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Romania: pilot project focusing on the working preferences of physicians and nurses in two hospitals in Romania, using Discrete Choice Experiments

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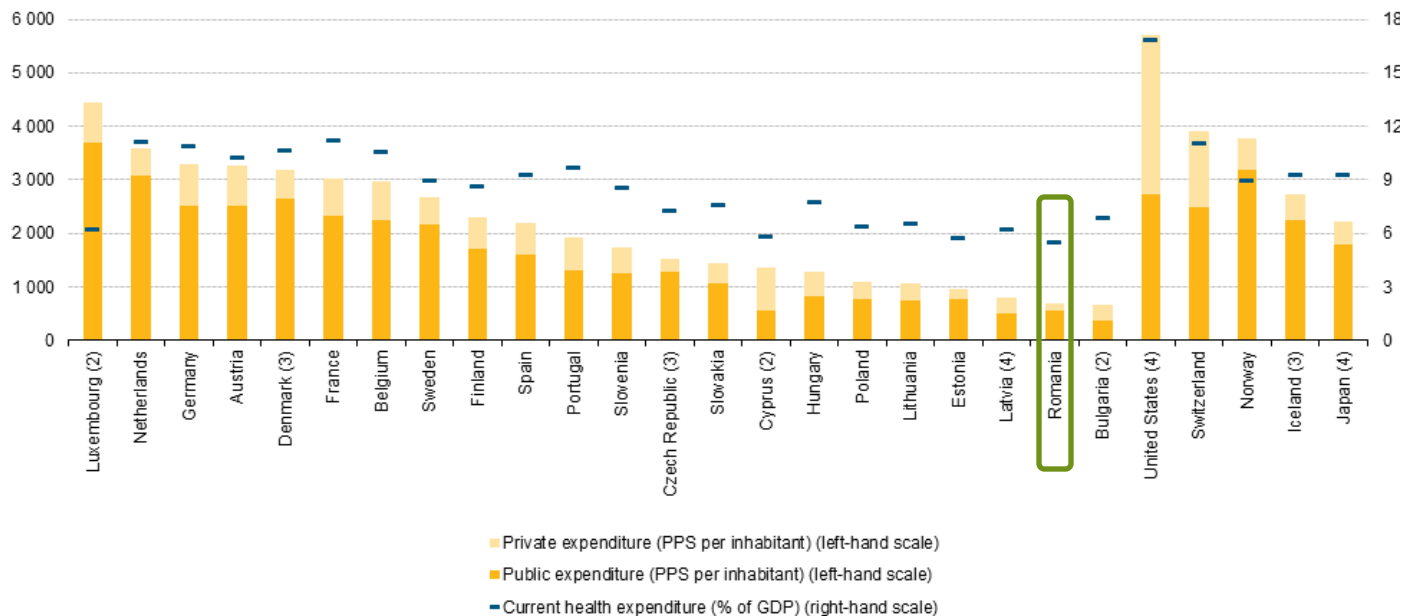
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Romanian healthcare system

- Social health insurance system
- Low % of GDP for health expenditures (~5%)





Romanian healthcare system

- Increasing urban-rural disparities in terms of resources distribution
- 50% of population in rural areas, whereas only 20% of physicians, 30% of pharmacists
- The number of patients allocated to a physician in rural areas – 6 times higher than in urban areas
- Inter-regional disparities



Romanian health workforce

- Mobility of health professionals has become a more acute issue since 2007
- No (accurate) data on the outflows and inflows

Table 16.1 *Main data sources and data holders on health professional mobility in Romania*

Data holder	Type of data
Ministry of Health and its subordinate institution, the National Centre for Organising and Ensuring the Health Information System (NCOEHIS)	National registry of medical doctors and dentists Number of requests for diploma recognition certificates
RCP	National registry of practising medical doctors
Romanian College of Dental Practitioners	National registry of practising dentists
Order of Nurses and Midwives (OAMMR)	National registry of practising nurses and midwives
National Institute of Statistics	Labour force survey
Ministry of Labour, Family and Social Protection	Data on temporary work contracts mediated through its accredited structures

Source: Health Professional Mobility and Health Systems – Evidence from 17 European countries (2011)



Romanian health workforce

- No (evidence-informed) health workforce planning process
- National Strategy for Hospital Rationalization (2011)
- National Health Strategy (2014)



Mobility of the health workforce

- The most frequent factors: low wages, poor condition of healthcare facilities, lack of respect from society
- Poor data on health professionals' motivation for leaving the country/returning to the country – almost intention-to-leave exclusively
- Largest national group of foreign medical doctors in France (15.4%), outnumbering those from Belgium, Germany and Italy – based on 2010 data (Buchan et al., 2014)
- Issues of costs



Research question

- How do job characteristics influence Romania physicians' and nurses' workplace choice?



Hypothesis

- Physicians' and nurses' preference of a workplace is complex and the factors contributing to their choice are not related to their salary only



Rationale/policy relevance

- Romania is facing severe health workforce issues
- Our data will help local/regional/national policy makers to improve workforce recruitment, retention and motivation



Design/Methodology

Design

- Exploratory sequential design

Methodology

- Mixed-methods
- Quantitative methods –Discrete Choice Experiments (DCEs)
- Qualitative methods (in-depth interviews)
 - to document the attributes and attribute levels for the DCEs



Why DCEs?

- Used for investigating individual preferences
- Determine the extent to which individuals are willing to trade one aspect for another
- In the health sector:
 - economic evaluation
 - decision-making



Why DCEs? (cont)

- Require the respondents to decide between hypothetical scenarios, goods or services
- Alternatives are described through a series of attributes
- Responses are used to determine how important each attribute is to the respondent
- A straightforward task which resembles a real-world decision



Where were DCEs used before?

- Erik Magnus Sæther (2003)-Norway
- S Wordsworth, et. al. (2004)-Scotland
- Kara Hanson, William Jack (2008)-Ethiopia
- Lindsay J. Mangham, Kara Hanson (2008)-Malawi
- Margaret E Kruk, et. al. (2010)-Ghana
- Julie Riise Kolstad (2011)-Tanzania
- Peter C Rockers, et.al. (2012)-Uganda
- Peter C Rockers, et.al. (2013)-Laos
- Anthony Scott, et.al. (2013)-Australia

Sample scenario



Therapy A	Attributes	Therapy B
are communicated but not implemented in daily routines	Strategies for weight loss	are communicated and trained in daily routines
choice of various therapy and leisure programs	Variety of therapy measures available	standardised therapy and leisure program
personal care by the staff	Type of advice	no intensive personal care
standardised predefined therapy	Therapy plan	therapy is tailored to you individually
3- star, comfortable, for discerning tastes	Hotel and service aspects (infrastructure quality)	2-star, standard, for average tastes
transfer to aftercare is organised	Coordination & referral	there is no organised aftercare
therapy enables group experience	Social contacts (Interaction)	group experiences are not possible within the therapy
not specialised in overweight and obesity	Technical competence (specialisms)	Specialised in overweight and obesity
<input data-bbox="430 1200 531 1275" type="checkbox"/>	Please select one alternative. <small>(with a cross)</small>	<input data-bbox="1288 1200 1389 1275" type="checkbox"/>

Source: Muehlbacher & Bethge (2013)



Data collection

Interviews

- Stakeholder analysis
- Stakeholders contacted and asked for permission to be interviewed
- 8 interviews conducted (representatives of the Romanian College of Physicians, nurses' associations, National Institute of Public Health, WHO Romania, health professionals' union, medical students' association)



Data collection (cont)

DCEs

- 2 hospitals in Cluj county
- Hospital managers were contacted
- Collaboration agreements signed
- Study presented to the physicians and nurses working in the hospital



Results

Interviews

The attributes and attribute levels used in the DCEs

1. Monthly wage
2. No. of patients seen daily
3. Workplace relations
4. Hospital resources
5. Professional development prospects
6. Hospital location



Results (cont)

234 valid questionnaires

- 194 nurses (82.9%); 40 doctors (17.1%)
- 94.3% females; 5.7% males
- 33% of nurses work for more than 20 years
- 55.6% of physicians work for more than 20 years
- Monthly wage lower than 1.500 lei (340 EUR) for 68.6% of participants
- 0,9% have monthly wages higher than 4.000 lei (900 EUR)



Results (cont)

- 66.5 % strongly believe the Romanian health system is facing workforce challenges
- 62.2 % of the participants thought about working abroad



Results (cont)

The most important factors when choosing their workplace:

- monthly wages (77.2% first factor);
- hospital resources (37.6% first factor);
- quality of workplace relations (31% first factor);
- hospital location (30.4%)
- number of patients seen daily (27.6%)
- professional development (17.8%)



Discussion

- Salaries are pushing health professionals to consider working abroad, BUT so do the level of hospital resources and the quality of workplace relations
- Policies need to tackle all of the identified issues
- (More) research is needed



Limitations

- Only two hospitals in one county - no generalizability
- Self-selection bias among participants
- Possible differences between physicians and nurses



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Thank you!