

Evaluation of the Australian Captioned Telephone Trial: A Non-Technical Summary*

OVERVIEW

This study was commissioned by the Australian Communication Exchange Ltd (ACE), to evaluate its Australian trial of captioned telephone services (CTS). Two surveys and five focus groups were conducted for the study to produce quantitative and qualitative indicators of the effect of CTS on the health-related quality of life (HRQoL) and well-being of people who have a hearing deficit. A contingent valuation (CV) study was also undertaken to estimate how much CTS users value the service, in monetary terms. One hundred and sixty-one (161) people responded to the online surveys. The response rates for the baseline and followup surveys were 66% and 57%, respectively.

The quantitative and qualitative results suggest that the availability of CTS is associated with important and, for some respondents, profound improvements in HRQoL. CTS users reported lower levels of embarrassment, nervousness, feelings of handicap, and other adverse aspects of using a telephone. Many users described the impact of CTS in transformational or profound terms, in relation both to their interactions with family and friends, and at work. A large majority of people who had used the captioned handset at work indicated that they had experienced improvements in work-related performance, such as their abilities to perform a wider variety of tasks, and overall productivity.

Participants in the contingent valuation study indicated that they would be willing to forgo consid-

erable amounts to retain access to CTS. On average, respondents were willing to forgo approximately 9.5% of their annual incomes to have continued access to CTS. This result is remarkable because the sample was over-represented by lower-income households.

Readers who are interested in a detailed account of the methods and results reported here are referred to Connelly (2011).

METHODS AND MEASURES

The main results consist of comparisons of baseline and followup responses to a range of hearing-related questions about using a telephone. At the baseline, no respondent had access to a captioned telephone. At followup, all respondents were captioned telephone users. The baseline and followup surveys used similar questions about using the telephone so that responses could be compared. An index, called the Hearing Handicap Index for Telecommunications (HHIT) was devised to test for an association between CTS and a reduction in the problems that people with hearing impairments may experience when they use the phone.

Focus groups of CTS users were held in Brisbane, Sydney and Melbourne and these participants also took part in the CV study. In addition, a focus group of people who do not use CTS but were interested in doing so was held in Brisbane. A focus group of local businesspeople was also held to demonstrate CTS and TTY and ask hearing parties about their experience using these two substitute technologies.

The CV study was conducted via individual, face-to-face interviews with CTS users who attended

*This document provides a non-technical summary of the methods and results that were used to evaluate the Australian Captioned Telephone Trial. For a discussion of technical background, statistical analyses, and citations, please refer to Connelly (2011).

the focus group meetings in Brisbane, Sydney and Melbourne.

RESULTS

The captioned telephone was associated with a large reduction in the chance that a high-range hearing handicap was reported to be associated with telephone use. By comparison with non-CTS users, and after controlling for other factors (such as age, gender, self-reported hearing loss) that could affect the results, CTS users were:

- 56% less likely to report a hearing handicap in the top-third range of the Hearing Handicap Index for Telecommunications (HHIT);
- 17% less likely to report the highest level of hearing handicap on the 19-point HHIT;
- 40% less likely to report feeling upset by his/her hearing problem when using the phone;
- 34% less likely to report feeling frustrated trying to communicate family on the phone;
- 28% less likely to report feeling frustrated talking to friends on the phone;
- 20% less likely to report feeling embarrassed by a hearing problem when using the phone.
- 25% less likely to report that a hearing problem moderately or greatly affected the way they feel about themselves.

A small number of respondents had used a captioned telephone at work. The results of its use in the workplace are also remarkable:

- 75% of these respondents indicated that the phone had improved (i) work satisfaction, (ii) communication with colleagues, coworkers and customers, (iii) work-related satisfaction and (iv) their ability to fulfil the expectations of clients and customers;
- 88% also indicated that the phone had changed the range of tasks they could perform at work;
- 69% believed that the phone had both changed the way that they worked, and the range of tasks that they actually performed at work; and
- more than half of these respondents believed that access to the phone, in the workplace, could enable them to retire later in life.

Two-thirds of respondents were either satisfied, or very satisfied with the captioned telephone service.

The major source of dissatisfaction for most respondents was the limited hours of operation of the captioning service during the trial: only 28% of respondents were satisfied or very satisfied with the hours of operation. The other primary source of dissatisfaction concerned teething problems with the setup of the technology which often were attributable to an inadequate internet connection.

The qualitative results derived from open-ended comments by survey respondents and from focus group meetings are consistent with the quantitative evidence obtained from responses to the survey items. Respondents were generally enthusiastic about CTS and a number described its impact on their home and work life in terms that may be described as transformational or profound.

Participants in the CV study were willing to forgo, on average, 9.5% of their annual incomes to have continued access to CTS after the trial ends. This is remarkable given the over-representation of low-income households in this study.

CONCLUSION

This study of the trial of CTS in Australia used a variety of measures and methods, both qualitative and quantitative, to examine the impact of CTS on the lives of people who may benefit from captioned calls. Remarkably, all of the evidence points in the same direction: CTS is strongly and positively associated with reductions in the reported feelings of handicap and frustration with telephone use; it is preferred to TTY by most people who have used both technologies; and the qualitative responses of many respondents suggest that their access to CTS has transformed the way they feel about themselves, increased their feelings independence, and has reduced feelings of social isolation. Furthermore, individuals are willing to sacrifice, on average, approximately 9.5% of their household incomes to have continued access to CTS. This is remarkable considering the modest household incomes of most respondents. A population-based study of WTP would likely yield greater values for CTS, given the relationship between ability to pay and WTP and the considerably higher mean income of the Australian population than of this sample.

REFERENCES

Connelly LB, *An Evaluation of the Australian Captioned Telephone Trial*, Australian Centre for Economic Research on Health Research Report No. 12, September 2011, ACERH: Canberra.