



A Medicina no Brasil

Expansão da oferta e desafios de pesquisa

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Brasília, 14/02/2020*

Por que estudar MÉDICOS é tão relevante hoje?

MUDANÇAS/DEBATES: graduação, RM, provimento, currículos, formatos, moratória, revalidação ...

MONITORAMENTO: avaliação das políticas sobre RM já implantadas e em curso

PESQUISA: aprimoramento das bases de dados e evidências sobre RM e médicos especialistas, para orientar decisões das políticas e programas

PLANEJAMENTO: aproximar a formação e a oferta de médicos especialistas das necessidades do sistema de saúde e da população

Referencial possível para estudar RM

Demografia Médica no Brasil

(desde 2010)

CFM/FMUSP

2011

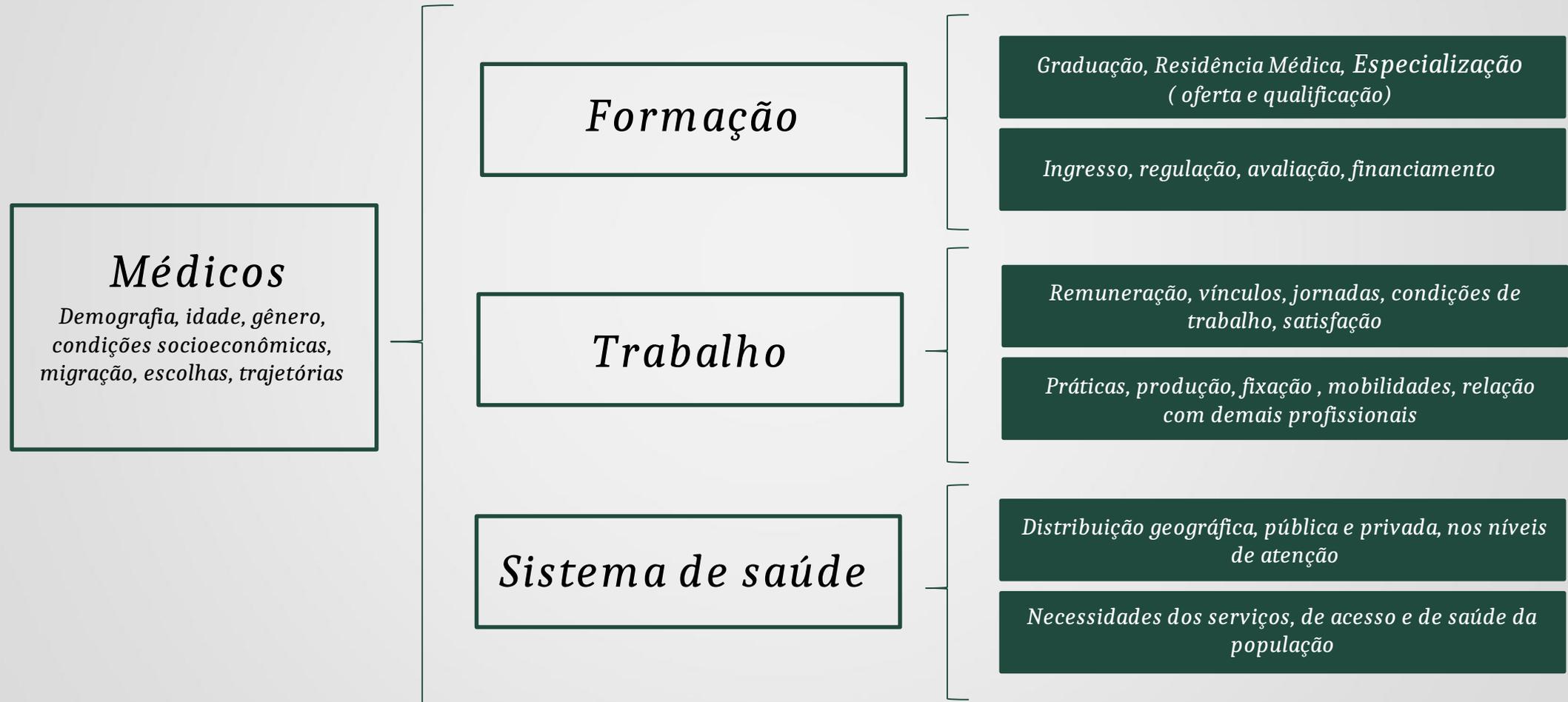
2013

2015

2018



Quadro conceitual do estudo - Demografia Médica no Brasil



Qual a relação entre graduandos, residentes e especialistas?

Graduação

*Cursos e vagas: oferta,
características e distribuição*

(Fonte: MEC - E-MEC, Seres)

NÚMERO E PERFIL DE NOVOS MÉDICOS

Residência

*Oferta, ocupação, ociosidade,
distribuição*

(Fonte: MEC - E-MEC, Seres)

NÚMERO E PERFIL DE RESIDENTES

Especialidades

*RM e titulados, distribuição,
mercado de trabalho*

(Fonte: CNRM, Sociedades de Especialidades, CRMs)

NÚMERO E PERFIL DE ESPECIALISTAS



*Aumento do número de médicos no Brasil
Expansão de cursos e vagas de medicina*

Médicos no Brasil em 2019



Médico/1.000 habitantes

(OCDE)

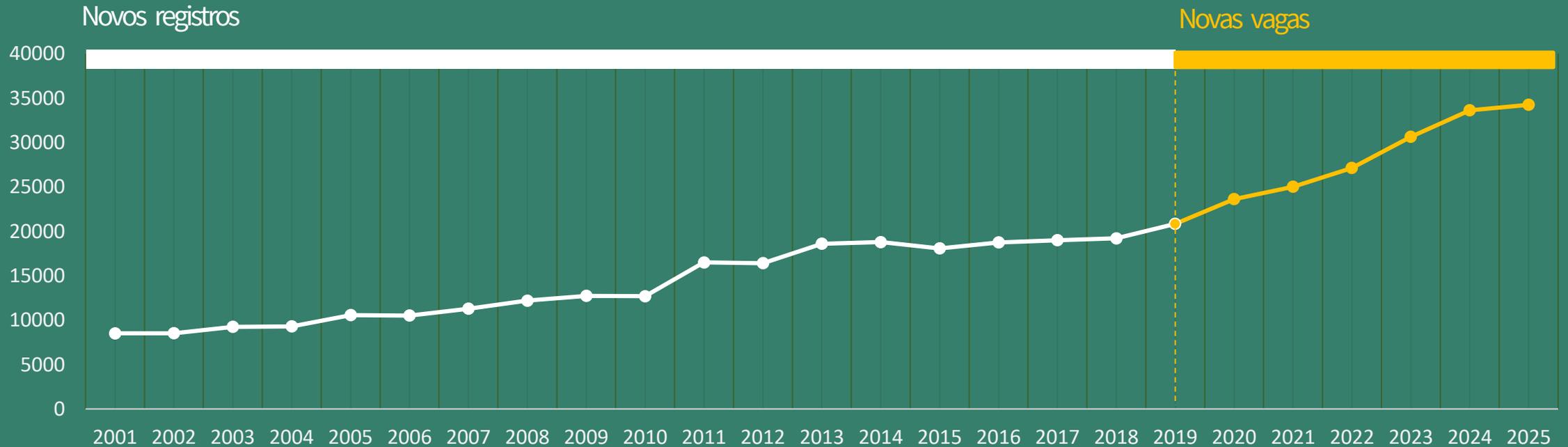


Brasil pode se aproximar de Canadá, Estados Unidos, Reino Unido?

Fonte: Scheffer M. et al., Demografia Médica no Brasil

Dados preliminares- Sujeitos a revisão

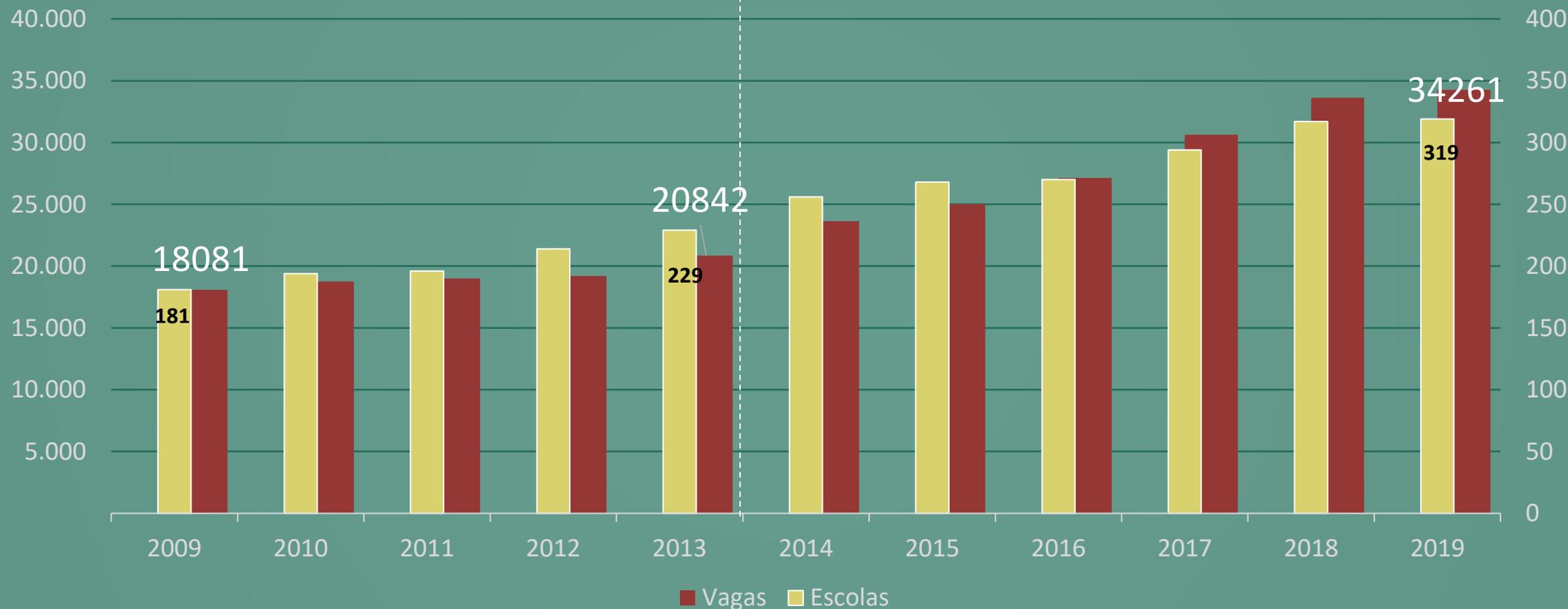
≈ 35.000 novos médicos por ano (total de vagas atuais)



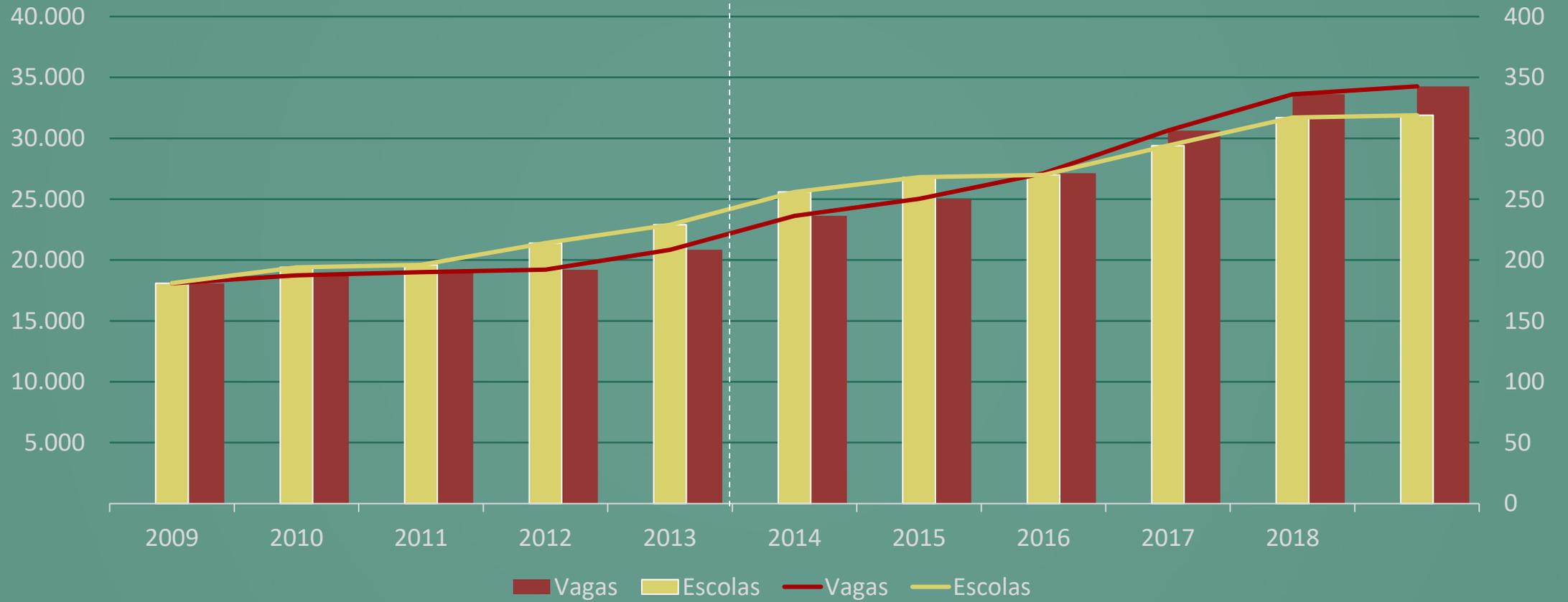
Adaptado de: Scheffer M. et al., Demografia Médica no Brasil 2018.

**Projeção: aumenta com novas aberturas de cursos e vagas ou “congela” com moratória*

Vagas de graduação e escolas médicas

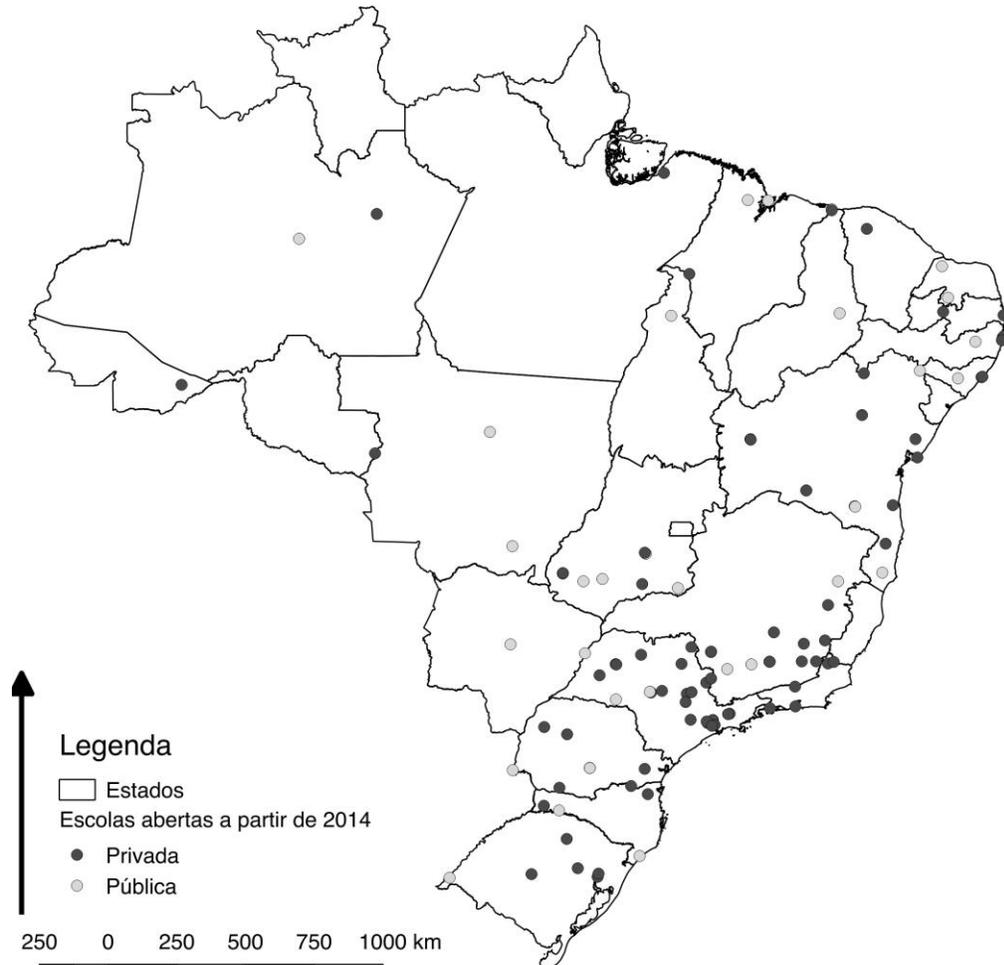


Vagas de graduação e escolas médicas

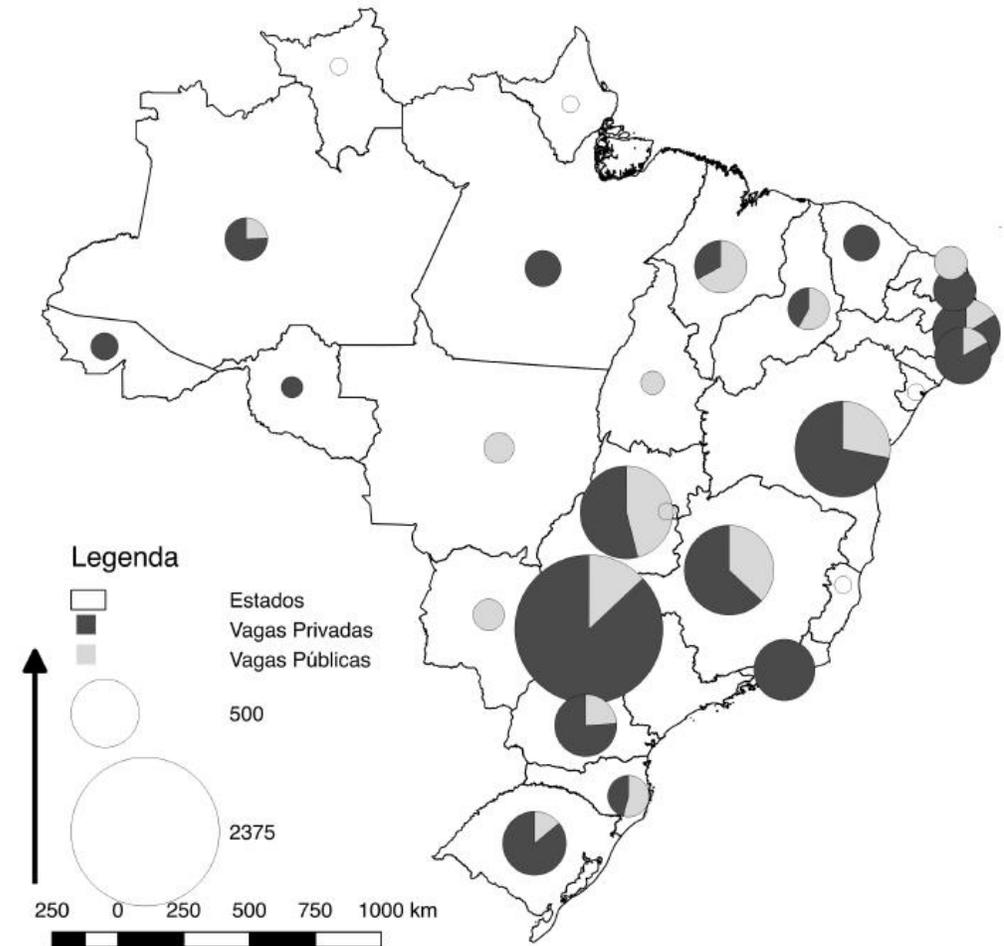


Cursos e vagas de Medicina (2014-2018)

Interiorização: + de 80% vagas no interior



Privatização: + de 70% vagas privadas





Internal migration of physicians who graduated in Brazil between 1980 and 2014

Mario Cesar Scheffer^{1†}, Alex Jones Flores Cassenote^{1**†}, Aline Gil Alves Guilloux¹ and Mario Roberto Dal Poz²

Escolas médicas no
Interior fixam
médicos nessas
localidades?

Abstract

Background: The internal migration of physicians from one place to another in the same country can unbalance the supply and distribution of these professionals in national health systems. In addition to economic, social and demographic issues, there are individual and professional factors associated with a physician's decision to migrate. In Brazil, there is an ongoing debate as to whether opening medicine programmes in the interior of the country can induce physicians to stay in these locations. This article examines the migration of physicians in Brazil based on the location of the medical schools from which they graduated.

Methods: A cross-sectional design based on secondary data of 275,801 physicians registered in the Regional Councils of Medicine (Conselhos Regionais de Medicina—CRMs) who graduated between 1980 and 2014. The evaluated outcome was migration, which was defined as moving away from the state where they completed the medicine programme to another state where they currently work or live.

Results: 57.3% of the physicians in the study migrated. The probability of migration ratio was greater in small grouped municipalities and lower in state capitals. 93.4% of the physicians who trained in schools located in cities with less than 100,000 inhabitants migrated. Fewer women (54.2%) migrated than men (60.0%). More than half of the physicians who graduated between 1980 and 2014 are in federative units different from the unit in which they graduated. Individual factors, such as age, gender, time of graduation and specialty, vary between the physicians who did or did not migrate.

Conclusions: The probability of migration ratio was greater in small municipalities of the Southeast region and strong in the states of Tocantins, Acre and Santa Catarina. New studies are recommended to deepen understanding of the factors related to the internal migration and non-migration of physicians to improve human resource for health policies.

Keywords: Human resources for health, Distribution of physicians, Medical schools, Internal migration, Brazil



The privatization of medical education in Brazil: trends and challenges

Mário C. Scheffer^{1*} and Mario R. Dal Poz²

Abstract

Background: Like other countries, Brazil is struggling with issues related to public policies designed to influence the distribution, establishment, supply and education of doctors.

While the number of undergraduate medical schools and places available on medical schools has risen, the increase in the number of doctors in Brazil in recent decades has not benefitted the population homogeneously. The government has expanded the medical schools at the country's federal universities, while providing incentives for the creation of new undergraduate courses at private establishments. This article examines the trends and challenges of the privatization of medical education in Brazil.

Methods: This is a descriptive, cross-sectional study based on secondary data from official government databases on medical schools and courses and institutions offering such courses in Brazil. It takes into account the year when the medical schools received authorization to initiate the activities, where they are situated, whether they are run by a public or private entity, how many places they offer, how many students they have enrolled, and their performance according to Ministry of Education evaluations.

Results: Brazil had 241 medical schools in 2014, offering a total of 20,340 places. The private higher education institutions are responsible for most of the enrolment of medical students nationally (54 %), especially in the southeast. However, enrolment in public institutions predominate more in the capitals than in other cities. Overall, the public medical schools performed better than the private schools in the last two National Exam of Students' (ENADE) .

Conclusion: The privatization of the teaching of medicine at undergraduate level in Brazil represents a great challenge: how to expand the number of places while assuring quality and democratic access to this form of education. Upon seeking to understand the configuration and trends in medical education in Brazil, it is hoped that this analysis may contribute to a broader research agenda in the future.

Keywords: Human resources for health, Medical education, Undergraduate medical education, Privatization, Brazil

Ampliação de vagas privadas

Financeirização, grupos educacionais

Elitização x democratização da entrada

Qualidade do ensino (corpo docente, estruturas, campos de prática)

Qual avaliação?

Após 2013 (Lei Mais Médicos)

JUSTIFICATIVAS OFICIAIS:

Graduação: meta de aumentar número de médicos por 1.000 habitantes

Residência: meta baseada inclusive na dificuldade dos gestores de contratar especialistas

Brasil sairá de
374 mil para
600 mil médicos
até 2026

Atingindo a meta de

2,7

médicos por mil habitantes

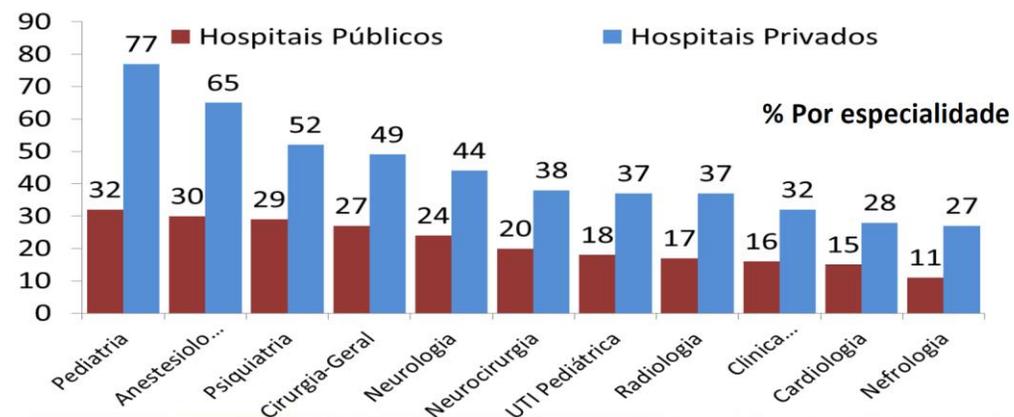


- **11,5 mil** novas vagas de **graduação** até 2017
- **12,4 mil** novas vagas de residência para formação de **especialistas**
- **Interiorização da formação**

Necessidade de especialistas



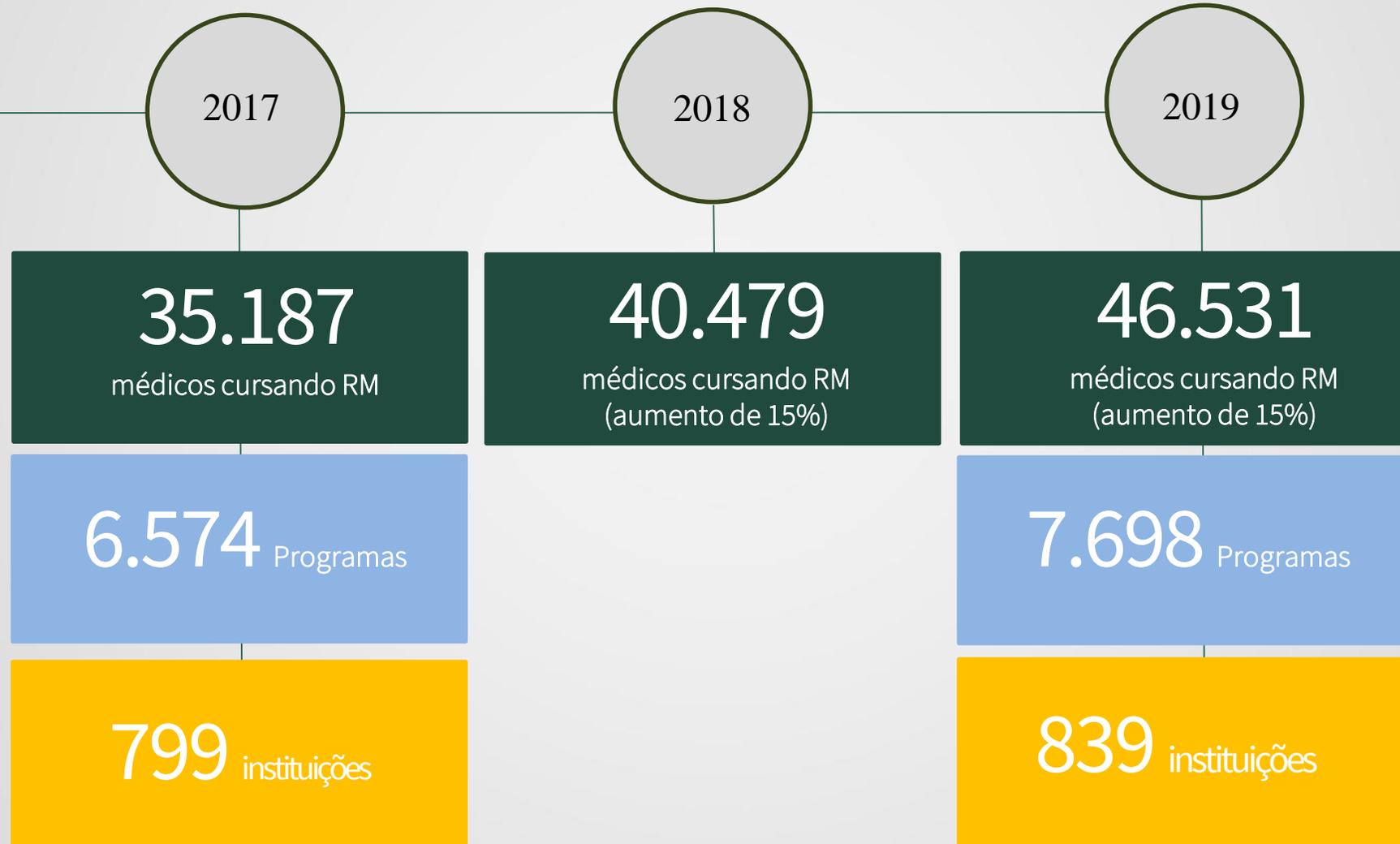
Pesquisa da UFMG em 2012 apontou a dificuldade dos gestores de hospitais públicos e privados na contratação de especialistas





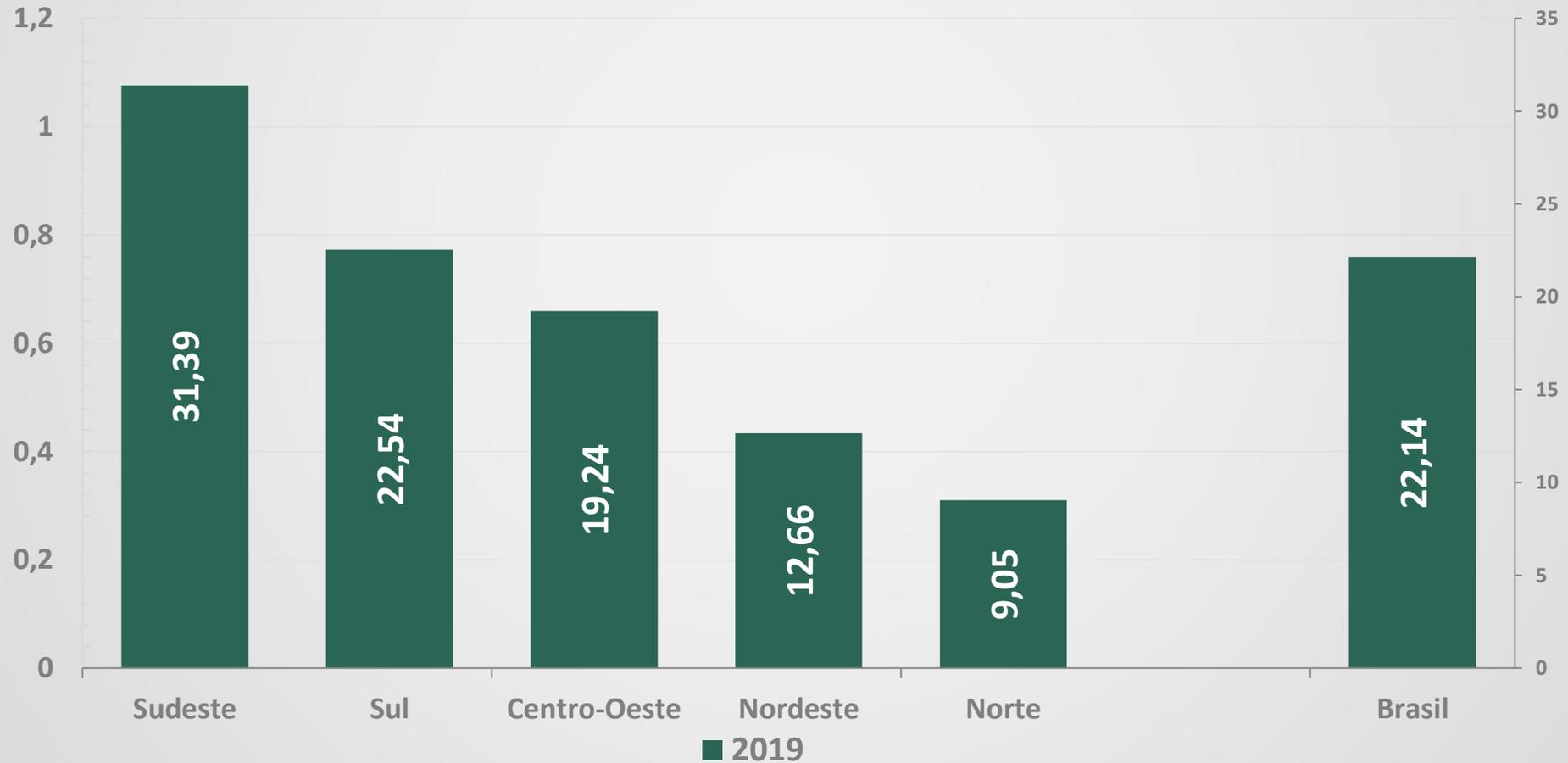
Expansão da Oferta de Residência Médica

Residência Médica (2017 a 2019)



Residência Médica

Médicos Residentes por 100.000 habitantes (2019)

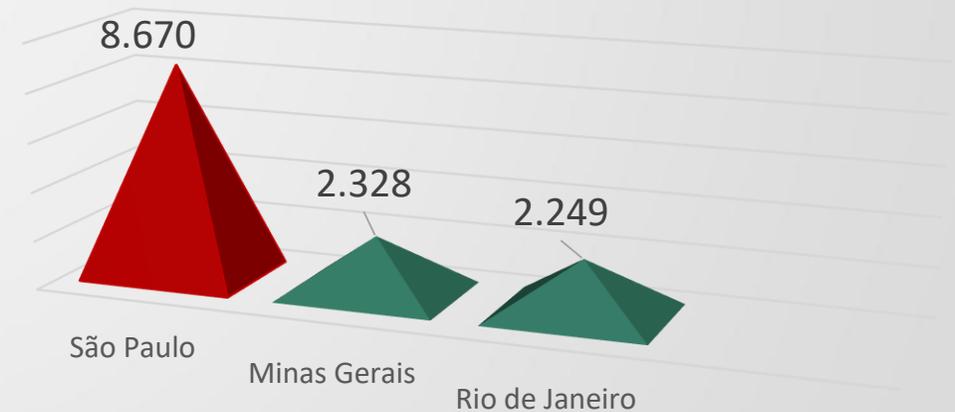
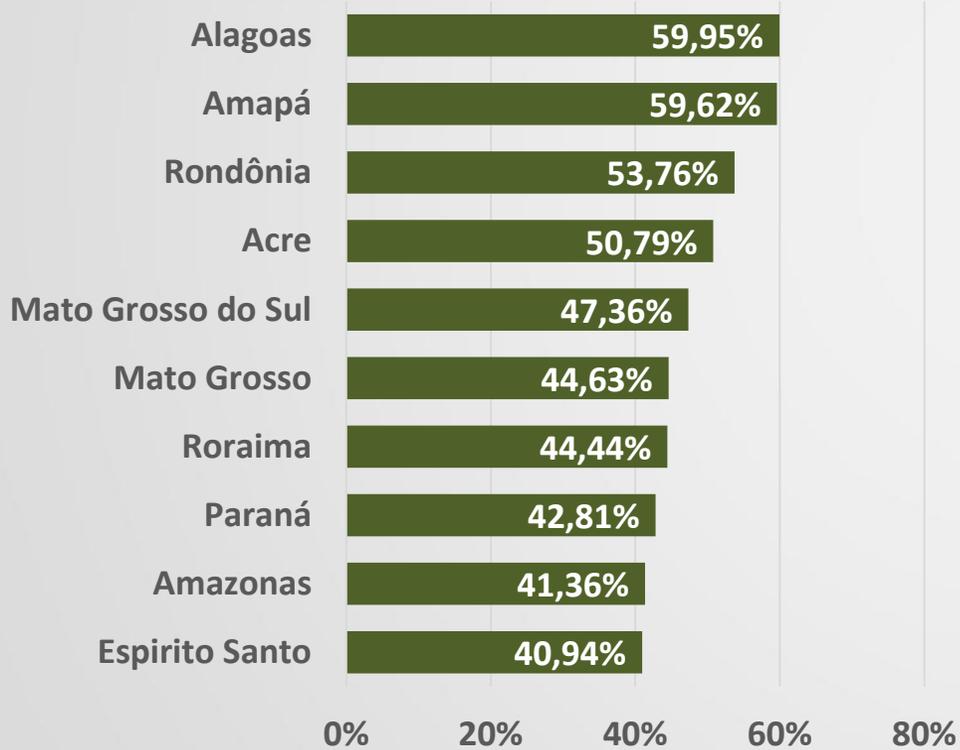


Vagas de RM autorizadas e não ocupadas (2017-2019)



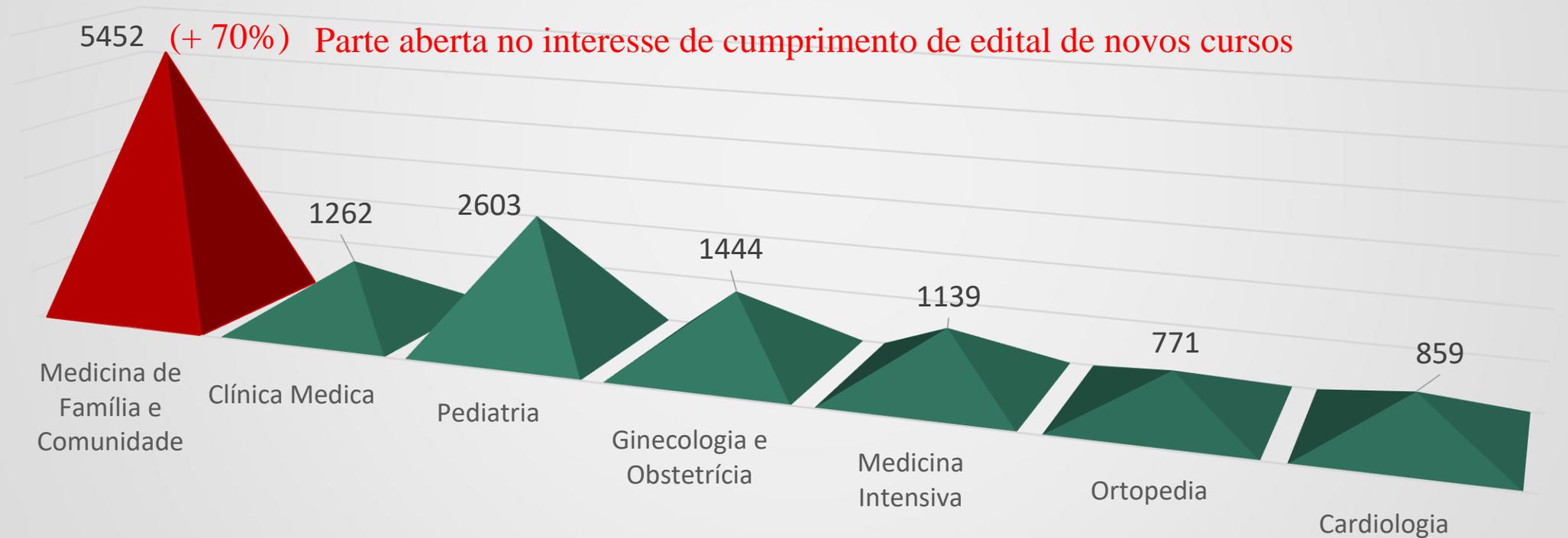
Vagas de RM autorizadas e não ocupadas (2019)

Vagas ociosas por estado



Vagas de RM autorizadas e não ocupadas (2019)

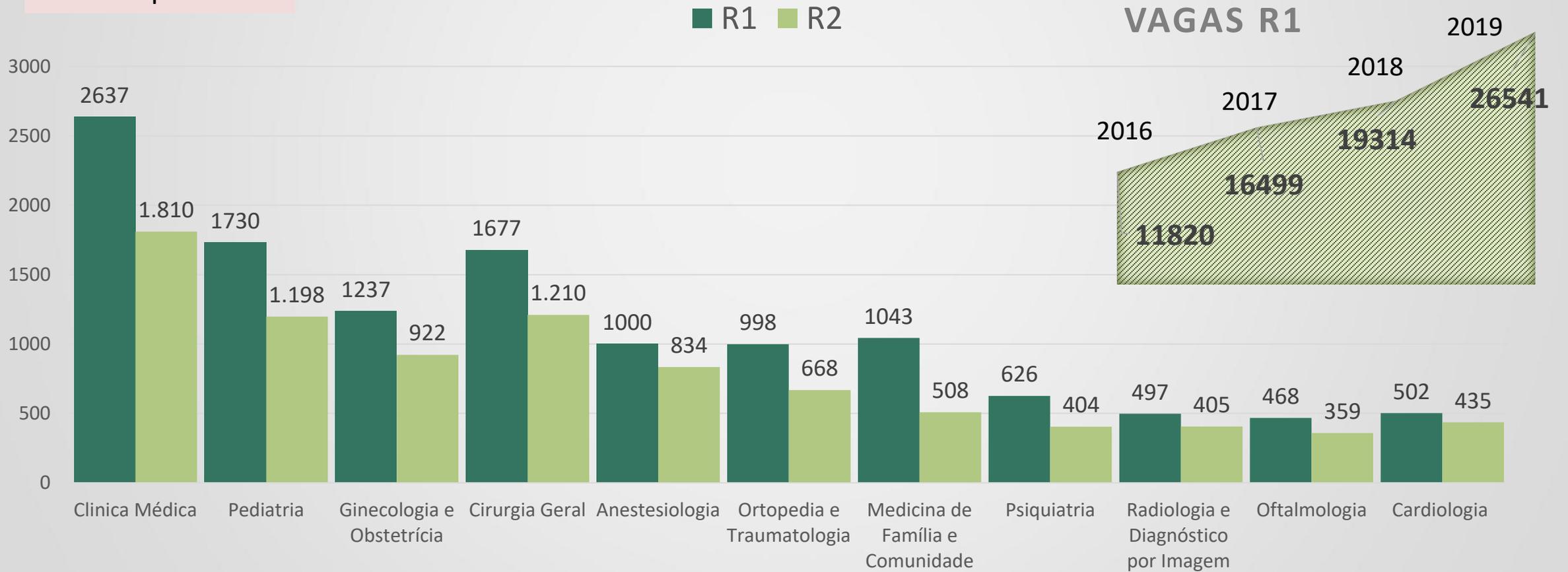
Especialidades com maior número de vagas ociosas



Residência Médica

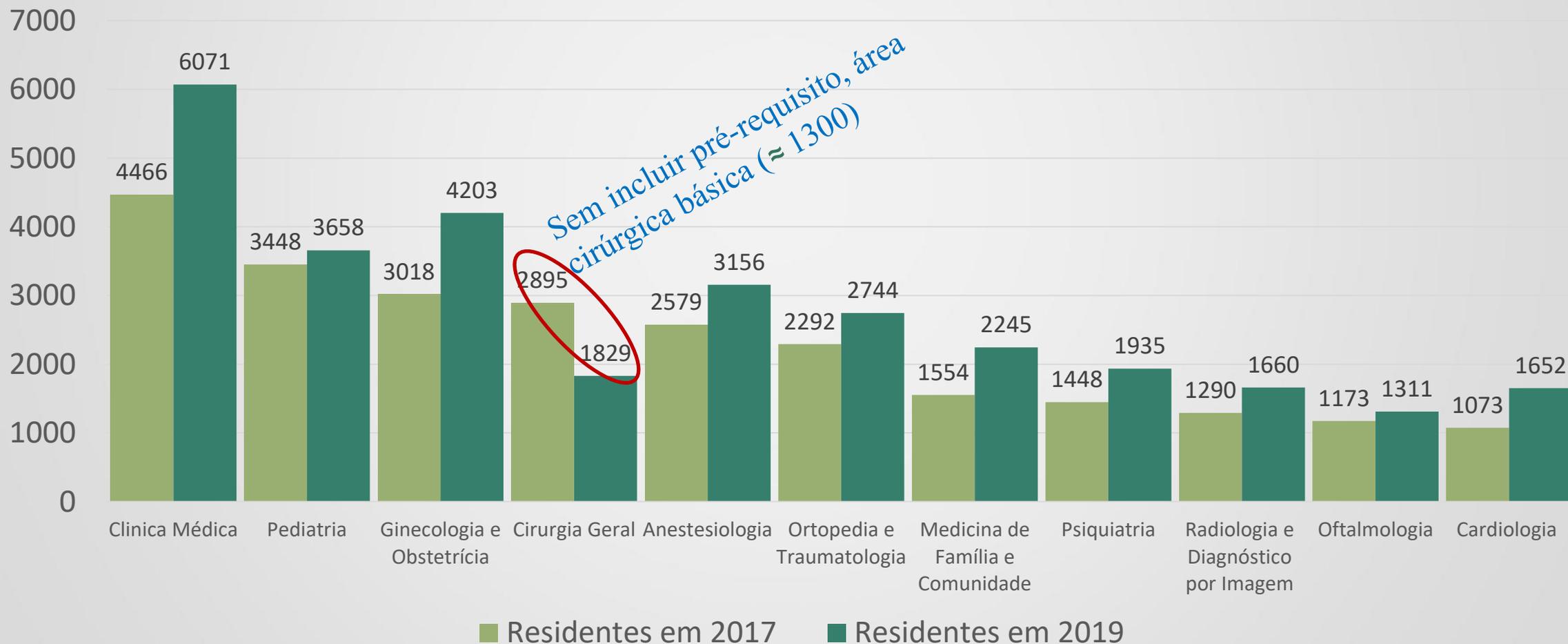
Expansão da oferta

De 2016 para 2017



Residência Médica

Distribuição de vagas ocupadas (2019)



Por que há tantas vagas de RM não ocupadas?

Falhas no registro/atualização de dados
Não abertura de editais para todas as vagas
Limitação de financiamento/bolsas
Falta de estrutura/preceptores
Desistências e afastamentos
Baixa procura (+ vagas/-candidatos)
Disponibilidade de campo de prática para o total de vagas
Mudança de gestores de serviços
Programas com salários competitivos com RM
Questões administrativas e legais

O número de vagas de RM é suficiente para o número de egressos da graduação?

Residência Médica: número de vagas RM X Graduação

| ANO | Vagas R1 | Registros (novos médicos) | Defasagem |
|------|----------|---------------------------|-----------|
| 2016 | 11.820 | 19.440 | 7.620 |
| 2017 | 16.499 | 21.349 | 4.850 |
| 2018 | 19.314 | 23.461 | 4.147 |
| 2019 | 26.541 | - | - |

Total de médicos sem RM ou título : 167.561

Projeção de 34.300 novos médicos/ano em 2025

Oferta de especialistas!

Contagem de especialistas

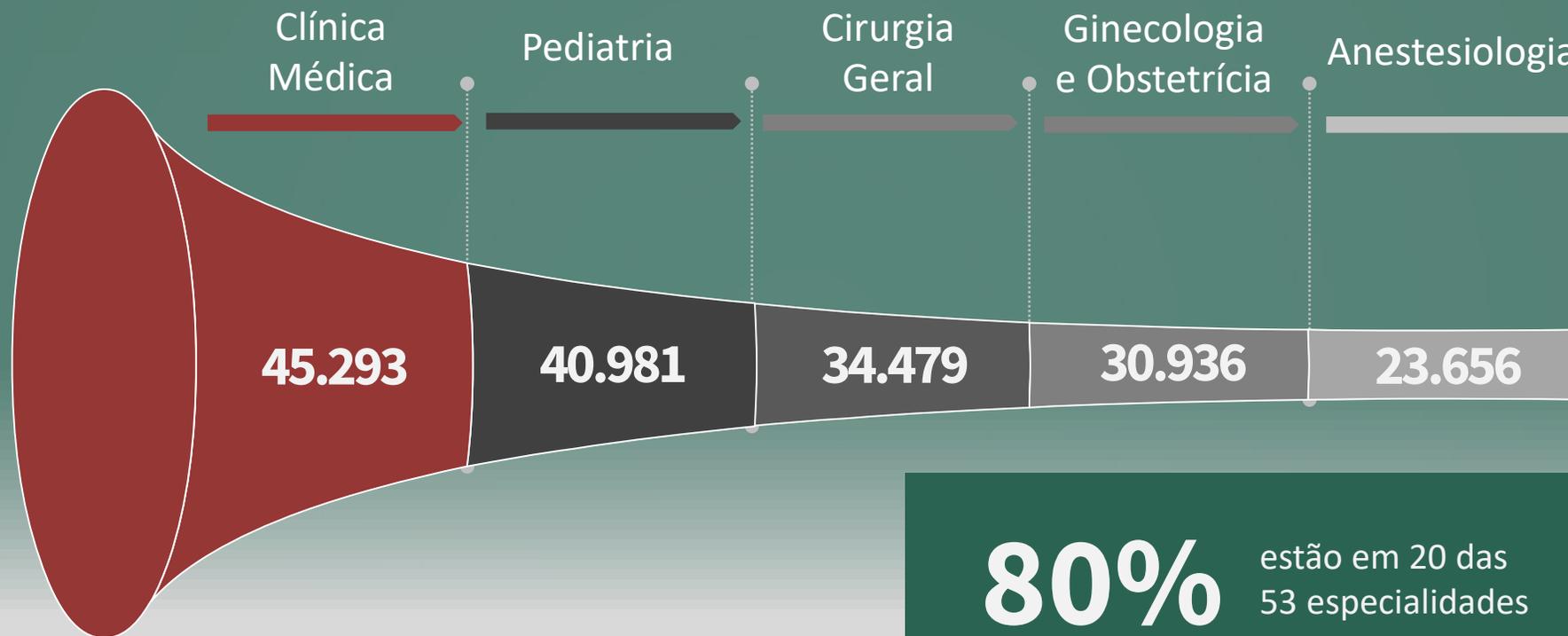


Bases de dados: CRMs, CNRM e AMB



64% dos especialistas tem Residência Médica

Contagem de especialistas



5 especialidades

Têm 44% dos especialistas

80% estão em 20 das 53 especialidades

- 11º. Psiquiatria(11.023)
- 12º. Dermatologia (9.078)
- 14º. Medicina de Família e Comunidade (6.648)
- 16º. Cirurgia plástica(6.152)

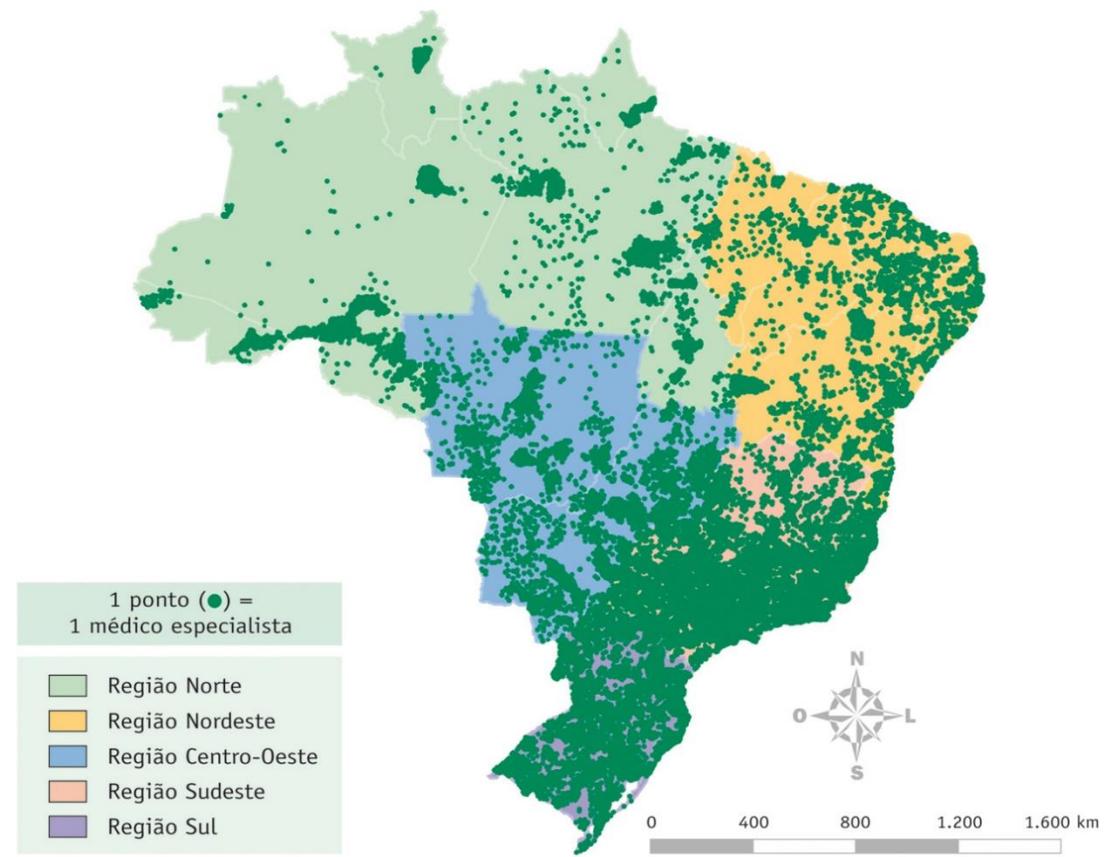
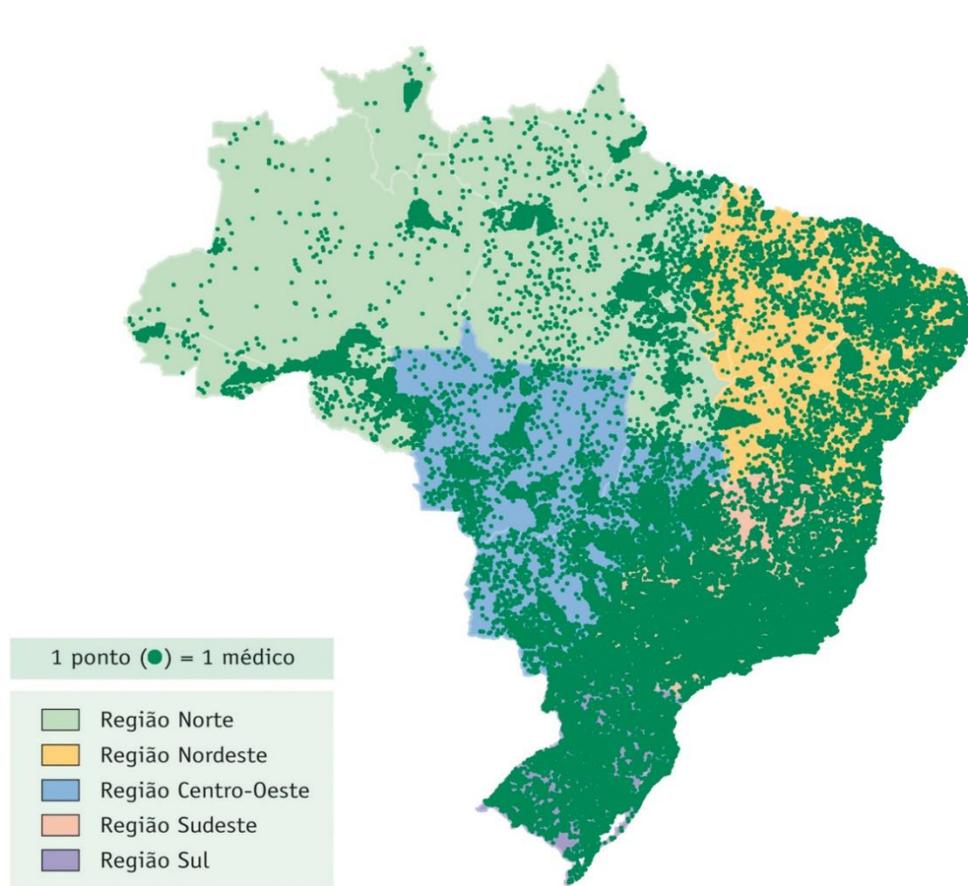
Razão Especialistas/Residentes

| | Especialistas | % | D | Residentes | % | D | Razão E/R |
|------------------------------------|---------------|----------------|---------------|---------------|----------------|--------------|--------------|
| Medicina de Família e Comunidade | 5486 | 1,44% | 2,64 | 1554 | 4,42% | 0,75 | 3,53 |
| Pediatria | 39234 | 10,28% | 18,89 | 3448 | 9,80% | 1,66 | 11,38 |
| Medicina Interna/Clínica Médica | 42728 | 11,20% | 20,58 | 4466 | 12,70% | 2,15 | 9,57 |
| Anestesiologia | 23021 | 6,03% | 11,09 | 2579 | 7,33% | 1,24 | 8,93 |
| Ginecologia e Obstetria | 30415 | 7,97% | 14,65 | 3018 | 8,58% | 1,45 | 10,08 |
| Ortopedia e Traumatologia | 15598 | 4,09% | 7,51 | 2292 | 6,52% | 1,10 | 6,81 |
| Psiquiatria | 10396 | 2,72% | 5,01 | 1448 | 4,12% | 0,70 | 7,18 |
| Radiologia | 12233 | 3,21% | 5,89 | 1290 | 3,67% | 0,62 | 9,48 |
| Cirurgia Geral | 34065 | 8,93% | 16,40 | 2895 | 8,23% | 1,39 | 11,77 |
| Oftalmologia | 13825 | 3,62% | 6,66 | 1173 | 3,33% | 0,56 | 11,79 |
| Cardiologia | 15516 | 4,07% | 7,47 | 1073 | 3,05% | 0,52 | 14,46 |
| Neurologia | 5104 | 1,34% | 2,46 | 826 | 2,35% | 0,40 | 6,18 |
| Urologia | 5328 | 1,40% | 2,57 | 521 | 1,48% | 0,25 | 10,23 |
| Dermatologia | 8317 | 2,18% | 4,01 | 647 | 1,84% | 0,31 | 12,85 |
| Otorrinolaringologia | 6373 | 1,67% | 3,07 | 588 | 1,67% | 0,28 | 10,84 |
| Neurocirurgia | 3298 | 0,86% | 1,59 | 538 | 1,53% | 0,26 | 6,13 |
| Cirurgia Plástica | 6304 | 1,65% | 3,04 | 439 | 1,25% | 0,21 | 14,36 |
| Outras*especialidades ⁷ | 104265 | 27,33% | 50,21 | 6383 | 18,14% | 3,07 | 16,33 |
| Total | 381506 | 100,00% | 183,72 | 35.178 | 100,00% | 16,94 | 10,85 |



O que já sabemos e precisamos considerar no planejamento da formação e oferta de médicos e especialistas?

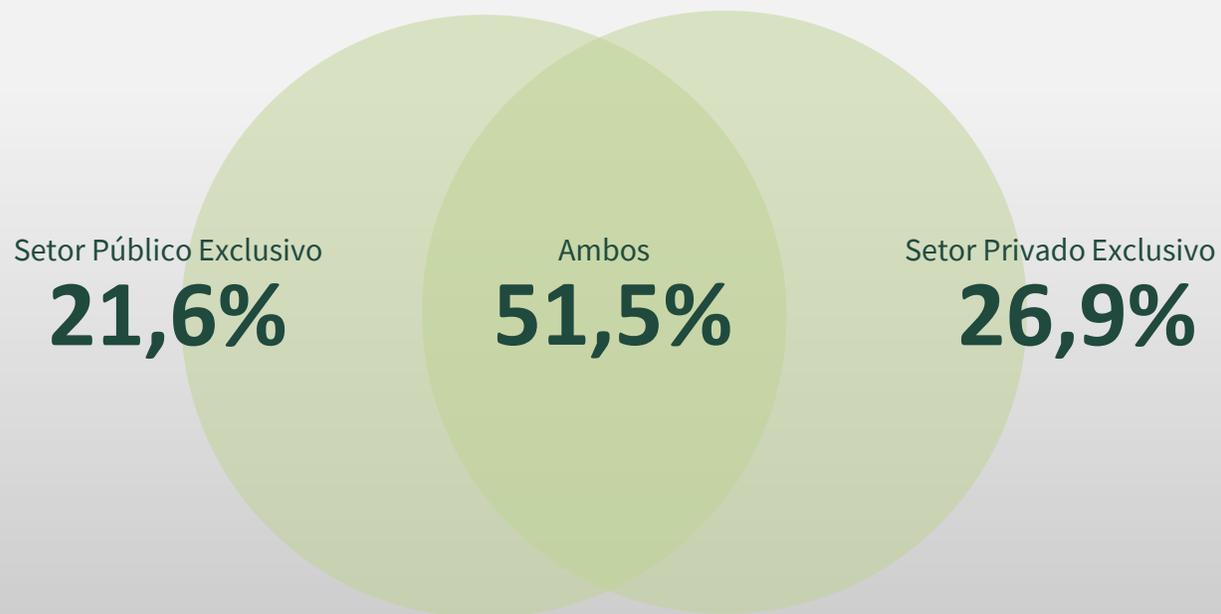
Distribuição desigual de médicos e de especialistas



Fonte: Scheffer M. et al., Demografia Médica no Brasil 2018.

Desequilíbrio entre público e privado

(Inquério com médicos)



Hospital público ,
Atenção Básica e
Especializada



Consultório particular
Clínica e Hospital privado

Desigualdades público-privadas

*Dupla prática
Mais de 50%.
Afeta a disponibilidade no setor
público*



Physician's sociodemographic profile and distribution across public and private health care: an insight into physicians' dual practice in Brazil

Bruno Alonso Miotto^{1†} , Aline Gil Alves Guilloux^{1†}, Alex Jones Flores Cassenote¹, Giulia Marcelino Mainardi¹, Giuliano Russo² and Mário César Scheffer¹

Abstract

Background: The intertwined relation between public and private care in Brazil is reshaping the medical profession, possibly affecting the distribution and profile of the country's medical workforce. Physicians' simultaneous engagement in public and private services is a common and unregulated practice in Brazil, but the influence played by contextual factors and personal characteristics over dual practice engagement are still poorly understood. This study aimed at exploring the sociodemographic profile of Brazilian physicians to shed light on the links between their personal characteristics and their distribution across public and private services.

Methods: A nation-wide cross-sectional study using primary data was conducted in 2014. A representative sample size of 2400 physicians was calculated based on the National Council of Medicine database registries; telephone interviews were conducted to explore physicians' sociodemographic characteristics and their engagement with public and private services.

Results: From the 2400 physicians included, 51.45% were currently working in both the public and private services, while 26.95% and 21.58% were working exclusively in the private and public sectors, respectively. Public sector physicians were found to be younger (PR 0.84 [0.68–0.89]; PR 0.47 [0.38–0.56]), less experienced (PR 0.78 [0.73–0.94]; PR 0.44 [0.36–0.53]) and predominantly female (PR 0.79 [0.71–0.88]; PR 0.68 [0.6–0.78]) when compared to dual and private practitioners; their income was substantially lower than those working exclusively for the private (PR 0.58 [0.48–0.69]) and mixed sectors (PR 0.31 [0.25–0.37]). Conversely, physicians from the private sector were found to be typically senior (PR 1.96 [1.58–2.43]), specialized (PR 1.29 [1.17–1.42]) and male (PR 1.35 [1.21–1.51]), often working less than 20 h per week (PR 2.04 [1.4–2.96]). Dual practitioners were mostly middle-aged (PR 1.3 [1.16–1.45]), male specialists with 10 to 30 years of medical practice (PR 1.23 [1.11–1.37]).

(Continued on next page)

Perfil e escolhas dos recém-formados em Medicina

80% pretendem fazer
Residência Médica

20% pretendem entrar
imediatamente no mercado

Onde prefere trabalhar?



Hospital

79,2%



Consultório particular

50,2%



Clínica (ambulatório)

45,3%



Unidade Básica de Saúde

28,3%

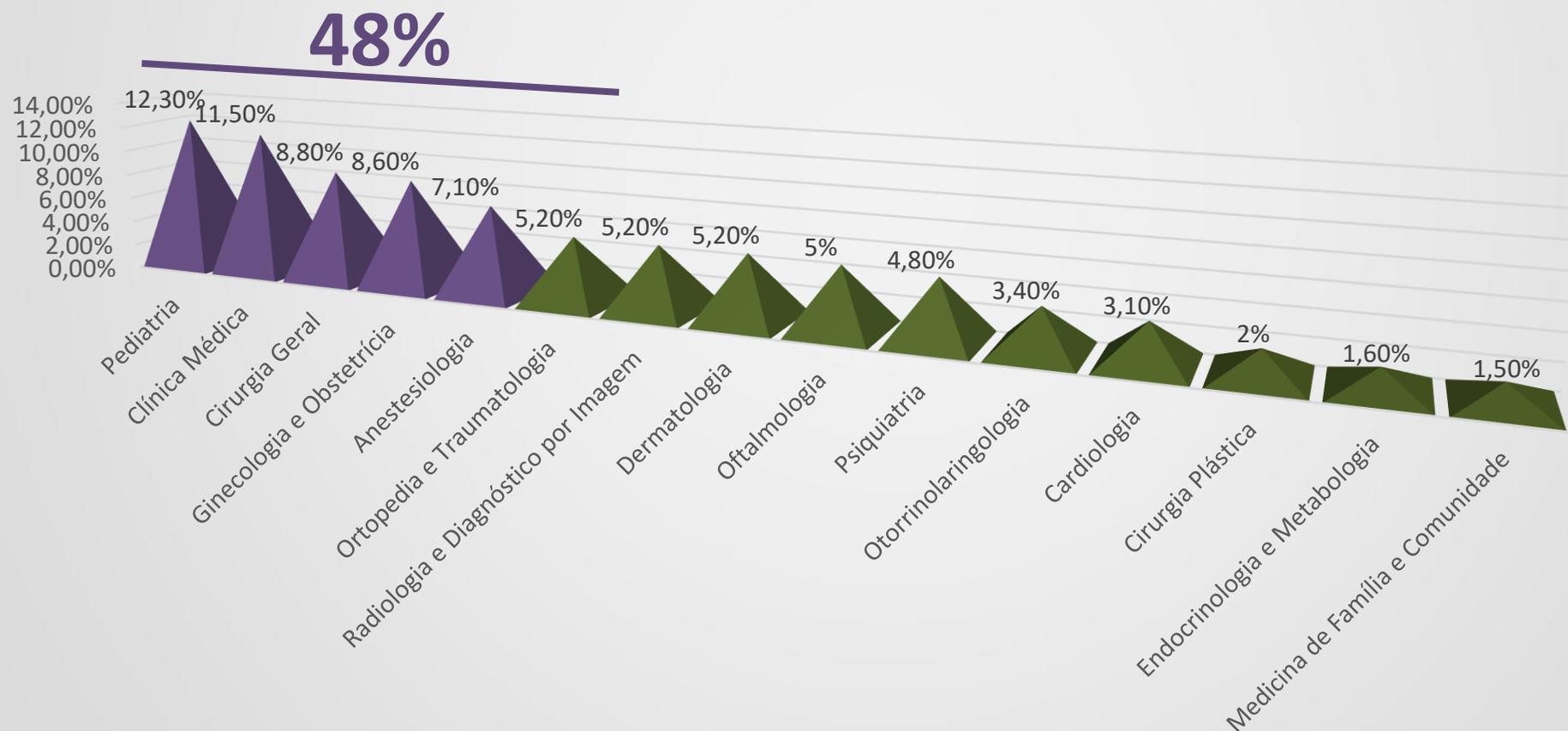


Estratégia Saúde da Família

19,4%

Motivos de escolhas dos recém-formados (4.600 participantes)

Qual a primeira opção de Residência Médica?



Conhecer melhor as escolhas

Guilloux et al. *BMC Medical Education* (2019) 19:136
<https://doi.org/10.1186/s12909-019-1562-6>

BMC Medical Education

RESEARCH ARTICLE

Open Access

Profiling recent medical graduates planning to pursue surgery, anesthesia and obstetrics in Brazil



Aline Gil Alves Guilloux^{1*}, Jania A. Ramos^{2,3}, Isabelle Citron², Lina Roa^{2,4}, Julia Amundson², Benjamin B. Massenburg², Saurabh Saluja², Bruno Alonso Miotto¹, Nivaldo Alonso¹ and Mario César Scheffer¹

Abstract

Background: Lack of providers in surgery, anesthesia, and obstetrics (SAO) is a primary driver of limited surgical capacity worldwide. We aimed to identify predictors of entry into Surgery, Anesthesia, and Obstetrics and Gynecology (SAO) fields and preference of working in the public sector in Brazil which may help in profiling medical students for recruitment into these needed areas.

Methods: A questionnaire was applied to all Brazilian medical graduates registered with a Board of Medicine from 2014 to 2015. Twenty-three characteristics were analyzed. Logistic regression was used to determine predictors' influence on outcome.

Results: There were 4601 (28.2%) responders to the survey, of which 40.5% (CI 34.7–46.5%) plan to enter SAO careers. Of the 23 characteristics analyzed, eight differed significantly between those who planned to work in SAO and those who did not. Of those eight characteristics, just three were significant predictors in the regression model: preference for working in the hospital setting, having spent more than 70% of their clinical years in practical activities, and valuing the substantial earning potential. These three factors explained only 6.3% of the variance in SAO preference. Within the graduates who preferred SAO careers, there were only two predictors for working in the public sector ("preparatory time before medical school" and valuing "prestige/status").

Conclusions: Factors affecting specialty and sector choice are multifaceted and difficult to predict. Future programs to fill provider gaps should identify methods other than medical student profiling to assure specialty and sector needs are met.

Keywords: Surgical workforce, Medical education, Specialty selection, Global surgery, Anesthesia, Obstetrics

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The state of the surgical workforce in Brazil

Mário C. Scheffer, PhD, Aline G.A. Guilloux, PhD, Alicia Matijasevich, MD, PhD, Benjamin B. Massenburg, BA, Saurabh Saluja, MD, MPP, Nivaldo Alonso, MD, PhD

ORIGINAL ARTICLE

Reasons for choosing the profession and profile of newly qualified physicians in Brazil

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SUMMARY

Objective: To evaluate the socio-demographic profile, path to medical school admission and factors affecting the choice of becoming a physician in Brazil.

Method: Application of a structured questionnaire to 4,601 participants among the 16,323 physicians who graduated between 2014 and 2015 that subsequently registered with one of the 27 Regional Boards of Medicine (CRMs).

Results: The average age of participants is 27 years, 77.2% are white, 57% come from families with a monthly income greater than ten times the minimum wage, 65% have fathers who have completed higher education, 79.1% attended a private high school, and 63.5% selected the "will to make a difference in people's lives or do good" as their main reason for choosing medicine, with some differences between the sexes and matriculation at a public or private medical school.

Conclusion: The recent politics for educational diversity and the opening of additional medical schools has not yet had an impact on the socio-demographic profile of graduates, who are mainly white, wealthy individuals.

Keywords: physicians, undergraduate medical education, career choice, demographics.

Study conducted at Faculdade de Medicina da Universidade de São Paulo (FMUSP), São Paulo, SP Brazil

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<http://dx.doi.org/10.1590/1806-9282.82.09.853>



*Quais pressupostos e cenários
tendenciais podem nortear novas
pesquisas sobre médicos e
médicos especialistas*

Pressupostos e cenários

1

A demanda por médicos em determinadas especialidades cresce mais rapidamente que oferta de RM e de especialistas, o que pode levar a um deficit desses profissionais. Em algumas especialidades a oferta estagnada de RM pode conduzir à escassez de especialistas

2

Há possíveis pontos de saturação em determinadas especialidades, tendo sido alcançada a capacidade de absorção de mais especialistas pelo sistema de saúde?

3

Persistem desequilíbrios entre oferta e demanda de médicos especialistas em áreas estratégicas para o SUS como atenção primária, saúde mental, urgência e emergência e outras.

Pressupostos e cenários

4

Mudanças demográficas e envelhecimento da população, assim como a longevidade associada à melhoria da saúde, resultarão em maior demanda por cuidados contínuos, por serviços e por determinadas especialidades

5

Haverá necessidade de adequação de especialistas às mudanças no perfil de adoecimento e morte da população brasileira. Houve queda acentuada da mortalidade por doenças transmissíveis, mortalidade de menores de cinco anos e por causas evitáveis. Mas há aumento das doenças crônicas não transmissíveis, como diabetes, cardiovasculares e câncer, além de aumento das mortes por causas externas, violências e acidentes de trânsito. Para atingir metas de saúde selecionadas (melhora de indicadores), e implementar políticas, haverá demanda por médicos e especialistas.

6

Há possíveis mudanças no *status quo* nas novas gerações de médicos: nas características pessoais, na escolha de especialidades, na feminização da profissão, e nos padrões de trabalho como horas trabalhadas, vínculos e momento de aposentadoria.

Pressupostos e cenários

7

Tecnologias, novos modelos de prestação de cuidados e organização de serviços, novos formatos de produtividade e de financiamento, podem alterar a configuração de especialidades e a distribuição de especialistas

8

Taxas gerais ou globais “adequadas” de especialistas por habitantes podem mascarar desigualdades geográficas e entre os setores público e privado

9

Reconfigurações do sistema de saúde público (acirramento do subfinanciamento e “encolhimento” do SUS) e privado (desregulamentação e crescimento de planos de saúde, clínicas populares etc) podem afetar mercado de trabalho e demanda por especialidades.

10

A oferta e demanda de especialistas é condicionada por múltiplos fatores, como escolhas profissionais, mercado, ação das entidades representativas e sociedades de especialidades, regulação estatal, financiamento e funcionamento do aparelho formador e do sistema de saúde.



ESTIMACIÓN DE LA OFERTA Y DEMANDA DE MÉDICOS ESPECIALISTAS. ESPAÑA 2018-2030

PATRICIA BARBER PÉREZ, BEATRIZ GONZÁLEZ LÓPEZ-VALCÁRCEL

EQUIPO ECONOMÍA DE LA SALUD

Universidad de Las Palmas de Gran Canaria

The Supply of Physicians in Canada ——— **Projections and Assessment** ———

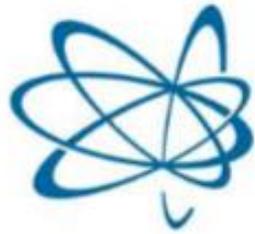
Steven Globerman, Bacchus Barua, and Sazid Hasan



2019 UPDATE

The Complexities of Physician Supply and Demand: Projections from 2017 to 2032

April 2019



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