



Health Research Associates, Inc.

ELASTICITY OF WILLINGNESS TO PAY IN PATIENTS WITH URINARY INCONTINENCE

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INTRODUCTION

THE IMPORTANCE OF WTP

(or, willingness to sacrifice in monetary unit)

- To quantify value in monetary units
- To allow calculation of positive and negative factors for total valuation

INTRODUCTION

THE PROBLEMS OF WTP

- Respondents often misunderstand the WTP questions
- WTP associated with ability to pay

OBJECTIVE

- To evaluate the impact of price change on individual WTP for IMPROVEMENT and for CURE of condition in persons with Urinary Incontinence

SAMPLE

- Males and females with stress, urge and mixed Urinary Incontinence seeking care at urology clinics in Seattle and Philadelphia

Demographics and Other Characteristics (n=41)

AGE: - Mean (Std) = 51.2 (10.6) Years
- Range = 18 - 79 Years

GENDER: - Male = 19.5%
- Female = 80.5%

ETHNIC: - White = 83%
- Black = 10%
- Other = 7%

INCOME: - Under \$25000 = 41%
- \$25000-\$50000 = 32%
- \$50 000 and over = 22%
- Missing data = 5%

EDUCATION: - High School = 27%
- College = 34%
- Graduate = 39%

YEARS WITH INCONTINENCE:
- Mean (Std) = 9.3 (10.6) years

GENERAL HEALTH:
- Good /Very Good/Excellent = 75.6%
- Fair = 22%
- Poor = 2.4 %

SELF REPORT OF SEVERITY:
- Mild = 48.8%
- Moderate = 41.5%
- Severe = 9.8%

STUDY DESIGN

- Respondents were given two WTP questions: one for IMPROVEMENT and one for CURE
- Each WTP question elicited patient responses to 11 bids ranging from \$1 to \$200 per month
- The WTP questionnaire was part of a larger self-administered battery measure

WTP Questionnaire

Example of WTP question for IMPROVEMENT

Question 1: concerns how much money you would be willing to pay for a new medication to treat your incontinence.

Imagine: - that this medicine **“improves”** your incontinence
- that there are no significant side-effects
- but that your insurance plan does not cover the cost of office visits or the cost of medicine.

Whenever you answer **“Definitely Not”** you can go forward to Question 2.

If your total monthly bill for improvement of your incontinence was \$1, *would you be willing to pay that amount out of your current monthly income?*

\$1 Yes Yes No No Don't
Monthly Bill Definitely Probably Probably Definitely Know
Not Not

If your total monthly bill for improvement of your incontinence was \$5, *would you be willing to pay that amount out of your current monthly income?*

\$5 Yes Yes No No Don't
Monthly Bill Definitely Probably Probably Definitely Know
Not Not

If your total monthly bill for improvement of your incontinence was \$10, *would you be willing to pay that amount out of your current monthly income?*

\$10 Yes Yes No No Don't
Monthly Bill Definitely Probably Probably Definitely Know
Not Not

WTP Questionnaire

Question 2: concerns how much money you would be willing to pay for a new medication to treat your incontinence.

Imagine:

- that this medicine “**cures**” your incontinence
- that there are no significant side-effects
- but that your insurance plan does not cover the cost of office visits or the cost of medicine.

Whenever you answer “Definitely Not” you will have completed this question, and can stop.

Example of WTP question for CURE

If your total monthly bill for curing your incontinence was \$1, would you be willing to pay that amount out of your current monthly income?

\$1 Yes Yes No No Don't
Monthly Bill Definitely Probably Probably Definitely Know
Not Not

If your total monthly bill for curing your incontinence was \$5, would you be willing to pay that amount out of your current monthly income?

\$5 Yes Yes No No Don't
Monthly Bill Definitely Probably Probably Definitely Know
Not Not

If your total monthly bill for curing your incontinence was \$10, would you be willing to pay that amount out of your current monthly income?

\$10 Yes Yes No No Don't
Monthly Bill Definitely Probably Probably Definitely Know
Not Not

DEFINITION

- **Willingness To Pay:**

is defined as the largest dollar value of the “Yes, definitely” or “Yes, probably” responses to willingness to pay bids.

If your total monthly bill for improvement of your incontinence was \$25, *would you be willing to pay that amount out of your current monthly income?*

<input type="checkbox"/> \$25	Yes <input type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No <input type="checkbox"/>	Don't <input type="checkbox"/>
Monthly Bill	Definitely	Probably	Probably	Definitely	Know
			Not	Not	

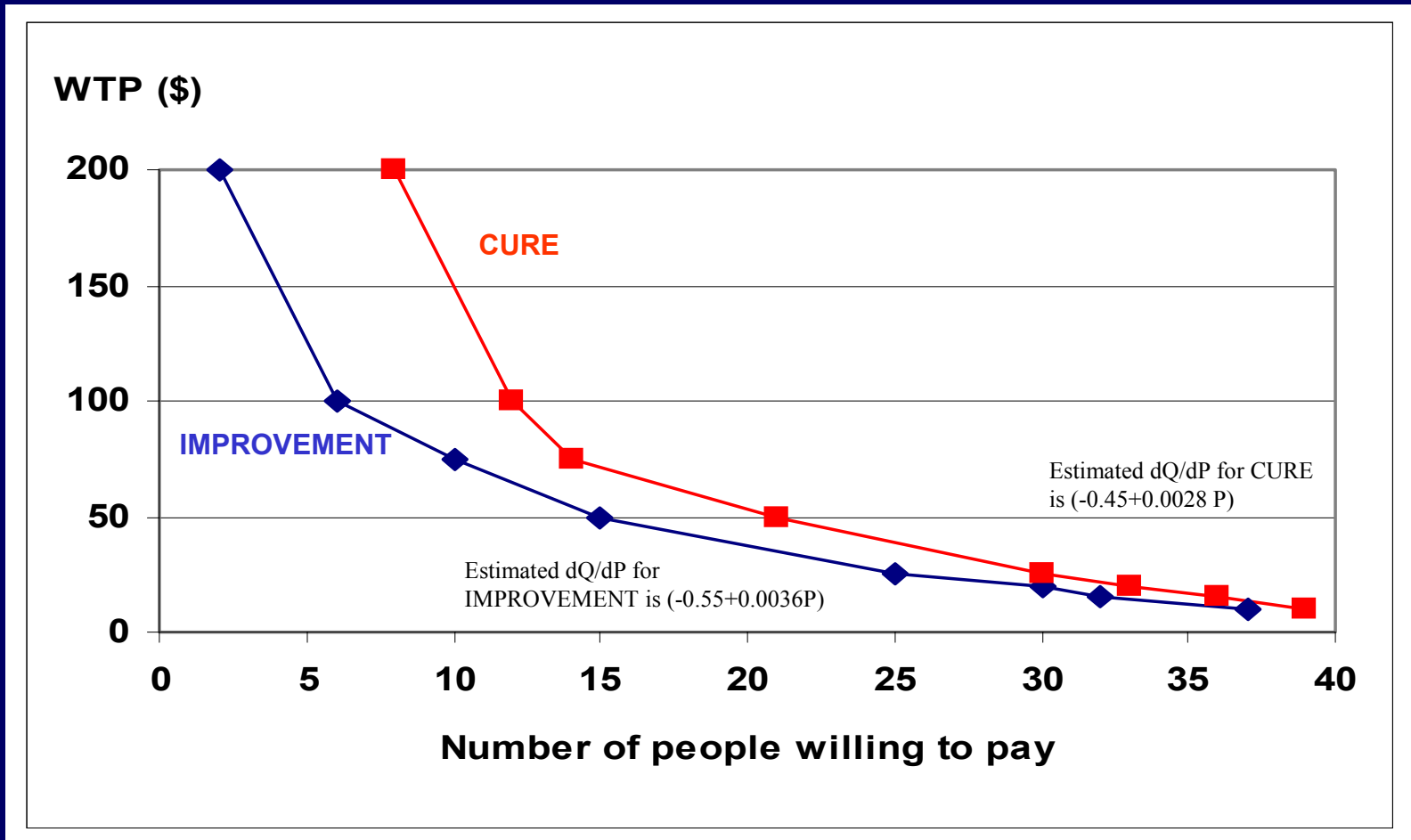
ANALYSIS

- Calculate maximum WTP (in USD) and number of people for each stated dollar value
- Plot the WTP against the number of people
- Calculate the ARC ELASTICITY and POINT ELASTICITY

PRICE ELASTICITY

$$\frac{\% \text{ Change in the number of people who were willing to pay}}{\% \text{ Change in price}}$$

RESULTS



RESULTS

ARC ELASTICITY

Price Range	Comparison
\$5 - \$50	Elast. CURE = Elast. IMPROVEMENT
\$75 - \$200	Elast. CURE < Elast. IMPROVEMENT
\$5 - \$200	Elast. CURE < Elast. IMPROVEMENT

RESULTS

POINT ELASTICITY

Price Range	Comparison
\$5 - \$25	Elast. CURE = Elast. IMPROVEMENT
\$50 - \$200	Elast. CURE < Elast. IMPROVEMENT
\$5 - \$200	Elast. CURE < Elast. IMPROVEMENT

CONCLUSION

- For a price change of up to \$50, people will react similarly for both IMPROVEMENT and CURE
- For a price change of greater than \$50, people will be more sensitive to change for an IMPROVEMENT scenario
- Generally, people are more sensitive to price change for a scenario promising IMPROVEMENT rather than for the promise of CURE