

# ¡Salud!, por la Vida, an educational intervention to increasing colorectal cancer screening in Puerto Ricans

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# Background

- Colorectal cancer (CRC) is the second highest incident cancer in both men and women in Puerto Rico (PR).<sup>1</sup>
- CRC screening (CRCS) rates (26.4% for FOBT and 47.2% for sigmoidoscopy/colonoscopy in 2012) among PR Hispanics aged 50-75 years old are below the Healthy People 2020 recommendations.<sup>2,3</sup>
- Given the higher burden of CRC and the low CRCS rates in PR, we developed ¡Salud!, por la Vida, an educational program which aims to increase CRCS in nonadherent men and women within 50 to 75 years of age who attend Federally Qualified Health Clinics (FQHCs) in PR.

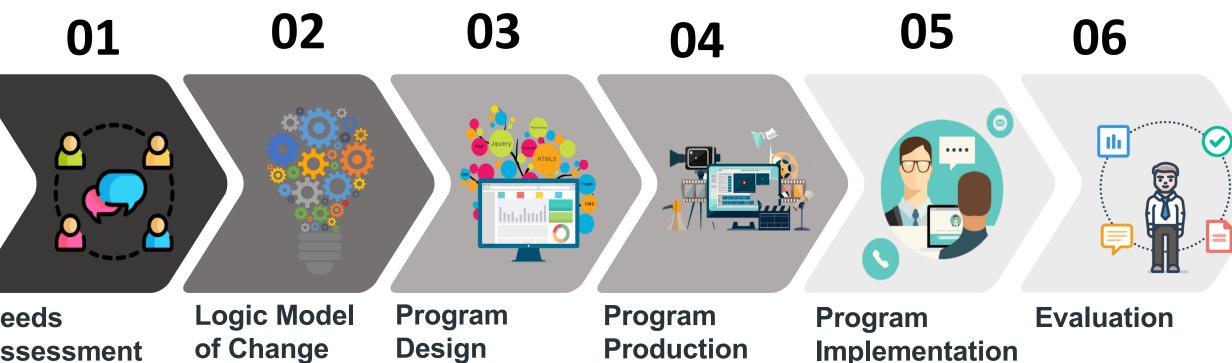
# Study Objectives

- 1) Describe the guiding framework for the development of the educational program ¡Salud!, por la Vida.
- 2) Describe the methodology of a randomized controlled trial to increase CRCS among non-adherent men and women within 50 to 75 years of age who attend FQHCs in PR.

### Methods

#### Guiding framework

Intervention Mapping<sup>4</sup> was used for the development of ¡Salud!, por la Vida.



**Assessmer** 

facilitators and

barriers to get

screened for

focus groups

CRC using

population.

Quantitative

obtained from

the FQHC's.

on key

Using IM and

Step 1, a logic

data gathered in

Using evidencebased methods, the script, testimonials, animations. written materials and newsletter were culturally designed and tailored to the

population at risk

Design

Once the design was finished taking into account evidence based methods focused on CRCS, the development and production of the materials of the

program took

# **Production**

This phase consists of participant recruitment The recruitmen process is currently ongoing

end by April 2020.

Cost- effectiveness and cost-efficacy analysis will be made in order to evaluate the program.

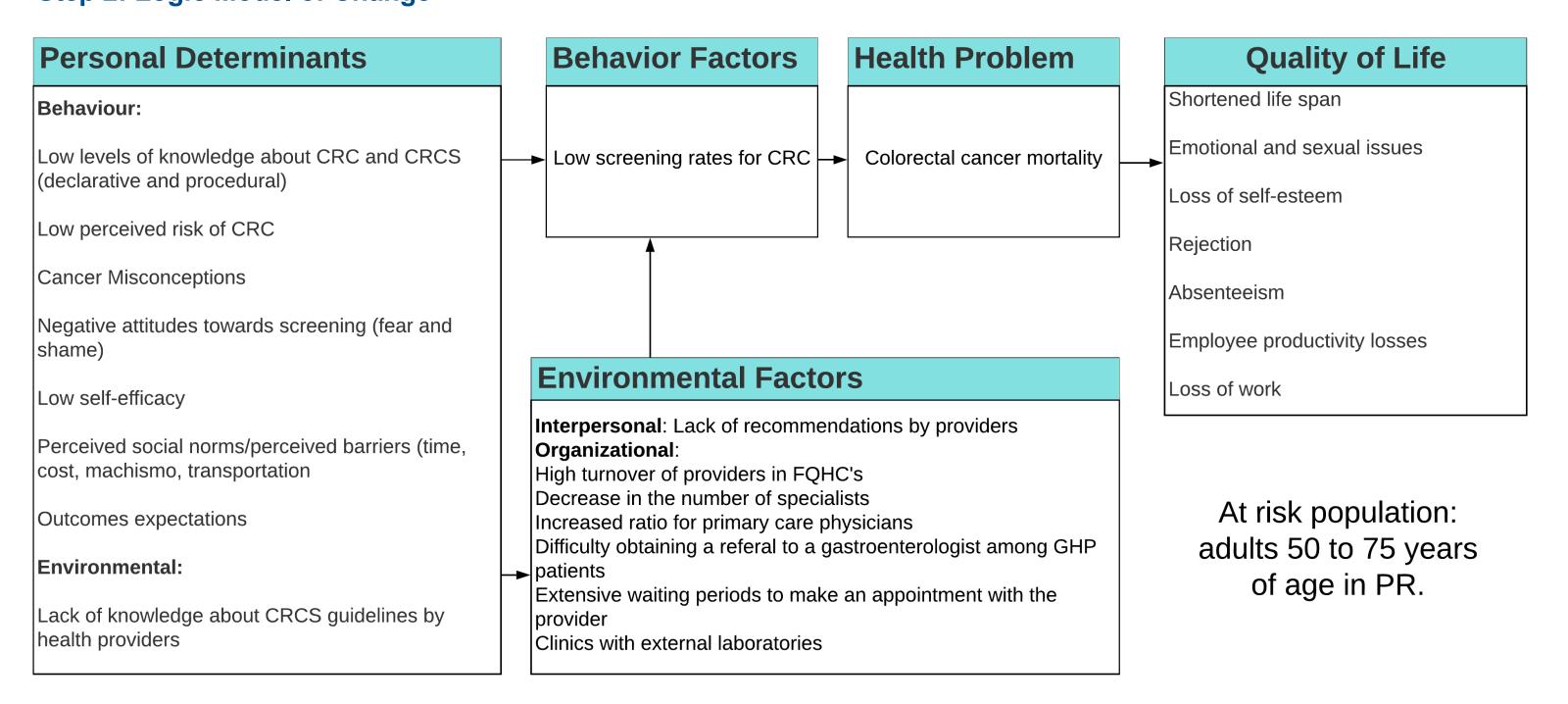
Monitoring is being made thru all the implementation phase.

# Results

# **Step 1: Needs Assessment Results - Main themes**

(1) Limited knowledge about CRC and CRCS practices; (2) Patient's fear of the CRC test results; (3) Low risk perception of CRC; (4) Reporting not having received a provider recommendation regarding the screening test; and (5) The importance of social support in making the decision of getting screened for CRC.

# **Step 2: Logic Model of Change**



#### Step 3: Evidence-based Methods and Strategies

Change Objective	Methods	Practical Applications (Strategies)	Components	Ideas for materials - create
K2a, K2b, K5a, K8a, K9a	Persuasion, modeling, cues	Personalized risk information about CRC risk	Discussion, Infographics, video	(video) Risk curve
DB10a, DB10b, OE5a, OE6, OE10, SE4, SE5, SE6, SE10, SN10, SN5, SN6, ATT5c, ATT10, ATT6	Reattribution training	Modeling of: - scheduling apt, - writing reminder, - finding location/ Connects CRCS w/other behaviors they have already done 1. H.E. 11. Phone Navigation	Video, health educator discussions/Ed, phone navigator	Scene of pt scheduling appointments - writing reminder, finding location
K11, PR11a, PR11b, DB11, OE5b, OE8a, OE9a, OE11a, SE11a, SE11b, SE11c, SN11a, SN11b, ATT9b, ATT9d, ATT9c, ATT9e, ATT11	Persuasion, modeling, cues	Health educator talks about discussing results w/provider	HE discusses action plan	Scene PCP-patient discussing results
DB5, DB6, DB8c, DB9c, ATT9d, ATT6, ATT5d	Tailoring	Interactive activity to choose barriers and get advice and overcoming barriers	Interactive Video / provider printout showing patient's barrier	Scene PCP-patient discussing results

# Step 4: Program ¡Salud!, por la Vida

- (1) Script development for fictional videos; (2) Testimonials; (3) Animations; (4) Written materials; and
- (5) Newsletter

# Conclusions

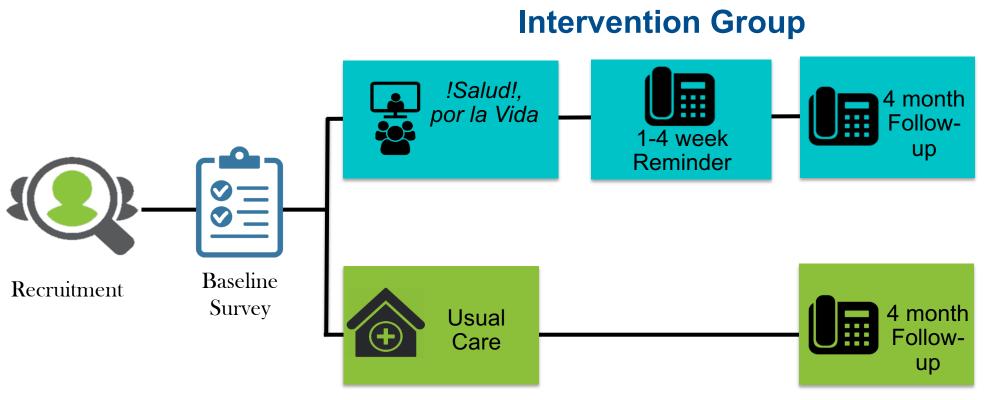
# Study design

A randomized controlled trial is currently been conducted in FQHCs in PR. Participating FQHCs were stratified based on patient volume and if FQHCs had an available laboratory in their facilities. The FQHCs were randomly assigned to either: (1) intervention group (n=5 clinics) and (2) control group (n=5 clinics).

## **Inclusion Criteria**

Eligible participants include men and women aged 50-75 years that have: (1) no prior history of CRC; and (2) who have not completed a CRCS test in the last year for FOBT/FIT or in the last 5/10 years for colonoscopy (depending on personal and/or family history).

# **Recruitment Procedures**



**Control Group** 

# **Data collection instruments**

Baseline survey: Sociodemographic characteristics; Healthcare Access; Medical History; Health Belief Model; CRC Awareness and Knowledge, and CRCS Awareness, Willingness, Attitudes, and Knowledge.

4-month survey: Health Belief Model; CRC Awareness and Knowledge, and CRCS Awareness, Willingness, Attitudes, and Knowledge.

### References

- 1. Torres-Cintrón, C. R., Alvarado-Ortiz, M., Román-Ruiz, Y., Ortiz-Ortiz, K. J., Zavala-Zegarra, D., & Tortolero-Luna, G. (2017). Cancer in Puerto Rico, 2010-2014. San Juan, PR. Retrieved from http://www.rcpr.org/Portals/0/Informe 2010-2014.pdf
- 2. PR Comprehensive Cancer Control Plan 2015-2020. Puerto Rico Cancer Control Coalition and Puerto Rico Comprehensive Control Program. San Juan, Puerto Rico, December 2014.
- 3. Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. BRFSS Prevalence & Trends Data [online]. 2019. URL: https://www.cdc.gov/brfss/brfssprevalence/.
- 4. Bartholomew LK et al. Planning Health Promotion Programs: An Intervention Mapping Approach. San Francisco: Jossey-Bass; 2011.

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