



UNIVERSITY of
ROCHESTER
MEDICAL CENTER

Advancing smoking cessation among **Latinos** via community-based participatory research

Francisco Cartujano-Barrera, MD (he/él)

Assistant Professor, Department of Public Health Sciences
Assistant Director, Community Outreach and Engagement
Wilmot Cancer Institute, University of Rochester Medical Center

Latinos

The ethnic terms *Hispanic* or *Latino* refer to a person of Caribbean, Latin American, and/or Spanish ancestry.



America Ferrera
Honduras



Anya Taylor-Joy
Argentina



Lupita Nyong'o
Mexico



Salma Hayek
Mexico

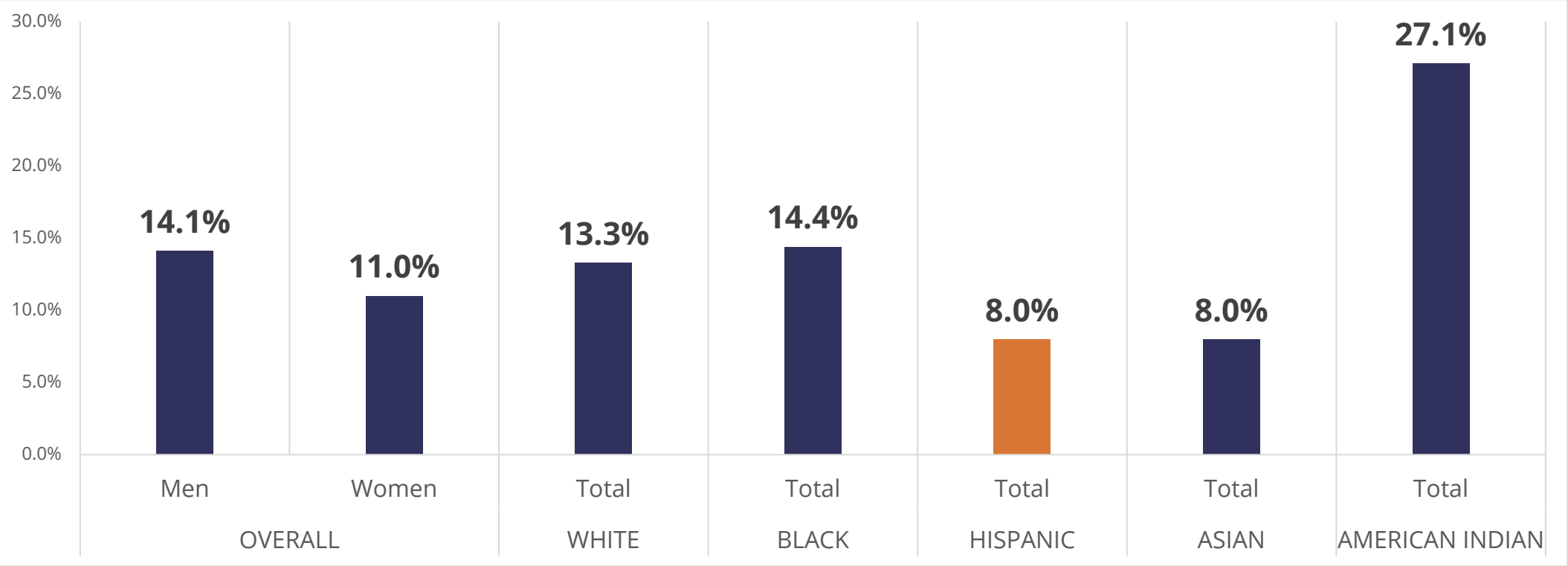


Sofia Vergara
Colombia



Zoe Saldana
Dominican Republic

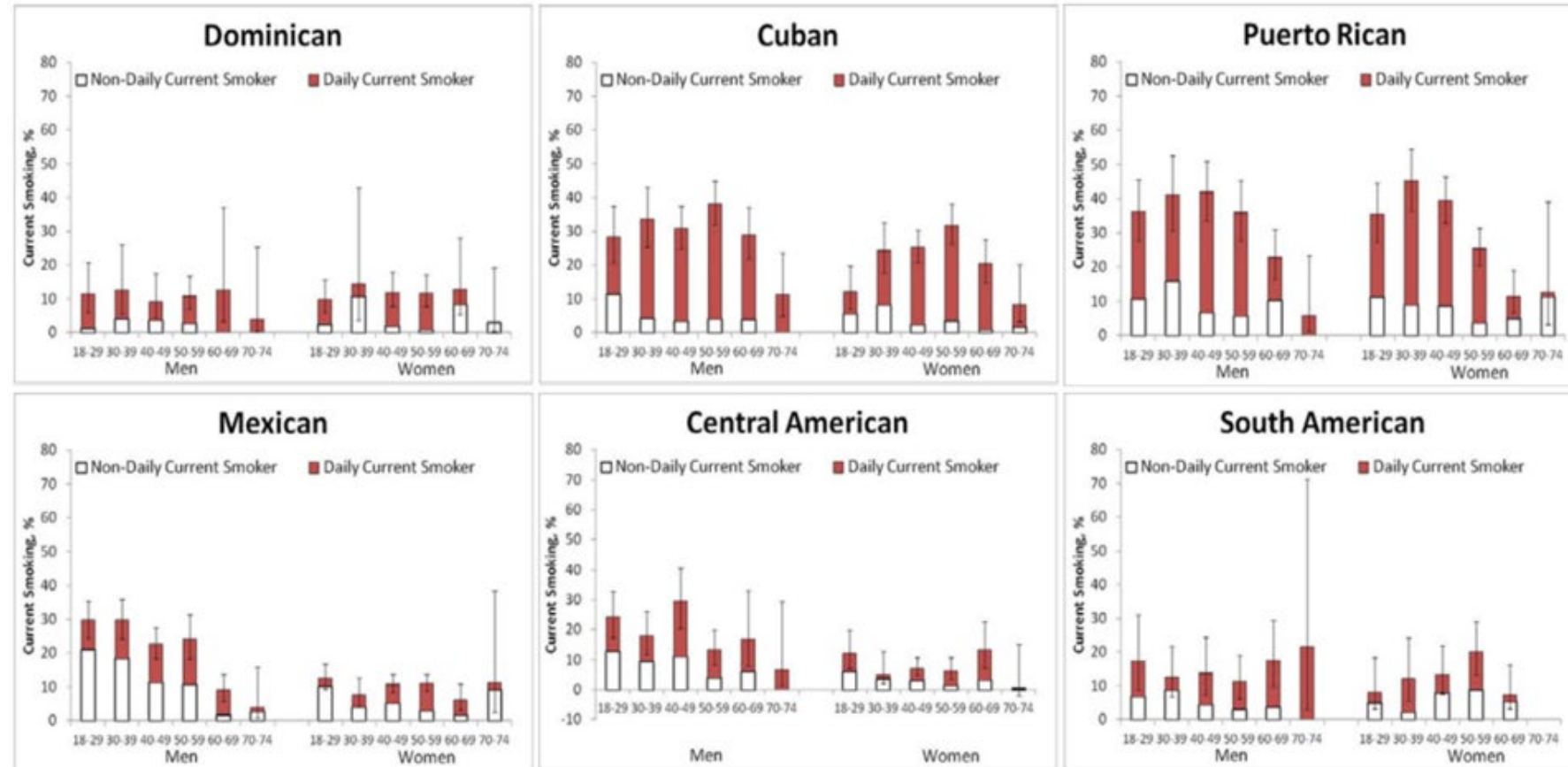
Cigarette smoking by race and ethnicity



Center for Disease Control and Prevention. Current Cigarette Smoking Among Adults – United States, 2020



Cigarette smoking among Latinos by birthplace



Kaplan RC, Bangdiwala SI, Barnhart JM, Castañeda SF, Gellman MD, Lee DJ, Pérez-Stable EJ, Talavera GA, Youngblood ME, Giachello AL. Smoking among U.S. Hispanic/Latino adults: The Hispanic community health study/study of Latinos. Am J Prev Med. 2014 May;46(5):496-506.

Cigarette smoking among Latinos

17% of population → 30% by the year 2060

↓ have access to healthcare

↓ advice to quit smoking

↓ use of counseling and medication

↓ participate in smoking cessation studies

- Cultural and linguistic sensitivity
- Non-daily or light smokers

Only two clinical trials in 20 years



VanFrank B, Malarcher A, Cornelius ME, Schechter A, Jamal A, Tynan M. Adult smoking cessation - United States, 2022.
MMWR Morb Mortal Wkly Rep. 2024;73(29):633-641.

The Cartujano-Barrera and Cupertino duo



Cartujano-Barrera F, Perales J, Arana E, Cox LS, Yeh HW, Ellerbeck EF, Richter KP, Cupertino AP. Increasing access to smoking cessation treatment among Latino smokers using case management. *J Smok Cessat*. 2019 Sep;14(3):168-175.

Cartujano-Barrera F, Arana E, Ramírez-Mantilla M, Perales J, Sanderson Cox L, Ellerbeck EF, Catley D, Cupertino AP. "Every day I think about your messages": Assessing text messaging interaction with Latino smokers. *Patient Prefer Adherence*. 2019;13:1213-1219.

Cartujano-Barrera F, Sanderson Cox L, Arana-Chicas E, Ramírez M, Perales-Puchalt J, Valera P, Díaz FJ, Catley D, Ellerbeck EF, Cupertino AP. Feasibility and acceptability of a culturally- and linguistically-adapted smoking cessation text messaging intervention for Latino smokers. *Front Public Health*. 2020. 8:269.

Cartujano-Barrera F, Peña-Vargas CI, Arana-Chicas E, Pérez-Ramos JG, Mattei J, Hurtado-de-Mendoza A, Costas-Muñiz R, Jiménez J, Cupertino AP, Castro EM. Decidetexto: Feasibility and Acceptability of a Mobile Smoki ng Cessation Intervention in Puerto Rico. *Int J Environ Res Public Health*. 2021;18(4):1379.

Cartujano-Barrera F, Arana-Chicas E, Catley D, Sanderson Cox L, Diaz FJ, Ellerbeck EF, Graves K, Ogedegbe C, Cupertino AP. Decidetexto: Mobile cessation support for Latino smokers. Study protocol for a randomized controlled trial. *Contemp Clin Trials*. 2020. 99:106188.

Cartujano-Barrera F, Cox LS, Catley D, Cai X, Diaz FJ, Arana-Chicas E, Chávez-Iñiguez A, Ogedegbe C, Graves KD, Rivera MP, Ponce A, Ellerbeck EF, Cupertino AP. Decidetexto: Mobile cessation support for Latino adults who smoke: A randomized clinical trial. *Chest*. 2024 Aug 10:S0012-3692(24)04904-3.

Community Advisory Board

NAME

ORGANIZATION

Arturo Ponce	Hackensack Meridian Health
Ciara Torres-Vargas, PhD	Hackensack Meridian Health
Diana Bermudez, MA	The Engagement Ed Corp
Elisa DeJesus, MS	Ibero-American Action League
Illuminada Vilca	Cornell Cooperative Extension
Marcela Gaitán, MPH	Nuestras Voces
Maria Delgado	Gilda's Club Rochester



Community Advisory Board

The Community Advisory Board

- Identifies health concerns
- Shares leadership to guide decision-making
- Is engaged in intervention design
- Guides recruitment strategies
- Collaborates in interpreting findings
- Collaborates in disseminating findings



Cultural accommodation

ENGLISH



Dishes



Cigarette

SPANISH

Trastes (Mexicans)
Platos (Puerto Ricans)

Cigarro (Mexicans)
Cigarrillo (Puerto Ricans)

Cartujano-Barrera F, Cox LS, Castro EM, Lara D, Quiñones Z, McIntosh S, Ossip DJ, Cupertino AP. Cigarro or cigarrillo? The pressing need to use culturally and linguistically appropriate terminology for tobacco control among Spanish-speaking Latinos. *Nicotine Tob Res.* 2022. 24(11):1840-1841.

Decídetexto

Culturally accommodated text messaging intervention that promotes smoking cessation.

Available in English and Spanish.

Four phases: Pre-quit, Quit Day, Post-quit Intensive, Post-quit Maintenance.

Relapse track.

Readability scores: averaged 3.9 (4th grade level) in English and 77.4 (easy/very easy) in Spanish.



Decídetexto

Randomized controlled trial

Aim 1: To assess the **efficacy** of Decídetexto versus standard care on smoking abstinence among Latinos who smoke.



Cartujano-Barrera F, Arana-Chicas E, Catley D, Sanderson Cox L, Diaz FJ, Ellerbeck EF, Graves K, Ogedegbe C, Cupertino AP. Decídetexto: Mobile cessation support for Latino smokers. Study protocol for a randomized controlled trial. Contemp Clin Trials. 2020. DOI: <https://doi.org/10.1016/j.cct.2020.106188>

Decidetexto

Recruitment

Community-based recruitment guided by the Community Advisory Board.



Parent Night at Hackensack High School



Edición Digital New York at Univision



Health fair at Palisades Medical Center



The Rochester Public Market

Arana-Chicas E, **Cartujano-Barrera F**, Rieth KK, Richter KK, Ellerbeck EF, Cox LS, Graves KD, Diaz FJ, Catley D, Cupertino AP. Effectiveness of Recruitment Strategies of Latino Smokers: Secondary Analysis of a Mobile Health Smoking Cessation Randomized Clinical Trial. J Med Internet Res. 2022 Jun 27;24(6):e34863.

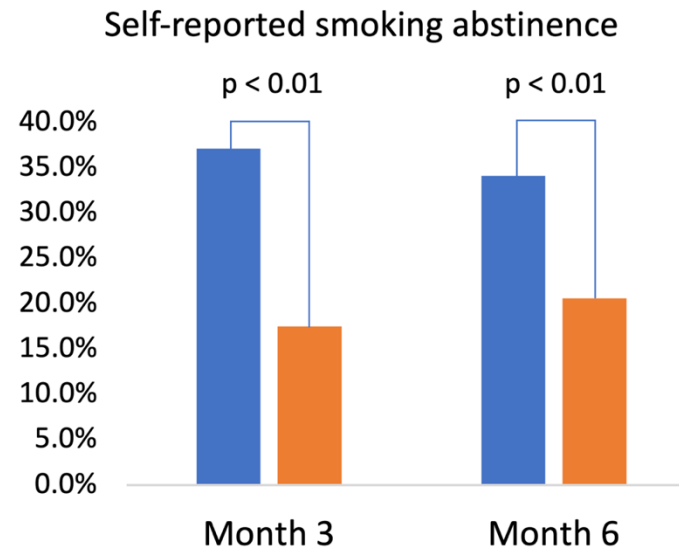
Decídetexto

Characteristics	Decídetexto (n=229)	Standard care (n=228)
Age, mean (SD), y	48.57 (10.87)	48.83 (11.41)
Women	101 (44.1%)	106 (46.5%)
Education ≥ high school	163 (71.2%)	167 (73.2%)
Below poverty	58 (25.3%)	63 (27.6%)
Spanish as primary language	163 (71.2%)	159 (69.7%)
Country/region of birth		
Caribbean	63 (27.5%)	77 (33.8%)
Central America and Mexico	51 (22.3%)	46 (20.2%)
South America	63 (27.5%)	50 (21.9%)
U.S.	51 (22.3%)	54 (23.7%)
Other	1 (0.4%)	1 (0.4%)
Heavy smoking	109 (47.6%)	121 (53.1%)

Cartujano-Barrera F, Cox LS, Catley D, Cai X, Diaz FJ, Arana-Chicas E, Chávez-Iñiguez A, Ogedegbe C, Graves KD, Rivera MP, Ponce A, Ellerbeck EF, Cupertino AP.
Decídetexto: Mobile cessation support for Latino adults who smoke: A randomized clinical trial. Chest. 2024 Aug 10:S0012-3692(24)04904-3.

Decídetexto

Results: Latinos receiving the Decídetexto intervention were significantly more likely than those receiving standard care to self-report smoking abstinence at Month 6 (34.1% vs 20.6%; $p < 0.001$).



Cartujano-Barrera F, Cox LS, Catley D, Cai X, Diaz FJ, Arana-Chicas E, Chávez-Iñiguez A, Ogedegbe C, Graves KD, Rivera MP, Ponce A, Ellerbeck EF, Cupertino AP.
Decídetexto: Mobile cessation support for Latino adults who smoke: A randomized clinical trial. Chest. 2024 Aug 10:S0012-3692(24)04904-3.

Decídetexto

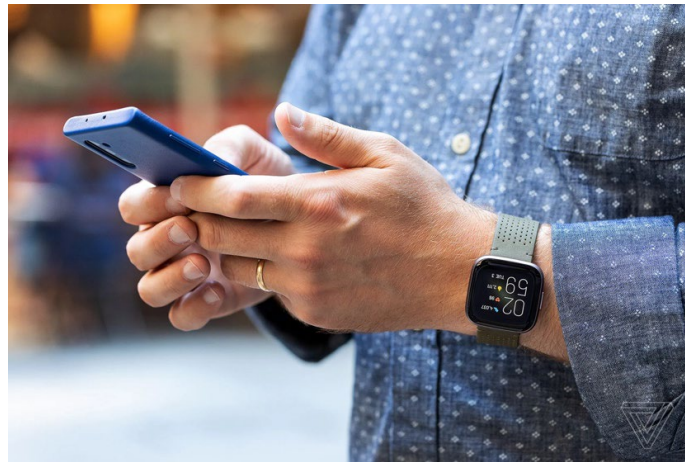


75% of participants in the Decídetexto trial did not meet recommended levels of physical activity.



Activatexto

- A culturally accommodated text messaging intervention that promotes **smoking cessation** and **physical activity** (at least 150 minutes of moderate to vigorous physical activity per week).
- Wearable devices to monitor physical activity.



Hernández-Torres R, Alaniz-Cantu E, Bautista Rojas MV, Lara D, Merritt S, DeJesus E, D'Abundo ML, McIntosh S, Ossip DJ, Fuller D, Rivera MP, Cupertino AP, **Cartujano-Barrera F**. Understanding the perspectives of Latino adults who smoke on physical activity: A qualitative study. Int J Environ Res Public Health. 2023. 20(4), 3128

Actívatexto



Single-arm pilot study with Latinos who smoke and do not meet the recommended levels of physical activity (n=20)

- At Month 3, 14 participants (70%) self-reported 7-day point prevalence smoking abstinence (90% follow-up rate).
- Fitbit-assessed mean minutes of MVPA per week increased from 113 (SD 127; range 0-399) at Week 1 to 177 (SD 163; range 0-513) at Month 3 (p=0.15).
- Most participants reported being satisfied or extremely satisfied with the intervention (88.9%, 16/18).

Hybrid type I effectiveness-implementation research design

Aim 1: Assess the **efficacy** of Activatexto, a mobile intervention that promotes both smoking cessation and physical activity, compared to a mobile intervention that solely promotes smoking cessation, on smoking abstinence at Month 6 among Latinos.

Aim 2: Assess physical activity, self-efficacy, and perceived stress as **mediators** of the presumed treatment effect on cotinine-verified 7-day point prevalence abstinence at Month 6 among Latinos.

Aim 3: Examine the barriers and facilitators to **implement** Activatexto at local community-based organizations.



1R01MD019748-01

Status

Application awarded.

Project Title

Actívatexto: Advancing smoking cessation and physical activity among Latinos

PI Name

Cartujano, Francisco

NIH Appl. ID

10944029

Application ID

1R01MD019748-01

Full credit to the Community Advisory Board!



Additional community-engaged work with Latinos

Leveraging the electronic medical record to increase **enrollment** in smoking cessation treatment
([NIH R42MD010318](#))

Addressing smoking cessation among **transgender and gender diverse** individuals
([NIH R21CA284313](#) – **terminated** on 2/28/2025)

Addressing **vaping** cessation among young adults
([American Lung Association](#))

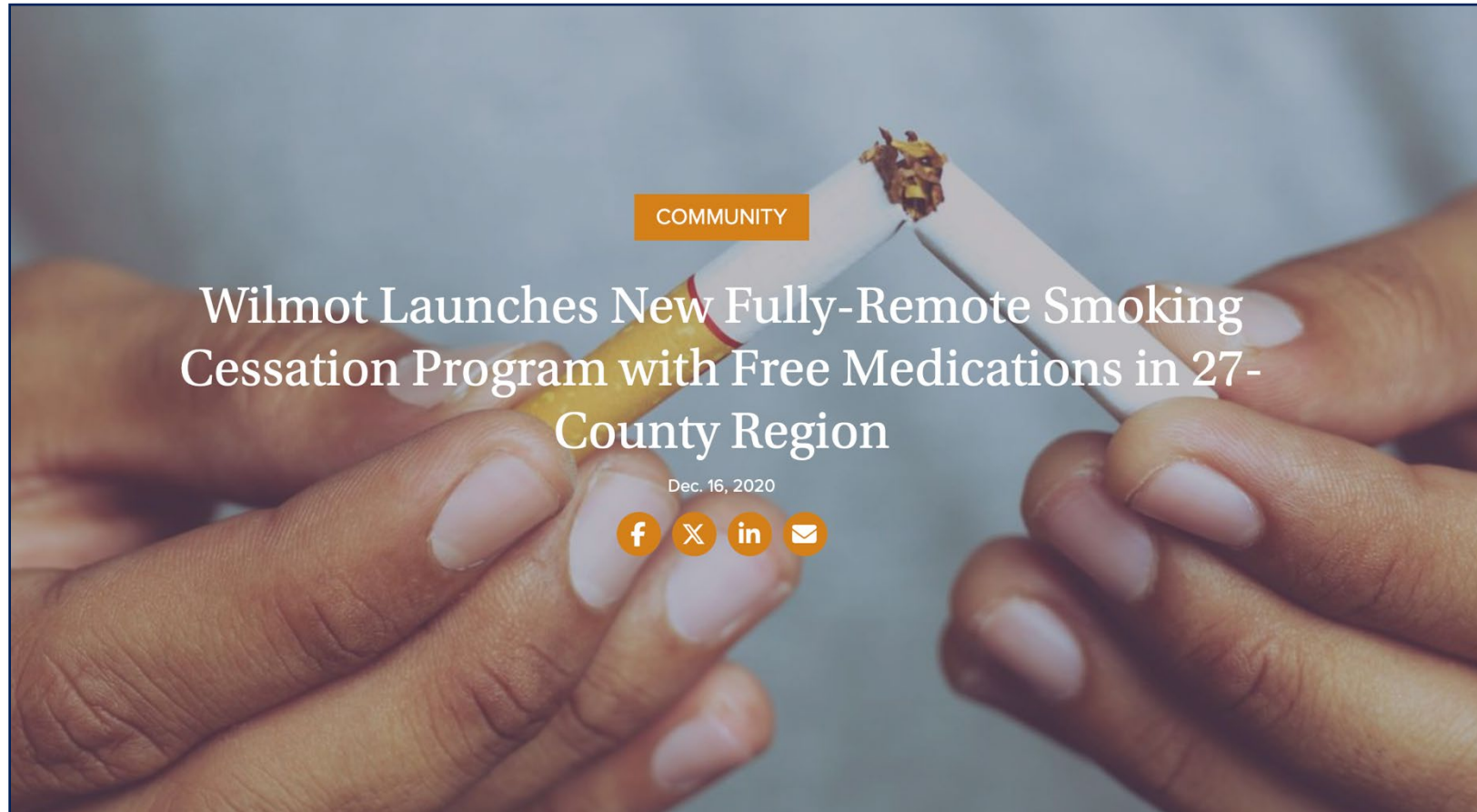
Promoting **lung cancer screening**
([Prevent Cancer Foundation](#))



Translating our research into practice



Translating our research into practice



Alcohol use

Decidetexto (n=457)

Alcohol Use Disorders Identification Test – Consumption (AUDIT-C)

Men with an AUDIT-C score of 4 or more: **50%**, 125/250

Women with an AUDIT-C score of 4 or more: **25.1%**, 52/207

The Community Advisory Board is interested in addressing alcohol consumption.



Acknowledgments

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- **Study team** (listed in alphabetical order): Arlette Chavez-Íñiguez, MD; Daimarelys Lara; Edgar Alaniz-Cantu, MD; Francisca Barria Lopez; Gabriella Alvarez; Jeffrey Ramos-Santiago, PhD; Rafael Orfin; Victoria Chávez-Uceda.
- Taylor Swift, PhD.



Questions?



Email me: Francisco_Cartujano@URMC.Rochester.edu





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Thank you!
¡Muchas gracias!

