



Building Effectiveness in the Health System The Role of the University

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The Example of Brazil



The Size of the Challenge

Building Effectiveness in Health in Brazil

- The Sistema Única de Saúde (SUS)
 - 20 years old
 - Universal access
 - Current estimates of 70-75% of population covered
- 64,000 ambulatory health facilities
 - 1.5 billion ambulatory visits/year
- 5,900 hospitals
 - 12 million hospitalizations/year
- 300 million laboratory tests/year

The SUS 1988 - 2008

Creation → Expansion → Quality improvement

Political Actions

Technical Actions

Technical Actions for Improving the Quality of Health Actions through the SUS

- Public health practice
 - Developing public health practice guidelines
 - Implementing and evaluating the use of these guidelines
- Health technology assessment
 - Producing health technology assessments
 - Helping managers incorporate these assessments into their practices
- Clinical practice
 - Developing clinical guidelines
 - Implementing and evaluating the use of these clinical guidelines
- Health care services
 - Evaluating health policies and actions of health promotion
 - Evaluating process, satisfaction and outcomes

Government – University Partnership



■ Government

- Organize the system
 - Central coordination
 - Collaborating centers (Societies/Universities/Others)
- Finance the system



■ University

- Provide critical expertise to support government's role
- Sponsor centers of excellence
 - to synthesize the evidence
 - to advise policy makers
 - to publish the evidence
- Train human resources to make the system work

Evolution of Funding in Health Research in Brazil

	2000	
	Pre	Post
Size:	Limited	Increasingly large
Emphasis:	Scientific merit Relevance in a Generic Sense	Scientific merit Relevance to the SUS Development of local health services research competence
Funding Initiator:	Ministry of Science and Technology	Ministry of Science and Technology Ministry of Health

Strengths of the University

A Major Pool of Resources

- Stability
- Independence
- Home of the principal raw material necessary
Qualified, motivated young health professionals
- Pluralism
- Motivation



NICE – Health Technology Assessment

Independent academic centres

- Health Economics Research Unit and Health Services Research Unit
University of Aberdeen
- Liverpool Reviews & Implementation Group
University of Liverpool
- NHS Centre for Reviews and Dissemination
University of York
- Peninsula Technology Assessment Group (PenTAG), Peninsula Medical School
Universities of Exeter and Plymouth
- School of Health and Related Research (ScHARR)
University of Sheffield
- Southampton Health Technology Assessment Centre (SHTAC)
University of Southampton
- West Midlands HTA Collaboration, Department of Public Health and Epidemiology
University of Birmingham

University Resources Available in Brazil

Masters and Doctoral Programs

- 1965: First programs
- Overall (2006)
 - 2266 Programs
 - 1182 Doctoral courses (~50,000 students)
 - 2070 “Academic” Masters courses (~100,000 students)
 - 157 “Professional” Masters courses
- Health
 - 403 Programs: 201 Medicine, 84 Dentistry, 27 Pharmacy, 27 Nursing
 - Public Health: 34 Programs



The Response of One Graduate Studies Program



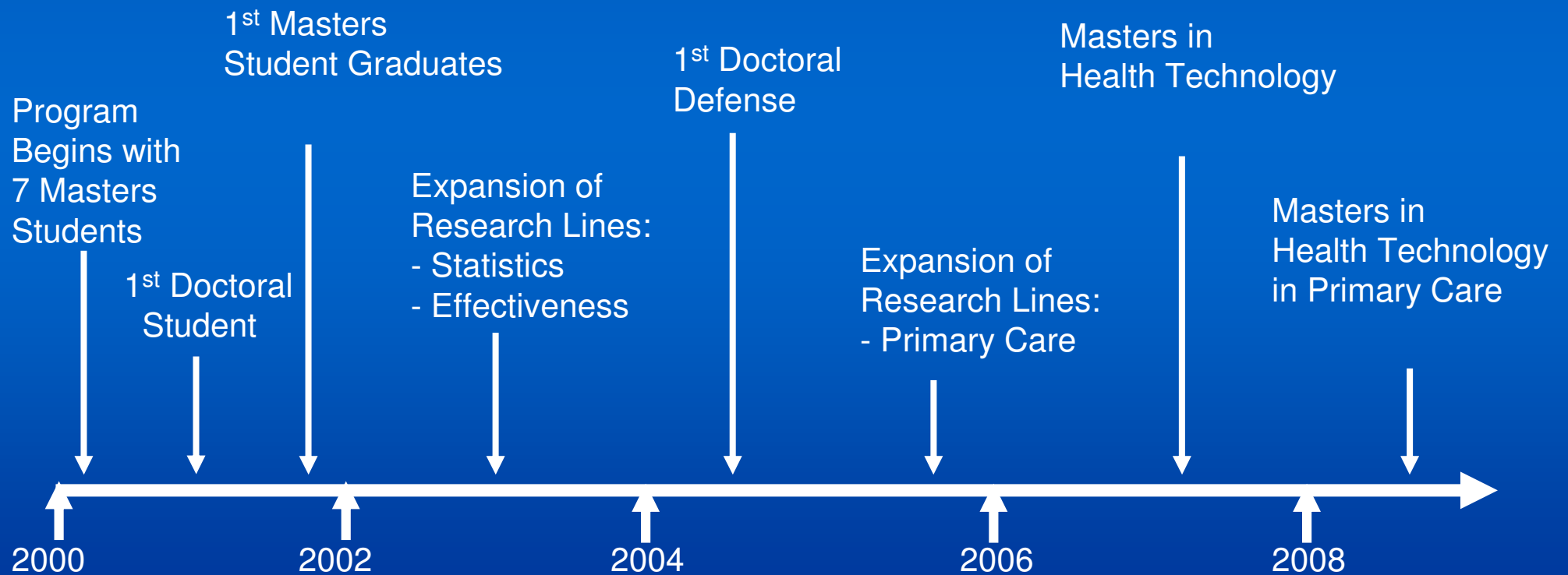
Programa de Pós-Graduação em Epidemiologia

- Objective
 - Promote the use of epidemiologic methods with the aim of qualifying actions in health and producing knowledge of local, regional, national and international relevance

- Aptitude to Assume the Necessary Tasks
 - Clinical epidemiology/Evidence-based medicine
 - Interdisciplinary background: medicine, pharmacy, statistics, economics

- Conscious Decision to Expand Activities in Support of the SUS

Graduate Studies Program in Epidemiology UFRGS– Timeline



Evolution of Research Lines

Initial Lines of Research

CVD/Diabetes

Cancer

Infectious Diseases

Sexuality and Human Reproduction

Health Services

Workers' Health

More Recently Added Lines of Research

Effectiveness in Health

Statistics in Epidemiology

Primary Care

Activities in Support of the SUS

PPG-Epidemiology, UFRGS – Research

BMC Health Services Research



Study protocol

Open Access

Quality and effectiveness of different approaches to primary care delivery in Brazil

DIABETICMedicine

DOI: 10.1111/j.1464-5491.2007.02157.x

International Diabetes Federation: a consensus on Type 2 diabetes prevention

PRÊMIO DE INCENTIVO AO DESENVOLVIMENTO E À APLICAÇÃO DA EPIDEMIOLOGIA NO SUS
MENÇÃO HONROSA DOUTORADO

Diabetes mellitus:
magnitude das hospitalizações
na rede pública do Brasil, 1999-2001

Laparoscopy versus laparotomy for benign ovarian tumor: a systematic review and meta-analysis
Int J Gynecol Cancer 2008, 18, 387–399

Initial Impact and Cost of a Nationwide Population Screening Campaign for Diabetes in Brazil: a Follow up Study

BMC Health Services Research

Academic medicine as a resource for global health: the case of Brazil
BMJ VOLUME 329 2 OCTOBER 2004

Improving population health demands stronger academic input

The impact on costs and care of two approaches to reduce employees' dental plan expenses in a private company
Cad. Saúde Pública, Rio de Janeiro, 24(5):1071-1081, mai, 2008

Hospitalization for Diabetes Mellitus as the first-listed diagnosis in the Brazilian National Health System (SUS), 1999-2001

Int J Gynecol Cancer 2005, 15, 192–202

Accuracy of frozen-section analysis in the diagnosis of ovarian tumors: a systematic quantitative review

INTERNATIONAL DIABETES FEDERATION, 2005

Clinical Guidelines Task Force

Global Guideline
for Type 2 Diabetes

Activities in Support of the SUS

PPG-Epidemiology, UFRGS - Consultations

- Chronic disease surveillance – Collaborative Center
 - National plan for surveillance of chronic diseases
 - Expansion of VIGITEL (telephone-based behavioral risk factor surveillance)
 - Burden of diabetes and chronic diseases
- Incorporation of technologies in cardiovascular disease
- Hospital based surveillance systems for adverse events
- Stimulating breastfeeding at birth
- Evidence-based guidelines for AIDS management

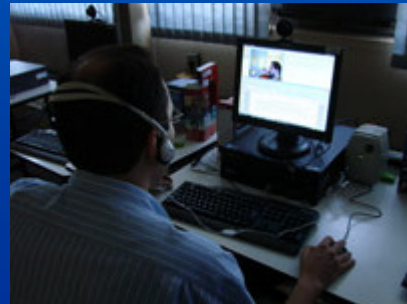
Activities in Support of the SUS

PPG-Epidemiology, UFRGS – Extension

- Evidence-based Primary Care – 30,000 textbooks distributed by the Ministry of Health in primary care health facilities
- Manuals produced by the Ministry for primary care management of CVD and diabetes
- Tele-Health – Internet-based Consultations in Primary Care
- Technological Network on HIV/AIDS Cooperation



Medicina ambulatorial:
Condutas de Atenção Primária Baseadas em Evidências
1ª Edição
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Maria Inês Schmidt
Elsa R.J. Giugliani
e Colaboradores



CADERNOS DE
ATENÇÃO BÁSICA

DIABETES MELLITUS

DIABETES MELLITUS

16

CADERNOS DE
ATENÇÃO BÁSICA

PREVENÇÃO CLÍNICA DE DOENÇA CARDIOVASCULAR, CEREBROVASCULAR E RENAL CRÔNICA

PREVENÇÃO CLÍNICA DE DOENÇA CARDIOVASCULAR, CEREBROVASCULAR E RENAL CRÔNICA

14

Activities in Support of the SUS

PPG-Epidemiology, UFRGS

■ Teaching

- “Academic” Masters (MSc) and Doctoral (DSc) Courses
- “Professional” Masters (~MPH) Course
 - Contracted by the Ministry of Health for professionals working in the SUS



Professional Masters Course

Epidemiology: Management of Health Technologies

General Objective

To train health professionals to act strategically in health systems management, incorporating the vision of the importance of critical analysis of health technologies as a pre-requisite to decision making and definition of priorities within the context of the the SUS – the Brazilian national health system.

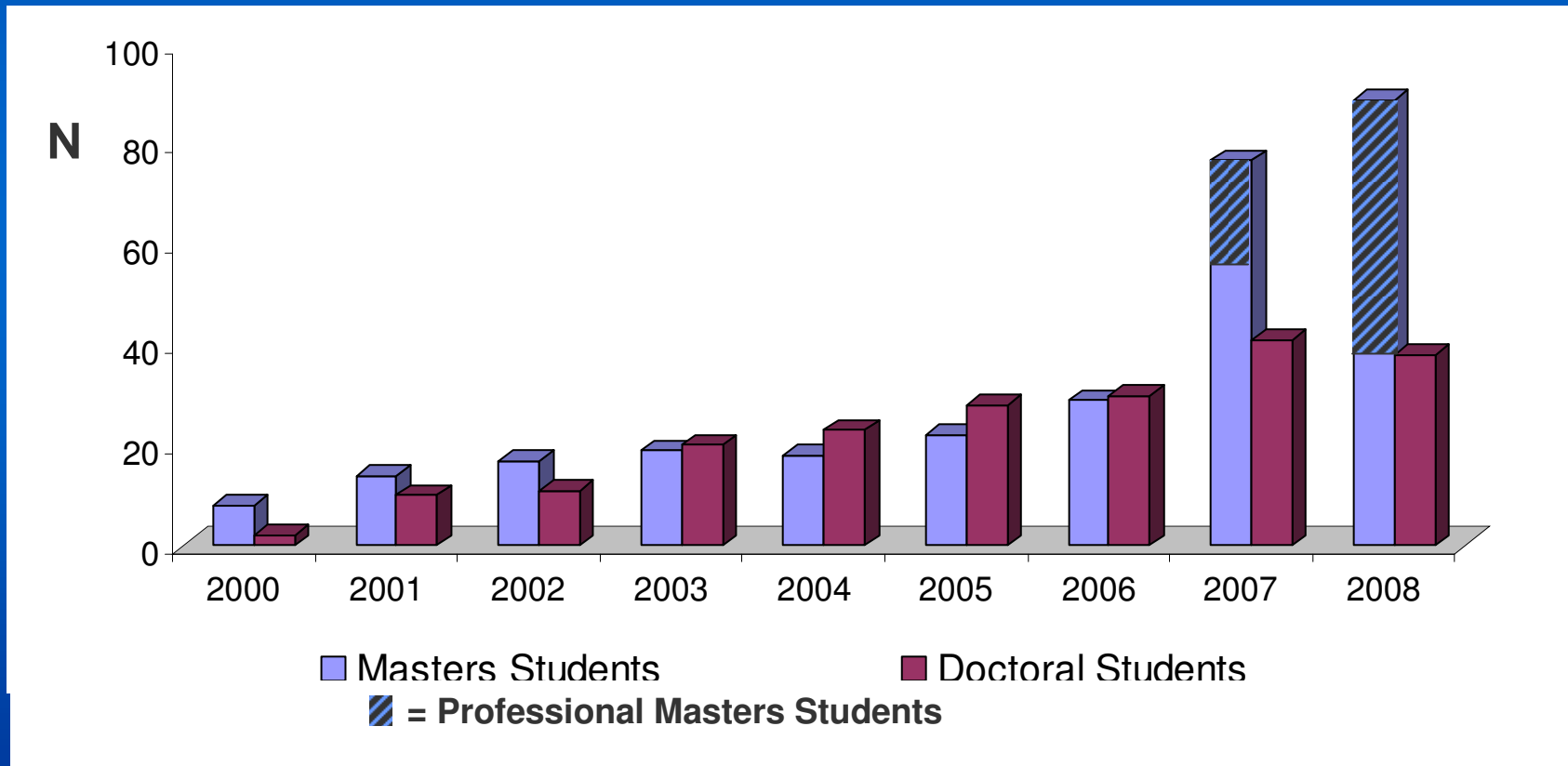
Professional Masters Course

Epidemiology: Management of Health Technologies

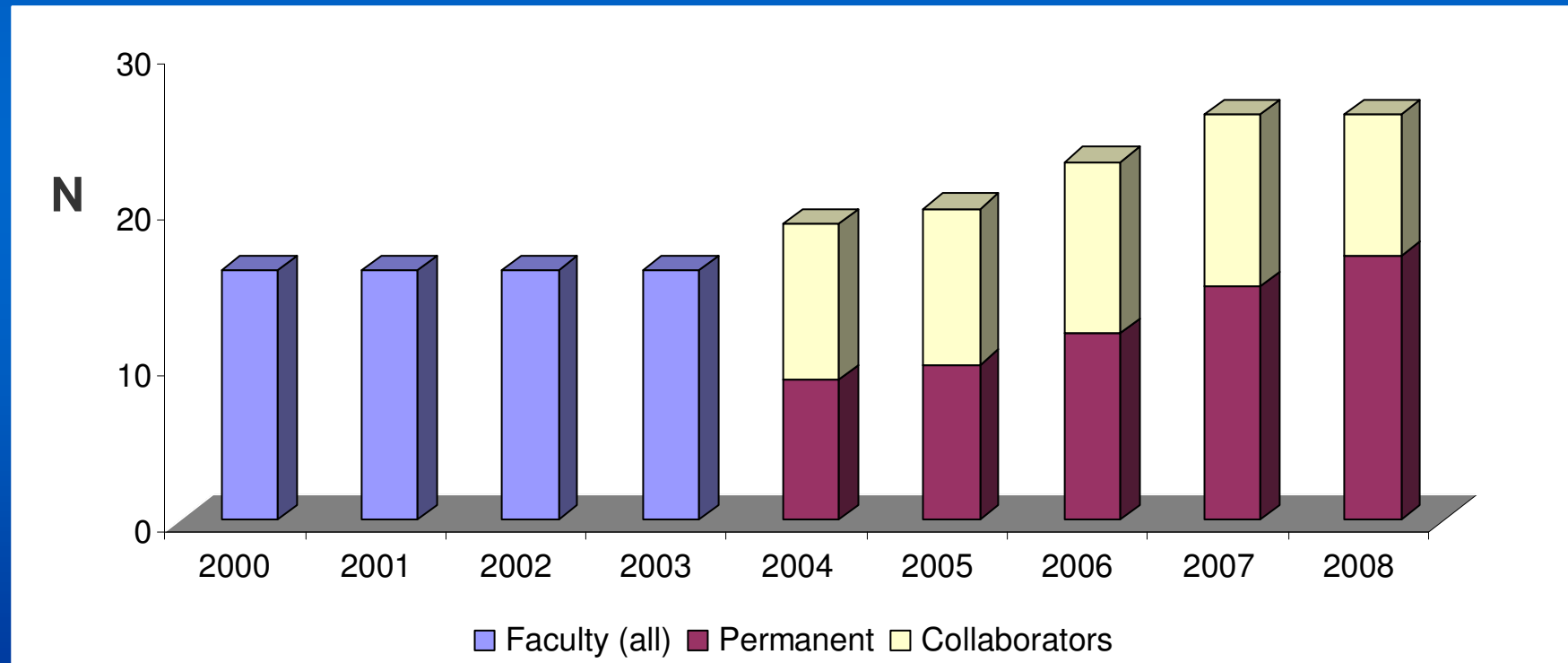
Final Academic Products

- Systematic review or health technology evaluation
- Intervention project or evaluation of indicators of an intervention's impact
- Plan
 - to restructure an area of regulation or
 - to structure an area of technology management
- Clinical guideline for the incorporation of a technology

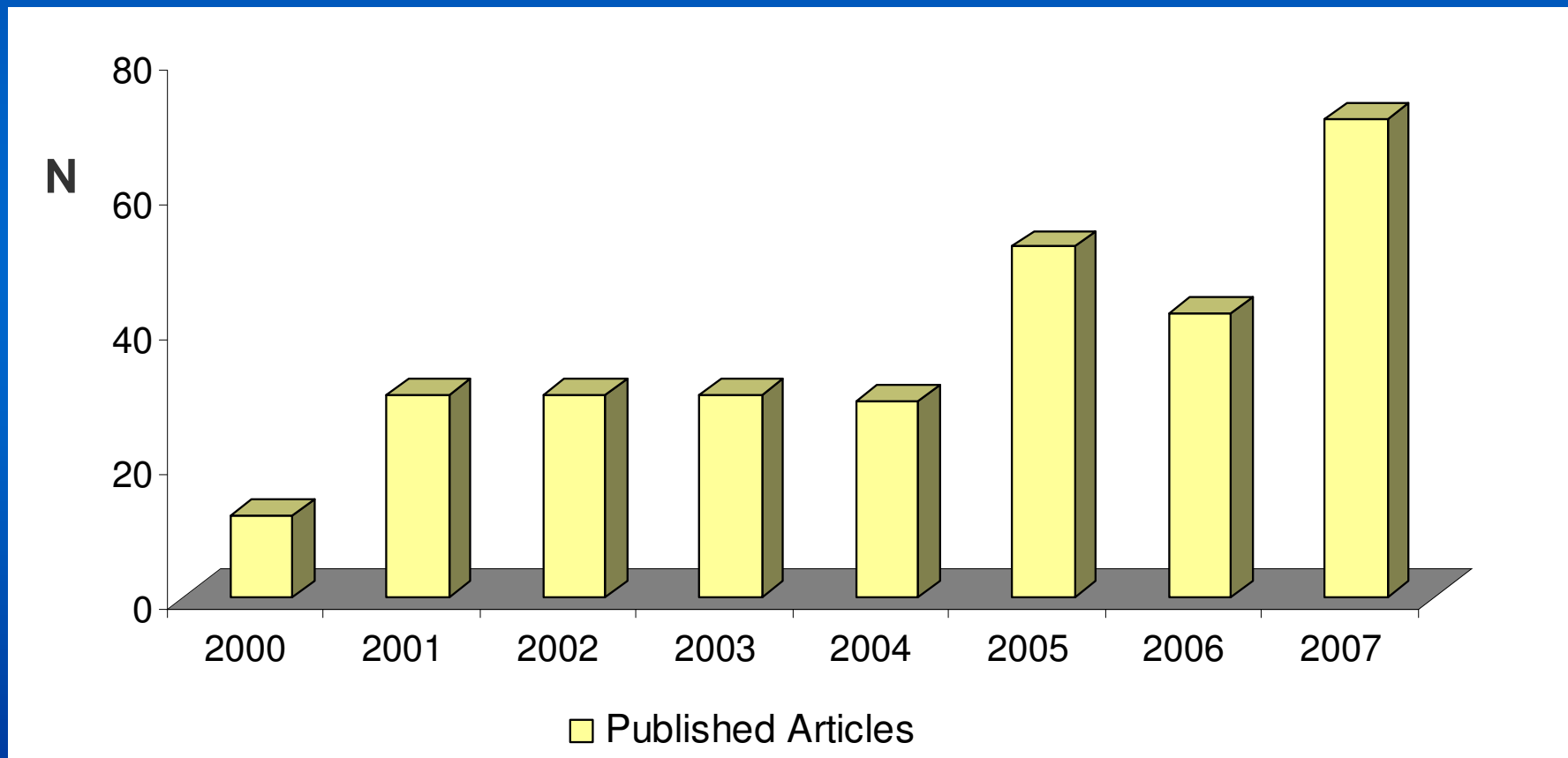
Total Number of Students



Faculty



Published Articles



Conclusions

- Achieving technical excellence in a national health system is a huge challenge
- The University must play a major role
- Recent changes in the PPG-Epi, UFRGS demonstrate the feasibility of rapid adaptation of current masters and doctoral programs to meet the technical needs of the SUS
- This Brazilian experience is a good case study for other middle-income countries

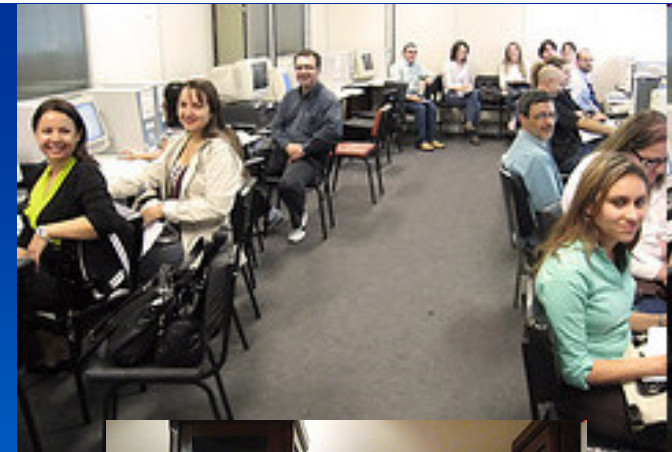


Muito Obrigado





Programa de Pós-Graduação em Epidemiologia





Corpo Docente 2007

Acadêmico:

Permanentes: 16

Colaboradores: 9

Profissional:

Permanentes: 13

Colaboradores: 14

Polarização da Distribuição de Agregados Observados





Programa de Pós-Graduação em Epidemiologia



Activities in Support of the SUS

PPG-Epidemiology, UFRGS – Research

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