

Determinants of Pricing for Emergent Inter-hospital Ambulance Transfer in a Developing Setting: a Geographically Randomized Study

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This paper recently received the Rose Undergraduate Research Award.

Objectives: To identify the determinants of willingness-to-pay (WTP) for government ambulance referral transports from a rural municipality to a regional hospital to provide information on access to emergency health-care in a developing country setting.

Methods: A geographically randomized survey instrument comprised of socioeconomic indicators, system usage statistics, and three-case bidding game was administered. Multiple linear regression and comparison of means were used to stratify the sampled population and identify the primary and secondary components of WTP for referral transport.

Results: The primary quantitative determinants of WTP for ambulance transport in Santiago Atitlan include the socioeconomic measure, household daily income, the sociogeographic measure, rural vs. municipal, and the respondent characteristic, formal schooling. Although bottom-tier socioeconomic strata had lower WTP for severe and medium-grade emergencies, they had higher WTP for simple emergencies than the wealthy. Those of lower socioeconomic status were also more likely to be excluded from transport at the current price. In addition, we discovered that the community was not only generally unaware of recent changes in transport pricing, but also faced a number of cultural barriers in engaging with emergency transport decisions.

Conclusions: WTP for referral transport primarily represents the combinatorial effect of family capacity to pay and respondent perspective. Respondents are willing to pay a significant portion of transport costs but also consider cultural barriers, non-transport costs, and value-to-family of the sick and injured in determining their WTP. Respondents were best stratified by rural and municipal divisions, suggesting that awareness of medical resources plays a large role in WTP for services. Future work should consider the role of public education campaigns and subsidies for emergency referral transport in improving access-to-care.