ASSESSMENT OF THE SCOPE OF PRACTICE OF PHYSICIANS FROM THE MORE DOCTORS PROGRAM IN BRAZIL, AND ASSOCIATED FACTORS

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Introduction
Introduction

- Scope of practice refers to a set of roles, functions and activities of a given occupation.

- Defined by:
  - Professional regulation
  - Activities authorized by law
  - Education and training
  - Standards for exercising the profession
  - Professional responsibility

Federation of State Medical Boards of the United States (2005).
Canadian Academy of health Sciences (2014).
Introduction

- In health...

Restrict

- Referral Rates
- Costs
- Access

Expanded

- Referral Rates
- Costs
- Access

- Associated factors, such as...
  - Gender
  - Age
  - Experience
  - Work location
  - Access to secondary care
  - Access to medical specialists
  - Patients needs and demands
  - Requirements of the employer

Baranek PM, 2005.
Federation of State Medical Boards of the United States, 2005.
Introduction

20% of municipalities with shortage of physicians and unequal distribution (Shortage Index)

Very low propensity of physicians to go to remote and most needed areas (DCEs)

Projection studies indicated that even in the best scenario Brazil would not reach a sufficient number of physicians

Social perception that the shortage of physician was one of the main problems in health care

Evidence that pointed to a scenario of deep physician shortage in Brazil.

Medical labor market signals:
• growing salaries
• very low unemployment rates
• high demand and filling of positions in medical graduate courses

World-wide problem, resistant to several strategies, such as:
• educational strategies
• financial incentives
• professional support
• regulatory reforms
• recruitment of foreign medical workforce

MORE DOCTORS PROGRAM (MDP)

BARANEK PM, 2005.
WONG E, STEWART M, 2010
Introduction

- The MDP, implemented in 2013 by the president Dilma Rousseff, is one of the most wide-ranging public policies so far adopted by the Brazilian government to deal with physician shortage and reduction of distributive inequalities.

- Three main directions of action:
  
  I. investment in improving the infrastructure of healthcare facilities.
  
  II. expansion of the offer of courses and positions in medical training, including educational reforms in graduation and residency programs;

  III. emergency provision of physicians in priority areas
Introduction

Primary Healthcare Physician Shortage Index (EPSM/UFMG)

Legend
- With shortage
- Without shortage

2013

2015

GIRARID et. al. 2016.
Aim of the study

Fotos: Araquém Alcântara
Aim of the study

- Considering that...
  - Expanded scope of practice is a way to meet patients’ needs and enable professionals to practice at the top of their education and experience;
  - Physicians are at the frontline of service delivery in primary care.

- Knowing the activities and procedures they perform is essential for policy makers to improve access and efficacy of the Brazilian Unified Health System (SUS).

Characterize the scope of practice of the ‘More Doctors’ physicians and identify associated factors with an expanded scope
Methods

Fotos: Araquém Alcântara
Methods

Regulation of the health professions (EPSM/UFMG and ObservaRH/UERJ - 2015-2017)
Cross-sectional study
January - March 2016
Self-applied questionnaire

Questionnaire:
- Access of primary health care protocols from the Ministry of Health
- Interviews with key informants and specialists
- International literature review

- Social-demographic profile (gender, age, nationality, country and year of graduation, specialist title, work experience)
- Work location (geographical region, population size and distance – travel time to the headquarters of the health region)
- List of procedures (49 items)

Pre-test conducted with physicians working in PHC health facilities from different geographical regions in Brazil
Methods

17,350 emails sent
3,568 answered

1,241 were included

Statistical Analysis

Frequencies distribution - Measures of central tendency

Mann Whitney Test
Significance level 5%

MMD Physicians and who responded to the questions related to the procedures and activities practiced in PHC facilities
Results

Fotos: Araquém Alcântara
## Results

### Profile of More Doctors physicians participating, Brazil 2016 (n=1,241)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>n</th>
<th>%</th>
</tr>
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<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>643</td>
<td>52.3</td>
</tr>
<tr>
<td>Male</td>
<td>586</td>
<td>47.7</td>
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<tr>
<td><strong>Age (years)</strong></td>
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<td></td>
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<tr>
<td>20 to 29</td>
<td>38</td>
<td>3.1</td>
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<tr>
<td>30 to 39</td>
<td>379</td>
<td>30.9</td>
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<tr>
<td>40 to 49</td>
<td>488</td>
<td>39.8</td>
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<tr>
<td>50 to 59</td>
<td>281</td>
<td>22.9</td>
</tr>
<tr>
<td>60 or more</td>
<td>39</td>
<td>3.3</td>
</tr>
<tr>
<td><strong>Nationality</strong></td>
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<tr>
<td>Brazilian</td>
<td>227</td>
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<tr>
<td>Cuban</td>
<td>906</td>
<td>73.8</td>
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<tr>
<td>Other</td>
<td>94</td>
<td>7.7</td>
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<tr>
<td><strong>Country of graduation</strong></td>
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<td></td>
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<tr>
<td>Brazil</td>
<td>153</td>
<td>12.5</td>
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<tr>
<td>Other</td>
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<td>87.5</td>
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<tr>
<td><strong>Years since graduation</strong></td>
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<tr>
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<td>11.5</td>
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<td>6 to 10</td>
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<td>11 to 15</td>
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<td>16 to 20</td>
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<td>21 to 25</td>
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<td>25.5</td>
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<tr>
<td>26 or more</td>
<td>258</td>
<td>21.3</td>
</tr>
</tbody>
</table>

### Medical specialist

- Yes 1075 (86.6%)
- No 166 (13.4%)

### Experience in PHC

- ≤8 years 582 (47.1%)
- >8 years 653 (52.9%)

### Experience in the PHC unit

- ≤2 years 719 (58.4%)
- >2 years 513 (41.6%)

### Geographic region of work location

- North 137 (11.0%)
- Northeast 540 (43.5%)
- Southeast 304 (24.3%)
- South 183 (14.8%)
- Midwest 76 (6.1%)

### Population size of the city of work location

- Capitals and metropolitan regions 292 (23.5%)
- More than 100 mil inhabitant 166 (13.4%)
- More than 50 up to 100 mil inhabitant 140 (11.3%)
- More than 20 up to 50 mil inhabitant 272 (21.9%)
- More than 10 up to 20 mil inhabitant 221 (17.8%)
- Up to 10 mil inhabitant 150 (12.1%)

### Distance from the headquarters of the health region (minutes)

- Up to 15 minutes 448 (36.1%)
- From 16 to 30 minutes 126 (10.2%)
- From 31 to 45 minutes 186 (15.0%)
- From 46 to 60 minutes 118 (9.5%)
- From 61 to 120 minutes 253 (20.4%)
- More de 120 minutes 110 (8.9%)

Source: Girardi et al, 2016
Examples of procedures that have less than 50% practice in the PHC facility and more than 50% knows how to practice:

- Loss of sharp vision (refraction, glaucoma,...)
- Visual acuity screening
- Sutures
- Incision and drainage of abscess
- Removal of unwanted body from legs, arms and...
- Immobilization of fractures
- Removal of unwanted body from eye
- Removal of foerign body from air passages
- Removal of ingrown nail
- Cauterisation of nosebleed
- Removal of callus
Results

Why they do not practice what they know?

Lack of materials and inadequate infrastructure: 87.3%
Restrictive rules of practice (clinical protocols, medical professional board): 49.0%
Lack of demand: 24.5%
Practiced by another professional: 23.0%
Workload: 21.0%
Personal reasons: 3.9%
Factors associated with an expanded scope of practice (p < 0.001)

Results

- Male gender
- North and Northeast of the country
- Municipalities with small population size
- Municipalities distant from the regional health headquarters
Results

Factors associated with an expanded scope of practice \( (p < 0.001) \)

- Male gender
- Cuban nationality
- Specialization in PHC or related
- More time experience in primary health care
- North of the country
- Municipalities with small population size
- Municipalities distant from the regional health headquarters
Final Considerations
Final Considerations

- The present study identified several factors associated with an expanded scope of practice and a broader knowledge of practice in PHC, such as: male gender, Cuban nationality, specialization in PHC, longer time experience in PHC, work in more distant and small sized municipalities and in the north region of the country.

- The results also showed that ‘More Doctors’ physicians practice a lower number of procedures and activities, than they indicated knowing how to practice, mainly due lack of materials and the inadequate infrastructure, and due to restrictive rules of practice.

- In this sense, the use of professional competences can be optimized by structuring health care units and by increasing flexibility around scope of practice in PHC (not only the scope of physicians, but also other health professionals).

- We believe that reviewing the scope of practice of health professionals can be an important tool to expand the potential of primary health care and improve patients access and efficacy of PHC services in Brazil.
Thank you!

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