

WILLINGNESS TO PAY IN PATIENTS WITH URINARY INCONTINENCE

S.D. Ramsey ^{1,2}, I. Budhiarso ³, M.L. Martin ³, D.M. Bushnell ³, and D.L. Patrick ²

¹ Department of Medicine, University of Washington, ² Department of Health Services, University of Washington, ³ Health Research Associates, Inc, Seattle, WA, USA

Background

Willingness to pay (WTP) has gained popularity despite the fact that the use of the technique has been limited by concerns regarding the accuracy of the estimates and the reluctance of many decision makers in the medical field to accept measures that are expressed in monetary terms. Several studies using a variety of health care interventions have been conducted to address the technical concerns of WTP. In addition people are beginning to pay more attention in current studies to how willingness to pay can provide important information regarding patient perspectives and values.

Objective

To address the effects of quality of life on willingness to pay (WTP) in patients with urinary incontinence.

WTP Questionnaire

- 4-page self-administered questionnaire for two situations: cure and improvement
- Close-ended WTP bids: 11 bids from \$1 to \$200
- 5 responses: “yes-definitely”, “yes-probably”, “no-probably not”, “no-definitely not”, “don’t know”
- Average administration time: 2 minutes

Methods

At the baseline appointment, participants were given the self-administered study measures. A month after the baseline, participants were mailed a follow-up battery which included instructions and a self-addressed stamped envelope to return the completed battery. All complete data were then cleaned and analyzed, and a regression model was developed.

To estimate the willingness to pay, an Ordinary Least Squares (OLS) regression was utilized:

- The dependent variable is maximum WTP, which is defined as the largest dollar value of the “yes-definitely” or “yes-probably” response to willingness to pay bids.
- The independent variables included income, age, years with incontinence, self-perceived severity, general health, and incontinence-related quality of life (I-QOL).

Results

Independent Variables	Dependent Variable	
	Max.WTP Improvement	Max.WTP Cure
Intercept	8.83	-79.18
Income (mid-point)	0.0014***	0.0018***
Age	0.65	1.95**
Years with incontinence	-1.71**	-2.86***
Self-report of severity	28.75**	51.84***
General health	-10.99	-23.94**
I-QOL	-0.79*	-0.043
NOTE	n = 38 F = 4.73*** R ² = 0.47 Adj. R ² = 0.37	n = 38 F = 5.68.*** R ² = 0.52 Adj. R ² = 0.43

- **For improvement:** income and self-report severity have a positive and significant impact; years with incontinence and I-QOL have a negative and significant impact; age and general health are statistically insignificant.
- **For cure:** income and self-report of severity have a positive and significant impact; years with incontinence, age and general health have a negative and significant impact; I-QOL is statistically insignificant.
- The R-square and F statistics for each model showed that the variables in the model reasonably explain the variation of WTP at a significant level.

Sample

Participants in the study were recruited from clinics, newspaper advertisements, posters, and contact cards at medical centers in Seattle and Philadelphia. To ensure they met the inclusion criteria, the site staff carefully surveyed the subjects using a clinician-established screen. After being screened for the presence of UI, a total of 41 patients were entered into the study.



Conclusion

Quality of life (as measured by the I-QOL) has an inverse and significant impact on the willingness of incontinent patients to pay for improvement of their condition. Curiously, the better their quality of life, the more they are willing to pay, and only for improvement, not for cure. As expected, however, the higher the income, and the more severe the incontinence, the greater the willingness to pay for both improvement and for cure. Finally, the more years a person has lived with urinary incontinence, the less they are willing to pay (most likely due to accommodation to the condition). The mean predicted willingness to pay for cure is \$66.26 a month, while the WTP for improvement is \$42.65 a month.