RWD154

Preferences and Willingness to Pay for Mammography Screening Services Among Working-Age Urban Women in Thailand.

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BACKGROUND

- Breast cancer is the most common cancer among Thai women.
- Early detection via mammography greatly improves survival outcomes.
- Mammography is not covered under Thailand's universal health coverage.
- Discrete choice experiments (DCEs) quantify trade-offs in health service attributes and can guide policy on cost-sharing.

OBJECTIVES

- To quantify preferences and willingness to pay (WTP) for mammography screening services among urban women aged 40-59 years in Thailand.

METHODS

We conducted a DCE, approved by the Mahasarakham University Ethics Committee (No. 534-434/2024).

Attribute development:
Based on literature review, expert interviews, and focus groups, we identified four attributes—waiting time, travel time, opening hours, and screening cost.

Experimental design:
A D-efficient design generated 36 choice sets, divided into six blocks, each with eight sets (two internal validity checks, with opt-out choice).

Questionnaire:
The questionnaire included an educational video, choice tasks, and sociodemographic questions; pilot testing confirmed their clarity.

Sampling:
Stratified random sampling was conducted across Thailand's four regions. Eligible participants were women aged 40–69 years with no personal history of breast cancer.

Data collection:
In-person interviews were conducted from November 2024 to February 2025.

Analysis:
Mixed logit models estimated preference coefficients, relative importance (RI), and WTP for each attribute level.

Table 1 Attributes and levels used in the DCE

Attributes	Definition	Levels
Waiting time	Time to wait for an appointment for mammography screening.	• 2 weeks • 1.5 months • 3 months
Travel time	Time spent traveling from home to the screening facility.	• Less than 3 hours • More than 3 hours
Opening hours	Opening hours for mammography screening services at the facility.	• During and outside office hours and weekend • During office hours
Screening cost	Out-of-pocket cost of screening.	• THB 2,000 (US$59) • THB 3,000 (US$89) • THB 4,000 (US$118)

Attributes	Screening option A	Screening option B	No screening
Waiting time	3 months	2 weeks	No screening
Travel time	More than 3 hours	Less than 3 hours	
Opening hours	During office hours	During and outside office hours and weekend	
Screening cost	THB 2,000	THB 4,000	
Which option would you choose ?	☐ choose option A	☐ choose option B	☐ No screening

Figure 1 Example of the mammography screening services choice set

RESULTS

- A total of 168 participants completed the survey.
- **Preferences:** Positive preferences for a 2-week wait, travel time < 3 hours, and extended opening hours, and negative preferences for higher screening costs.
- **RI:** Cost had the highest RI (57.0%), followed by waiting time, opening hours, and travel time.
- **WTP:** US$18.3 (2-week wait), US$17.1 (extended opening hours), US$9.2 (travel time < 3 hours).
- The 1.5-month waiting time was not statistically significant.

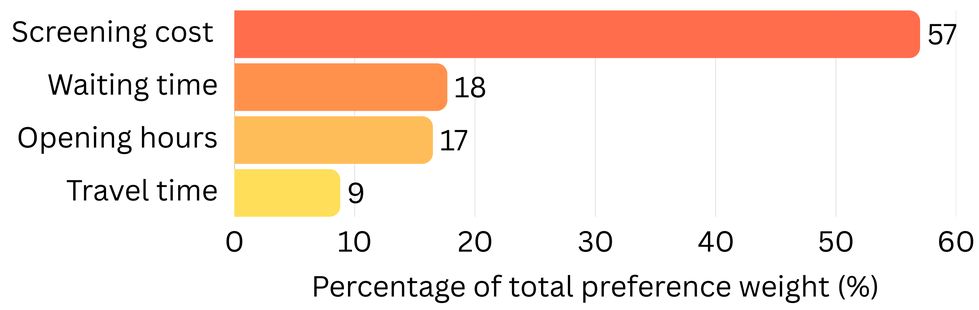

Figure 2 Relative importance of each attribute

Table 2 Attribute importance coefficients from mixed logit

Attributes and levels	Coefficient (95% CI)	SE	p-value
Waiting time (Ref: 3 months)			
2 weeks	0.694 (0.465 to 0.924)	0.117	**<0.001**
1.5 months	0.019 (-0.155 to 0.192)	0.088	0.834
Travel time (Ref: More than 3 hours)			
Less than 3 hours	0.347 (0.193 to 0.500)	0.078	**<0.001**
Opening hours (Ref: During office hours)			
During and outside office hours and weekends	0.647 (0.484 to 0.809)	0.083	**<0.001**
Screening cost	-0.0011 (-0.0013 to -0.0009)	0.0001	**<0.001**

95% CI, 95% confidence interval; SE, standard error.

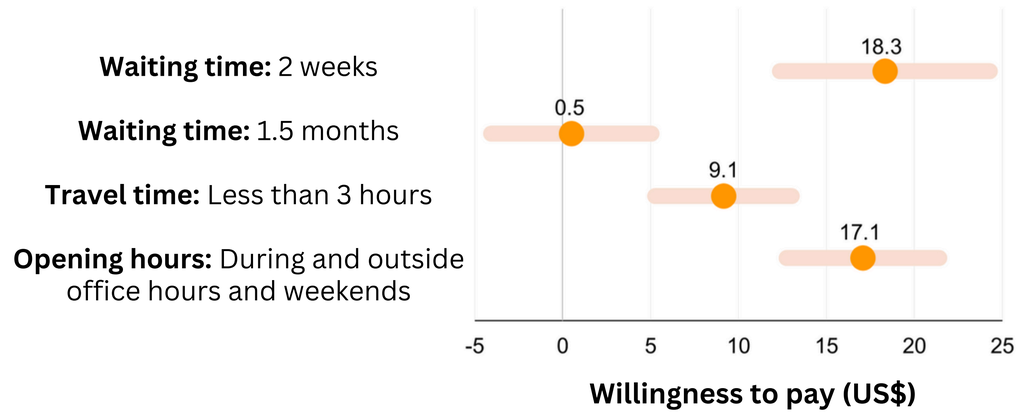

Figure 3 Willingness to pay for each attribute level

CONCLUSIONS

- Cost is the most influential factor in screening choices.
- Respondents valued shorter waiting times, extended service hours, and shorter travel times.
- These insights can inform policy to align program design and pricing with women's willingness to pay.

Acknowledgements

The authors thank the Faculty of Pharmacy, Mahasarakham University, the Health Systems Research Institute for funding support, and all experts and stakeholders for their valuable contributions to this study.

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