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PAYING FORMALLY OR INFORMALLY? Eliciting preferences for physician services in Ukraine using discrete choice experiment

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Introduction

Outcomes of the contemporary “*free-of-charge*” provision of medical services in Ukraine:

- Low quality
- Chronic lack of funds
- Reduced access for certain population groups
- Underdeveloped primary health care
- **Dominance of informal patient payments^{1,2,3}**

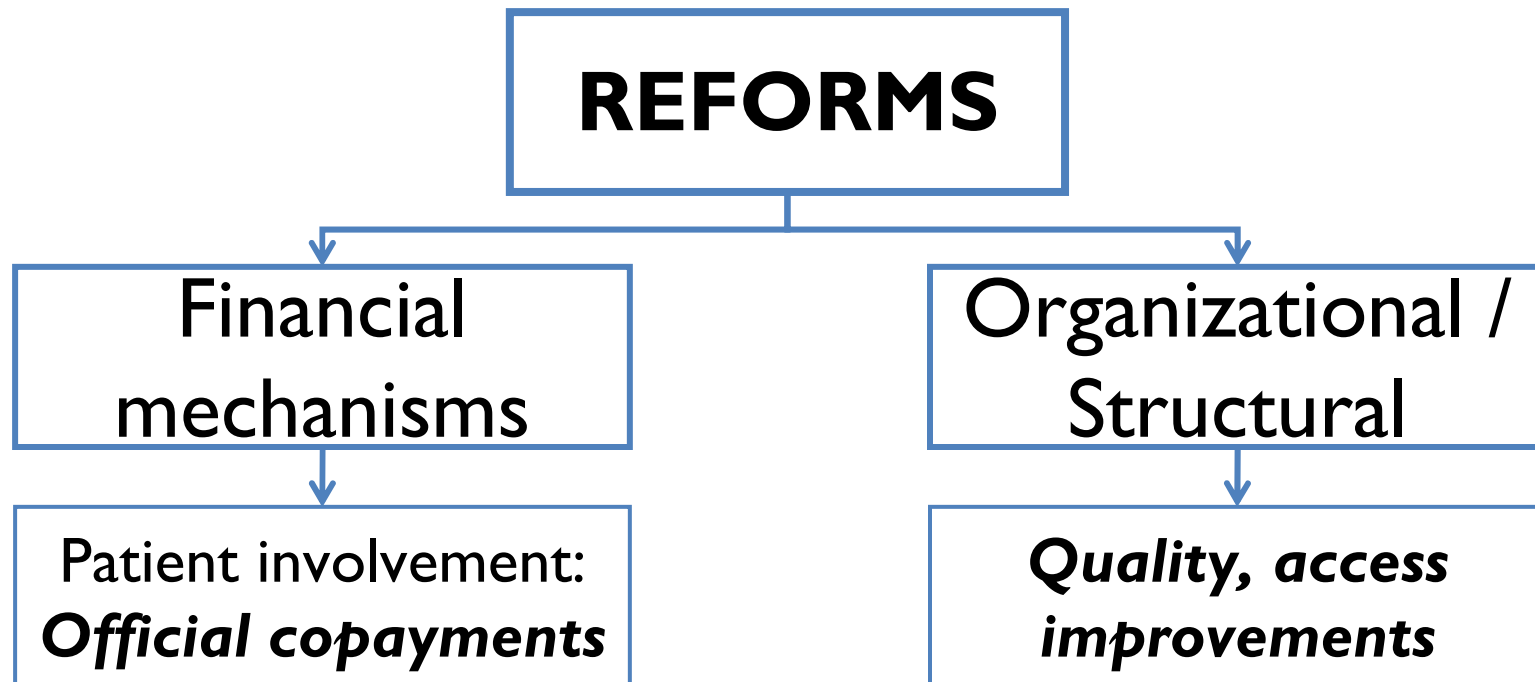
¹ Balabanova, D., Mckee, M., Pomerleau, J., Rose, R., Haerper, C.: Cross-Country Comparisons Health Service Utilization in the Former Soviet Union : Evidence from Eight Countries. Health Serv. Res. 39(6), 1927-1950 (2001)

² Lekhan, V.M., Slabkyj, G.O., Shevchenko, M.V.: Health care system strategy development: Ukrainian measuring. Ukraina (in Ukrainian). Zdorovja naciji 1(13), 5-23 (2010)

³ Litvak, A., Pogorilyj, V., Tyshchuk, M.: Shade economy and future of the medical care in Ukraine (in Ukrainian). Vyd.TES, Odesa (2001)



Introduction



Patients' perspective
Potential? Barriers? Trade-offs?



Objectives

Study **preferences** for the **physician services** at a **primary contact**:

- ▶ Quality characteristics
- ▶ Access characteristics
- ▶ Price
- ▶ **Formal vs Informal way of payment**
- ▶ Specialization of the physician



Special
Focus!



Data

- ▶ Pilot survey
- ▶ Our questionnaire joined the bigger survey
- ▶ 303 respondents
- ▶ Representative of Ukrainian population
- ▶ Slight over-presentation of certain groups occurred
- ▶ No information about non-respondents



Methods

Discrete choice experiment

Example

1 of 16 tasks

Imagine you have some major or severe symptoms.

Given this and taking into account your real life situation which of the physicians from each pair (A or B) would you choose if you met the following choices in the real market? Please perform all the 16 choice tasks.

Physician A	Physician B
<ul style="list-style-type: none">•General practitioner•Outdated medical equipment•Old looking physician's office•Polite treatment of medical staff•15 min travelling to the office•45 min waiting in front of the office•20 UAH out of the patient's pocket•Formal payment	<ul style="list-style-type: none">•General practitioner•Out-dated medical equipment•Old-looking physician's office•Arrogant treatment of medical staff•15 min travelling to the office•10 min waiting in front of the office•20 UAH out of the patient's pocket•Informal payment
<p>If you had to choose what physician would you choose?</p> <p><input type="checkbox"/> A</p> <p><input type="checkbox"/> B</p>	

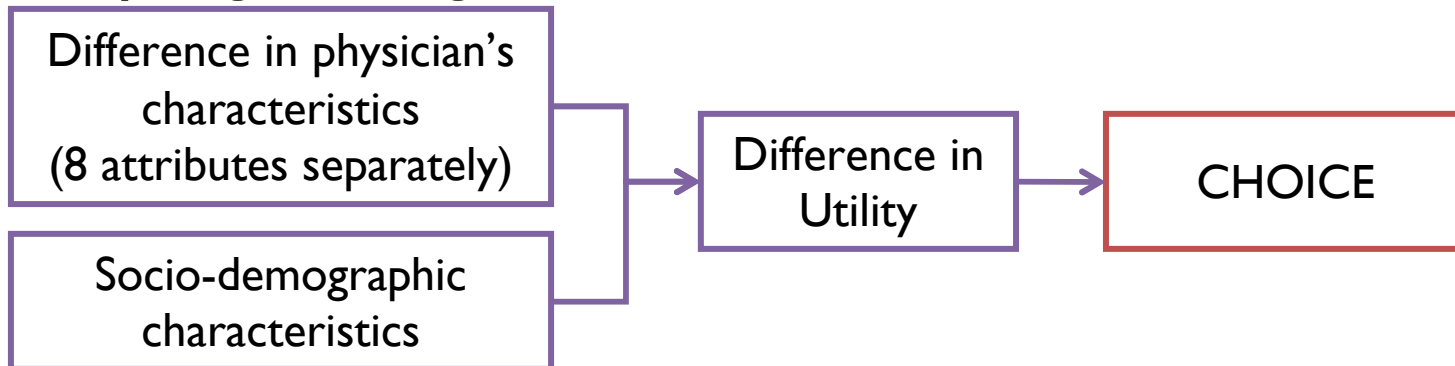


Methods

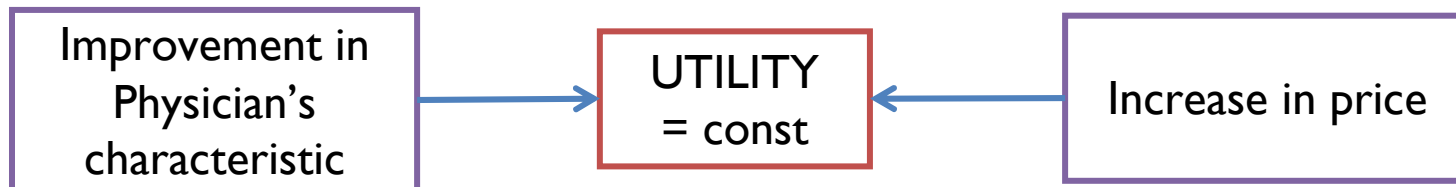
Modeling and analysis

- **Discrete choice experiment**

Binary logistic regression:



Marginal willingness to pay: (monetary value)



RESULTS



RESULTS: Marginal WTP

Attribute	Change	Marginal Willingness to Pay, UAH per visit	
		Main effects only	Weighted for soc.- dem. char.
Physician's specialization	From GP to medical specialist	-	8.93
State of the medical equipment	From outdated to modern	71.13	57.43
Maintenance of the office	From old-looking to modern	21.68	27.26
Attitude of the medical staff	From arrogant to polite	103.56	86.68
Travel time to the office	From 60 min to 15 min	35.61	32.91
Waiting time in front of the office	From 45 min to 10 min	25.96	22.80
Form of payment	From informal to formal	-	1.68

► 1 UAH \approx 0.10 Euro

RESULTS: Preference prioritization

Attribute	Priority
Attitude of the medical staff	1
State of the medical equipment	2
Maintenance of the office	3
Travel time to the office	3
Waiting time in front of the office	3
Physician's specialization	4
Form of payment	4



RESULTS: Socio-demographic effects

Attribute	Change	Reinforcing factors	Protective factors
Attitude of the medical staff	From arrogant to polite	<ul style="list-style-type: none"> • Elderly (>70y.o.) 	<ul style="list-style-type: none"> • No or primary education • Poor or very poor health • Capital residence • 30-80% of family members do not work
State of the medical equipment	From outdated to modern	<ul style="list-style-type: none"> • Residing in small cities and towns 	<ul style="list-style-type: none"> • Males • No or primary education • Poor or very poor health • Capital residence
Maintenance of the office	From old-looking to modern	<ul style="list-style-type: none"> • Higher or doctoral education • 1 or 2 children in a family • Rural residence 	<ul style="list-style-type: none"> • 30-80% of family members do not work
Travel time to the office	From 60 min to 15 min		<ul style="list-style-type: none"> • Missed more than 14 days due to illness



RESULTS: Socio-demographic effects

Attribute	Change	Reinforcing factors	Protective factors
Waiting time in front of the office	From 45 min to 10 min	<ul style="list-style-type: none"> Residing in middle-size cities 	<ul style="list-style-type: none"> Not working Missed more than 14 days due to illness
Physician's specialization	From GP to medical specialist	<ul style="list-style-type: none"> Younger than 20 Missed more than 14 days due to illness Higher income (>1000UAH per person) Capital residence 	<ul style="list-style-type: none"> Assigned to disability category
Form of payment	From informal to formal	<ul style="list-style-type: none"> No missed days due to illness 	<ul style="list-style-type: none"> Younger than 20 Higher income (>1000UAH per person) Residing in small-size cities and towns Residing in rural areas
Size of patient payment	Increase	<ul style="list-style-type: none"> Very good or perfect health 	<ul style="list-style-type: none"> Elderly (>70y.o.)



RESULTS CONFIRMED:

Contingent valuation

Factors	Change in factor	Effect on WTP, UAH per visit
Joint quality improvements	Improved medical equipment Improved maintenance Reduced waiting time	21-22 UAH higher
Specialization of a physician	From GP to medical specialist	6.4-6.6 UAH higher
Socio-demographic		
	Aged (>70 y.o.)	21-22 UAH lower
	People having private insurance	36-45 UAH higher
	Higher income group	20-21 UAH higher



CONCLUSIONS & DISCUSSIONS



CONCLUSIONS

Patient payment policies

- ▶ Introduction of formal patient payments in Ukraine has certain potential:
 - High marginal WTP for quality improvements (in priority order):
Attitude of medical staff, State of medical equipment, Maintenance of the office, Travel and waiting time reduction
 - **BUT!** patients should understand that funds are allocated to IMPROVEMENTS, and not maintaining the system



CONCLUSIONS

Exemption mechanisms

- ▶ The group that is the most sensitive to price is:
 - ▶ Elderly people (>70 y.o.)
- ▶ Exemption mechanisms should be based on these criteria and implemented together with patient payment policies.



CONCLUSIONS

Strengthening the primary health care

- ▶ On the societal (sample) level there is no strong explicit preference for medical specialist over GP or vice-versa
- ▶ However, there might be some intention for primary level avoidance (referring directly to a medical specialist) in some groups.
- ▶ It might be necessary to use price signals providing disincentives for direct access to medical specialist (GP bypass).



CONCLUSIONS

Dealing with informal payments

- ▶ These policies might meet obstacles in inertial involvement of the population in paying informally
 - No explicit preferences for paying formally or informally at a sample level
- ▶ There are **‘risk groups’** that due to some cultural reasons or life style might explicitly prefer informal payments:
 - People residing in rural areas or small cities/towns
 - Younger people
 - People with higher income





Thank you for your attention!

