



Up, Down, & Sideways...

our adventure in survey compression

Carol Cosenza
Jessica LeBlanc
University of Massachusetts Boston



Up, Down, & Sideways...

our adventure in survey compression

Carol Cosenza
Jessica LeBlanc
UMass Boston



Acknowledgments

- Thanks to Jack Fowler (CSR) and Paul Cleary (Yale)
- Funded by AHRQ from NIH



Background

- Consumer Assessment of Healthcare Providers and Systems (CAHPS)
 - Original goal to develop standardized patient surveys used to compare results over time and across providers
 - Now used nationally to report on quality of care
- Consumers/patients report on and evaluate their experiences
 - Access to care
 - Communication with providers



The Study

- CAHPS Clinician & Group Survey
- Goal was to help evaluate a university health center (and conduct some methodological tests)
- Total of 10,000 cases/12 different survey formats
 - Overall Study RR= 57% (including telephone)
 - Overall Mail RR = 43%
- Standard 3-contact mail protocol
- Field period: September 2011 – March 2012



The Standard

- 12 pages
- Front and back covers
 - Instructions on the inside front cover
- 8 pages of questions
- 12 point type
- Lots and lots of white space

Your Provider

1. Our records show that you got care from the provider named below in the last 12 months.

Is that right?

- Yes
 No → If No, go to #52 on page 7

The questions in this survey will refer to the provider named in Question 1 as “this provider.” Please think of that person as you answer the survey.

2. Is this the provider you usually see if you need a check-up, want advice about a health problem, or get sick or hurt?

- Yes
 No

Your Care From This Provider in the Last 12 Months

These questions ask about your own health care. Do not include care you got when you stayed overnight in a hospital. Do not include the times you went for dental care visits.

4. In the last 12 months, how many times did you visit this provider to get care for yourself?

- None → If None, go to #52 on page 7
 1 time
 2
 3
 4
 5 to 9
 10 or more times

5. In the last 12 months, did you phone this provider’s office to get an appointment for an illness, injury or condition that needed care right away?

- Yes
 No → If No, go to #8



CENTER for
SURVEY RESEARCH

University of Massachusetts Boston

Test A (condensed)

- 4 pages
- No front and back cover pages
 - Instructions at the top of the 1st page
- 11 point font
- Kept vertical response options (except Yes/No)

Your Experiences Getting Health Care

Answer all the questions by checking the box to the left of your answer. You are sometimes told to skip over some questions in this survey. When this happens you will see an arrow with a note that tells you what question to answer next, like this:

Yes → **If Yes, Go to #1** No

Your participation is voluntary. You may choose to answer the survey or not. If you choose not to, this will not affect the health care you get.

What to do when you're done. Once you complete the survey, please return it in the postage paid envelope provided to the Center for Survey Research at 100 Morrissey Blvd., Boston, MA 02125.

1. Our records show that you got care from the provider named below in the last 12 months. Is that right?

Yes No → **If No, go to #52**

The questions in this survey will refer to the provider named in Question 1 as "this provider." Please think of that person as you answer the survey.

2. Is this the provider you usually see if you need a check-up, want advice about a health problem, or get sick or hurt?

Yes No

6. In the last 12 months, when you phoned this provider's office to get an appointment for **care you needed right away**, how often did you get an appointment as soon as you needed?

Never
 Sometimes
 Usually
 Always

7. In the last 12 months, how many days did you usually have to wait for an appointment when you **needed care right away**?

Same day
 1 day
 2 to 3 days
 4 to 7 days
 More than 7 days



Test B (horizontal columns)

- 4 pages
- No front and back cover pages
 - Instructions at the top of the 1st page
- 11 point font
- Horizontal Yes/No
- Responses of 4 or more banked (in 2 columns) – to be read horizontally

A survey from: **Yale HEALTH** **Your Experiences Getting Health Care**

Answer all the questions by checking the box to the left of your answer. You are sometimes told to skip over some questions in this survey. When this happens you will see an arrow with a note that tells you what question to answer next, like this:

Yes → If Yes, Go to #1 No

Your participation is voluntary. You may choose to answer the survey or not. If you choose not to, this will not affect the health care you get.

What to do when you're done. Once you complete the survey, please return it in the postage paid envelope provided to the Center for Survey Research at 100 Morrissey Blvd., Boston, MA 02125.

<p>1. Our records show that you got care from the provider named below in the last 12 months. Is that right?</p> <p style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No → If No, go to #52</p> <p>The questions in this survey will refer to the provider named in Question 1 as “this provider.” Please think of that person as you answer the survey.</p> <p>2. Is this the provider you usually see if you need a check-up, want advice about a health problem, or get sick or hurt?</p> <div style="border: 2px solid red; padding: 5px; text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No</div> <p>3. How long have you been going to this provider?</p> <p style="text-align: center;"><input type="checkbox"/> Less than 6 months</p>	<p>6. In the last 12 months, when you phoned this provider’s office to get an appointment for care you needed right away, how often did you get an appointment as soon as you needed?</p> <div style="border: 2px solid red; padding: 5px;"><p style="text-align: center;"><input type="checkbox"/> Never <input type="checkbox"/> Sometimes <input type="checkbox"/> Usually <input type="checkbox"/> Always</p></div> <p>7. In the last 12 months, how many days did you usually have to wait for an appointment when you needed care right away?</p> <p style="text-align: center;"><input type="checkbox"/> Same day <input type="checkbox"/> 1 day <input type="checkbox"/> 2 to 3 days <input type="checkbox"/> 4 to 7 days <input type="checkbox"/> More than 7 days</p> <p>8. In the last 12 months, did you make any appointments for a check-up or routine care with this provider?</p> <p style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No → If No, go to #10</p>
---	---

Sample Characteristics

	Standard	Test A (condensed)	Test B (columns)
Male	40%	45%	35%
Age 55+	43%	49%	44%
White Non-Hispanic	69%	68%	73%
Education (Less than college)	37%	25%	25%



Response Rates

	Original Sample	Eligible Sample	Completed	Response Rate
Standard	2100	2040	923	45%
Test A (condensed)	500	490	218	44%
Test B (columns)	500	492	184	37%



Expectations

- Cost less
- Lower response rate
- More skip problems
- Difference in answers



The Standard

21. In the last 12 months, after you checked in for your appointment at this provider's office, were you ever kept informed about how long you would need to wait for your appointment to start?

- Yes
- No

22. In the last 12 months, how often did this provider explain things in a way that was easy to understand?

- Never
- Sometimes
- Usually
- Always

23. In the last 12 months, how often did this provider listen carefully to you?

- Never
- Sometimes
- Usually
- Always

Percent answering
"Always" (Top Box)

81.6%



CENTER for
SURVEY RESEARCH

University of Massachusetts Boston

Test A (condensed)

21. In the last 12 months, after you checked in for your appointment at this provider's office, were you ever kept informed about how long you would need to wait for your appointment to start?

- Yes No

22. In the last 12 months, how often did this provider explain things in a way that was easy to understand?

- Never
 Sometimes
 Usually
 Always

23. In the last 12 months, how often did this provider listen carefully to you?

- Never
 Sometimes
 Usually
 Always

Percent answering
"Always" (Top Box)

75.9%*

*p=.044

Standard: 81.6% said "always"



Test B (horizontal columns)

22. In the last 12 months, how often did this provider explain things in a way that was easy to understand?

Never Sometimes

Usually Always

23. In the last 12 months, how often did this provider listen carefully to you?

Never Sometimes

Usually Always

24. In the last 12 months, did you talk with this provider about any health questions or concerns?

Yes No → **If No, go to #26**

Percent answering
“Always” (Top Box)

87.0%*

*p=.044

Standard: 81.6% said “always”



Differences in “Top Box” scores for the 18 Never-Always questions

Question	Standard	Test A (condensed)	Test B (columns)	Standard & Test A	Standard & Test B
Q6	55.3	53.8	56.3	.45	.48
Q9	49.9	54.7	53.7	.17	.23
Q12	38.6	27.8	36.1	.15	.47
Q14	49.7	48.1	66.7	.45	.00**
Q16	44.2	18.2	54.5	.10*	.38
Q18	70.4	55.2	73.6	.02**	.39
Q20	41.7	42.3	42.0	.46	.50
Q22	81.6	75.9	87.0	.04**	.05**
Q23	77.4	72.9	84.5	.10*	.02**
Q25	75.3	70.2	79.9	.09*	.13
Q26	65.8	59.7	71.0	.06*	.10*
Q27	81.5	77.2	85.0	.10*	.15
Q28	75.8	72.4	82.4	.18	.03**
Q30	67.9	63.9	69.7	.19	.37
Q37	48.7	41.8	61.3	.10*	.01**
Q43	36.0	35.9	42.0	.54	.15
Q49	42.4	42.1	46.0	.50	.21
Q50	60.1	64.5	65.2	.14	.11



Group Comparisons

Significant differences in Top Box Scores

Groups Compared	# of items with significant differences	
	p value $\leq .10$	p value $\leq .05$
Standard and Test A	6/18	2/18
Standard and Test B	1/18	5/18



Trends

Question	Standard	Test A (condensed)	Test B (columns)
Q6	55.3	53.8	56.3
Q9	49.9	54.7	53.7
Q12	38.6	27.8	36.1
Q14	49.7	48.1	66.7
Q16	44.2	18.2	54.5
Q18	70.4	55.2	73.6
Q20	41.7	42.3	42.0
Q22	81.6	75.9	87.0
Q23	77.4	72.9	84.5
Q25	75.3	70.2	79.9
Q26	65.8	59.7	71.0
Q27	81.5	77.2	85.0
Q28	75.8	72.4	82.4
Q30	67.9	63.9	69.7
Q37	48.7	41.8	61.3
Q43	36.0	35.5	42.0
Q49	42.4	42.1	46.0
Q50	60.1	64.5	65.2

In 17 of 18 Qs,
more Rs
said “always”

In 15 of 18 Qs,
fewer Rs
said “always”



Q: Why is this happening?

Standard

6. In the last 12 months, when you phoned this provider's office to get an appointment for **care you needed right away**, how often did you get an appointment as soon as you needed?

Never
 Sometimes
 Usually
 Always



Test B
(columns)

6. In the last 12 months, when you phoned this provider's office to get an appointment for **care you needed right away**, how often did you get an appointment as soon as you needed?

Never  Sometimes
 Usually Always 

More evidence

4. In the last 12 months, how many times did you visit this provider to get care for yourself?

- None → **If None, go to #52 on page 7**
- 1 time
- 2
- 3
- 4
- 5 to 9 → **5.3%**
- 10 or more times

4. In the last 12 months, how many times did you visit this provider to get care for yourself?

- None → **If None, go to #52**
- 1 time
- 2
- 3
- 4
- 5 to 9 → **4.9%**
- 10 or more times

4. In the last 12 months, how many times did you visit this provider to get care for yourself?

- None → **If None, go to #52**
- 1 time
- 2
- 3
- 4
- 5 to 9 → **10.6 %**
- 10 or more times



But why this?

Standard

Please answer these questions about the

21. In the last 12 months, after you checked in for your appointment at this provider's office, were you ever kept informed about how long you would need to wait for your appointment to start?

Yes
 No

22. In the last 12 months, how often did this provider explain things in a way that was easy to understand?

Never
 Sometimes
 Usually
 Always

81.6%

23. In the last 12 months, how often did this provider listen carefully to you?

Never
 Sometimes
 Usually
 Always

21. In the last 12 months, after you checked in for your appointment at this provider's office, were you ever kept informed about how long you would need to wait for your appointment to start?

Yes No

22. In the last 12 months, how often did this provider explain things in a way that was easy to understand?

Never
 Sometimes
 Usually
 Always

75.9%

23. In the last 12 months, how often did this provider listen carefully to you?

Never
 Sometimes
 Usually
 Always

Test A (condensed)



What did we learn about a 4 page survey

- Cost
 - Less expensive & is easier to field
- Response Rate
 - Lower response rate
- Findings – Different top box scores
 - Condensed version (fewer Rs gave “top” scores)
 - Horizontal columns (more Rs gave “top” scores)
 - No differences when controlling for age, gender, or education



What do we need to be able to answer?

- More analysis of current data
 - Test composite scores
- Need to figure out how people are looking at the answer choices (eye-tracking software, please?)
- More methodological testing
 - Compare horizontal & vertical columns



Conclusion



CENTER *for*
SURVEY RESEARCH
University of Massachusetts Boston

Maybe not always, but for now...
bigger IS better *

* when fielding a CAHPS survey



CENTER *for*
SURVEY RESEARCH
University of Massachusetts Boston

Thank you



CENTER *for*
SURVEY RESEARCH
University of Massachusetts Boston