Author’s response to reviews

Title: Willingness to Pay for Physician Services at a Primary Contact in Ukraine: Results of a Contingent Valuation Study

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Author’s response to reviews: see over
REVISION NOTES

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Title: Willingness to Pay for Physician Services at a Primary Contact in Ukraine: Results of a Contingent Valuation Study

We would like to thank the reviewers for their important and useful comments. We have revised our paper following the reviewers’ suggestions. Below, we explain how we have responded to the reviewers’ comments.

Associate Editor’s comments

General comments
This is an interesting paper that presents the results of a contingent valuation study of people’s willingness to pay for physicians’ services in public facilities in the Ukraine. The results might hold interest among researchers and policy makers in similar societies where individuals are forced to pay out of pocket for health services that are officially supposed to be funded by the government. However, although the study and results are unique, the manuscript requires some considerable work (particularly with respect to describing the methods used) to bring it up to standards for a high-quality peer-reviewed journal.

Response:
We are grateful to the Associate Editor for recognizing the relevance of our study for both researchers and policy-makers. We agree that a more detailed description of the methods and additional discussion could improve the paper. We addressed this general concern by answering to the specific comments below. The most substantial changes are done in the Methods and Discussion sections.

Specific comments:
1. Pages 3/4: This section nicely sets the stage for the usefulness and relevance of the study.
   Response: Thank you for confirming this.

2. Page 5, last paragraph, 1st sentence: It states that the study was to obtain people’s views on paying for ‘major health problems’, but beyond this, there is no information anywhere else in the manuscript on how this was presented to the survey participants.
   We added Appendix A where the English wording of the contingent valuation task is presented, including the specification of ‘major health problems’ presented to the participants.
This comment is closely related to the next comment#3 about the content of the contingent valuation task. Therefore, the detailed response is presented to comment#3.

3. Pages 6/9: This section does not clearly explain how the actual contingent valuation technique was applied. (Appendix A was missing) Were choice sets offered to participants? Was there a ranking used? How exactly was the amount of money established? The last line on page 6 seems to suggest that people had to pick an amount of money that they would pay (if they would pay at all) for a physician with a particular profile. Was there a range of numbers offered to them? Or did they select a number themselves? The text does not really explain this well. Is Figure 1 actually how each profile was presented to an individual and answers solicited at each step? None of this is clear. This section will have to be more clearly described before this is publishable.

Response: Based on the questions of the reviewer, the following changes were made in order to describe better the contingent valuation task:

§ Appendix A is added to present the English wording of the contingent valuation task presented to the participants. The appendix shows one of the physician profiles offered to the participants as well as the set of questions used to establish the maximum amount of money that a participant was willing to pay for a given profile.

§ In the Methods section, page 6, last paragraph, an explanation of the question sequencing is also added to explain Figure 1:

“Respondents were asked to state if they would be willing to pay for a visit to a physician with quality and access characteristics expressed by four profiles. In case a respondent was willing to pay, a combination of the payment cards and open-ended questions was applied: first the respondent selected a payment interval from the card, then, an exact amount within the interval (open-ended question). Payment cards allowed framing respondents’ answers (preventing overstatement), while exact values elicited by the open-ended questions, served as a more precise indication of the maximum WTP level. If a respondent was not willing to pay, s/he was asked to state the reason. The exact wording of the CV tasks is presented in Appendix A.”

4. Pages 9/12: The results section is interesting. Figure 2 is informative. There is a lot of information in Table 4 but the text in the Results section really does not explain much of it clearly. The authors seem to have assumed that readers will know exactly how the analyses were done.

Response: We assume that this comment is related to the insufficient description of the methods. Therefore, the following changes were made to better describe the way analysis was performed:

§ In the Methods section (since page 8 last paragraph to page 10) we add model specification for the three modeling stages. First, we describe the three outcome measures for objection to pay, inability to pay, and the level of willingness to pay (logarithmic). We show that for the two former measures, binary response models are suitable and, therefore, we provide equation for random effect logistic regression. Random effect is explained to be chosen in order to account for the fact that each respondent provided four answers. We also explain that the exponential coefficients of this regression represent the odds ratios for the change in the explanatory characteristics. Then, we provide the description of the random effect linear model for the logarithm of the willingness to pay. We also show that
the coefficients of the model represent the percentage change in the willingness to pay in response to a unit change in the explanatory characteristics.

§ In the Results section (page 11, paragraph 2) we added a description of the results organization in table 4. We explain that table contains three models for three response measures: objection to pay, inability to pay, and the level of willingness to pay (logarithmic). We also show two versions of each model: full model with all predictors, and reduced model with only significant predictors. This is done for comparison purpose as further conclusions are made about predictors that are insensitive to specification, i.e. significant in both full and reduced models.

§ The headings of the models describing the designation of the model specification (random effect logit and random effect linear) are added in table 4.

5. Pages 12/15: This is the section in which the authors should have discussed the limitations of their study. For example, this is a study of stated preferences, and people might not actually behave in real life as they state. How might this affect actually using the results to guide decisions on payment of physicians in the Ukraine? As well, there should be a discussion on the level of information that the participants had on things such as a doctor’s salary, so that they might understand the values they came up with in the WTP part.

Response: Based on the reviewer’s comment, we made the following changes:

§ We added a discussion on the main limitations of the study, such as small sample size and hypothetical bias (see Discussion section, page 13, paragraph 3 and 4). We discuss that moderate sample size of 303 respondents might have some impact on the significance of the discovered relations, but we make conclusions only about the strong relations. We also discuss the implications that the hypothetical bias, i.e. difference in respondents’ behavior in hypothetical and real markets, might have had on the results of the study. We explain that our results should not be interpreted as an indication for the level of patient charges, but should be seen as an indication of the potential that patient charges have and to derive main value drivers for the patients.

§ The paper (see page 14, paragraph 2) contains now a discussion on the respondents’ attitudes and prior information (including information on physicians’ salary), and the way this might affected the results. We argue that the fact that some part of the respondents might be negative about paying formally (reasons are provided) and perception of the informal payment as an act of solidarity, might lead to understatement of real willingness to pay in our experiment.
Reviewer 1: Ana Gil Lacruz

I enjoyed very much reading the article. I found innovative and it provides new argumentation lines for solving the problem of health public funding.

Response: We thank the reviewer for a positive general assessment of the paper.

Major revision

1. I would like to know the authors’ opinion about the consequences of introducing prices on the public health sector. For example, I am wondering if medical staff will ask for higher wages. For one, the unofficial charges will get reduced, and on the other the health system will have extra-revenues.

Response: The introduction of the official charges might have different effects, which are hard to predict. To respond to the reviewer’s comment, we add we add a discussion of possible effects of official charges from the perspective that quality and access improvements should be introduced (page 15, last paragraph – page 16, first paragraph). We argue that additional funds should not be used for maintenance of the system, but targeted at quality and access improvements, which also implies better personnel motivation.

I would like also to know how the working conditions of people who work at the health sector are. Do they need unofficial charges?

Response: We provide the level of physicians’ salary (page 14, paragraph 2). We also discuss that physicians’ salary is low in comparison to the rest of the Ukrainian economy, and general population is aware of this fact. Patients express solidarity paying informally to the doctors (page 15, paragraph 1).

2. Do the authors know how much health goods and services cost? It would be interesting to compare the WTP with approximated costs.

Response: Unfortunately, no estimations of service cost are available for Ukraine. We explain this in the Discussion (page 15, paragraph 1). Therefore, we make a rough comparison to the personnel cost instead.

3. I imagine the quality of health services is measured taking only into account individual perceptions. Why are not Ukrainians satisfied with the quality of care? What do the authors think about the quality of health services in Ukraine?

Response: In the Background (page 4, paragraph 1), we provide evidence that patients suffer from lack of access to proper care (especially in rural areas), long waiting lines, reluctance of the unmotivated medical staff, and obsolete and inefficient treatment methods.

4. I find very interesting the third paragraph of page 14. ..."inability is a perceptional issue depending on personal attitude and life-style...". Given the estimations are not controlled by life-styles I suppose this is just a hypothesis of the authors rather than a demonstrated fact. Anyway, I find this is one of the most interesting paragraphs of the paper, so it would be interesting to have more details about it.

Response: We did not mean to control for life-style. This was a misleading statement. An emphasis in this situation should be put on the distinct mechanisms of being unable to pay and defining level of the willingness to pay. We addressed
this issue by changing explanation (see page 16, last paragraph - page 17, first paragraph):

“It is notable however that inability to pay is related to perceived income level, while the level of WTP is related to monetary income. This reveals the fact that inability is a perceptual issue depending on the evaluation of one’s own income level, while the level of the WTP is defined by the objective monetary budgetary constraints. This suggests that different mechanisms underlie the two stages of the decision about willingness to pay for the physician services and this should be accounted for in the WTP modeling.”

Minor revision

1. In page 4, how small is the health expenditure administered by the private sector?

Response: Unfortunately, official published data, such as from National Statistics Services or from WHO, do not allow the estimation of the share of the total health expenditure or of the out-of-pocket expenditure administered in the private sector. The detailed data we have from 2003-2004 is not published and we cannot cite it. Therefore, we just state in the Background (page 4, paragraph 2) that the exact size of out-of-pocket payments in the private sector is unknown.

2. In page 9, I suggest changing the effect of “X1” or “X2” for the name of variables. There is no identification what it is included under X1 or X2.

Response: The designations of the effects were changed to “Specialization” and “Quality/access improvements” respectively (see page 9, last paragraph and Table 1).

3. The concept “ideological reasons” is very vague. I suggest giving some examples of ideological reasons or deleting “other ideological reasons” in page 16.

Response: The text was changed as follows (see page 18, 3rd paragraph):

“We found that acceptability/objection to pay is mostly caused by quality/access characteristics of the services and it is not related to objective socio-economic barriers.”