Operational and Methodological Lessons Learned from the 2003 Joint Canada/U.S. Survey of Health

Catherine Simile, Ph.D.
National Center for Health Statistics
Overview

• Genesis and Objectives

• Lessons learned
  – Questionnaire Design
  – Sampling and Data Collections
  – Data Processing and Release
How It Started

• Both NCHS and STC were involved in international efforts to improve cross national comparisons of health data

• NCHS/STC yearly interchanges to discuss common interests

• Idea for a joint survey launched at the October 2000 Interchange
Objectives

• Produce highly comparable data on the Canadian and American populations unaffected by difference in data collection methodology on the following core indicators:
  – Health care
  – Functional status
  – Health status
  – Risk factors
Objectives (cont.)

• Influence content of the each country’s ongoing, national health surveys to enhance comparability and data quality

• Develop a model for successful collaboration towards standardizing concepts
Organization

• Project Team – Responsible for day to day operations

• Steering Committee – project oversight

• All interviews conducted from Statistics Canada’s Regional Offices using RDD and CATI
Survey tasks

• Questionnaire design - questions taken from ongoing surveys in both countries - the Canadian Community Health Survey and the National Health Interview Survey

• Average duration of questionnaire – 25 minutes

• Editing specifications specific to questions

• Interviews conducted in English, Spanish (US), and French (Canada)
Population Covered

- Residents of Canada and the US aged 18 and older living in private dwellings with telephones
- Canadian samples stratified by province
- US samples stratified by 4 regions
- Sample designed to produce reliable national estimates for 3 age groups (18-44, 45-64, 65 and over) by gender
Sample Size

- Canada: 3,505
- US: 5,183
Timeline

• October 2000 – Idea hatched

• June 2002 – Final content decided

• Nov. 4, 2002 – Data collection starts
Timeline (cont.)

• July 14, 2003 - collection officially ended

• September, 2003 – official response rates calculated

• June, 2004 data and analytic report jointly released on websites
Cognitive Testing: Window of Opportunity

Normal practice:

- U.S.: individual one-on-one English interviews in Washington D. C. agency office
- Canada: focus groups in English in Ottawa and in French in Montreal

JCUSH:

- Combined approach: one-on-one interviews and focus groups for both U.S. and Canada in agency labs and off-site
Cognitive Testing, (cont’d)

– Forced us to think about comparability differently: More difference between subsamples in country than between countries

– Led to a new way of doing cognitive testing in U.S.
Translation: Implementation of New Guidelines

Languages used in this survey
- English (both countries)
- French (Canada only, required by law)
- Spanish (U.S. only, customary)
Steps from the Guidelines:

1. Pre-translation preparation--NO
2. Selection of contractor--YES
3. Completion of translation from final text--NO
4. Review of translation—YES
   • Bilingual review used survey and topic experts, U. S. Census interviewers, translators, and French speaker from Canada
5. Adjudication--YES
6. Development of survey instrument --YES
7. Pretest of survey, including translators--NO
8. Selection of interviewers YES
9. Training of Interviewers--NO
10. Incorporation of feedback from the field--YES
Data Collection Expectations

– “Clean sample” and resolving cases

– Cooperativeness of Canadian and U.S. population different

– Differences in implementing legal requirements impacted discretion and authority of data collection staff
DATA COLLECTION RESULTS: Resolution, Cooperation and Final Response Rates, JCUSH
Resolving Cases

- Sampling methodologist for each country determined number of telephone lines necessary to reach intended sample sizes

<table>
<thead>
<tr>
<th># of lines selected</th>
<th>Targeted Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>32,009</td>
</tr>
<tr>
<td>Canada</td>
<td>10,334</td>
</tr>
</tbody>
</table>
Resolving Cases (Cont’d)

• Definition of clean sample different
  – GENYSIS removed 1/3 of original U.S. sample
  – The remaining 2/3 sent to Statistics Canada assumed to be “clean”

• Working residential numbers cannot be verified in the U.S. like they can in Canada
**Cooperation: Refusals**

Percentage of all eligible cases:

<table>
<thead>
<tr>
<th>Type</th>
<th>U.S.</th>
<th>Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refusals</td>
<td>21%</td>
<td>14%</td>
</tr>
<tr>
<td>Breakoffs</td>
<td>11%</td>
<td>&lt;.01%</td>
</tr>
</tbody>
</table>

**TOTAL**  
33%  
14%
Collection Monitoring

• Not necessary to monitor unresolved cases where 100% of the cases can be relatively easily resolved

• The monitoring system used works well for a Canadian sample, but not for a U.S. sample where much of resolution work is done by field staff

• Throughout the data collection period, the staff was always uncertain as to what was happening, and so had difficulty ascertaining how to allocate resources

• Did not help that U.S. staff could not easily travel to Canada
Discretion and Authority of Data Collection Staff

- Restrictions and delays to convert non response (all communications approved by NCHS Institutional Review Board)
Data Release

Followed Statistics Canada’s usual practice. Preparation for release included both:

• editing and review of microdata for public release
• collaborative analytical report released at the same time

Collaborative analysis hampered by legal restrictions on data access
Summary

• Windows of Opportunity Provided
  – New ways of doing cognitive testing
  – First opportunity to implement new translation guidelines

• Communication and Clarifying Assumptions Crucial
  – “Clean sample” and resolving cases
  – Differences in cooperativeness of Canadian and US population require different monitoring and collection strategies

• Difference in implementing legal requirements not insignificant in their impacts
  – impacted the discretion and authority of interviewers
  – difficult to collaborate in analysis
Access Data and Reports

NCHS website at
www.cdc.gov/nchs/nhis.htm

Statistics Canada website at
www.statcan.ca
Contact Information

Catherine M. Simile, Ph.D.
National Center for Health Statistics
Division of Health Interview Statistics
3311 Toledo Road, Room 2115
Hyattsville, MD 20782
Phone: (301) 458-4499
Email: cus4@cdc.gov