



# Tobacco Quitlines

National Cancer Advisory Board Meeting  
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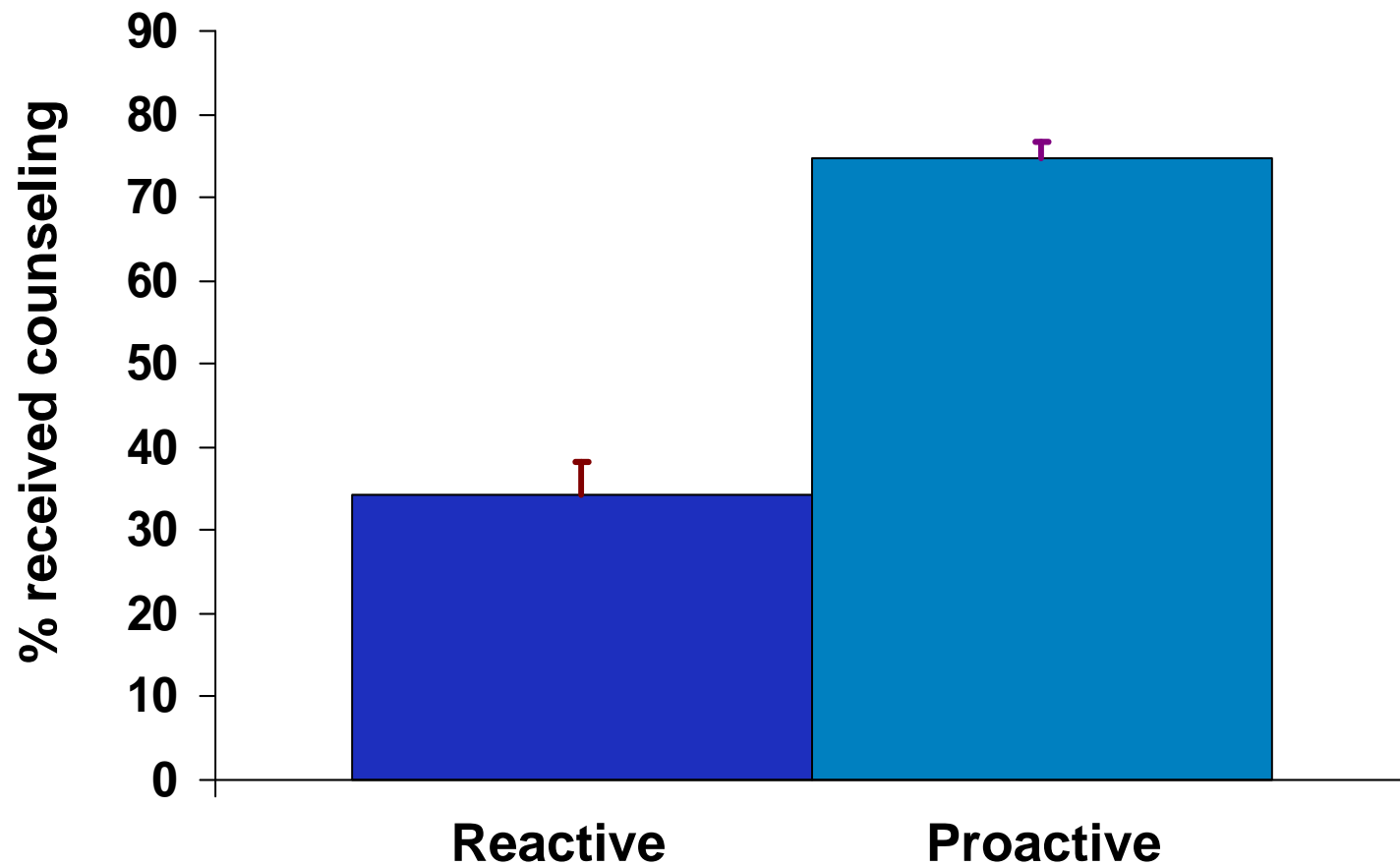
## What is a Quitline?

- Telephone counseling for tobacco cessation
  - Accessible (for smokers)
  - Easy to be proactive (for interventionists)



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# Proactive Counseling Cuts Attrition in Half



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Source: Zhu et al. (2002), *NEJM*, 347, 1087-1093.

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# What is a Quitline?

- Telephone counseling for tobacco cessation
  - Key features: accessibility & reactivity
- Centralized operation
  - Multi-lingual services and extended hours
  - Large volume
    - Strong implications for research & dissemination
- Potential for integrated service
  - with new technology
  - with other cancer prevention endeavors

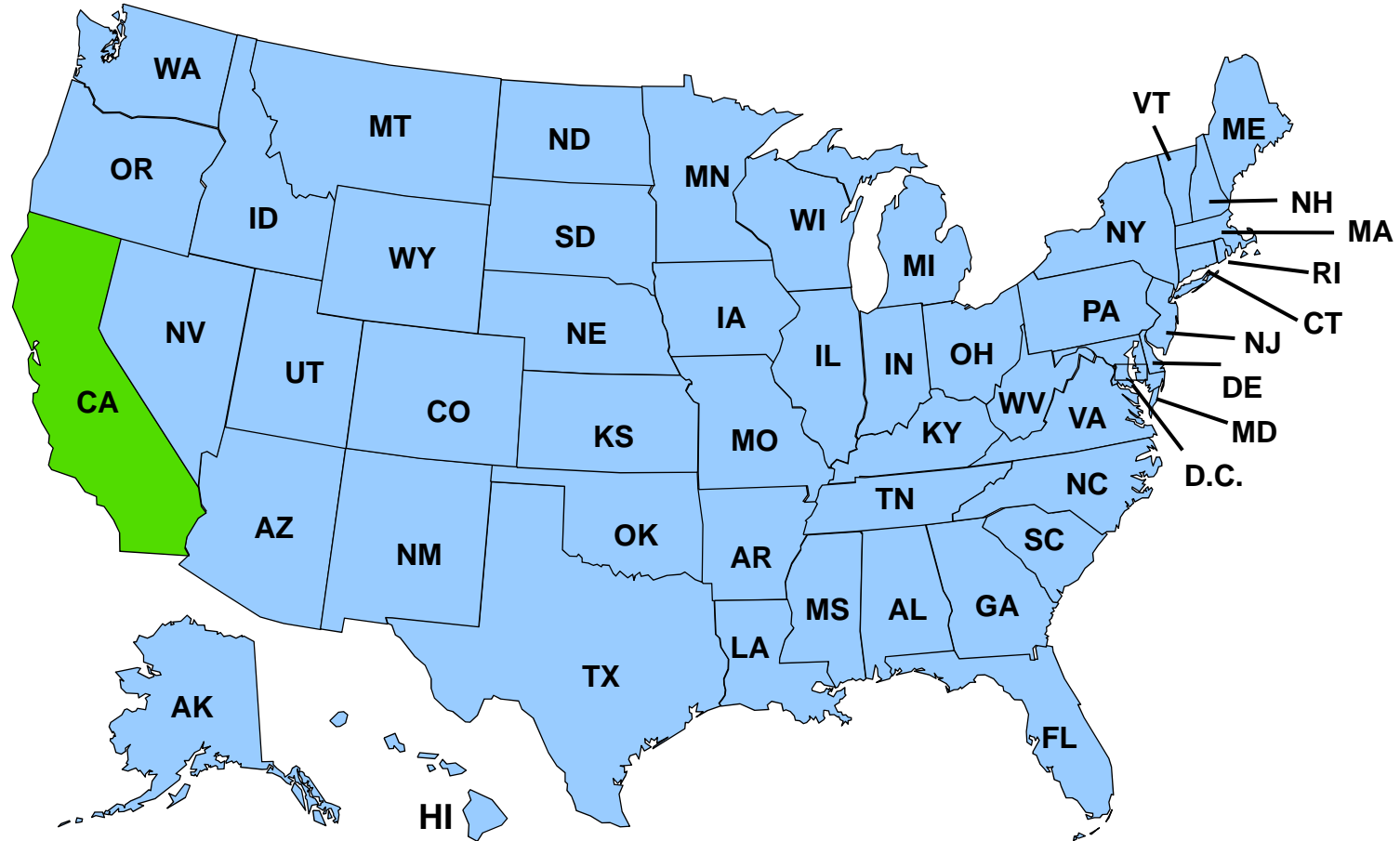
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# A Very Brief History of U.S. Quitlines

- 1980s NCI Cancer Information Service
- 1992 First state quitline in the US
  - California Smokers' Helpline
- 1992 First large HMO quitline
  - GHC/Free & Clear Inc. (It now runs about 20 state quitlines)
- 2003 ICSH Subcommittee recommendation:  
“Launch a national quitline network.”
- 2004 NCI-CIS coordinates telecommunication system for national quitline network, while CDC provides funding to states
  - National Network = NCI, CDC, states, and NAQC

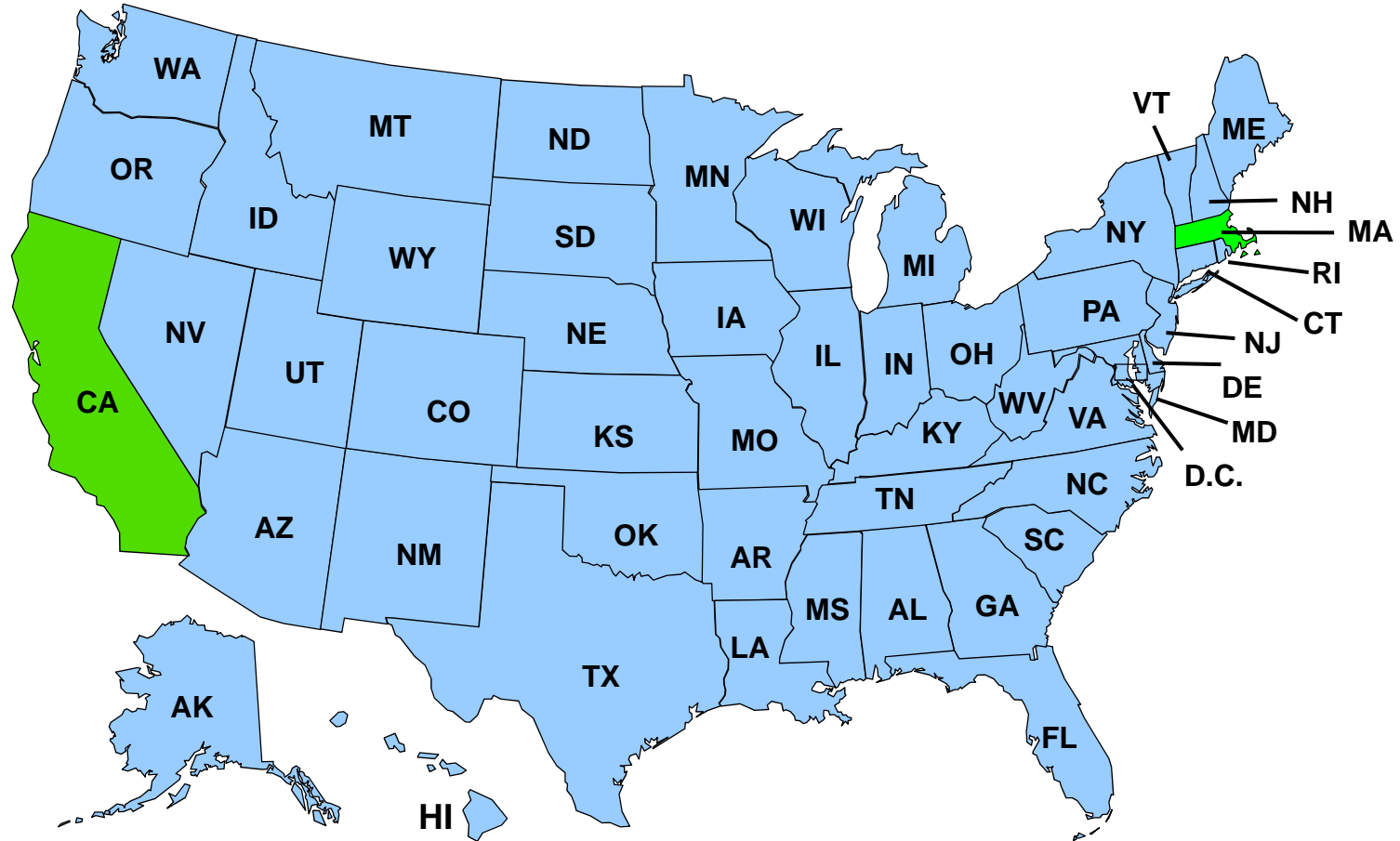
# State Quitlines in 1992

 Statewide Quitline       No Statewide Quitline



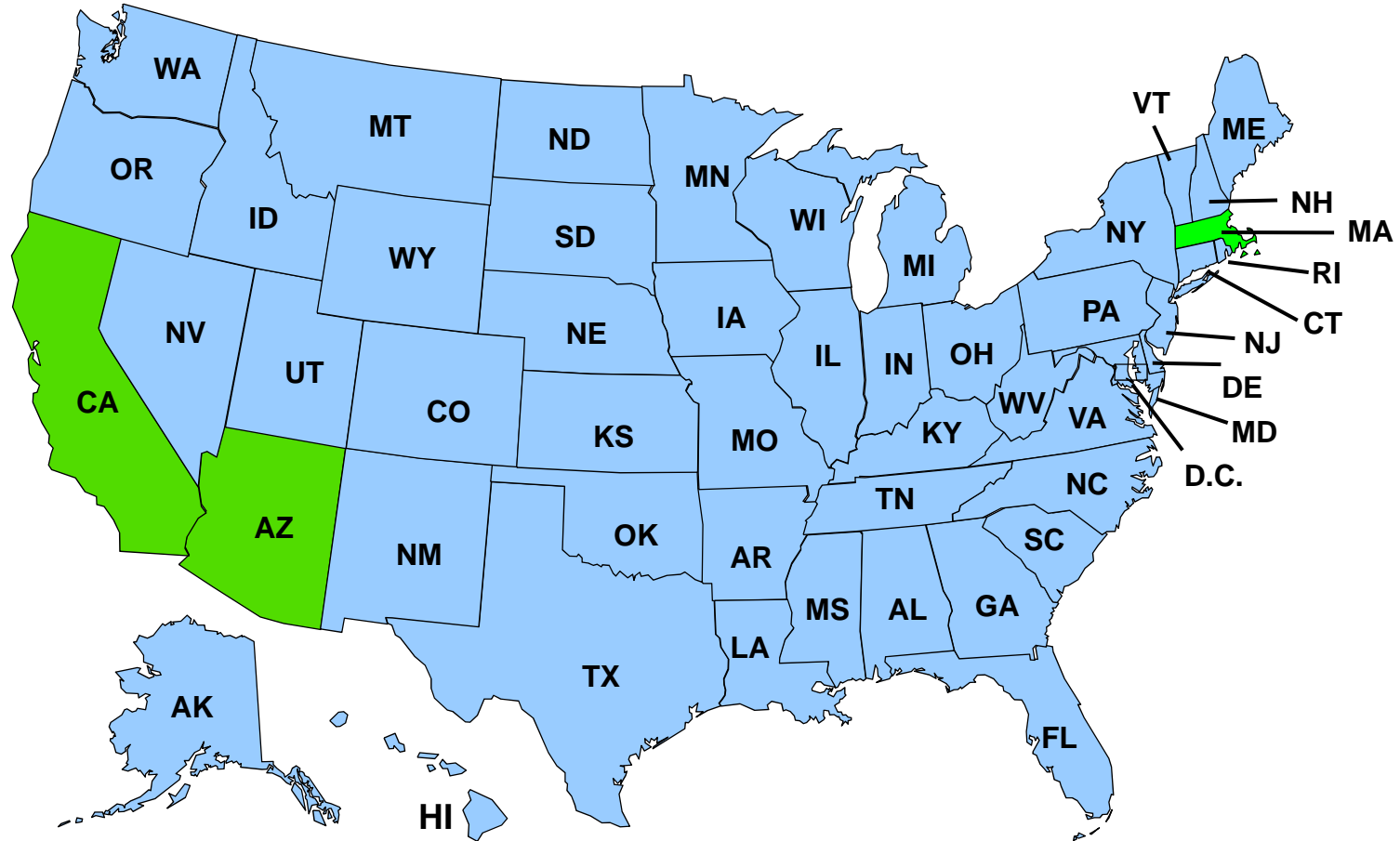
# State Quitlines in 1994

 Statewide Quitline       No Statewide Quitline



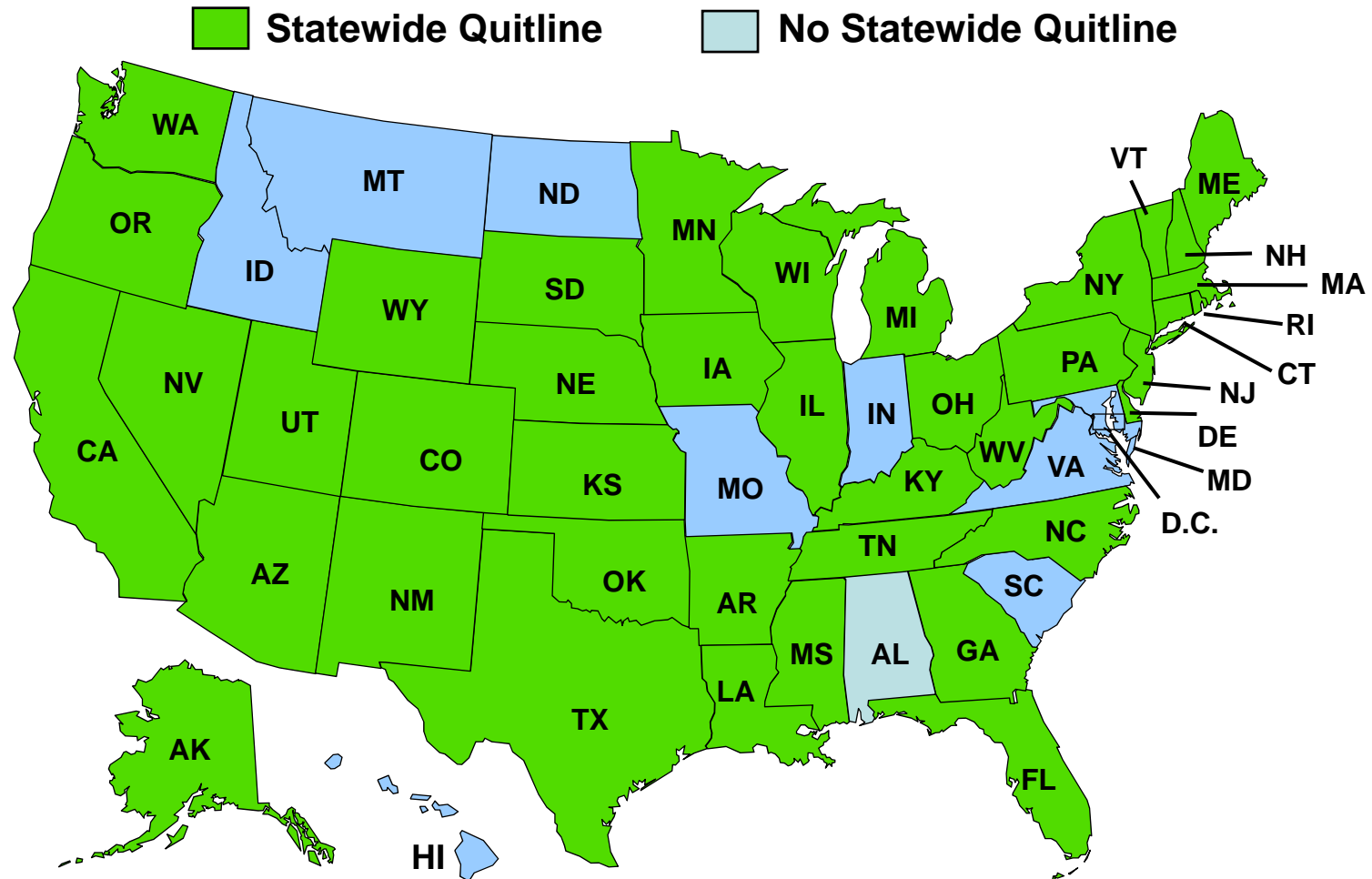
# State Quitlines in 1995

 Statewide Quitline       No Statewide Quitline





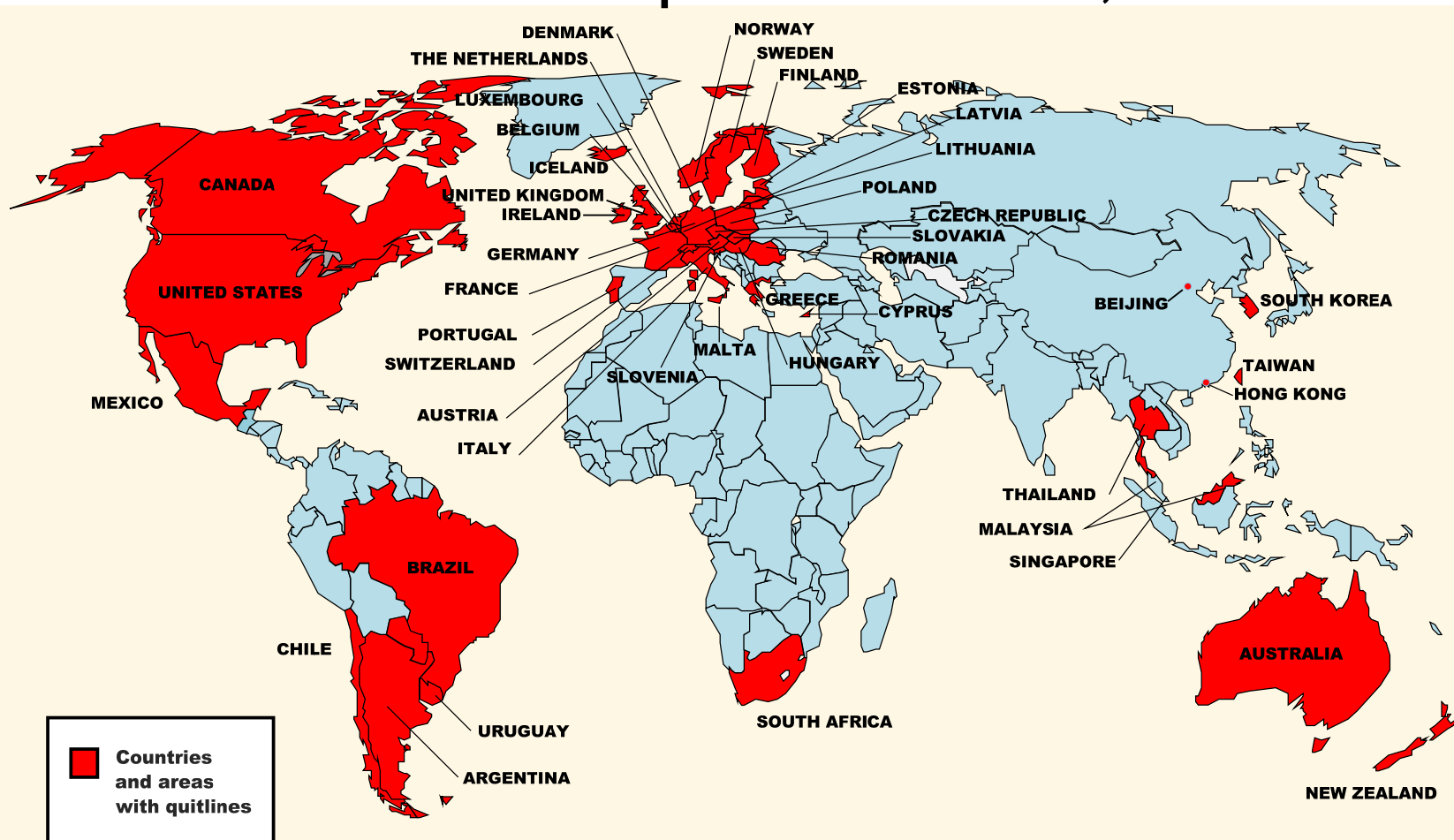
# State Quitlines in 2004



Source: CDC Office on Smoking and Health (<http://www.NAQC.org>).



# A World Map of Quitlines, 2007



This map is based on one produced by the Map Design Unit of the World Bank for the May 2004 piece, "Tobacco Quitlines: at a glance." It has been updated with information gathered by the North American Quitline Consortium. The boundaries shown on this map do not imply any judgment on the legal status of any territory.

Source: Anderson & Zhu (2007) *Tobacco Control*.

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## The U.S. State Quitlines

- The state quitlines collectively serve about 400,000 smokers per year
- The 1-800-QUIT-NOW calls had passed one million by the end of 2007

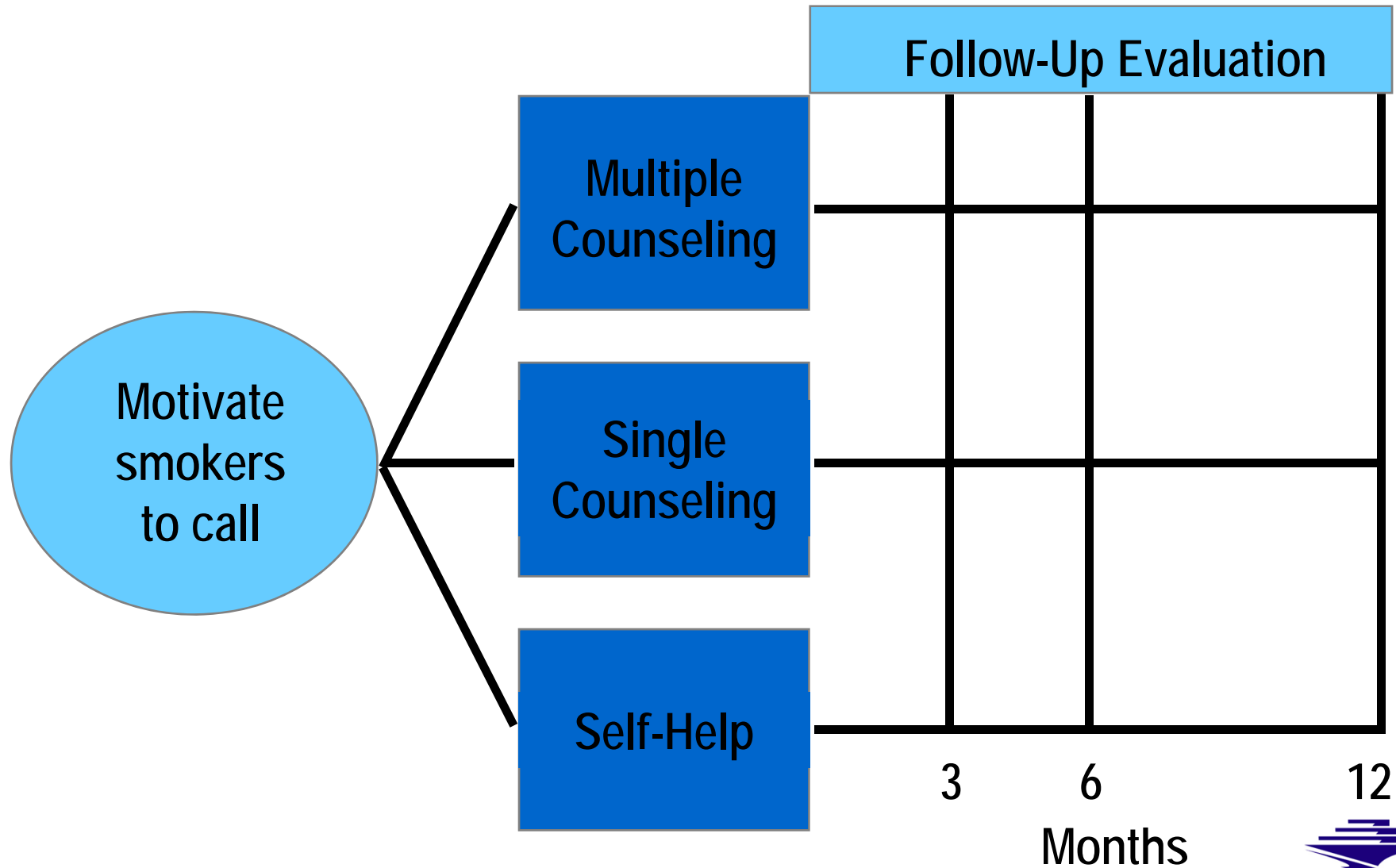


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## California Smokers' Helpline

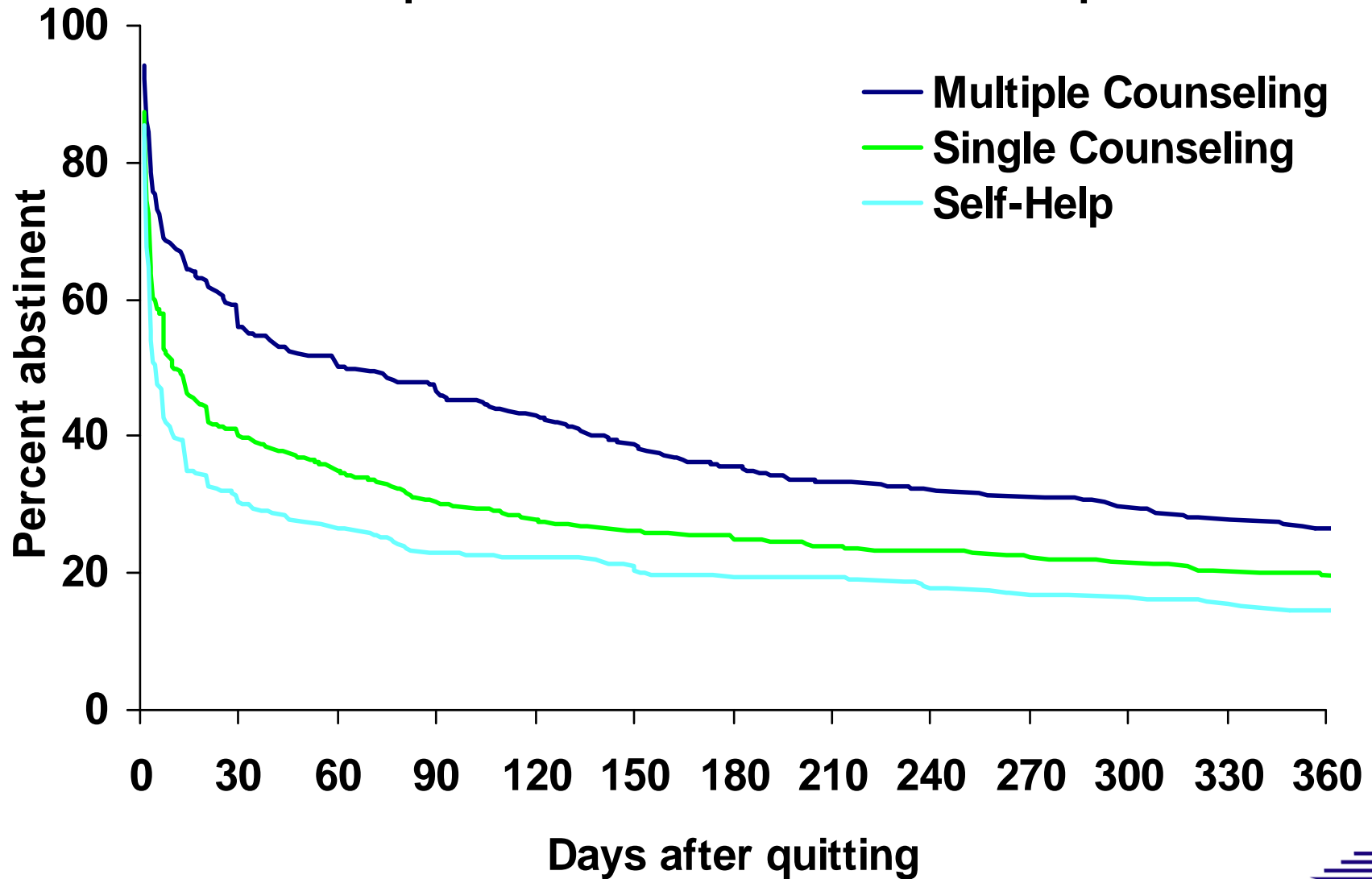
- The first state quitline
- Testing multiple protocols in randomized trials
- Reaching underserved populations
- Active in both research and dissemination

# The 1st Randomized Controlled Trial



Source: Zhu, Stretch, et al. (1996), *J Consult Clin Psychol*, 64, 202-211.

# Relapse Curves for 3 Groups



Source: Zhu, Stretch, et al. (1996), *J Consult Clin Psychol*, 64, 202-211.

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## California Smokers' Helpline (cont.)

- The randomized trials
  - Adult smokers, Study 1 (N=3000)
  - Adult smokers, Study 2 (N=3000)
  - NRT users (adults) (N=3000)
  - Teen smokers (N=1400)
  - Pregnant smokers (N=1200)
  - Asian-speaking smokers (N= 2100)
- Trials are large and study samples diverse



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# Efficacy of Telephone Counseling and NRT

## COCHRANE REVIEW:

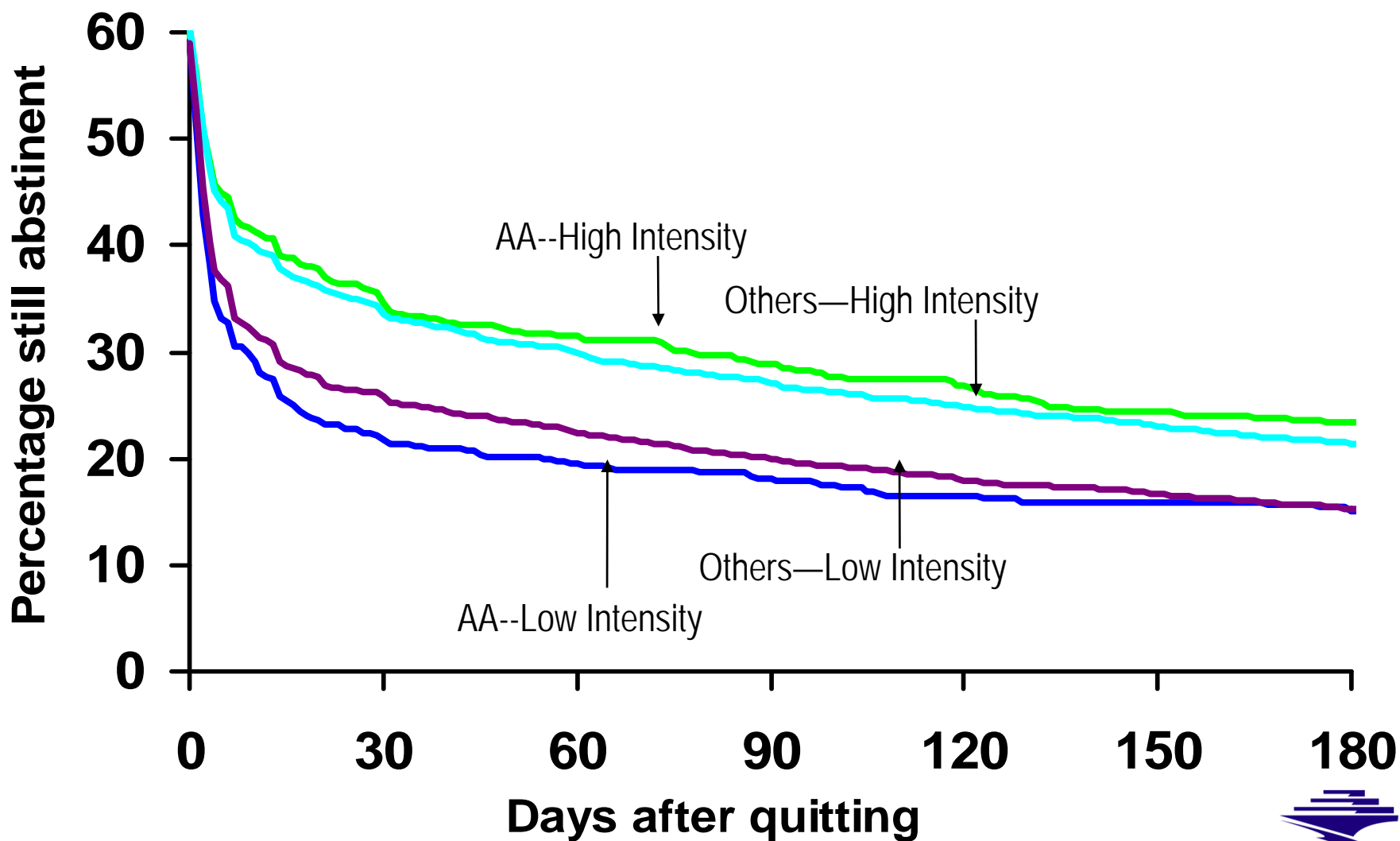
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	Odds Ratio (95%CI)	Average Sample Size per Trial
NRT (n=98)	1.74 (1.64, 1.86)	385
TC (n=13)	1.56 (1.38, 1.77)	1100

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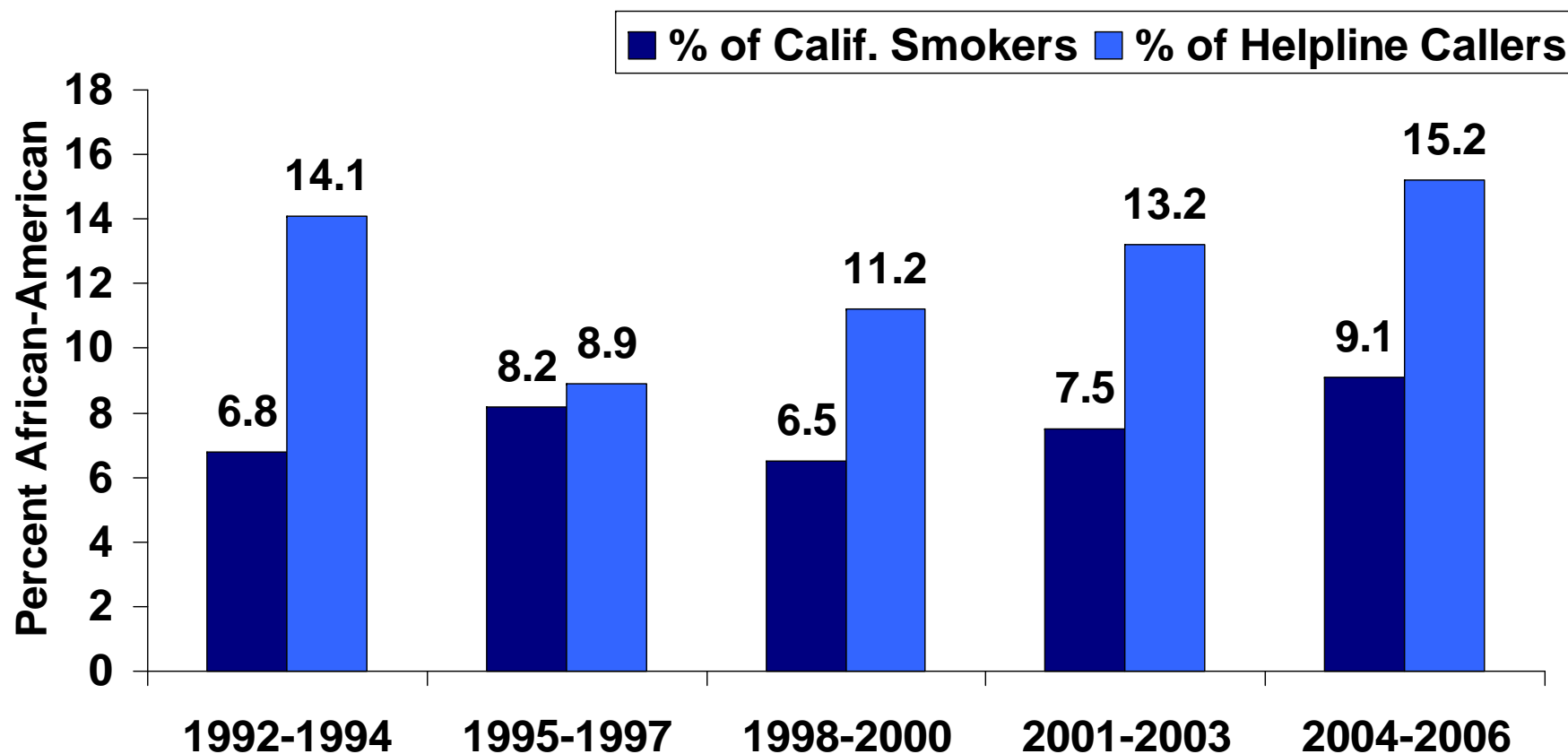
Based on Cochrane review data, quitline studies average 700 more subjects per study than NRT trials.

# Outcomes for African-Americans & Others, Averaged Over 5 Clinical Trials Done by Helpline



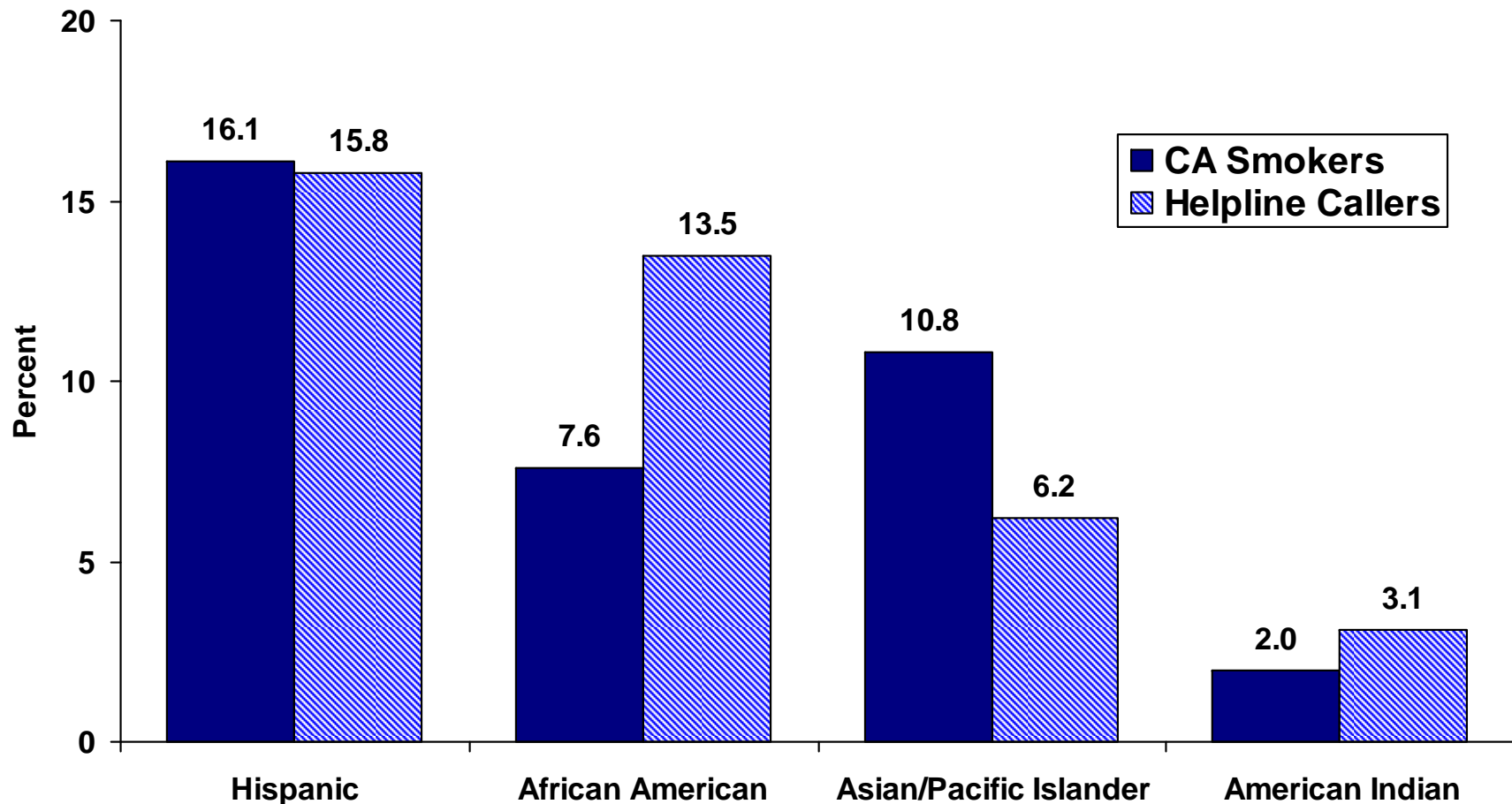
Source: Unpublished data from the California Smokers' Helpline (Zhu et al. 2008)

# African-American Representation Among California Daily Smokers & Among Helpline Callers



Source: Unpublished data from the California Smokers' Helpline (Zhu et al. 2008)

# Representation of Ethnic Minorities Among Helpline Callers Compared to California Smokers



Population-level data are estimates based on the aggregated survey results for daily smokers. Helpline data do not include proxy callers

Source: CA Health Interview Surveys, 2001, 2003, and 2005, and CA Smokers' Helpline, 5/1999-7/2007.



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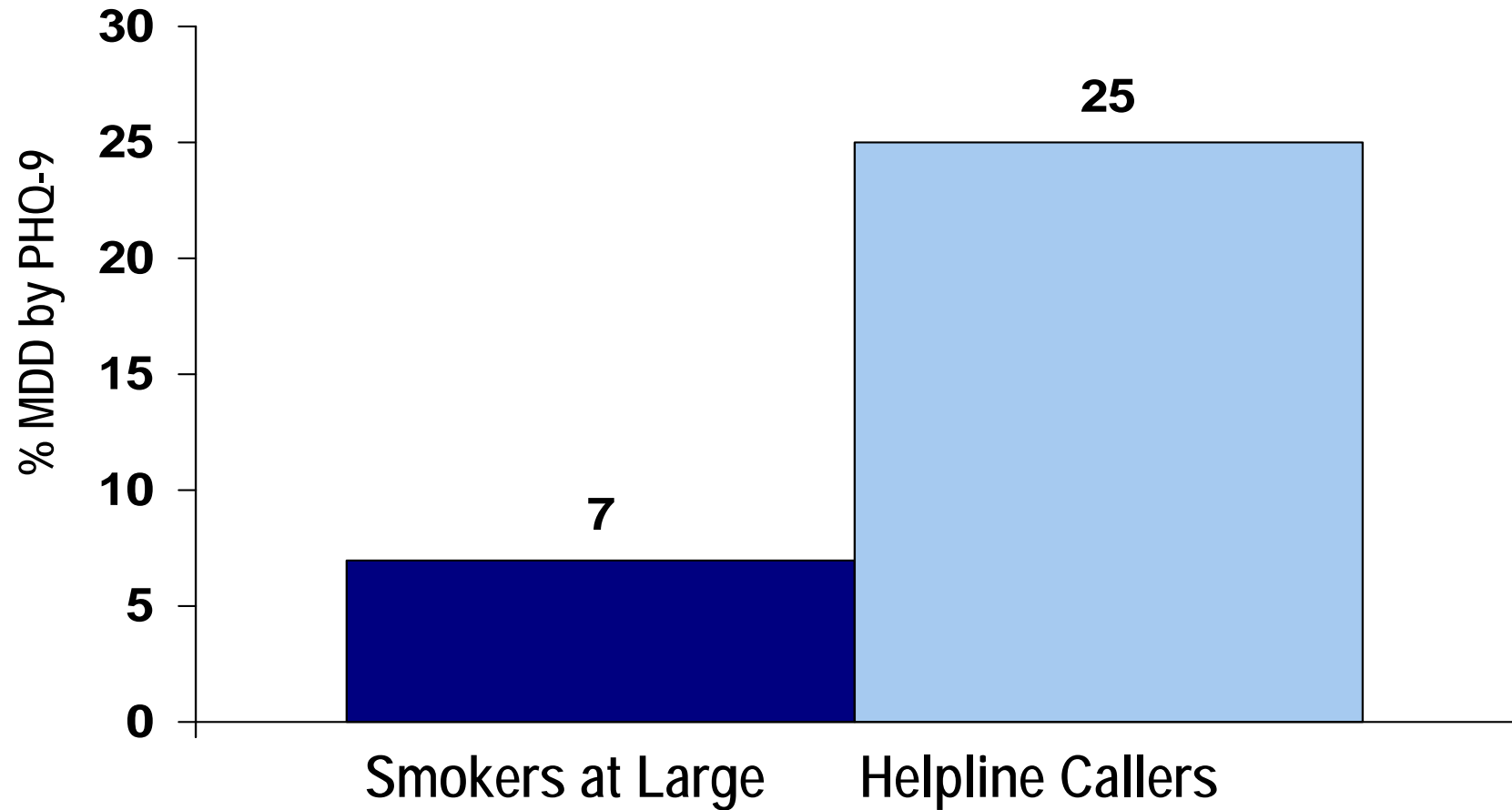
## California Smokers' Helpline (cont.)

- Upcoming research
  - Smokers with co-morbidity (e.g., depression)
  - Proactive recruitment
  - Telephone + Web-based intervention (New NCI trial)
  - Nonsmokers as an extension of the quitline



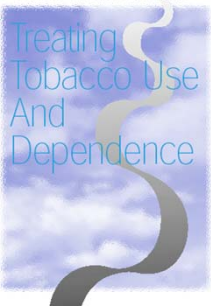
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# Smokers with Depression

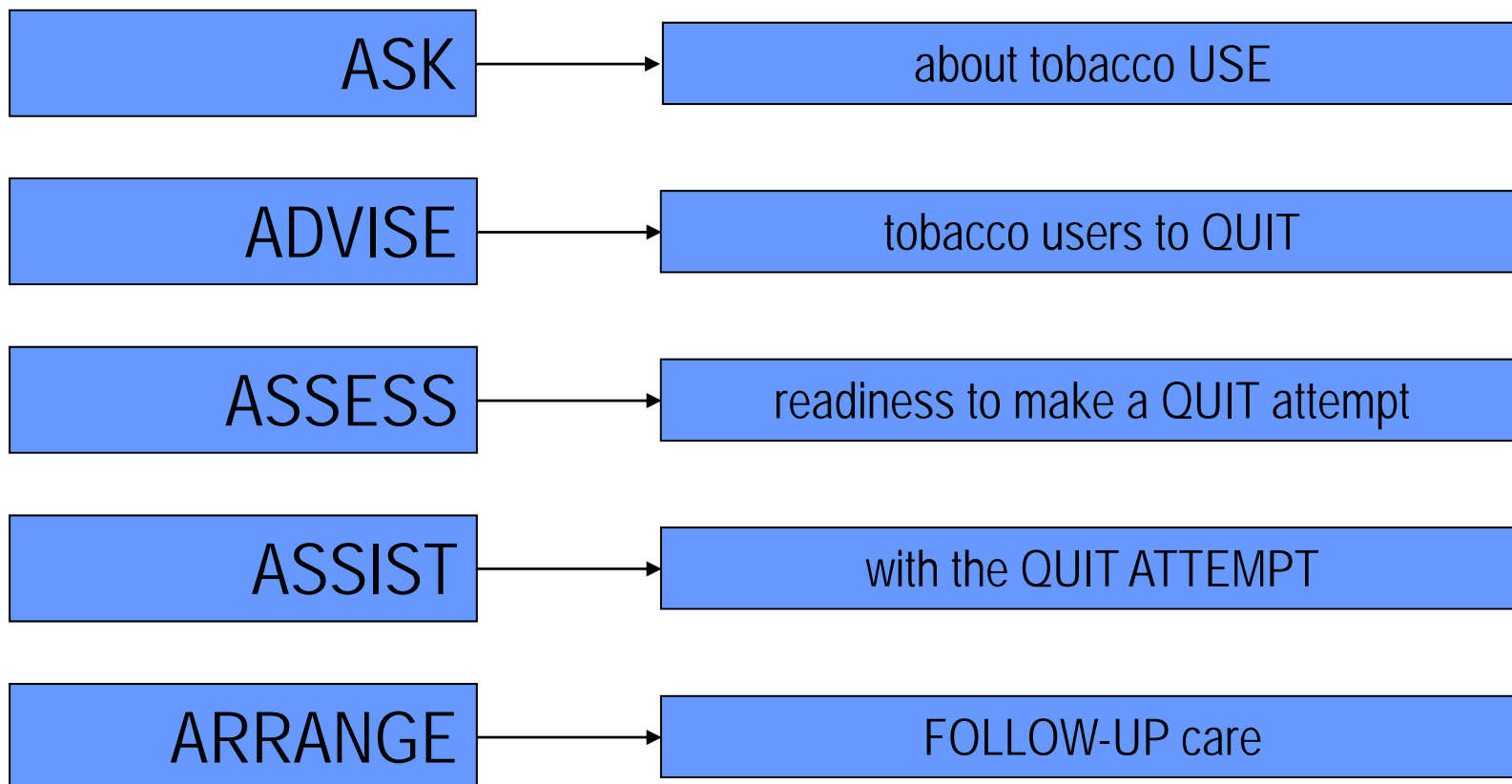


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Source: Zhu et al. (2008) Unpublished paper.

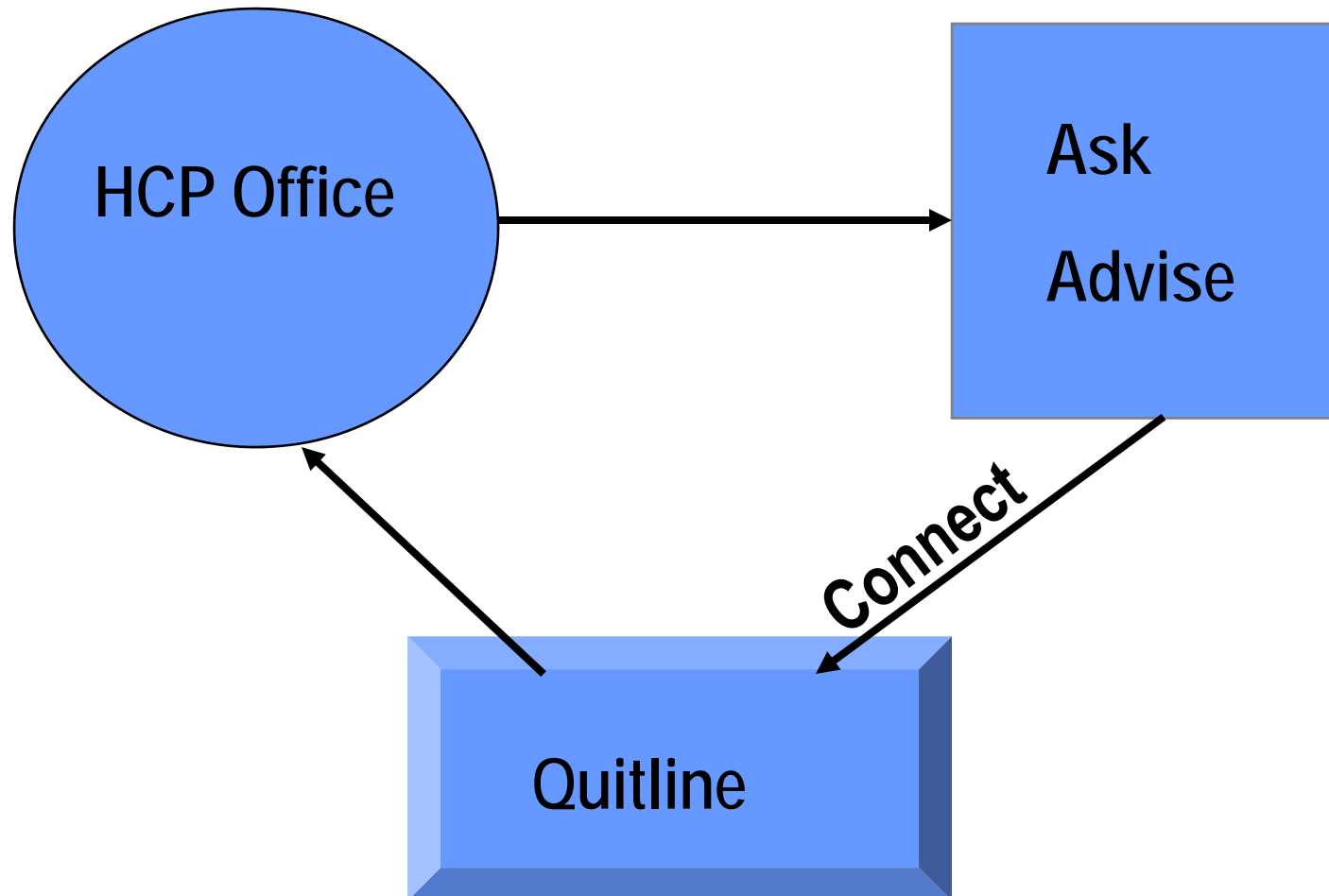


# The 5 A's



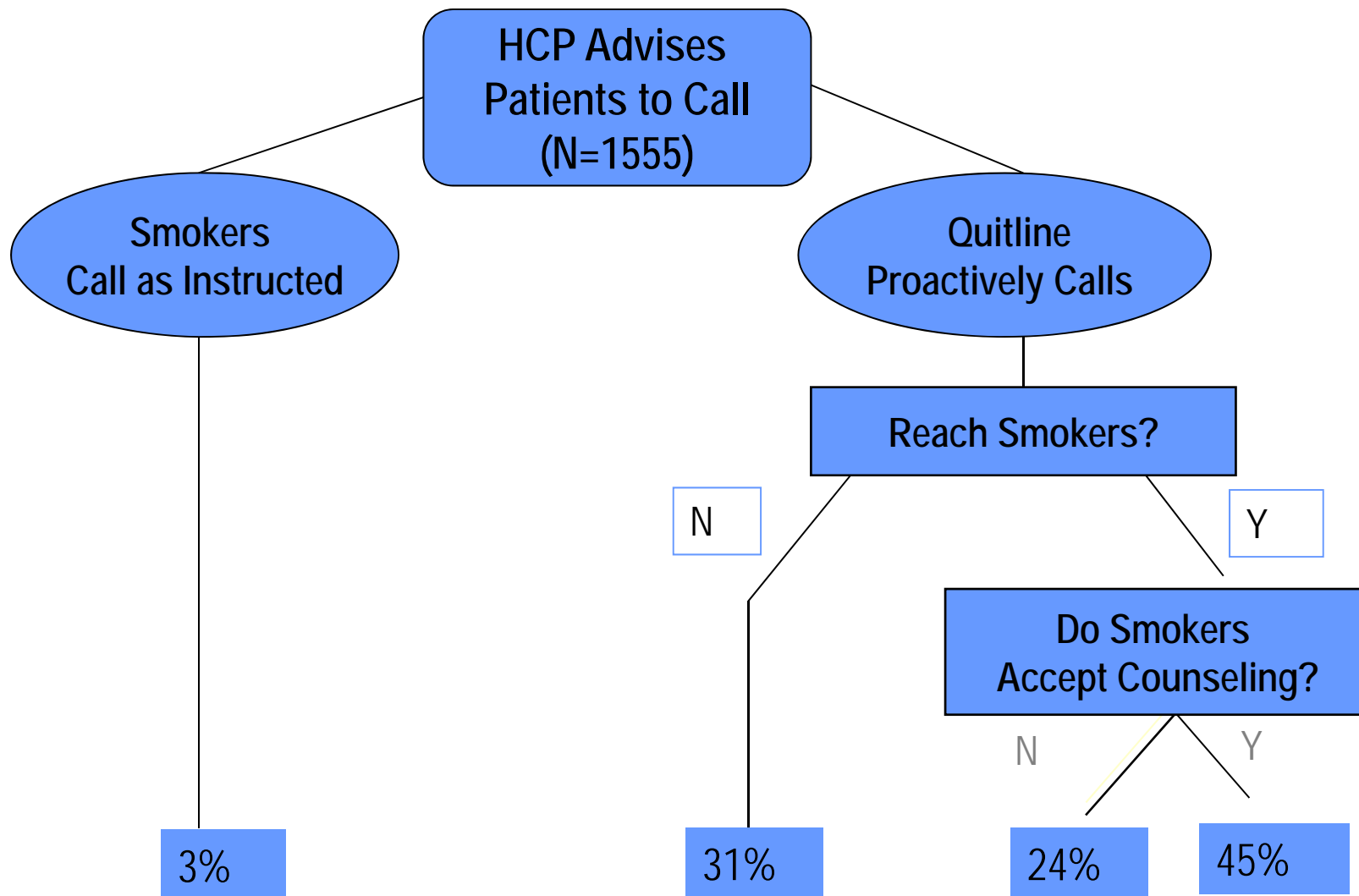
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# Telephone Counseling, Starting in the Health Care Provider's Office





# Proactive Recruitment: Pregnant Smokers



Source: Unpublished data, California Smokers' Helpline

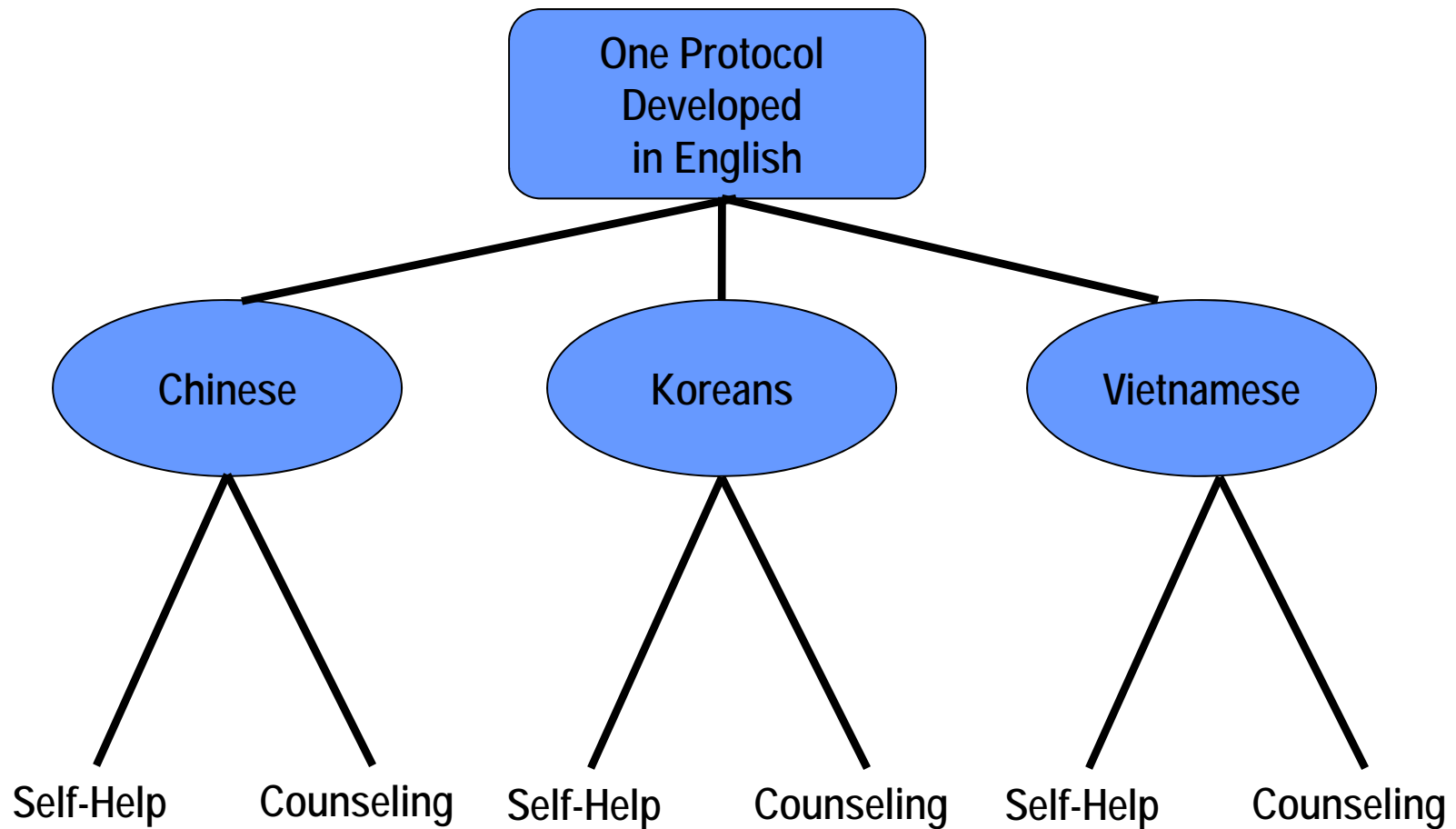
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# A Study of Asian American Smokers: A Design With Dissemination in Mind

- Key question:
  - Will “talk therapy” work for the less acculturated Asian smokers (defined as preferring Asian languages)?
- Big challenge:
  - There are so many Asian languages
- Solution:
  - A single protocol: translated and back translated
- Design
  - Test it on 3 different languages in a single study
  - Sufficient sample for each language group (700 each)

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# Asian-Speaking Smokers



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# A Design With Dissemination in Mind

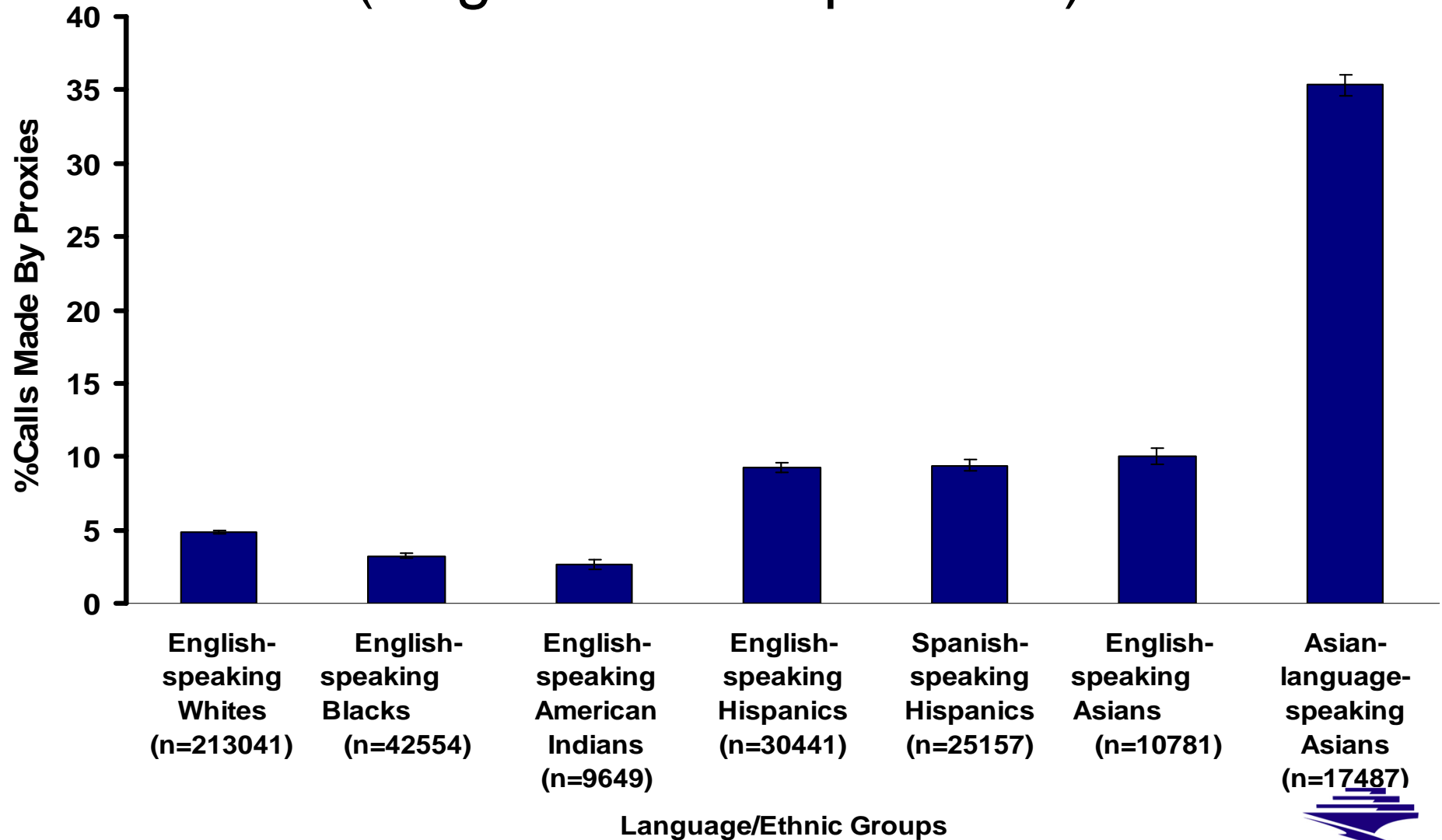
- Logic:
  - If the protocol is proven effective in each of the three languages, then there is some confidence in disseminating it to other Asian languages, without testing it in all the individual languages
- Role for federal agency in dissemination?
  - NCI, CDC, others?
    - Reason: With a few exceptions, most U.S. states do not perceive Asian-language quitlines as cost-efficient

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# The Response of Nonsmokers to Quitline Promotion



# Proxy Calls By Language/Ethnic Group (Aug. 1992—Sept. 2005)



Source: Zhu et al. (2006). *Tobacco Control*.

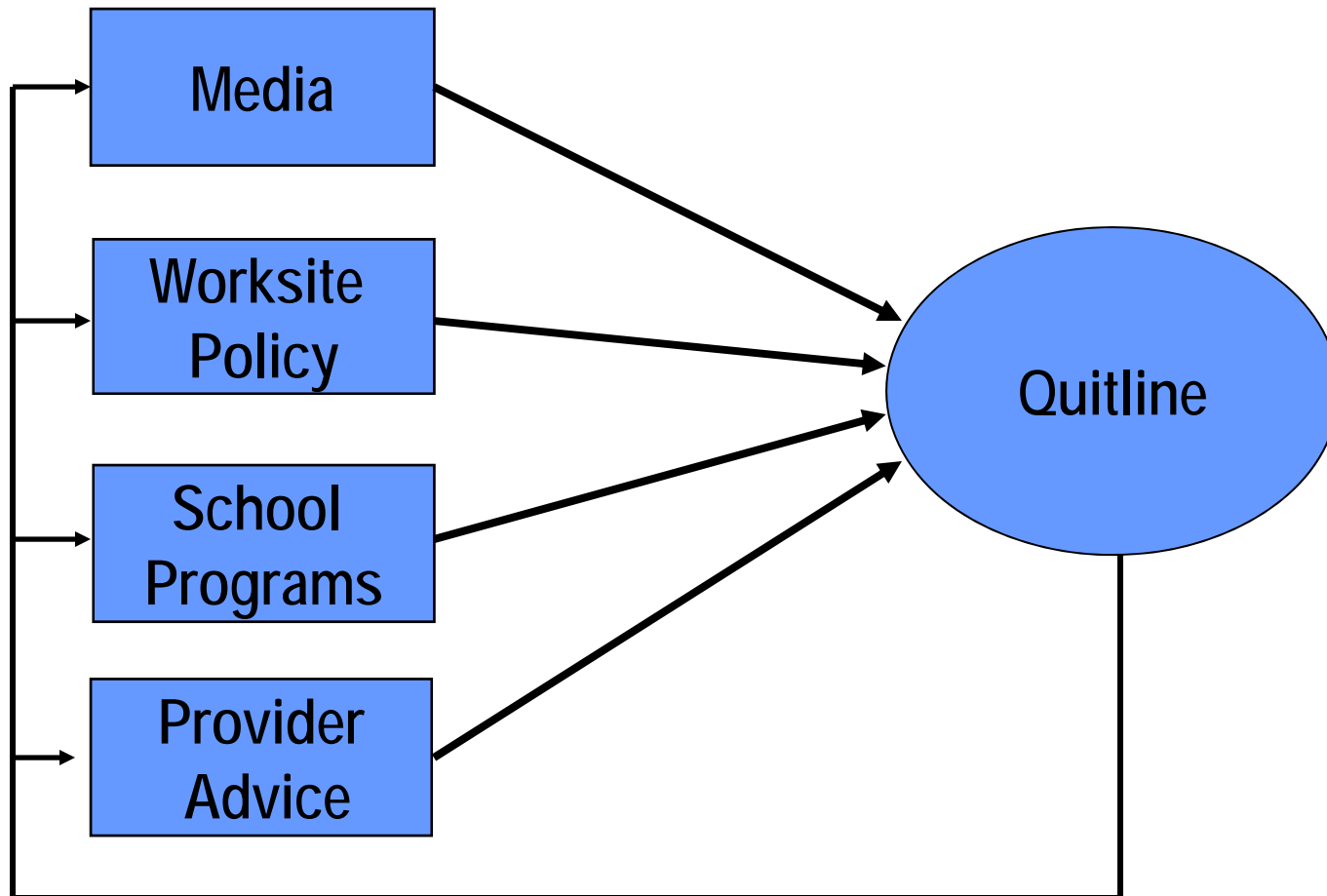
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# Studies with Nonsmokers as Interventionists

- There is a tendency to professionalize in every field
  - e.g., Certification of cessation counselors
- Quitlines have taken a different approach
  - Emphasize ongoing evaluation of program effectiveness, instead of emphasizing individual counselors' certification, training, etc.
- Harnessing the spontaneous efforts of nonsmokers can dramatically increase the reach of quitlines
  - Especially important for groups such as Latinos and Asian Americans, who are less likely to seek formal help
- Capitalizing on nonsmokers' willingness to help smokers is another step toward making quitlines an integral part of a population-based approach to tobacco cessation

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# A Quitline in a Population-Based Framework





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## Conclusions

- Quitlines are an accessible & effective cessation service
- Quitlines reach underserved populations
- Quitlines can be leveraged to achieve greater population effects
  - State tobacco control programs
  - Healthcare systems (chronic disease management)

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# Funding Acknowledgments

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  - 13RT-0023
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**Thank You!**  
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