

### Methods:

A comparative analysis of the costs of the IVF ICSI + PGT alternative versus the RRT cost was carried out. The RRT cost was obtained from the specialised literature. The cost of the preventative strategy was calculated by adding the costs of an assisted reproduction procedure in a public hospital and the market price of the PGT in Spain. The average cost of a standard patient during the natural course of the disease has been calculated with patients' records from the registry of Granada (Spain).

### Results:

The average costs of transplantation (47,136 and 6,477 euros/year, first year and successive years respectively), haemodialysis (44,778 euros/year), and peritoneal dialysis (34,554 euros/year) are notably higher than costs of preventing the transmission of the disease (5,520-6,020 euros). An incremental cost-effectiveness ratio in favour of the preventative strategy was obtained in a scenario with three single embryo transfers.

### Conclusions:

From the perspective of the cost-effectiveness analysis, the preventative strategy proved to be a superior alternative to the renal replacement therapies currently applied. Thus, it would be advisable to promote the strategy of preventing transmission of the disease through assisted human reproduction and genetic testing. Despite the positive contribution of this strategy to the economic sustainability of the public health system, a decided health policy action in its favour is still needed.

### Key messages:

- The preventative strategy for ADPKD demonstrated advantages in terms of cost-effectiveness plus benefits as regards quality of life.
- Public health action in favour of the preventative strategy for ADPKD lacks still of a decided support among stakeholders.

### Voluntary insurance is associated with higher expenditure on health administration in OECD countries

Błażej Łyszczarz

B Łyszczarz

Nicolaus Copernicus University in Torun, Bydgoszcz, Poland  
Contact: blazej@cm.umk.pl

### Background:

Developed countries differ in terms of expenditure for health administration, ranging from 0.6% (Norway) to 8.3% (the United States) of current health spending. The reasons for these differences are not well recognised; however, it is hypothesised that macro-level financing arrangements play a role. The aim of this study is to assess whether the financing structure of health systems is associated with the level of spending on health administration in OECD countries.

### Methods:

I used macro-level data for 33 OECD countries for the period 2003-2016 (356 observations). Dynamic panel regression was applied to quantify the relationships between three measures of health administration spending [expenditure on health administration: i) as a share of current health expenditure; ii) as a share of GDP; iii) in real US\$] and shares of taxes; compulsory health insurance; and out-of-pocket payments in countries' health financing structure.

### Results:

The results show that the expenditure on health administration in OECD countries is associated mainly with past spending on this purpose. Also, higher shares of taxes and compulsory health insurance in country's financing mix is associated with significantly lower expenditure for health administration compared to voluntary insurance schemes. On the other hand, the effect of out-of-pocket spending is not statistically different from that of voluntary health insurance in terms of association with the level of health administration expenditure. Greater overall expenditure for health care is not related to administration spending.

### Conclusions:

OECD countries differ notably in the level of health administration expenditure and this difference can be, at least partly, attributed to arrangements applied in health systems' funds collection. Relying on private financing sources is associated with higher spending on administration resulting in less resources devoted to core health services provision.

### Key messages:

- Higher share of voluntary insurance schemes in health spending coexists with greater spending on health administration in OECD countries.
- OECD countries differ notably in the level of health administration spending and this level is mainly associated with past spending on that purpose.

## 3.G. Improving health services: Europe and beyond

### Using participatory action research to improve care coordination in Latin America healthcare networks

M Luisa Vázquez Navarrete

M Vitaloni<sup>1</sup>, I Vargas<sup>1</sup>, P Eguiguren<sup>2</sup>, A Mogollón<sup>3</sup>, I Samico<sup>4</sup>, J López<sup>5</sup>, D Amarilla<sup>6</sup>, F Bertolotto<sup>7</sup>, ML Vazquez<sup>1</sup>

<sup>1</sup>CSC, Barcelona, Spain

<sup>2</sup>UCH, Santiago, Chile

<sup>3</sup>UR, Bogotá, Colombia

<sup>4</sup>IMIP, Pernambuco, Brazil

<sup>5</sup>UV, Veracruz, Mexico

<sup>6</sup>UNR, Rosario, Argentina

<sup>7</sup>UDELAR, Montevideo, Uruguay

Contact: mlvazquez@consorci.org

### Background:

The improvement of care coordination across levels is a concern in Latin American health systems. It leads to efficient and higher quality services. Effective ways to improve it are bottom-up and training interventions using participatory action research (PAR). Active stakeholders' involvement ensures practice change. We analyze the intervention design to improve care coordination across levels in public health

networks of Argentina, Brazil, Chile, Colombia, Mexico and Uruguay using PAR approach.

### Methods:

A qualitative study led by a local steering committee (LSC) of healthcare professionals, managers and researchers supported by training. A platform of professionals (PP) from different care levels, with leadership ability and keen to voluntarily participate carried on the project tasks: 1. Dissemination of mixed results of a care coordination study performed in the network 2. Problems identification 3. Interventions identification and prioritization based on numerical prioritization, group meeting, individual reflection 4. Interventions and action plan design 5. Evaluation of intervention design based on monitoring documents.

### Results:

LST and PP (15-25 professionals/each country, the majority from primary care) collaborated throughout the study. Professionals targeted by interventions were involved in results dissemination and problems selection. Results were discussed in group meetings (up to 11-20). Discussions allowed a continuum process of problem prioritization highlighting

causes and consequences. Prioritized problems were: lack of communication, absence of coordination mechanisms, mistrust among doctors. Mostly, the interventions selected were joint meetings to improve communication. The monitoring included indicators and individual interviews.

**Conclusions:**

PAR approach allowed the identification of the most suitable solutions for coordination issues. Interventions reflect a need for regular communication among professionals to improve patient management.

**Key messages:**

- First study applying a PAR in the design of intervention of coordination of care in six middle income Latin-American countries.
- Health professionals were involved throughout the intervention design process to ensure the more effective results.

**Cross-border care in Europe: a critical analysis of collaborations (2007-2017)**

Andrea Schmidt

A Schmidt, J Bobek, S Mathis-Edenhofer, F Bachner  
Austrian Public Health Institute, Vienna, Austria  
Contact: andrea.schmidt@goege.at

**Background:**

There are multiple reasons that may drive countries to collaborate with each other on specific aspects of healthcare provision. In the face of increasing differences in the capacity of public health care sectors across Europe, this study aims to give a first-time comprehensive overview of publicly funded types of collaborations that have developed in the past decade both on the supply and the demand side.

**Methods:**

The study provides a systematic analysis of collaborations between healthcare systems in European countries in the period 2007 to 2017. Out of a total of 1167 analyzed projects, 423 EU-funded projects were selected based on a systematic search of online databases, grey literature and expert consultations. Results were validated by a stakeholder and expert forum in a systematic peer review process. Information about projects was synthesized regarding geographic location of the collaboration, time frame, and potential benefits for patients, payers and purchasers, adapting a conceptual framework by I. Glinos on cross-border care.

**Results:**

Findings confirm the importance of so-called fluid borders, as countries with shared historical ties and in geographical proximity were most likely to launch cross-border healthcare collaborations in the period analyzed. Little evidence for patient-driven collaborations was found.

**Conclusions:**

In view of recent policy developments at EU level, including the 2011 Patient Rights Directive, we conclude that further steps at EU policy level encouraging cross-border healthcare seem unjustified given the results of our study, except for border areas where an objective, local need exists. In these areas, there is potential that local inequalities be reduced. Future policies at European level should also carefully weigh concerns about patients' rights against tendencies for increased liberalization of healthcare markets.

**Key messages:**

- Historical and geographical ties are most important factors for driving EU cross-border care.
- Cross-border care policies should focus on local patients' needs and reduction of inequalities thereof.

**Healthcare organization mergers: a systematic review of the literature on clinical outcomes.**

Marco Mariani

M Mariani<sup>1</sup>, LG Sisti<sup>1</sup>, A Acampora<sup>1</sup>, G Damiani<sup>1,2</sup>

<sup>1</sup>Section of Hygiene, Department of Public Health, Università Cattolica del Sacro Cuore, Rome, Italy

<sup>2</sup>Fondazione Policlinico "Agostino Gemelli", Rome, Italy

Contact: marcomariani1990@hotmail.it

**Background:**

A wave of healthcare organization mergers have been pursued for more than two decades in different countries regardless the type of health systems, although little attention is paid to their impact and assessment. The objective of this work is to synthesize evidence on the effect on clinical outcomes of patients after a merger of a healthcare organization, through a systematic review of the literature

**Methods:**

This systematic review was conducted according to the Population-Intervention-Comparison-Outcome model, using specific keywords and Boolean operators to build a search string, and by querying 3 electronic databases. Articles that reported quantitative evaluation of the impact of mergers on clinical outcomes were included. Titles, abstracts, and data extraction performed by 2 independent investigators

**Results:**

From a total of 28748, 5 studies met our inclusion criteria and 37 indicators were identified: 54.1% didn't show any variation, 32.4% worsened and only 13.5% improved significantly after the merger. In particular, orthopedic care didn't show any statistically significant variation in 44.5% indicators, while 33.3% showed a worsening and 22.2% an improvement in clinical outcomes. Obstetrics and neonatal indicators care didn't change in 50.0% and 33.3% of them showed a statistically significant worsening. Cardiovascular disease indicators showed that acute myocardial infarction mortality didn't vary in 75.0% of the indicators but 25.0% worsened. Indicators of heart failure, percutaneous coronary intervention and coronary artery bypass graft mortality didn't improve significantly. Eventually, 60.0% of stroke mortality indicators showed a significant worsening.

**Conclusions:**

The impact of mergers showed contrasting effect on health outcomes that should be considered when these activities are intended to be pursued. These processes should be followed by a periodic assessment and actions that try to continuously improve and reach the targeted results

**Key messages:**

- Mergers may imply important consequences in terms of clinical outcomes that should not be underestimated.
- A continuous evaluation approach to health risks linked to this type of intervention is suggested.

**Factors affecting physician satisfaction in European hospitals: evidence based on systematic review**

Alicja Domagała

A Domagała<sup>1</sup>, M Bala<sup>2,3</sup>, D Storman<sup>3</sup>, JN Peña-Sánchez<sup>4</sup>, M Świercz<sup>3</sup>, M Kaczmarczyk<sup>3</sup>, M Storman<sup>3</sup>

<sup>1</sup>Institute of Public Health, Faculty of Health Sciences, Jagiellonian University Medical College, Krakow, Poland

<sup>2</sup>Epidemiology and Preventive Medicine, Department of Hygiene and Dietetics, Jagiellonian University Medical College, Krakow, Poland

<sup>3</sup>Systematic Reviews Unit - Polish Cochrane Branch, Cochrane Poland, Jagiellonian University Medical College, Krakow, Poland

<sup>4</sup>Department of Community Health and Epidemiology, College of Medicine, University of Saskatchewan, Saskatoon, Canada

Contact: alicja.domagala@uj.edu.pl

**Background:**

Physician satisfaction is a multidimensional concept associated with many factors. Notwithstanding the wide range of research concerning factors affecting physician satisfaction in different European countries, there is a lack of studies analyzing and summarizing the current evidence. The aim of our research was to synthesize the literature studying the factors associated with physician satisfaction.

**Methods:**

The following databases were searched: MEDLINE, Embase, PsycINFO, CINAHL and the Cochrane Library from 2000 to 2017. The search strategy included MESH/Emtree terms and free text words related to the subject and was performed with no language restrictions. Our eligibility criteria included: (1) target population: physicians working in European hospitals,