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- Diagnosis-related group (DRG) is a system to classify <u>hospital</u> cases into groups.
- Its intent was to identify the "products" that a hospital provides.
   One example of a "product" is an appendectomy.
- The system was developed to replace "cost based" reimbursement that had been used up to that point in US health care system.
- DRGs are assigned by a "grouper" program based on <u>ICD</u> (International Classification of Diseases) diagnoses, procedures, age, sex, discharge status, and the presence of complications or <u>comorbidities</u>.

#### **INTRODUCTION**

#### **Innovation**

Theory of diffusion of innovation (Rogers, 2003) suggests that successful adoption of an innovation depends on its attributes: relative advantage, compatibility, complexity, testing capacity and observability.

The organizational theories explain the adoption of innovation by the structure and culture of an organization.

The environmental theories explains the adoption of an innovation by the sociopolitical and economic context.

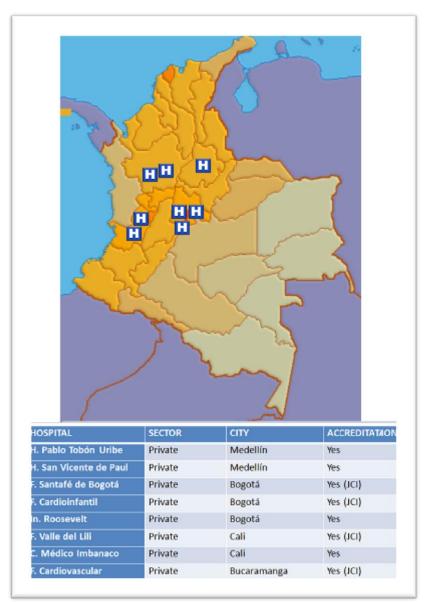


#### INTRODUCTION

Figure 1. High Complexity Hospital with DRGs in Colombia, 2014

Although DRGs are not an innovation in Europe or US, them actually do for Colombia

Only eight of 50 high complexity hospitals have it.



## Our big challenge

# Very low implementation proportion of DRGs\* in colombian hospitals.

(Eight out of 50\*\*)

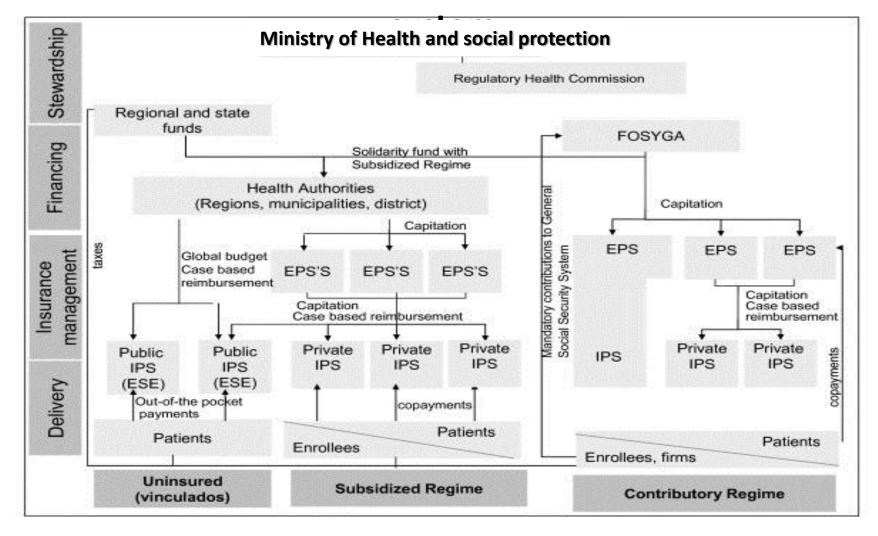
\*Diagnosis Related Groups

\*\*High Complexity Hospitals





## Figure 2. The model of managed competition in the Colombian healthcare



Vargas et al. BMC Health Services Research 2010 10:297

#### **INSTRUMENTS AND METHODS**

It was an exploratory qualitative study that used a case method.

We made a pilot study to validate the interview guide. We identified purposeful sample of key informants.

The positive and negative aspects with relation to innovation were identified as well as the cultural aspects and the relationship among them.



#### **Informants**

Table 1. Hospitals participanting in the study

HOSPITAL	WITH DRGs	WITHOUT DRGs	Total
Public	0	1	6
Private	2	3	O O

We only could capture data from these 6 institutions, because DRG's and HIS in Hospital Directors agenda were not a priority

### Results

We found two types of constraints:

- Institutional aspects: health care system
  - Organizational aspects: hospitals



## Relative advantage

Directors know DRGs allow to combine clinical performance and cost considerations.

Improve clinical performance and quality of care, reduce the variability of medical practice, make staff performance transparent, helps to enforce the clinical practice guidelines and monitor the prescription of generic medicines rather than branded ones.

DRG can help to get accreditation.

Potentially, GRD can make negotiations between insurers and providers more transparent and evidence—based because allows to compare the performance of the hospital with national and international practice.



## **Cultural compatibility**

- DRGs are result oriented but, management indicators in Colombian hospitals and the health system in general are process oriented. (This occurs despite the evidence that good processes in health care do not ensure good results)
- Directors thought DRGs threatens physician autonomy.



## Complexity

- There is a need of special training for doctors because they perceived DRGs as difficult to use.
- Managers do not consider DRGs as an autonomous program but as a module of ERP used in their hospitals.
- For Colombian medical doctors are essential to record the procedure because the procedure is billed.
- The main difficulty lies in the requirement of a detailed and correct record of diagnosis according to ICD10.
- Another obstacle to good reporting is the specific classification for procedures used in Colombia. (CUPs)



## **Testability**

The acquisition process of DRGs also appears as a complex matter.

Managers consider DRGs as a system that cannot be tested before purchasing and implementation.

The interviewees seemed interested to do so but no provider offered such a possibility.



## Observability

Managers agree that the observability of DRGs reports is not automatic.

DRGs allows keeping track of the performance to the level of an individual doctor, but the management chooses not to do so for fear of harming the organizational climate.



Figure 2. Institutional determinants of DRGs implementation process

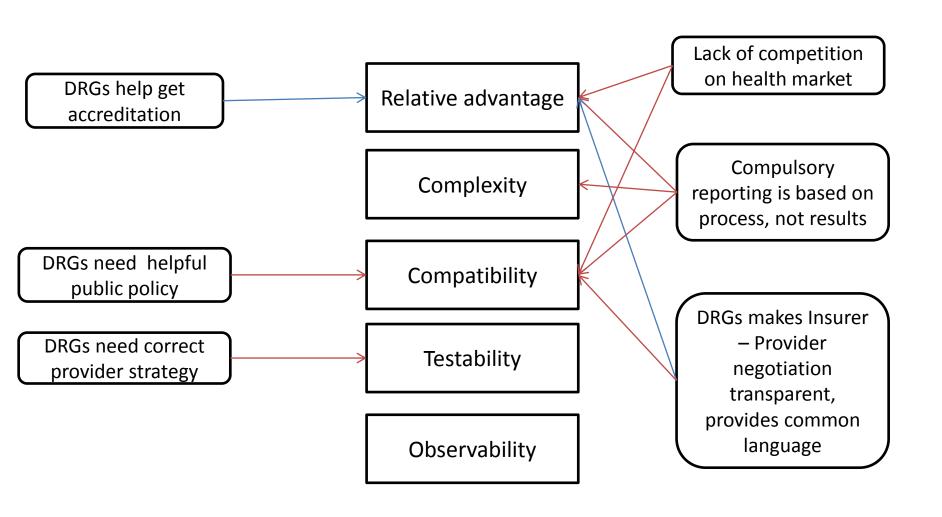
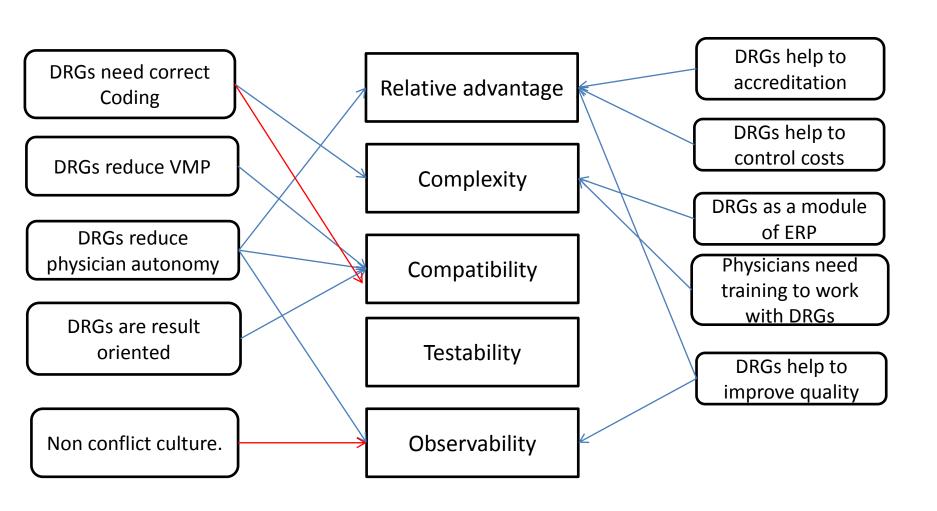


Figure 3. Organizational determinants of DRGs implementation process



\*VMP: Variability in Medical practice

\*ERP: Enterprise Resource Planning

Positive Effect ———
Negative Effect ———

#### CONCLUSION

Interviewees have positive perception of DRGs.

DRGs allows to control for quality and costs simultaneously, they help to get accreditation, reduce VMP, potentially, may make negotiation between Insurers and Providers transparent.

... But the managers, who want to adopt DRGs, face organizational and institutional restrictions.

Among organizational restrictions are: the culture of physician autonomy, non conflict culture, sub record of diagnosis and emphasis on process instead of results.

Among the institutional restrictions are: lack of competition on the health care market, the negotiation between Insurers and Providers based on procedures not diagnosis and finally lack of public policy aimed at DRGs adoption.





#### **Further information:**

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