Beyond efficacy to national implementations of net-therapy: Public health perspective

ISRII Panel

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Reducing Health Disparities in the Americas (and beyond)

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National Implementation of Net-therapy in the Americas

- ***USA: "While there is not a centralized govt activity, you could report that according to a highly placed but unnamed source in the CDC, that agency is launching a major initiative in the area in FY 08."***
- ***Some agencies do have Web interventions available. NCI: smokefree.gov***
- ***But, most countries in the Americas have no organized activities in this area.***

Why Web Interventions?
Limitations of Traditional Health Interventions

- The World Health Organization lists
  - 1.1 billion smokers
  - 121 million people with clinical depression
  - 76 million with alcohol use disorders
- Even developed countries do not have the capacity to offer face-to-face services to all who need them.

To reduce health disparities:

- We need to reach people ***whose local health care system cannot provide them with the interventions they need***
- We need interventions that can be shared widely ***without taking anything away from local populations***

An Analogy: Medications vs. Web Interventions

Agent	*Medication*	*Information*
Standardized	*Yes*	*Yes*
RCT evaluation	*Yes*	*Yes*
Global access	*With $, yes*	*Via the Web*
Cross cultural	*In theory, yes*	*If adapted, yes*
Development cost	*Very high*	*Moderate*
Per person cost	*Moderate to high*	*Negligible*

Using the Web to reduce health disparities

Imagine a scenario in which:

1. A major health problem has ***similar characteristics*** across populations, and
2. There is ***unequal utilization*** of standard health interventions across populations

*If a Web intervention produced **similar outcomes** comparable to standard interventions across these populations,*

*Then, making the Web intervention widely available would help **reduce health disparities.***

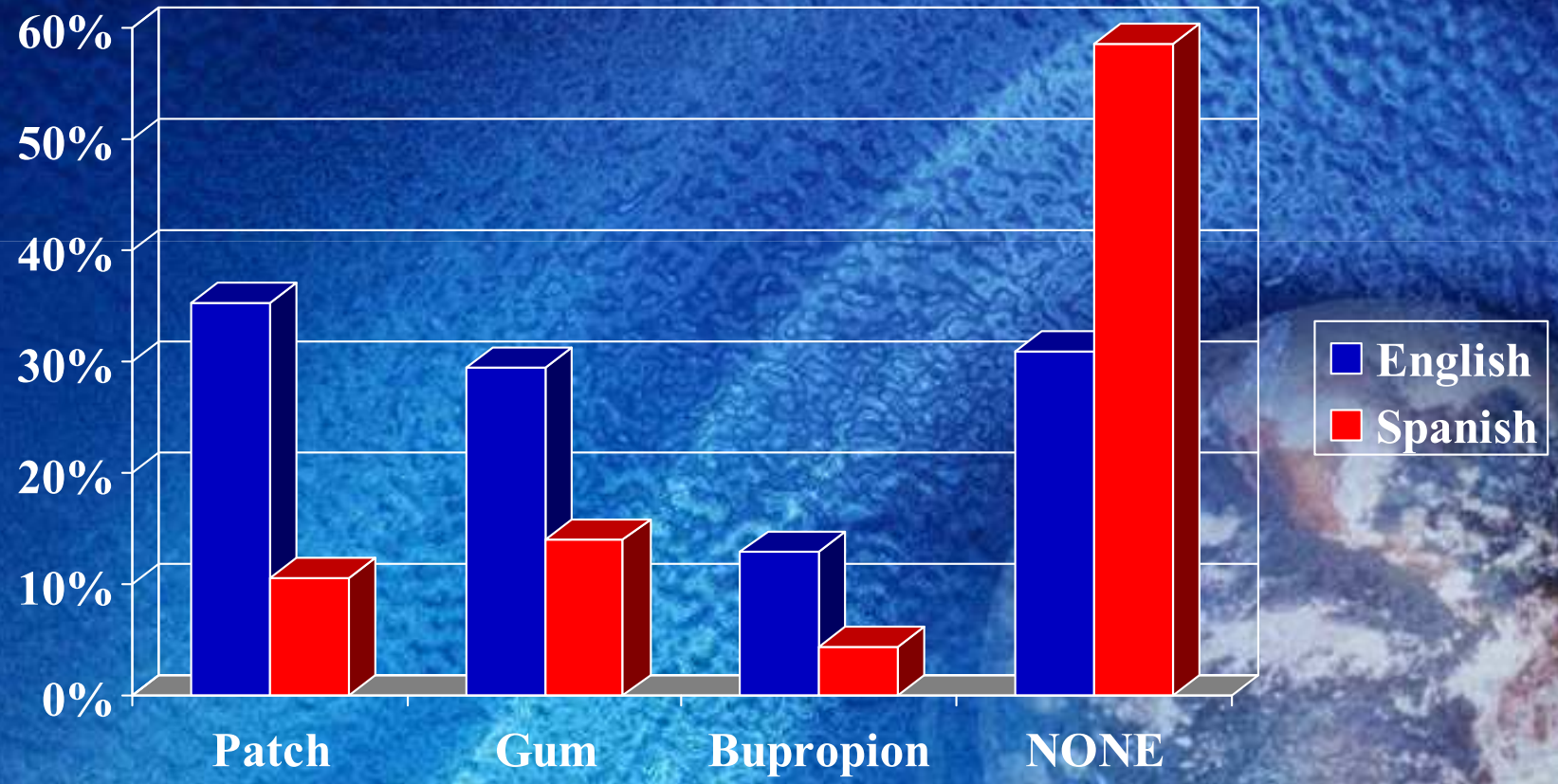
Proof of concept:
Can Web-based smoking cessation interventions *match the patch*?

- ***A benchmark: Nicotine Patch studies yield the following six-month quit rates:***
  - ***Placebo patch: 5% - 8%***
  - ***Nicotine patch: 14% - 22%***
- ***Can Web Interventions do as well?***

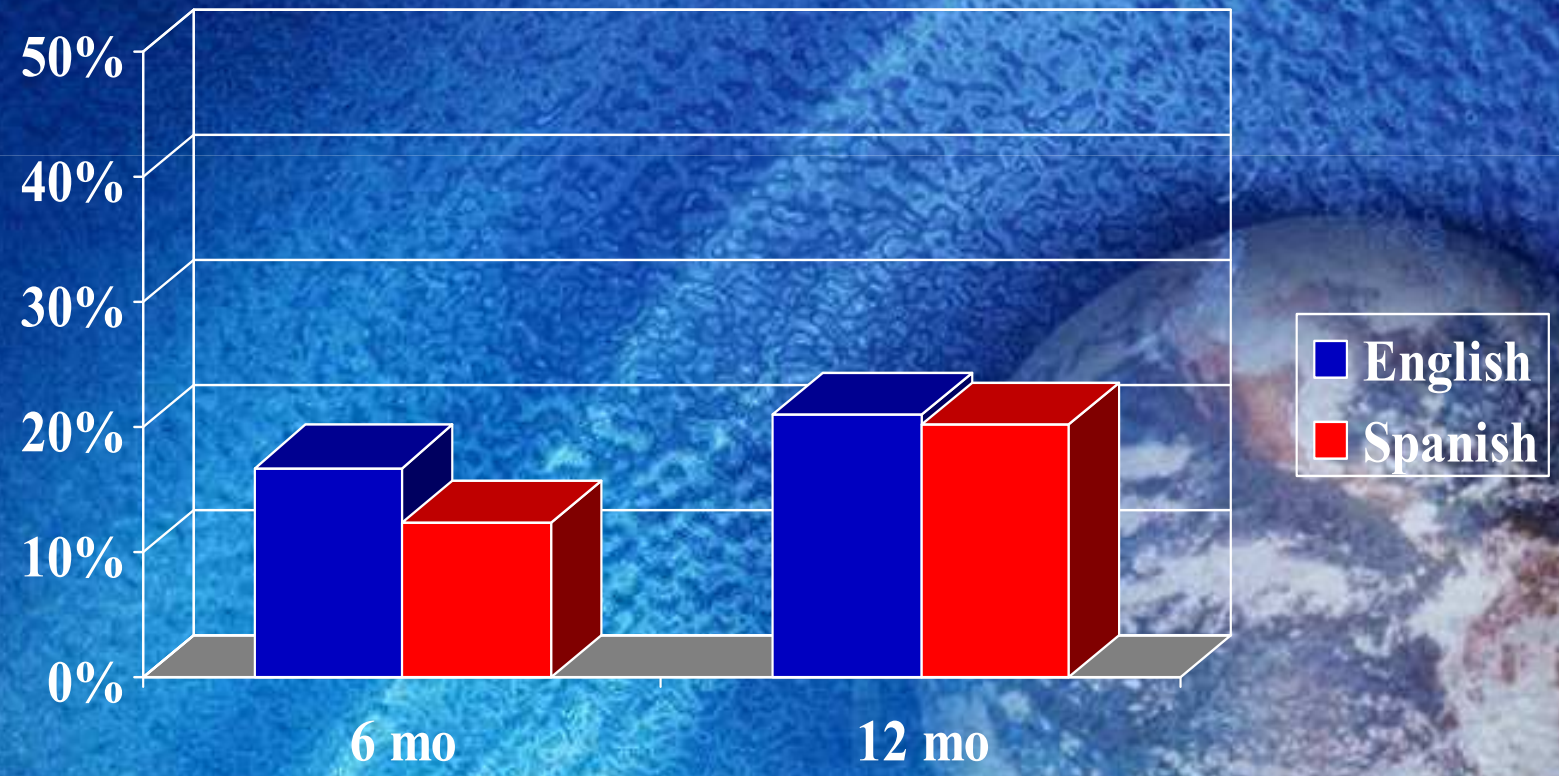
We find very similar smoking patterns across languages

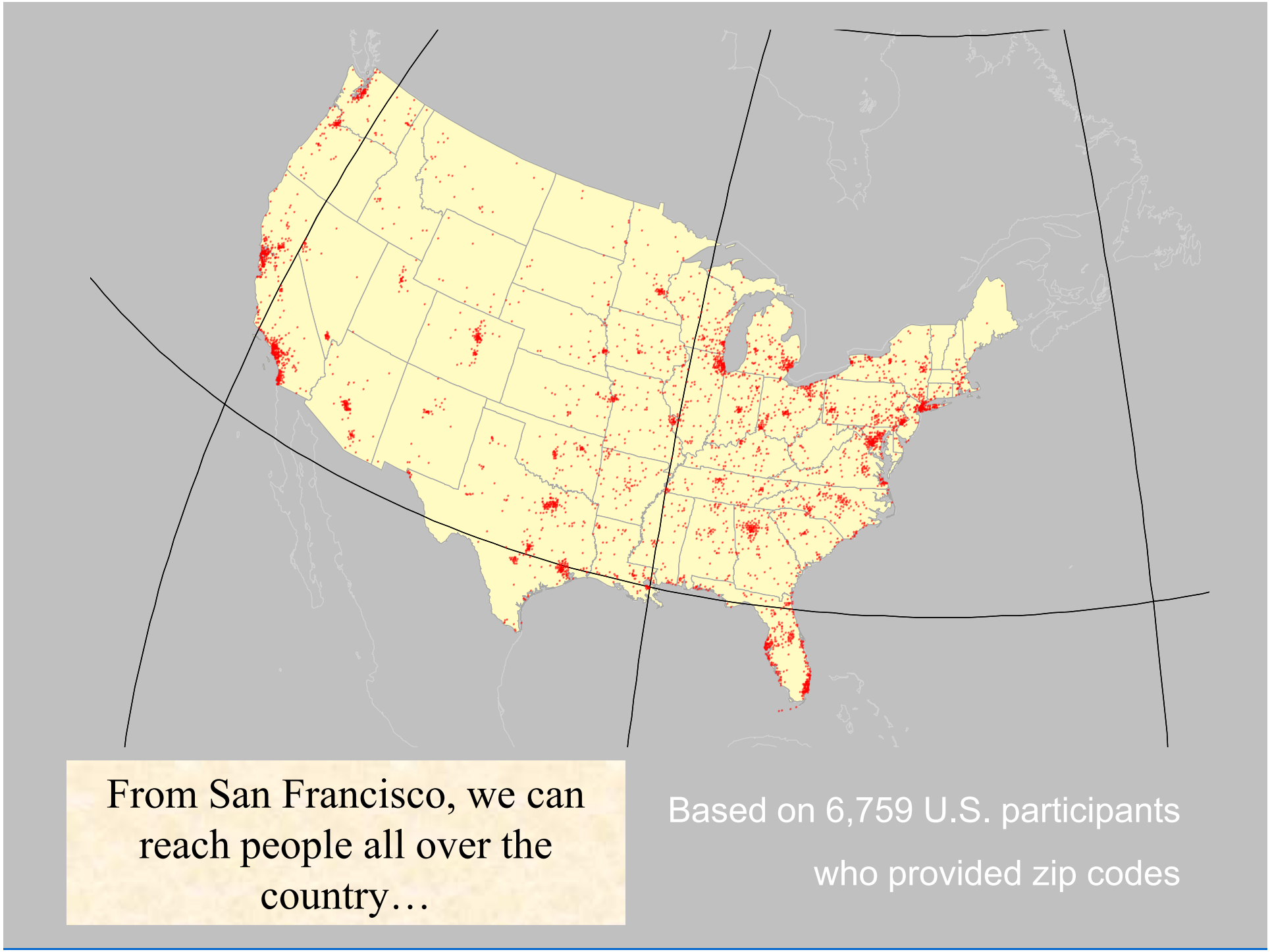
	English (*n*=10,303)	Spanish (*n*=13,552)
Age, first cigarette	15.6 (4.4)	15.6 (3.2)
Age, regular smoker	18.0 (4.3)	18.5 (4.2)
Cigarettes per day	21.0 (10.7)	21.1 (10.8)
FTND (nicotine addiction) score	5.5 (2.3)	5.3 (2.5)
Quit Confidence	6.7 (2.2)	7.1 (2.0)

But great disparities in the use of smoking cessation aids by language



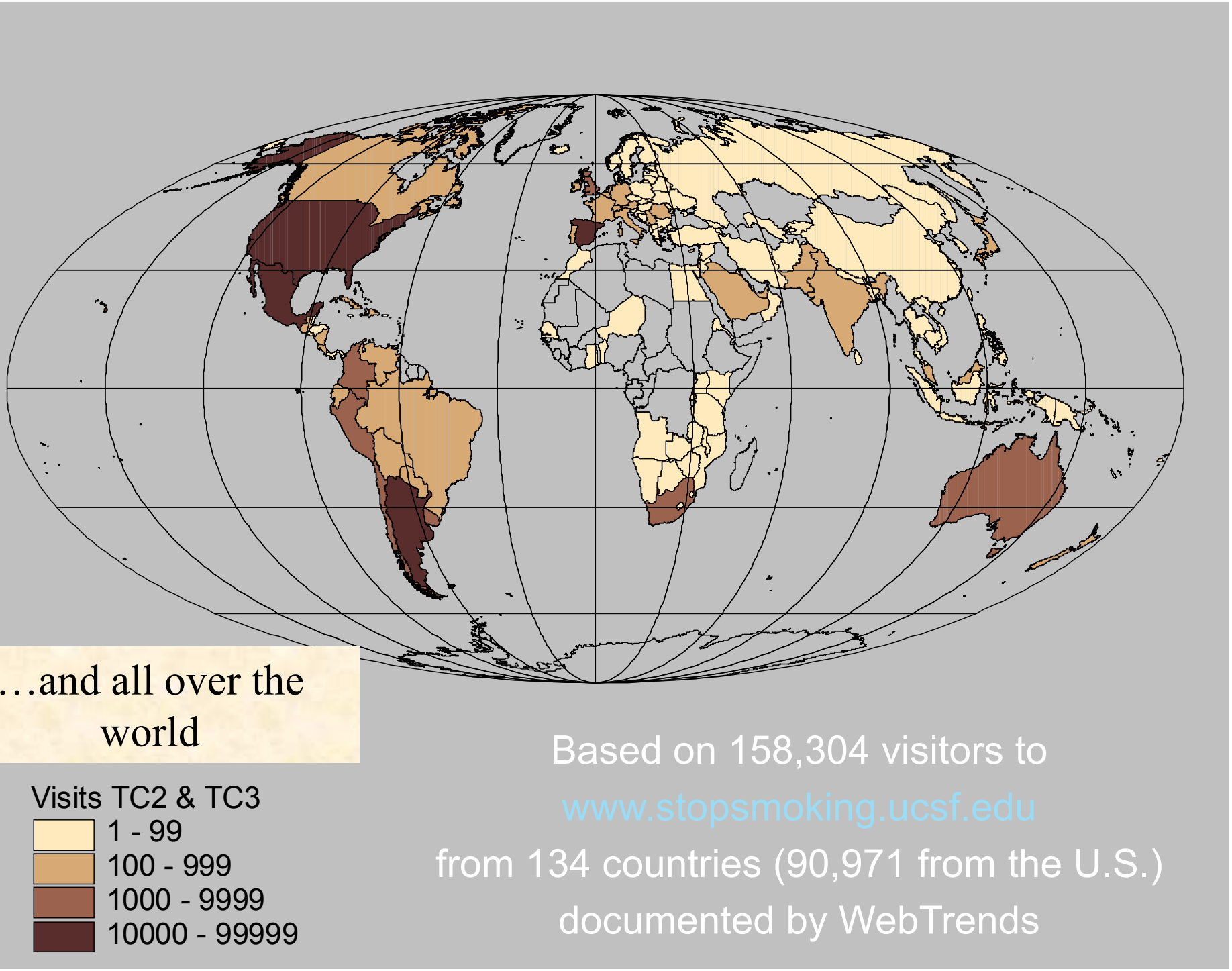
However, Web quit rates (%) are similar across languages: 20% quit rates at 1 year (Missing = Smoking)





From San Francisco, we can reach people all over the country…

Based on 6,759 U.S. participants who provided zip codes


…and all over the world
Visits TC2 & TC3
1 - 99
100 - 999
1000 - 9999
10000 - 99999
Based on 158,304 visitors to
www.stopsmoking.ucsf.edu
from 134 countries (90,971 from the U.S.)
documented by WebTrends

Countries with > 500 participants

Spain	14001
United States of America	10297
Argentina	6639
Mexico	6628
Chile	3734
Venezuela	1826
Colombia	1586
India	1448
United Kingdom of Great Britain and Northern Ireland	1242
South Africa	1077
Uruguay	1033
Australia	742
Ireland	738
Ecuador	659
Perú	619
Canada	524

2-D Ever-expanding Sample Grid For Evidence-based Web Intervention Development: Health Problems x Languages

	Smoking	Depression	Alcohol	Obesity	Pain…
English					
Spanish					
Chinese					
Russian					
Arabic					
Etc…					

Beyond National Implementations: Why Stop at the Border?

- *Let's create a public worldwide service of **self-help evidence-based Web interventions***
- *Let's create a virtual lab for **randomized controlled trials** with the best interventions from all over the world*
- *Let's fund the most efficacious Web interventions using with private donations and corporation and foundation sponsorships.*