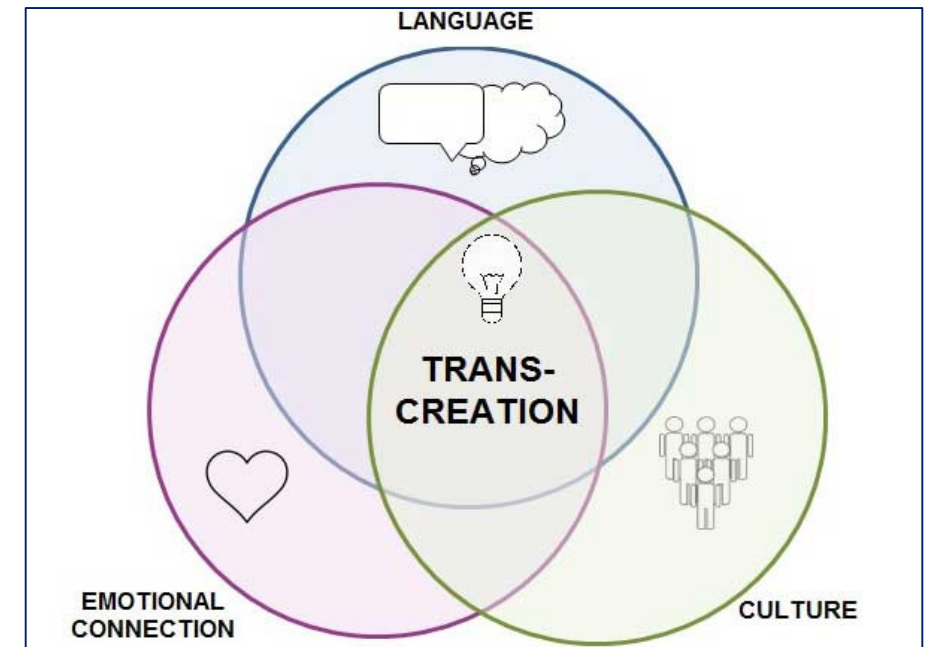
Construct	Finding	How addressed?
Cancer Worry (PHM)	Fear of abnormal results or knowing cancer diagnosis	Patient verbalizes and addresses this concern with provider. Provider reassures patient and discusses follow up of abnormal results.
Literacy Critical health literacy	Patient unsure how to use information and act on it.	Patient observed assembling FIT kit components in bathroom and getting ready to collect sample . . . Next scene is patient mailing KIT.
Social Influence (PHM)	Provider suggestion is key.	Doctor makes a definitive recommendation: Follow-up is shown.

Transcreation



- Involves translation ***plus*** cultural adaptation
- Practical and scientifically sensible for developing an intervention for a **new** audience – while keeping core elements.
- Speaks to *cultural* and *literacy* relevance.

***“Simple translation
is not enough”***



<https://digital.gov/>

Learner Verification (LV)



LV Item	Example
Attraction	Let's look at the cover: would you want to pick it up and read it?
Comprehension	Overall, what's the main message here? Can you name what is needed for FIT?
Acceptability	Is there anything about this booklet that bothers you?
Persuasiveness	If asked, do you think you would consider FIT?
Efficacy	Based on what you have read: Do you think you can do the FIT?

Attraction



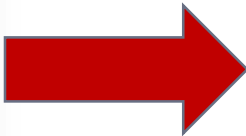
Before

**Un Examen Sencillo
Para Un Colon Saludable**



**La Historia De Una Familia Que Toma El
Primer Paso Para Proteger Su Futuro**

January 7, 2013 Version #1



After

Un examen sencillo para un
colon saludable



La historia de una familia que toma el primer paso para proteger su futuro

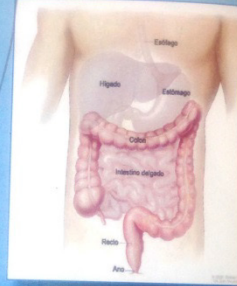
Comprehension



Before

¿Qué es el cáncer de colon y recto?

- El colon es parte del intestino grueso. Absorbe agua y nutrientes de la comida. También ayuda a mover los residuos hasta el recto para ser exportados luego por el ano.
- El recto es la parte inferior del intestino por donde el excremento sale del cuerpo.
- El cáncer de colon aparece en el colon o en el recto. También se llama cáncer colorrectal.

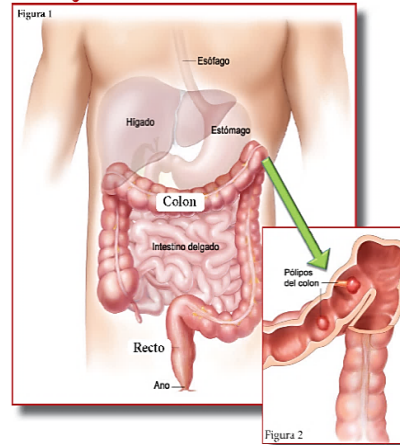


¿Adónde empieza el cáncer de colon?

- El cáncer de colon empieza con un pólipo en el colon o en el recto. Con tiempo el pólipo se puede convertir en cáncer.
- Un pólipo es un pedacito de carne que crece en el intestino grueso.
- Los exámenes de detección pueden encontrar los pólipos para quitarlos antes de que se conviertan en cáncer.



¿Adónde Está El Colon?



Mire la Figura 1

- El **colon** es parte del intestino grueso. Absorbe agua y nutrientes de la comida. También ayuda a mover los residuos hasta el recto para ser exportados luego por el ano.
- El **recto** es la parte inferior del intestino por donde la materia fecal sale del cuerpo.

Mire la Figura 2

¿Qué es un pólipo?

- Un pólipo es un pedacito de carne que crece en el intestino grueso.

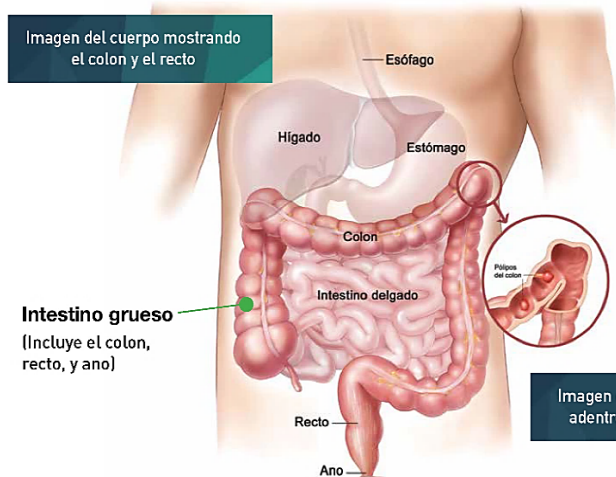
¿Qué es el cáncer de colon?

- El cáncer del colon es cáncer que se origina en el colon o el recto.
- Algunas veces, pólipos, se forman en el colon o el recto.
- Con el tiempo, algunos pólipos pueden convertirse en cáncer.

After

¿Dónde están el colon y el recto?

Imagen del cuerpo mostrando el colon y el recto



Intestino grueso
(Incluye el colon, recto, y ano)

Imagen de un pólipo adentro del colon

¿Cuáles son sus funciones?

- El **colon** es una parte del aparato digestivo que forma y almacena los excrementos. Ayuda a mover los residuos hasta el recto.
- El **recto** es la parte final del intestino por donde la materia fecal sale del cuerpo.

¿Qué es un pólipo?

- Un **pólipo** es un pedacito de carne o tejido que puede crecer en el colon y el recto.
- El cáncer puede desarrollarse a partir de pólipos.

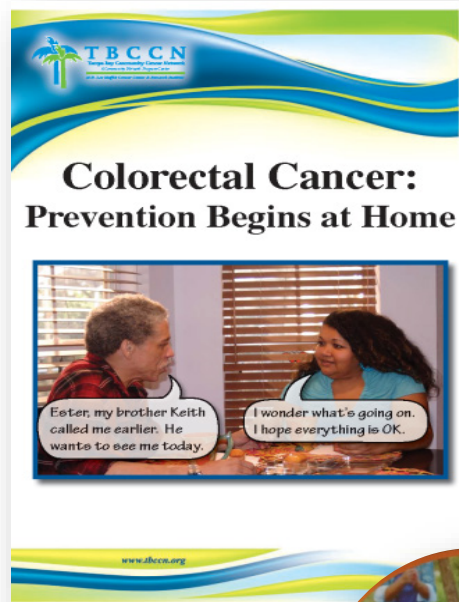
¿Qué es el cáncer del colon?

- A veces el cáncer del colon empieza como un pólipo que crece en el colon o recto.
- Los pólipos pueden sangrar un poco pero no se puede ver la sangre.
- No todos los cánceres tienen síntomas en su etapa temprana.

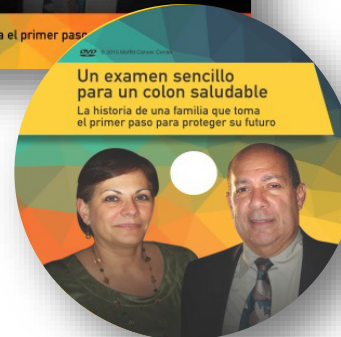
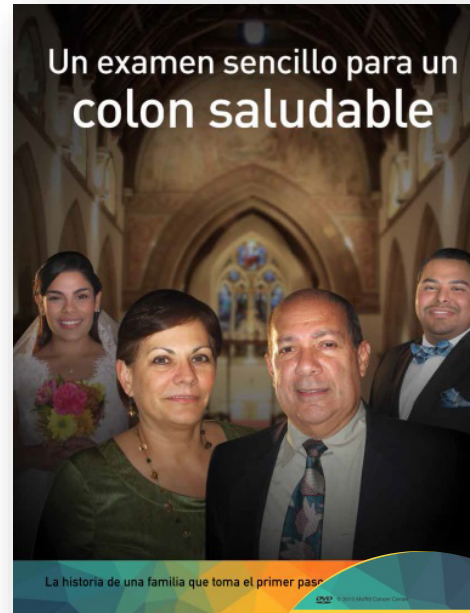
Patient Education Materials



English



Spanish



Haitian Creole



Deconstruct (e.g., What is FIT?)



Davis SN et al, 2017 A randomized controlled trial of a multi-component targeted low-literacy educational intervention compared with a non-targeted intervention to boost colorectal cancer screening with fecal immunochemical testing in community clinics. *Cancer*. 2017 Apr 15;123(8):1390-1400. **Christy et al., 2016** S, A community-based trial of educational interventions with fecal immunochemical test for colorectal cancer screening uptake among Blacks in community settings. *Cancer* 2016 Nov; 122: (21) **Gwede et al., 2019**, A culturally and linguistically-salient pilot intervention to promote colorectal cancer screening among Latinos receiving care in a Federally Qualified Health Center. *Health Educ Res.* 2019 Mar 30.

Our Most Popular Health Literacy Teaching Tool





CRC Screening Guidelines



ACS and USPSTF now recommend screening starting at age **45**, both men and women at average risk should use one of these screening tests:

- **Tests that detect adenomatous polyps and cancer**
 - Colonoscopy every 10 years (1-step test)
 - Flexible Sigmoidoscopy every 5 years*
 - CT Colonography every 5 years*
- **Tests that primarily detect blood in the stool (2-step tests)**
 - Annual Fecal Immunochemical Test (FIT)*
 - Stool DNA+FIT, every 3 years* (e.g., Cologuard)
 - Annual Guaiac-based Fecal Occult Blood Test (gFOBT)*

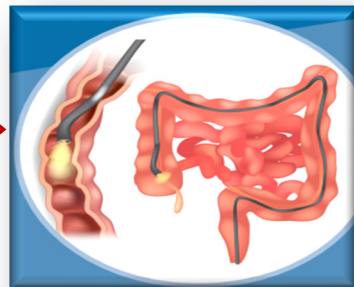
*** Colonoscopy should be done if test results are abnormal**

Best Screening Method?



- ❖ No evidence from RCTs that **one** screening method is the “best.” Home stool tests are **COMPARABLE** to a high-quality colonoscopy-based screening program when positive stool tests are followed by colonoscopy.
- ❖ **The best test is one that gets done!**

FIT to Colonoscopy



Linkage to Care



TBCCN Community-driven CRC Studies 2007- present

Community Settings

Ethnic Subgroups
(U01 CNP Pilot)
09/01/07-04/30/09

IACT
(ACS-RSG)
01/01/11-12/31/16

FQHC Settings

Latino CARES Pilot
(FDOH-BHC)
12/01/13 – 05/31/16

Community CARES
(FDOH-BHC &
Florida Blue Found.)
03/01/17 – 02/28/22
07/01/18 – 02/28/21



CARES-REACH
(NCI-R01)
04/01/20 –
03/31/25



CARES
(NCI-U54 CNPC)
09/01/10 –
08/31/16

Full RCT

- Introduced FIT to colonoscopy
- English Education Materials

Pilot RCT

- FIT to colonoscopy
- Spanish Education Materials

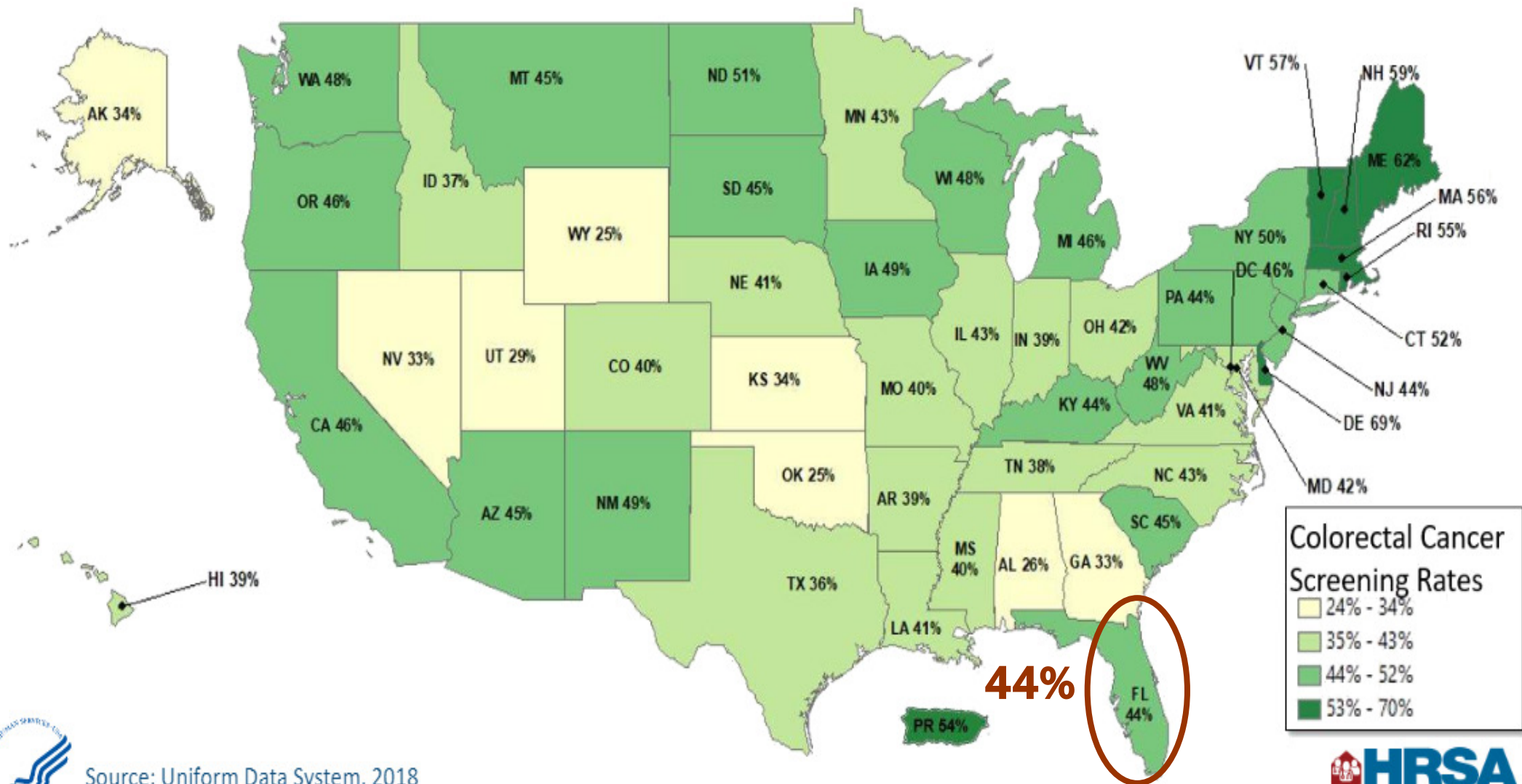
Full RCT

- Multi level
- Multi language materials
- Repeat annual screening
- Coach
- Cost Assessment

Implementation Science

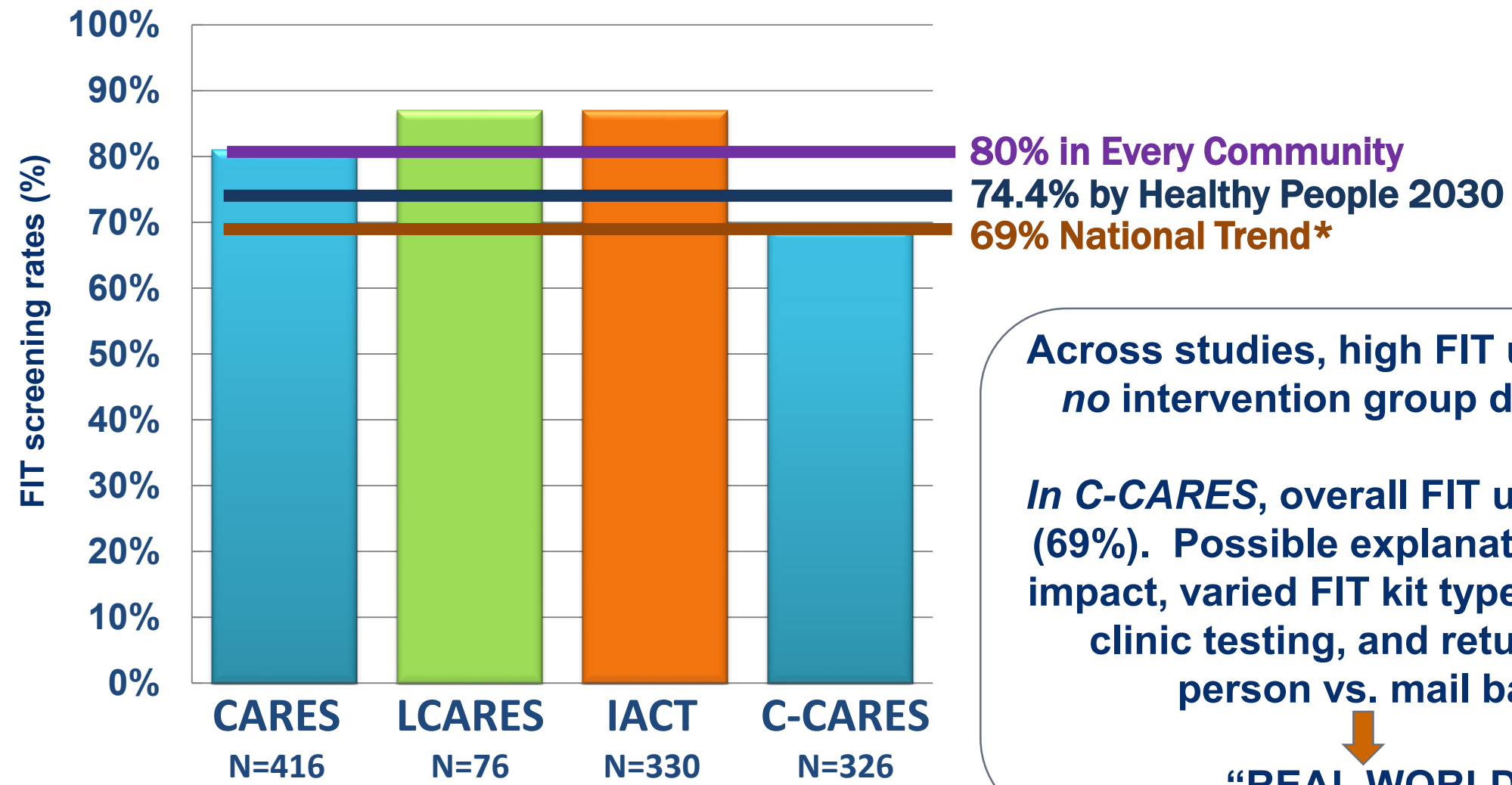
- Rural & Urban FQHCs
- Diverse Populations: Black, Hispanic, Haitian, White
- Multi-level EBIs
- Multi-language
- Champion
- Stepped Wedge

2018 UDS Colorectal Cancer Screening Rate



Source: Uniform Data System, 2018

Results: Total CRC Screening Rates by Study



Across studies, high FIT uptake – yet *no* intervention group differences

In C-CARES, overall FIT uptake lower (69%). Possible explanations: Covid impact, varied FIT kit types; in-house clinic testing, and return FIT in person vs. mail back!

↓
“REAL WORLD”

Summary of 3 FQHC-based CRC Studies

Measure/ Characteristics	CARES Project (N=416) RCT	Latinos CARES (N=76) Pilot RCT	Community CARES (N=378) RCT (multi-level)
Hispanic/Latino ethnicity (%)	10%	100%	46%
Spanish-language preferring (%)	N/A	100%	45%
< than high school (%)	24%	32%	41%
At risk for low health literacy	REALM-R: (≤ 6) 36%	SILS – < confident, 28%	SILS – < confident, 30%
Intervention language(s)	English only	Spanish only	English and Spanish

Summary of 3 FQHC-based CRC Studies

Measure/ Characteristics	CARES Project (N=416)	Latinos CARES (N=76)	Community CARES (N=378)
Intervention conditions	Photonovella/DVD + FIT vs. CDC brochure + FIT	Photonovella/DVD + FIT vs. CDC brochure + FIT	Photonovella/DVD + FIT + Coach vs. CDC brochure + FIT
Overall FIT uptake	81%	83%	69%
Intervention group effects	NS (no differences)	NS (no differences)	NS (no differences)
Influence of HL on FIT	NS	NS	NS

Key Messages:

- ❖ In all studies, FIT uptake increased with EBIs (education + FIT+ reminders).
- ❖ Yet, among intervention groups, no significant difference in increasing FIT uptake.
- ❖ No differences in effect of HL – on FIT uptake.
- ❖ **TYPE of materials may matter less. ACCESS to FIT seems to matter more.**

In 2 Studies with Spanish-language Preferring Individuals



In pilot Latinos CARES (n=76):

- Overall FIT uptake was 87% (LCARES 90% vs. Comparison group 84%) though NS=0.379)
 - LCARES group greater increases in CRC awareness ($p=0.046$) and susceptibility (0.013).
 - In Comparison group, cancer worry increased more ($p=0.045$)

In Community CARES (n=136):

- Individuals who received the intervention in Spanish language were more likely to return FIT kits compared to English language group (OR: 2.08; 1.3-3.4; $p=0.004$).

CARES Study: Univariate Correlates of Low HL

N=416			REALM score (0-6): At Risk for Low HL	
Variable	Level or Mean (SD)	N (%)	Odds Ratios (95% CI)	P-Value
Gender	Male	193 (46%)	2.1 (1.4-3.1)	<.001
Race/ethnicity	Racial/ethnic minority	172 (41%)	3.8 (2.5-5.9)	<.001
Employment status	Employed (Ref: Unable to work)	101 (24%)	0.3 (0.2-0.6)	<.001
Health Ins.	No	160 (39%)	0.6 (0.4-0.9)	0.025
Regular PCP	No	146 (35%)	1.5 (1.0-2.3)	0.049
Age	Mean=55.7, SD=4.1	416 (100%)	0.9 (0.9-1.0)	0.019
Education	HS/GED or greater	416 (100%)	0.4 (0.3-0.5)	<.001

CARES Study: Univariate Correlates of Low HL

N=416			REALM score (0-6): At Risk for Low HL	
Variable	Level or Mean (SD)	N	Odds Ratios (95% CI)	P-Value
Awareness of CRC	Mean=6.3, SD=2.2	416	0.8 (0.7-0.9)	<.001
PHM perceived susceptibility	Mean=8.6, SD=2.9	416	1.1 (1.1-1.2)	<.001
PHM social influence	Mean=14.9, SD=3.8	416	1.1 (1.1-1.2)	<.001
PHM religious beliefs	Mean=11.3, SD=5.2	416	1.1 (1.1-1.2)	<.001
Cancer fatalism	Mean=4.3, SD=3.2	416	1.1 (1.0-1.2)	0.009

CARES STUDY: Multivariable Correlates of Low HL

N=416		REALM score (0-6): At Risk for Low HL	
Variable	Level	Odds Ratios (95% CI)	P-Value
Gender	Male (Ref: Female)	2.0 (1.3-3.1)	0.003
Race/ethnicity	Racial/ethnic minority (Ref: White, non-Hispanic)	3.5 (2.2-5.5)	<.001
Employed status	Employed (Ref: Unable to work)	0.3 (0.1-0.6)	<.010
PHM social influence		1.1 (1.0-1.2)	0.005
PHM religious beliefs		1.1 (1.0-1.1)	0.002
Backward selection with an alpha level of 0.05 was used			

Community CARES: Health Literacy Characteristics

Variable	Variable Level	Total Sample N=326 (%)	Community CARES Plus n=165 (%)	Community CARES n=161 (%)	Intervention group comparisons (p-value)
Intervention materials language	Spanish	136 (42%)	63 (38%)	73 (45%)	0.19
	English	190 (58%)	102 (62%)	88 (55%)	
How confident are you in filling out health forms by yourself?	Very	174 (56%)	85 (54%)	89 (58%)	0.90
	Quite a bit	44 (14%)	23 (15%)	21 (14%)	
	Somewhat	46 (15%)	24 (15%)	22 (14%)	
	A little bit	36 (17%)	18 (12%)	18 (12%)	
	Not at all	11 (4%)	7 (5%)	4 (3%)	
		36%	32%	29%	

Main Outcomes Publications



Published in final edited form as:

Cancer. 2016 November 15; 122(21): 3288–3296. doi:10.1002/cncr.30207.

Cancer 2016 - I-ACT

A Community-Based Trial of Educational Interventions with Fecal Immunochemical Test for Colorectal Cancer Screening Uptake among Blacks in Community Settings

Shannon M. Christy, PhD^{1,2}, Stacy N. Davis, PhD, MPH¹, Kimberly R. Williams, MS, MPH¹, Xiuhua Zhao, MPH¹, Swapomthi Govindaraju, BS¹, Gwendolyn P. Quinn, PhD^{1,2}, Susan T. Vadaparampil, PhD, MPH¹, Hui-Yi Lin, PhD^{1,3}, Steven K. Sutton, PhD^{1,2}, Richard Roetzheim, MD, MSPH^{1,2}, David Shibata, MD, FACS, FASCP^{1,2,4}, Cathy D. Meade, PhD, RN, FAAN¹, and Clement K. Gwede, PhD, MPH, RN, FAAN^{1,2,3}

Published in final edited form as:

Cancer. 2017 April 15; 123(8): 1390–1400. doi:10.1002/cncr.30481.

¹Division of

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⁴University c

Cancer 2017 - CARES

A randomized controlled trial of a multi-component targeted low-literacy educational intervention compared with a non-targeted intervention to boost colorectal cancer screening with fecal immunochemical test in community clinics

Stacy N. Davis, PhD, MPH^{1,2}, Shannon M. Christy, PhD^{2,3}, Enmanuel A. Chavarria, PhD^{2,3}, Rania Abdulla, MS², Steven K. Sutton, PhD^{2,3}, Alyssa Schmidt, MPH², Susan T. Vadaparampil, PhD, MPH², Gwendolyn P. Quinn, PhD^{2,3}, Vani N. Simmons, PhD^{2,3}, Chukwudi Ufodu, MBBS, MPH, CPH⁴, Chitra Ravindra, MD⁴, Ida Schultz, LPN⁵, Richard Roetzheim, MD, MSPH^{2,3}, David Shibata, MD^{2,3,6}, Cathy D. Meade, PhD, RN, FAAN^{2,3}, and Clement K. Gwede, PhD, MPH, RN, FAAN^{2,3}

¹Health Education and Behavioral Science, Rutgers School of Public Health, Piscataway, NJ

Published in final edited form as:

J Health Commun. 2017 November; 22(11): 923–931. doi:10.1080/10810730.2017.1377322

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J Health Comm 2017 - CARES

Health Literacy Among Medically Underserved: The Role of Demographic Factors, Social Influence, and Religious Beliefs

Shannon M. Christy^{1,2,3}, Clement K. Gwede^{1,2}, Steven K. Sutton^{1,2}, Enmanuel Chavarria⁴, Stacy N. Davis⁵, Rania Abdulla¹, Chitra Ravindra⁶, Ida Schultz⁷, Richard Roetzheim^{1,2}, and Cathy D. Meade^{1,2}

¹Division of Population Science, H. Lee Moffitt Cancer Center & Research Institute, Tampa, Florida, USA

²Morsani College of Medicine, University of South Florida, Tampa, Florida, USA

³Department of Psychology, Indiana University-Purdue University Indianapolis, Indianapolis, Indiana, USA

⁴University of Texas Health Science Center at Houston, School of Public Health, Department of Health Promotion and Behavioral Sciences, Brownsville, Texas, USA

⁵Health Education and Behavioral Science, Rutgers School of Public Health, Piscataway, New Jersey, USA

⁶Florida Department of Health Pinellas County, St. Petersburg, Florida, USA

⁷Premier Community HealthCare Group, Inc., Dade City, Florida, USA

HEALTH EDUCATION RESEARCH

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Health Education Research 2019 - Latinos CARES

A culturally and linguistically salient pilot intervention to promote colorectal cancer screening among Latinos receiving care in a Federally Qualified Health Center

Clement K. Gwede^{1,2,3*}, Steven K. Sutton^{3,4}, Enmanuel A. Chavarria⁵, Liliana Gutierrez¹, Rania Abdulla¹, Shannon M. Christy^{1,2,3}, Diana Lopez⁶, Julian Sanchez^{1,2,3} and Cathy D. Meade^{1,3}

¹Department of Health Behavior and Outcomes, H. Lee Moffitt Cancer Center & Research Institute, Tampa, FL, USA,

²Department of Gastrointestinal Oncology, H. Lee Moffitt Cancer Center & Research Institute, Tampa, FL, USA,

³Department of Oncologic Sciences, Morsani College of Medicine, University of South Florida, Tampa, FL, USA,

⁴Department of Biostatistics and Bioinformatics, H. Lee Moffitt Cancer Center & Research Institute, Tampa, FL, USA,

⁵Department of Health Promotion and Behavioral Sciences, University of Texas Health Science Center at Houston, Brownsville Regional Campus, Brownsville, TX, USA and ⁶Suncoast Community Health Centers, Inc., Brandon, FL, USA

*Correspondence to: C. K. Gwede. E-mail: clement.gwede@usf.edu

Received on February 22, 2018; editorial decision on February 22, 2018

Preventive Medicine 2022- Community-CARES

A multilevel, low literacy dual language intervention to promote colorectal cancer screening in community clinics in Florida: A randomized controlled trial

Shannon M. Christy^{a,b,*}, Steven K. Sutton^{a,b}, Rania Abdulla^a, Carol Boxtha^a, Paola Gonzalez^c, Lakeshia Cousin^{c,d}, Aldenise Ewing^{c,e}, Samantha Montoya^a, Diana Lopez^f, Tina Beehler^g, Julian Sanchez^{a,b}, Rodrigo Carvajal^a, Cathy D. Meade^{a,b}, Clement K. Gwede^{a,b}

^a H. Lee Moffitt Cancer Center and Research Institute, Tampa, Florida, United States of America

^b Morsani College of Medicine, University of South Florida, Tampa, Florida, United States of America

^c Formerly with H. Lee Moffitt Cancer Center and Research Institute, Tampa, Florida, United States of America

^d University of Florida, Gainesville, Florida, United States of America

^e Ohio State University, Columbus, Ohio, United States of America

^f Suncoast Community Health Centers, Inc., Brandon, Florida, United States of America

^g Premier Community HealthCare Group, Inc., Dade City, Florida, United States of America

. . . At the End of the Day . . .

What do we Know? What's Next?



Personal/Individual	Organizational
Health literacy is important to cancer education – and contributes to well-informed patients, families/community members.	Health systems are increasingly literacy conscious and are implementing HL strategies to make information clear and usable at all levels.
FIT uptake can be achieved with core EBI's (i.e., education, reminders, FIT + linkages to care).	Providing access to screening options is critical and people are benefitting from FIT screening regardless of HL.



CARES-REACH

Our current implementation science work is a multilevel, multi-language CRC screening intervention that includes EBIs + a cancer control champion in FQHC organizations to optimize 'real world' application.



Overview

CARES-REACH

(Colorectal Cancer Awareness, Research, Education
and Screening-Rural Expansion, Access, and Capacity
for Health)

R01 CA249689 (Clement Gwede/Cathy Meade MPIs)
04/01/2020 - 03/31/2025

Overview



Overall Study Objective

To speed up the adoption of effective CRC screening in clinics (*rural and urban*) in Central & SW FL with focus on *repeat* screening.

- Organization wide/EMR
- Rural vs urban settings, Diverse patients
- Builds on EBIs and sustainability model
- Real world design
- Comprehensive evaluation of implementation process, resource requirements, and UDS rates

Intervention Strategies

Multi-level strategies

- Low-literacy patient education (EBIs)
- FIT
- Reminders
- Champion

“Champion”

Outcome: Boost UDS rates

Specific Aims:



Specific Aim #1: Implement an **organization-wide** multilevel CRC screening intervention using evidence-based interventions (EBIs) plus an organization-wide cancer control champion in FQHCs located in rural and urban Central/Southwest FL.

Specific Aim #2: Explore whether **practice setting (rural vs. urban) and population characteristics** (e.g., nativity [foreign-born status], language preference, education, income, health insurance, etc.) may differentially impact annual clinic CRC UDS screening rates.

Specific Aim #3: Conduct a **comprehensive evaluation** of the implementation process, resource requirements, and intermediate patient screening outcomes of the CARES-REACH program in FQHCs.

Guided by implementation science theory and stepped wedge design.



- Roll out in 2 waves to different clinics
- Randomly selected 7 clinics per wave (balanced by setting: rural/urban, population size)



Stepped-Wedge Design with Extension for Maintenance



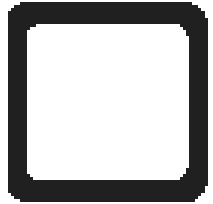
	Year 0 Baseline	Year 1 Wave 1	Year 2 Wave 2	Year 3 Sustaining	Year 4 Evaluation
Features/Aim	Pre- Intervention	Initiation	Initiation	Implementation	
Number of Clinics	0/14	7/7	14/0	14/0	14/0
UDS Data	✓	✓	✓	X	X
Readiness survey		✓	✓	X	X
EMR Optimization	✓ (ongoing)				
Provider Education and EBIs for Patients	N/A	✓	✓	Yes	Yes
Champion/Coach Intervention	N/A	✓	✓	Yes	Yes
Annual Provider Booster Education	N/A	N/A	✓	Yes	Yes

What is the Potential Impact of the study

- Community benefit, builds on prior successes/adds to evidence base.
- Enhances and expands CRC screening practices and processes throughout FQCH organizations –Scalability to other FQHC/Networks.
- Integrates HL strategies at patient, provider and system level.
- Bolsters clinic capacity and potential adoption of **champion** role to other cancer screening and chronic disease health problems.
- Improves annual screening rates of patients and ensuring Uniform Data System (UDS) measures – ***Performance indicators.***



In Closing . . .



Say YES! To Health Literacy





Questions, comments and discussion

Funding Acknowledgements



TITLE	AGENCY/ NUMBER	PROJECT DATES	PIs
CARES-REACH (Colorectal Cancer Awareness, Research, Education and Screening-Rural Expansion, Access and Capacity for Health)	NIH/NCI R01 CA249689	04/01/2020 – 03/31/2025	Gwede Meade
Moffitt Cancer Center Community CARES (Colorectal Cancer Awareness, Research, Education and Screening)	Florida Blue 5868	07/01/2018 – 02/28/2022	Gwede Meade
Community CARES: A Multilevel Intervention to Increase Colorectal Cancer Screening Adherence in Community Clinics	FDOH-BHC 7BC04	03/01/2017 – 02/28/2022	Gwede Meade
Latinos CARES (Colorectal cancer Awareness, Research, Education & Screening)	FDOH-BHC 4BB09	12/01/2013 – 05/31/2016	Gwede Meade
I-ACT (Increasing Access to Colorectal Cancer Testing for Blacks)	ACS-RSG CPPB-119451	01/01/2011 – 12/31/2014	Gwede
Tampa Bay Community Cancer Network (TBCCN) CNP-II RCT: CARES (Colorectal Cancer Awareness, Research, Education, and Screening)	NIH/NCI U54 CA153509	09/03/2010 – 08/31/2017	Meade Gwede

Community-Academic Team Members



Moffitt Cancer Center

Clement K. Gwede, PhD, MPH,
RN FAAN, FSBM, FAACE

Cathy D. Meade, PhD, RN,
FAAN, FSBM, FAACE

Julian Sanchez, MD

Mark Friedman, MD

Steven K. Sutton, PhD

Michael Schell, PhD

Rodrigo Carvajal, BS

Margaret Byrne, PhD

Shannon M. Christy, PhD

Rania Abdulla, MA

Carol Boxtha, BS

Samantha Montoya, MPH

Cindy Burcham

Yanid Grullon Molina

Vicki Slusher

Community-Academic Team Members



Central Florida Health Care, Inc.

Ann Claussen (CEO)

Barbara Turner (Chief Quality Officer)

Walt Whitten (Director of IT)

Dr. Andrew Hein (IT/EMR representative)

CFHC (Champion)

Manatee County Rural Health Services

Patrick Carnegie (CEO)

Linda Snyder (VP & Gov't Affairs & Policy)

Jenita Taylor (Implementation)

Robert Hierak (adhoc rep.)

Vickie Dutra (EMR)

Ashlon Joshua (Champion)

Moffitt Cancer Center

Clement K. Gwede, PhD, MPH,
RN FAAN, FSBM, FAACE

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Rania Abdulla, MA

Carol Boxtha, BS

Samantha Montoya, MPH

Cindy Burcham

Yanid Grullon Molina

Vicki Slusher

Community-Academic Team Members



Suncoast Clinic

Bradley Herremans
Diana Lopez, RN
Maria Perez (Maricela)
Betsy Martinez
Edward Martinbor
Dorrie Paquin-Brown

Premier Clinic

Joseph Resnick, MHA, FACHE
Tina Beehler, BSN, RN
Sheila Green/Jennifer Maffett

Community

Peggie Sherry
Martine Dorvil
Marlene Rivera, RN

Moffitt Cancer Center

Clement K. Gwede, PhD, MPH,
RN FAAN, FSBM, FAACE
Cathy D. Meade, PhD, RN,
FAAN, FSBM, FAACE
Julian Sanchez, MD
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Robert Hierak (ad hoc rep.)
Vickie Dutra (EMR)
Ashlon Joshua (Champion)

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Dr. Andrew Hein (IT/EMR representative)

GENE (Champion)

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Vickie Dutra (EMR)
Ashlon Joshua (Champion)

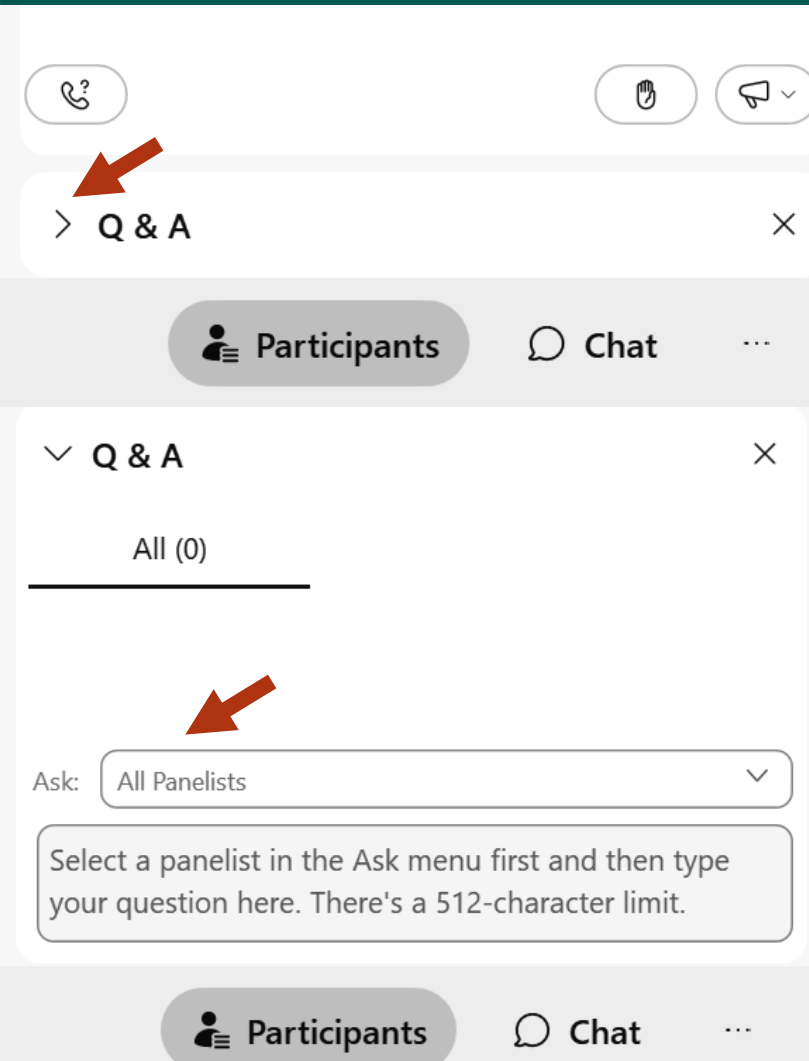
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Vicki Slusher

Prevention in Focus Webinar Series



Q&A Session

Please send us your questions
via the **Q&A pod** directed to
All Panelists



Thank You!

See you for the next webinar
on December 19th!



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