

# Adapting the BRFSS to Survey Deaf Sign Language Users

Steven Barnett MD

on behalf of the

Rochester Prevention Research Center:  
National Center for Deaf Health Research  
University of Rochester

# Learning Objectives

- Processes for adapting a survey for use with deaf sign language users
- Computer-based survey that allows the user to choose the best communication modality

# Take Home Messages

- ASL is not English
- Deaf sign language users comprise understudied disparity populations
- Community-based participatory research is essential to the survey adaptation process

# Outline

- Background
- Review a few steps in the adaptation process
- Describe survey interface (screen shots)

# Why Deaf people?

- HP2010 objectives
- Disparities is access to research
  - Modality
  - Language
  - Literacy
- Disparities in health & healthcare

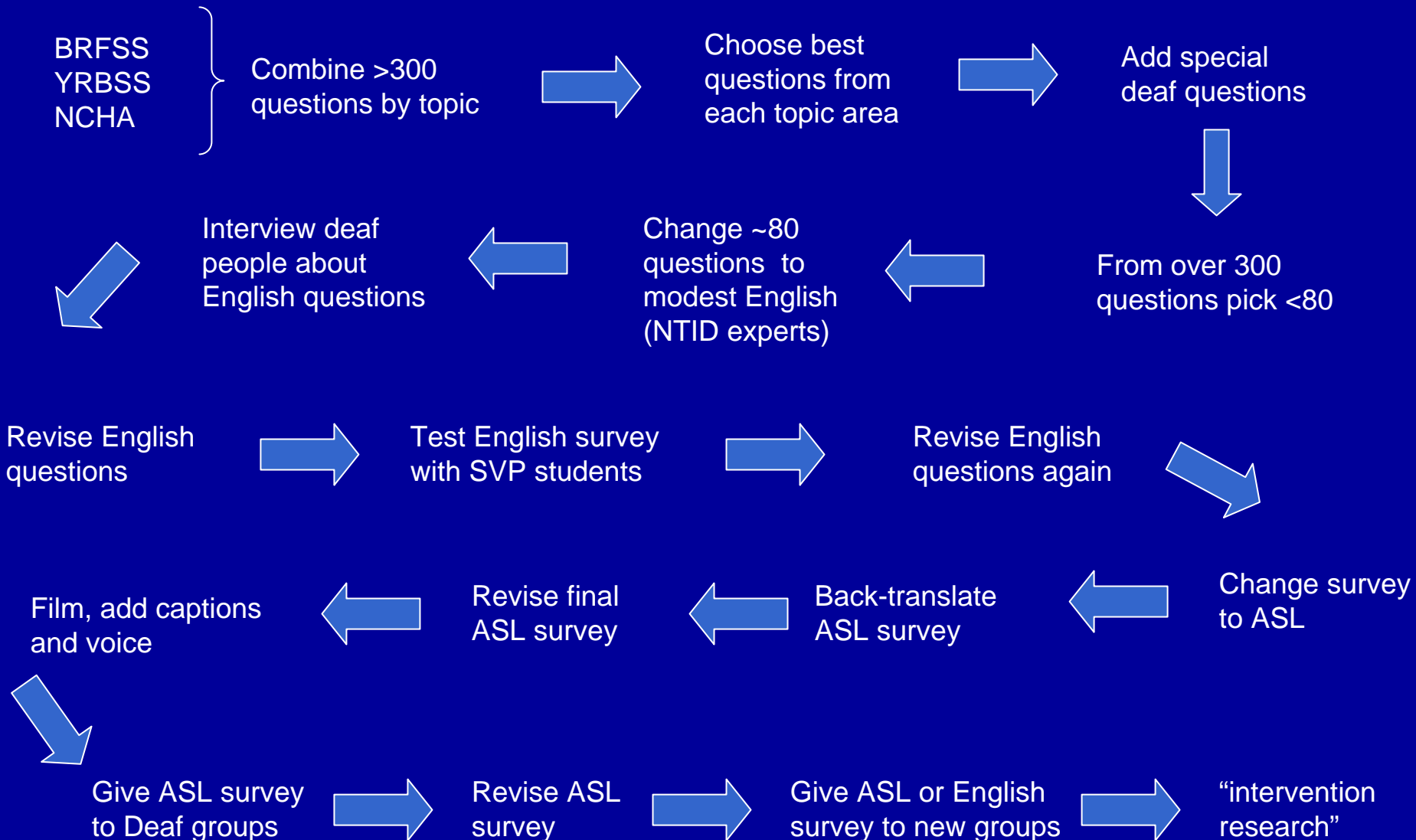
# Sign Language

- Not measured by census/surveys
- American Sign Language (ASL)
  - Different from English
- English-based signing

# Rochester NY

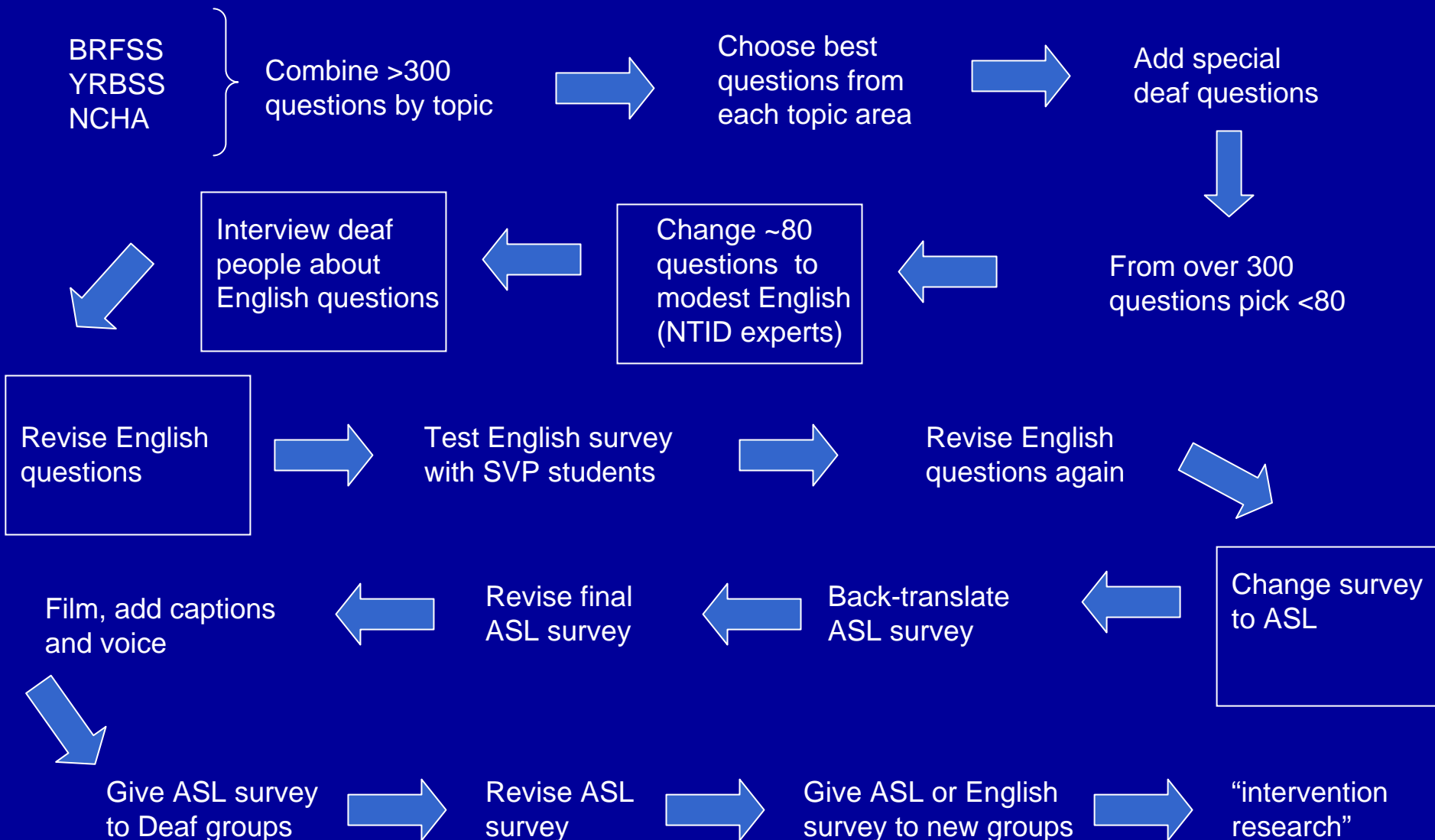
- Many sign language users
- Rochester Deaf Health Task Force
- Rochester Prevention Research Center:  
National Center for Deaf Health Research
  - health promotion & disease prevention with deaf ASL-users and their families
  - Local & national

# Core Project Steps





# Core Project Steps



# Adapt English

- Linguists reviewed original English
- In-depth individual cognitive interviews
  - “... blood cholesterol tested ...”

# Dictionary

- Addresses fund of information
- Similar in function to BRFSS explanations
  - Mammogram
- Consistent with purpose
  - Compare with other groups
  - Compare pre- & post- intervention

# Translations

- Bilingual fluent community members & researchers
- Two teams
- Decision examples
  - Include question stem in response
  - Education level question -> 11 items

# Interface design

- Accessible for broad range of education levels
- A lot of data



CC



CC



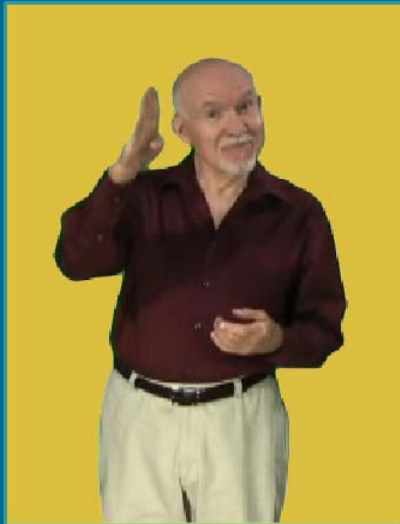
CC



CC



CC



CC

My name is Patrick. You can touch on the other signers. You can pick a different signer at any time. When you are done. Touch next.



## Introduction



During the survey questions, sometimes you will see that the letter 'i' with a circle around it will appear. Touching the 'i' will open a dictionary. You may see a word or sign that is unfamiliar. In this example we use the word 'cholesterol'. Touch the 'i' and a panel with the word being defined will slide out from the right. A sign explanation of the word will be given and then the English text version will appear. To close the dictionary, touch the box with the X in the top right corner.


**i** Cholesterol

**A** Example Answer 1

**B** Example Answer 2

**C** Example Answer 3

- MaryBeth
- D

As the survey progresses sometime you may see an 'i' inside a circle appear. 




# Basic Demographics



Navigation icons: [Close] [Home] [Back] [Forward] [Search] [Refresh] [Zoom]

Vertical menu: R, Li, P, G, MaryBeth, D



You are a man. [Close]

- AAA [Close] [Zoom]
- ? Are you female or male?
  - A female
  - B male**

Back Next



# Take Home Messages

- ASL is not English
- Deaf sign language users comprise understudied disparity populations
- Community-based participatory research is essential to the survey adaptation process

Questions?

Feedback?

Prevention Research Centers Annual  
Program Meeting  
Atlanta March 25-27, 2008

NCDHR is supported by Cooperative Agreement Number U48 DP000031 from CDC. Its contents are solely the responsibility of the author and do not necessarily represent the official views of the CDC.

Steven Barnett is supported by grant K08 HS15700 from the Agency for Healthcare Research and Quality.

This presentation briefly discusses a project made possible through a Cooperative Agreement between the Center for Disease Control and Prevention (CDC) and the Association of Teachers of Preventive Medicine (ATPM), award number TS-0817. The presentation content is the responsibility of the author and do not necessarily reflect the official views of the CDC or ATPM.

Thank you to everyone who has worked with NCDHR.

Steven Barnett, MD  
Assistant Professor, Department of Family Medicine  
Co-Associate Director, National Center for Deaf Health Research  
University of Rochester

Family Medicine Research Programs  
1381 South Avenue  
Rochester, NY 14620  
tel: (585) 506-9484 ext 110  
tty: (585) 461-4902  
fax: (585) 473-2245  
Steven\_Barnett@URMC.Rochester.edu

Presented at the 25<sup>th</sup> Annual BRFSS Conference, Orlando (March 18, 2008).