# Doctors' perceptions of care coordination across care levels and associated factors in six Latin American countries

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# Introduction

- Improving the coordination across care levels is a means to improve quality and efficiency in health systems
- At the core of PAHO's strategy to reinforce the health model based on primary care in Latin America
- Despite being a longstanding concern, it has scarcely been analyzed in this region

# Theoretical framework

## Clinical coordination across care levels

harmonious connection of the services needed to provide care to a patient along care continuum to achieve a common objective without conflicts

**Clinical information coordination** ⟷ **Clinical management coordination**

- Transfer of information
- Use

- Care coherence
- Follow-up
- Accessibility across levels

**Organizational factors**
- Coordination mechanisms
- Time available

**Professionals' factors**
- Values and attitudes
- Knowing each other

# Aim

To determine the level of clinical coordination between primary and secondary care experienced by doctors and to explore influencing factors in public healthcare networks of six LA countries.

# Method

## Design

**Cross-sectional study based on a survey of doctors** (May to October 2015)

COORDENA-LA questionnaire adapted, pretested and piloted

## Study population

Primary and secondary care doctors that had been working for at least three months in the study network

## Sample

**348 doctors in each country** (174 per network)

## Study areas

# Method II

## Outcomes variables

- 12 items on the clinical information and management coordination experienced
- Perception of care being coordinated across levels of care (always/often)

## Analysis

- Univariated by countries
- Logistic regression model to assess the relationship between general perception of care coordination and associated factors, adding them by groups.

## Explanatory variables

1. **demographic:** sex, age
2. **employment conditions**: care level, years working in the centre, type of contract, contracted hours, work in the private sector
3. **organizational conditions**: time per patient and for clinical coordination
4. **attitude towards the job**: satisfaction with job and salary, plan to change job
5. **doctors' interactional factors**: identification of PC doctor as coordinator of patient care, knowing doctors of other levels and trusting in their clinical skills

# Results

# Coordination of information between levels of care

| | AR (n = 350) | BR (n = 381) | CH (n = 348) | CO (n = 363) | MX (n = 365) | UR (n =353) |
|---|---|---|---|---|---|---|
| **1.** PC and SC doctors **exchange clinical information** on the patients we attend[a] | 36.9% | 19.4% | 10.3% | 43.8% | 14.5% | 43,2% |
| **2.** The **information is necessary** for the care of the patient[a] | 74.4% | 76.1% | 62.0% | 70.9% | 66.5% | 75.5% |
| **3.** PC doctors and SC doctors **take the information we exchange into account** in the care of the patient[a] | 75.9% | 78.1% | 58.9% | 78.2% | 62.0% | 87.6% |

[a] Results correspond to the categories always and often

# Coordination of clinical management: consistency of care between levels

| | AR (n = 350) | BR (n = 381) | CH (n = 348) | CO (n = 363) | MX (n = 365) | UR (n = 353) |
|---|---|---|---|---|---|---|
| **4.** Doctors **do not request the repetition of tests** that have already been performed at other care levels[a] | 85.4% | 81.6% | 71% | 66.9% | 76.2% | 87.1% |
| **5.** Doctors are in **agreement over the treatments** prescribed or indicated by doctors of other care levels[a] | 54.3% | 44.6% | 48.6% | 42.7% | 35.3% | 44.2% |
| **6.** There are **no contradictions** and/or duplications in the treatments that PC and SC doctors prescribe[a] | 82% | 75.9% | 80.8% | 73.8% | 81.4% | 82.7% |
| **7.** PC doctors **refer patients to specialists when it is necessary**[a] | 71.7% | 74.3% | 65.8% | 81.0% | 63.8% | 79.5% |

[a] Results correspond to the categories always and often

# Coordination of clinical management: follow-up between levels

| | AR (n = 350) | BR (n = 381) | CH (n = 348) | CO (n = 363) | MX (n = 365) | UR (n = 353) |
|---|---|---|---|---|---|---|
| **8.** The specialists **refer patients back to the PC doctor** for follow-up[a] | 69.1% | 62.2% | 56.6% | 34.2% | 55.6% | 47.3% |
| **9.** The specialists **make recommendations to the PC doctor** on diagnosis, treatment and other aspects for follow-up of the patient[a] | 51.1% | 26.5% | 42.9% | 38.6% | 46.0% | 50.4% |
| **10.** PC doctors **consult the specialists** with any queries they have about following up the patient[a] | 49.7% | 15.0% | 12.1% | 46.6% | 9.0% | 58.3% |

[a] Results correspond to the categories always and often

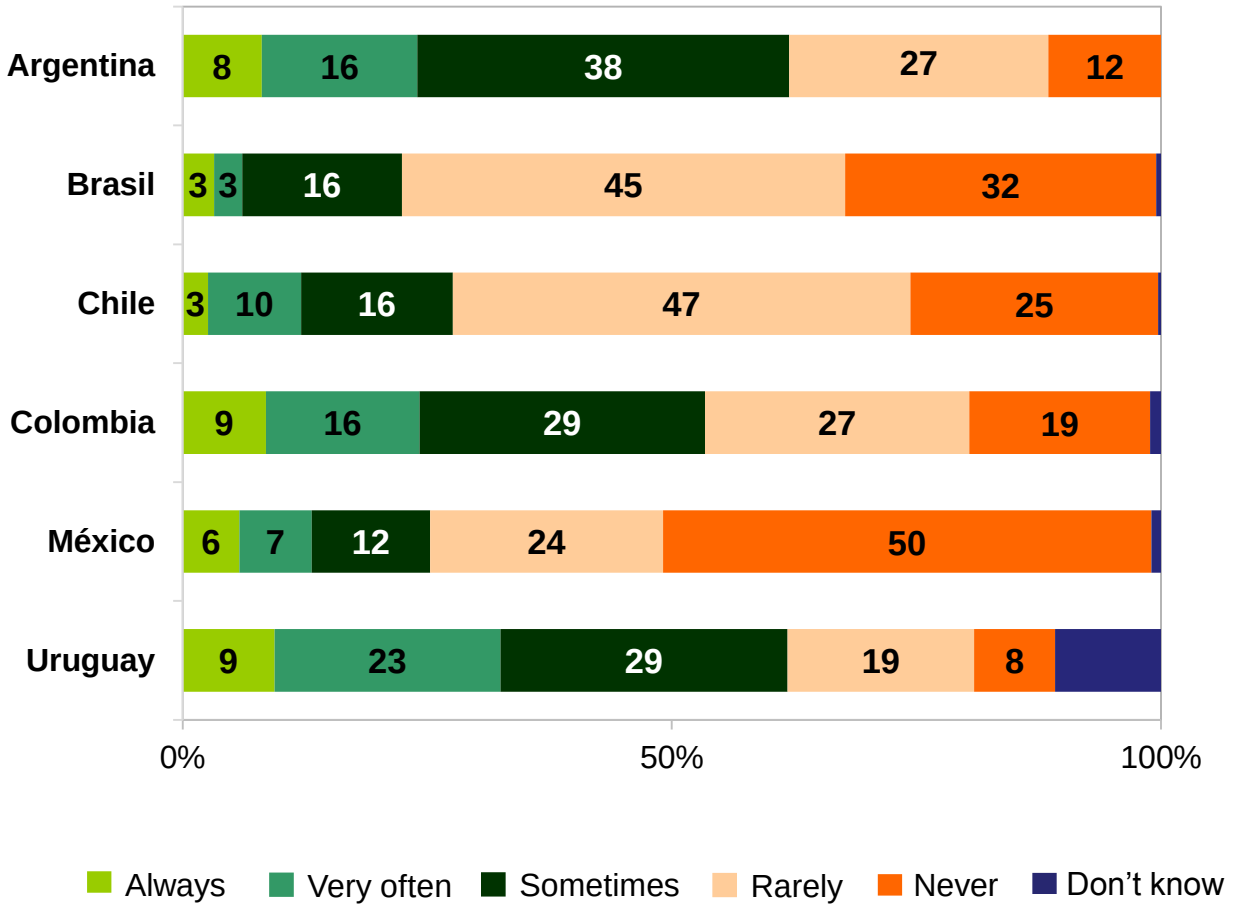
# Coordination of clinical management: accessibility between levels

| | AR (n = 350) | BR (n = 381) | CH (n = 348) | CO (n = 363) | MX (n = 365) | UR (n = 353) |
|---|---|---|---|---|---|---|
| **11**. **When patient is referred to the specialist, they don't have to wait long for** an appointment[a] | 27.7% | 14.7% | 18.1% | 17.6% | 34.3% | 35.7% |
| **12.** After consultation with the specialist, when **the patient requests to see the PC doctor, they don't have to wait long for the appointment**[a] | 69.7% | 47.5% | 57.8% | 57.3% | 55.9% | 55.4% |

[a] Results correspond to the categories always and often

# Doctors' general perception of coordination between levels

I think that the care provided is coordinated between the primary care and the specialists in the network



# Factors associates with perceptions of high care coordination between levels

| Variable | Categories | Odds Ratio aj. (95% IC) | | | |
|---|---|---|---|---|---|
| *Sex* | Male | 1 | | | |
| | Female | 1.08 | 0.80 | - | 1.47 |
| *Age* | 24- 35 years | 1 | | | |
| | 36 to 50 years | 1.26 | 0.72 | - | 2.21 |
| | > 50 years | 1.66 | 0.95 | - | 2.90 |
| *Care level* | AP | 1 | | | |
| | AE | **1.89** | **1.55** | **-** | **2.32** |
| *Type of contract* | Temporary | 1 | | | |
| | Stable | 0.99 | 0.74 | - | 1.33 |
| *Contracted hours per week* | < 20 hours | 1 | | | |
| | 20 to 40 hours | 0.99 | 0.64 | - | 1.53 |
| | > 40 hours | 0.72 | 0.40 | - | 1.29 |
| *Enough consultation time for coordination* | No | 1 | | | |
| | Yes | **1.41** | **1.04** | - | **1.89** |
| *Satisfaction with the salary* | No | 1 | | | |
| | Yes | **1.42** | **1.13** | - | **1.79** |
| *Satisfaction with the job* | No | 1 | | | |
| | Yes | **1.70** | **1.41** | - | **2.04** |
| *Identifies PC doctor as coordinator of patient care across care levels* | No | 1 | | | |
| | Yes | **1.51** | **1.12** | - | **2.04** |
| *Knows doctors of the other care level* | No | 1 | | | |
| | Yes | **1.44** | **1.08** | - | **1.91** |
| *Trusts in clinical skills of doctors of the other car level* | No | 1 | | | |
| | Yes | **2.51** | **1.77** | - | **3.54** |

# Conclusion

- Doctors in all the study networks experienced limited clinical coordination, especially in terms of information exchange and, to a lesser degree, clinical management, with differences between care levels and countries

  ⇨ limited implementation of the model based on primary care as care coordinator

- The results support that interactional factors - identifying the PC doctor as coordinator of patient care across levels, knowing doctors personally and trusting in their skills – are key aspects for care coordination

- Evidence of problems that require changes in aspects of employment, organization and doctors interaction.

# Thanks for your attention!

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