# Chinese Colorectal Cancer (CRC) Research Project: Physician-Initiated Intervention Project

Angela Sun, PhD, MPH (1); Janice Tsoh, PhD (2); Joyce Cheng, MD (2); Joanne Chan, BA (1); Brenda Yee, RN, MSN (3)/(4); Edward A. Chow, MD (4) (1) Chinese Community Health Resource Center, San Francisco (2) University of California, San Francisco (3) Chinese Hospital (4) Chinese Community Health Plan, San Francisco

### Purpose/Goals

**Purpose:** To assess effectiveness of involving CCHCA physicians in increasing CRC screening rate from 55% to 75%.

#### **Additional Goals:**

- Strengthen collaboration between academia and community.
- Raise awareness of colorectal cancer screening.
- Enhance physician-patient partnership.

### Background

#### Asian Americans (AA)<sup>6</sup>:

- Comprised of 4.8% of the US population (14.6 million)
- 3.8 million are of Chinese descent (about 26% of AA population)
  - 61.0% are immigrants 75.3% spoke a language other than English at home
  - 41.1% endorsed low English proficiency
- In San Francisco:
  - 32.9% are AA
  - 65.0% of AA group is Chinese (21.3% of SF County population)
  - 63.0% are immigrants
  - 85.2% spoke a language other than English
  - 52.8% endorsed low English proficiency
  - Average Household Size: 3.18 persons Poverty rate: 11.4%
- Studies indicated- in language communication between patient and provider leads to positive physical and mental health outcomes5

#### Colorectal Cancer (CRC) among AA:

- 2<sup>nd</sup> most commonly diagnosed cancer<sup>1</sup>
- 3<sup>rd</sup> leading cause of cancer-related mortality<sup>1</sup>
- CRC rates varied three-fold across AA, the highest among Chinese Americans<sup>2</sup>. • Lower rates of CRC screening (Fecal Occult Blood Test (FOBT), colonoscopy, or either)
- compared to Caucasian8
- Less likely to undergo CRC screening<sup>3,4,9</sup>, especially if
- Elderly (50+)
- Female
- Less educated
- Recent Immigrant
- Low-income Uninsured

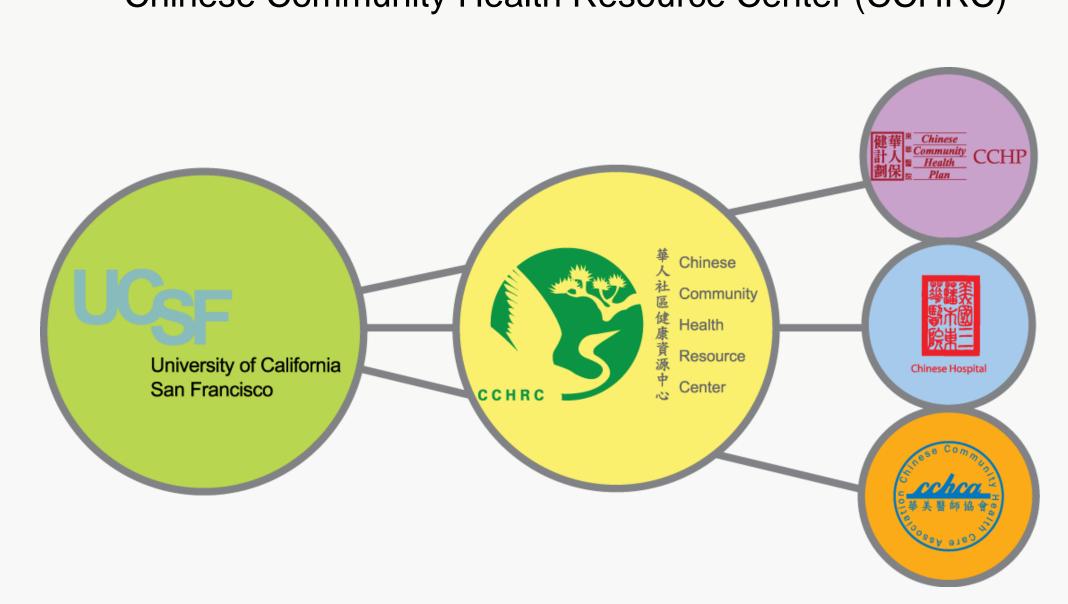
# Partnership

The multidisciplinary partnership was based on the Community Based Participatory Research approach that recognizes each individual partner's strengths and offers opportunities to develop better-informed hypotheses, effective interventions, and improve translation of research results into practice<sup>7</sup>.

Aligning with the need from the community, the Chinese Hospital Health System (CH Health System-community) partnered with the University of California, San Francisco (UCSF-academic) to develop a 2-year Physician-Initiated Intervention aimed at increasing CRC screening rates.

The CH Health System is comprised of the following entities:

- Chinese Hospital (CH)
- Chinese Community Health Plan (CCHP)
- Chinese Community Health Care Association (CCHCA)
- Chinese Community Health Resource Center (CCHRC)



### Methods

#### Study Design **50 Estimated Sample Size** (Family Practice, General Practice, Internal Experimental **Control Group** Group Delayed FOBT Packet (Study Mailer Usual Care + Bilingual FOBT Packet (Study Mailer **25**

Physicians

#### **Criteria for Participation**

#### Physician:

- Are members of Chinese Community Health Care Association
- Specialize in Family Practice, General Practice, Internal Medicine and/or Gastroenterology

#### **Patient:**

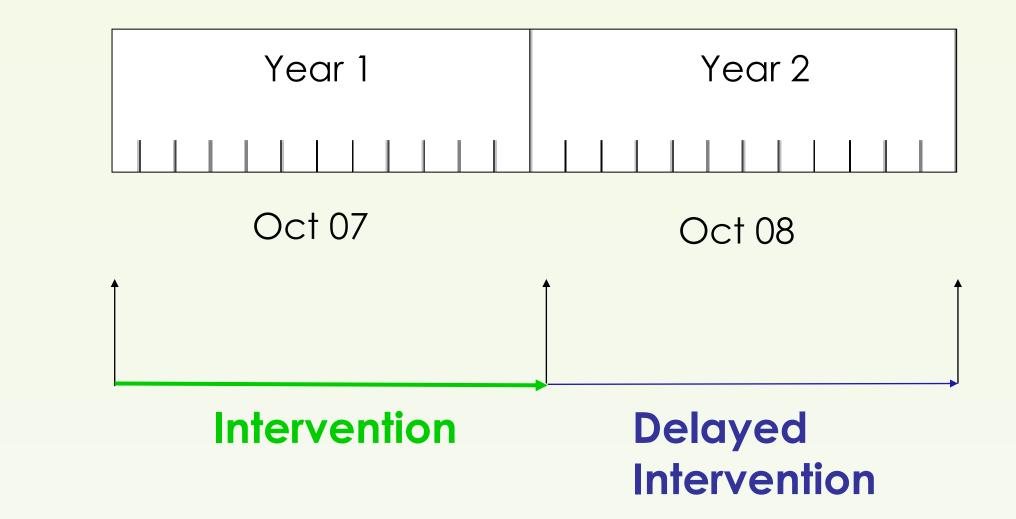
- Are members of Chinese Community Health Plan with their physician's consent for study enrollment Are between ages 50-85
- Have an estimated life expectancy of 10 years or more

enema within five years or colonoscopy within 10 years.

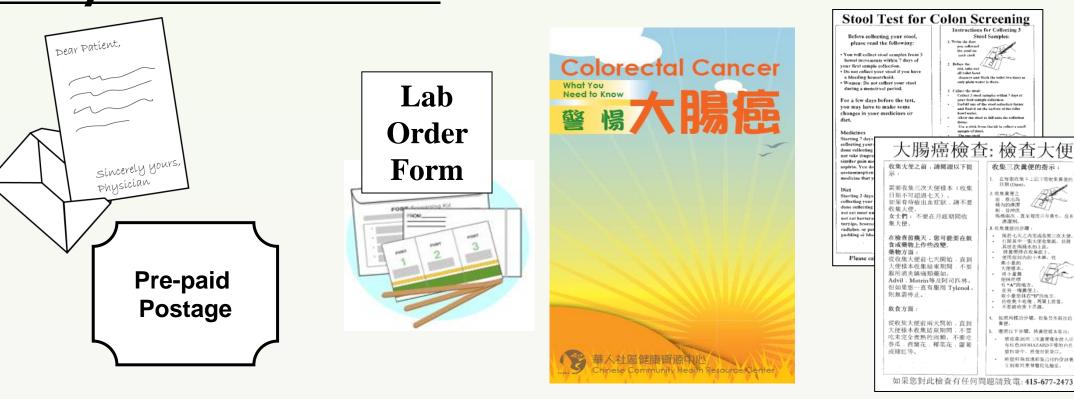
• Did not have FOBT within one year or sigmoidoscopy within five years or double -contrast barium

Physicians

#### Timeline



#### Study Mailer Packet



#### Roles and Skills provided by Community and **Academic Partners**

#### Academic (UCSF):

- Research Design
- Randomization
- Data Analyses

#### Research Dissemination

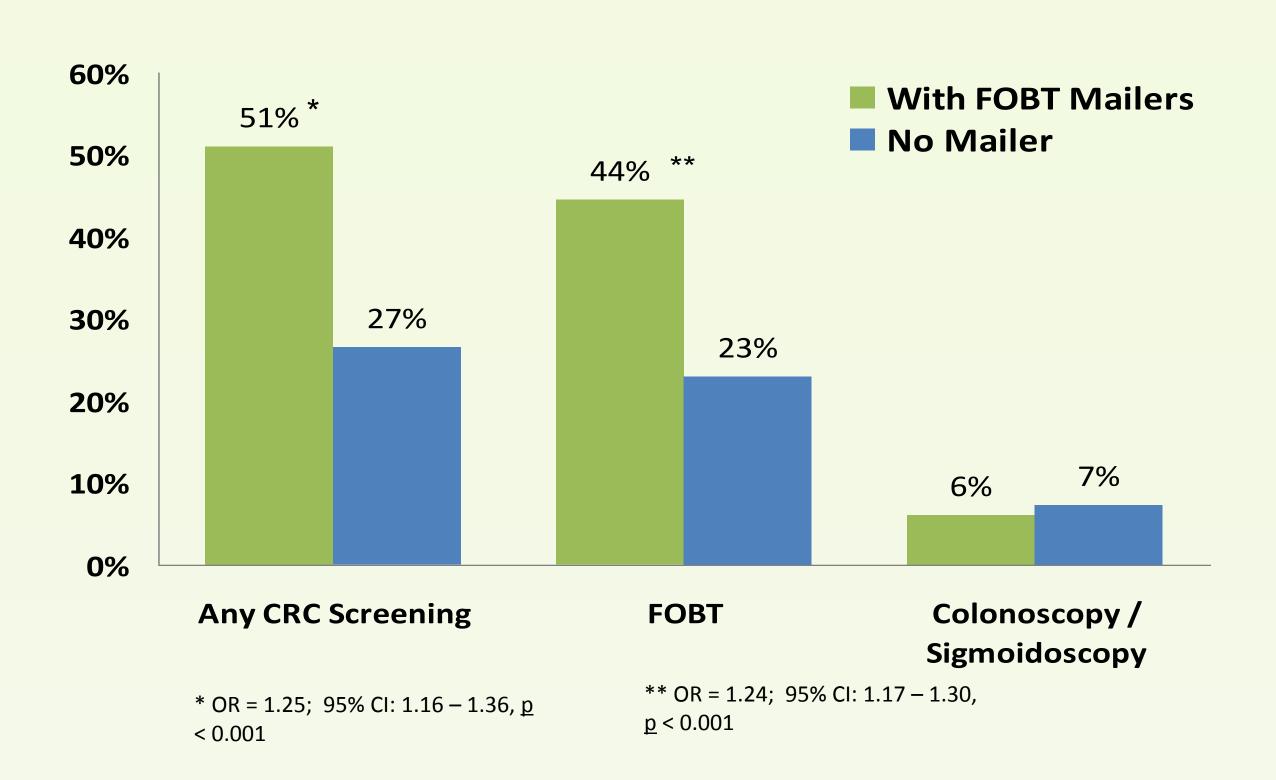
- **Community (CH Health System): CCHP:** Provision of Patient and Physician Contact
  - Lists and Patient Data
  - **CCHCA:** Review of Patient List and Consent for
  - CCHRC to send Study Mailer Packet on their behalf
  - CCHRC: Outreach
    - Cultural and Linguistic Competency Material Development
    - **Health Seminars** Coordination
    - Mailing of Packets to Eligible Patients
  - **CH**: Lab Tests for FOBT
  - CH Medical Staff: Development of
- Continuing Medical Education **All Partners:** Manuscript preparation to disseminate findings

### Results

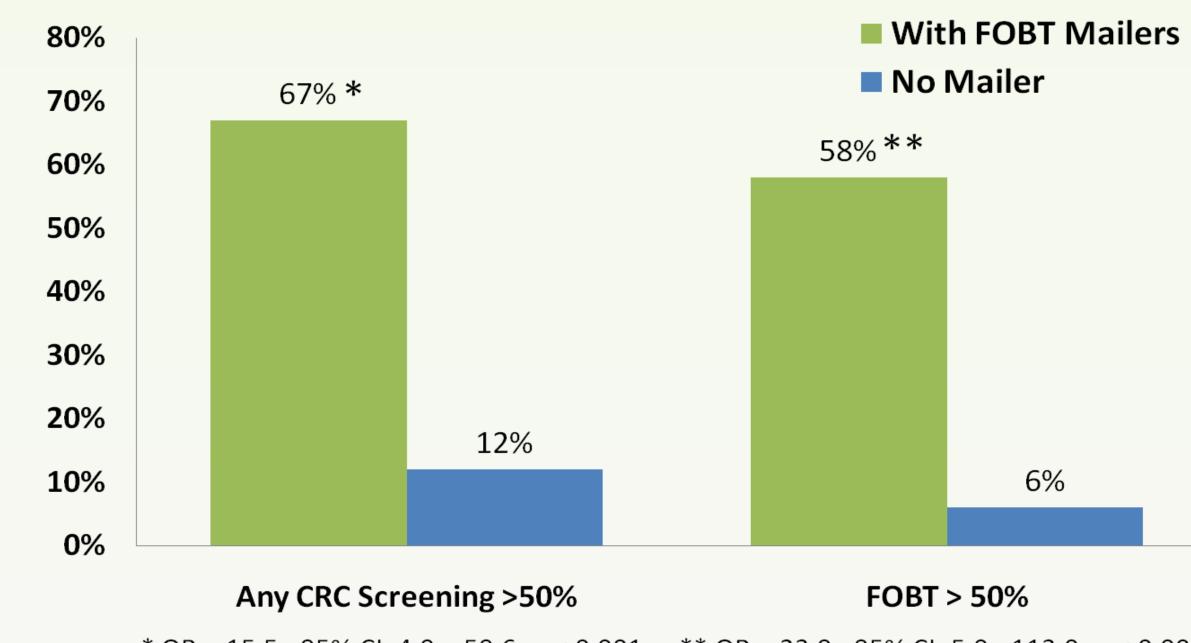
#### **Participation**

- 42 physicians consented to participate
- 12 physician refused
- 1,745 patients received mailed FOBT packet

Graph 1: Adjusted CRC Screening Rates



**Graph 2**: Adjusted proportions of PCPs who achieved 50% or higher in CRC Screening rates



The multivariate GEE model estimated that sending out FOBT mailers increased 24 times the odds for a PCP to attain 50% or higher FOBT rate for that year [odds ratio = 23.9; 95% Confidence intervals from 5.0 to 113.0, p < 0.001]

### References



# Overcoming Challenges

- Balanced communication and coordination among all partners
- Displaced barriers that may lead to lack of participation among partners
- Selected an appropriate and agreeable decision-making strategy
- Sought and secured external funding sources

### Discussion/Conclusion

- Statistically significant increase in CRC screening rates including FOBT rate with physician-initiated intervention.
- Success of Collaboration: The objectives of the study were met because partners utilized essential aspects of successful multidisciplinary collaboration, namely:
  - Common Vision
  - Balanced Power and Visibility
  - Recognition of Differences in strength and resources
  - Well-defined responsibilities
  - Flexibility
- Project can be used as a model for building prevention programs via community-academic partnerships.
- Project can be adapted cross culturally and tailored to meet the needs of the target population.
- Involved community partners are considering to implement new policies involving physicians in CRC screening for Chinese patients.

# Acknowledgements

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