European Technology Assessment Conference

**TECHNOLOGY ASSESSMENT AND POLICY AREAS OF GREAT TRANSITIONS**

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# Equity in access to MRI equipment in an ageing Society : Portuguese Case

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- Medical Devices - MRI
- Access - Equitity
- Portugal NHS

- Portugal thought indicators
- Number and distribution of MRI equipment

- Limitations

# Why MRI?

- Does not use x-ray
- Relevance in diagnose
  - cardiovascular disease
  - high sensitivity to fluids
  - accuracy
- Diagnostic possibilities
  - 3T...7T ....

# Access



Geographic distribution of MRI equipment

**Portuguese Constitution** - Article 64. º - Health

2. The right to health protection is performed:

a)  Through a **national health service and general and universal**, taking into account the economic and social conditions of citizens, **tend free**;

3. a) Ensure **access for all citizens**;

   b) ensure a rational and **efficient coverage nationwide** in human resources and health facilities;

   e) To **regulate and control** the production, **distribution**, marketing and use of chemical, biological and pharmaceutical and **other means of diagnosis and treatment**;

# Portuguese NHS

## The use of MRI by the Portuguese population

➢ Are performed 21.6 MRI exams per 1,000 inhabitants in Portuguese hospitals.

➢ There is no Convention agreement between the public and private HS for this types of exams.

**CONVENTION** is an adhesion contract signed between the Ministry of Health, through the Directorate General of Health (DGS) or Regional Health Administrations (ARS) and private persons, single or collective persons, that have the object Their provision of the health care, in Conjunction with the National Health Service, Integrating the national network of health care delivery.

1. Portuguese Population
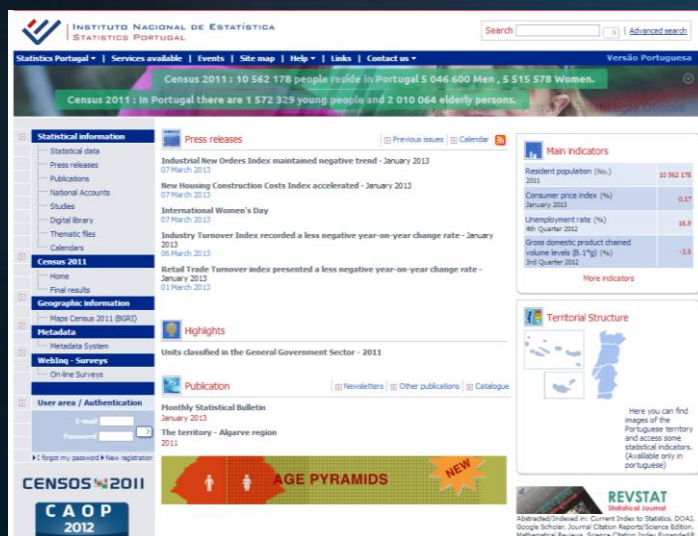
2. MRI installed capacity

# 2. Baseline Information

**Sources**

# 1. Statistical Information on Portuguese Population



www.ine.pt



CENSOS 2011
RESULTADOS DEFINITIVOS
PORTUGAL

**Sources**

## 2. Baseline Information on MRI installed capacity

- ✓ Data collection (Maia, 2011)

- ✓ Contact with companies

- ✓ Document research   - Web pages from Hospitals, Clinics...
  - International agencies reports (HTA)
    WHO, OECD, EUnetHTA...
  - National agencies reports
    DGS, ACSS, ERS...

# Age Structure



**Resident population projections (No.)**
Portugal, 2060

Legend: Man (blue), Woman (red)
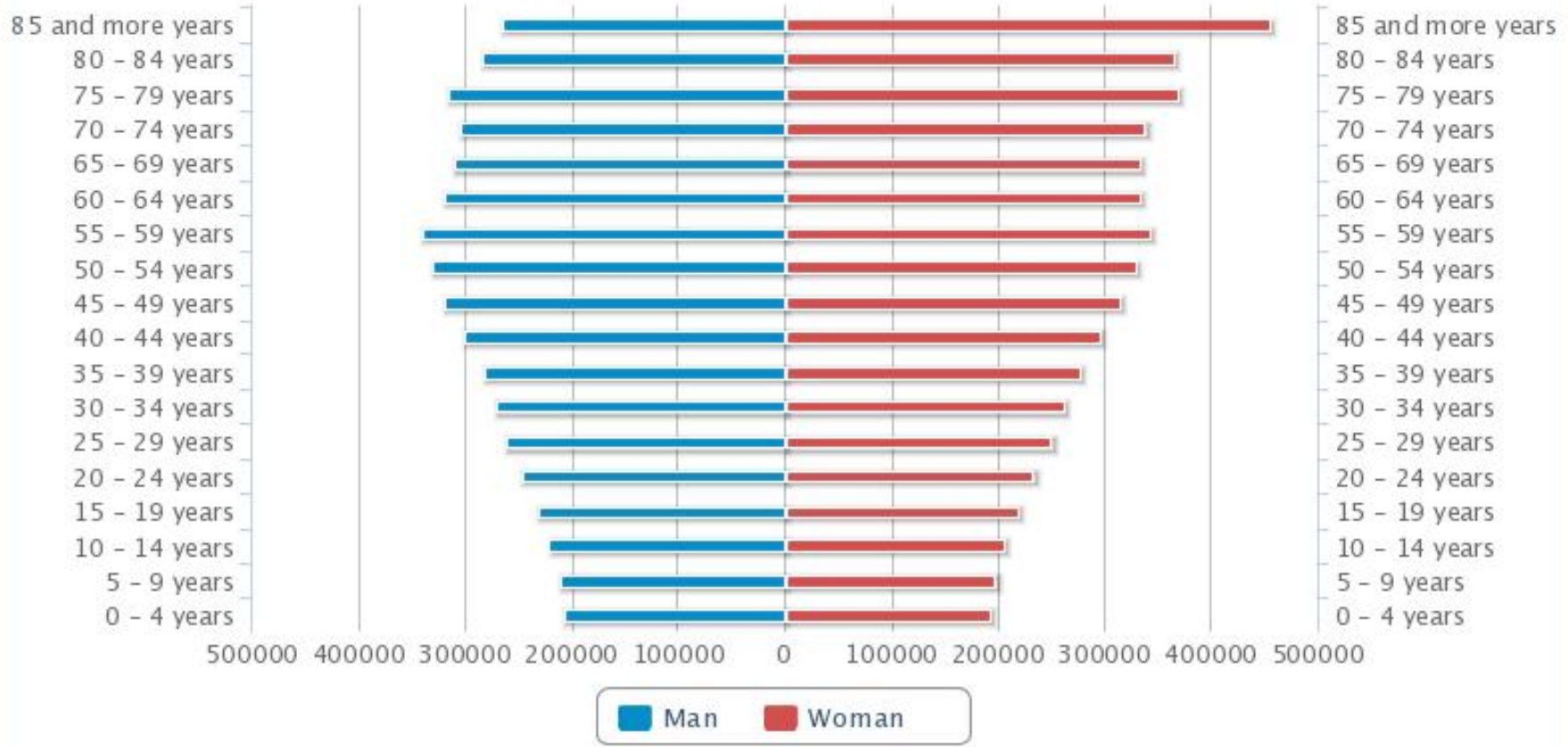
# Number and distribution of MRI equipment

**A. Number and Characterization of MRI Units**

**B. Geographic Distribution**

# A. Number and Characterization of MRI Units

| Firm | Sector | | | | | |
|---|---|---|---|---|---|---|
| | Public | | Private | | Total | |
| | nº | % | nº | % | nº | % |
| GE | ? | ? | ? | ? | 30 | 22 |
| Hitachi | 1 | 4 | 4 | 5 | 5 | 4 |
| Phillips | 11 | 42 | 26 | 31 | 37 | 27 |
| Siemens | 13 | 50 | 46 | 55 | 59 | 42 |
| Toshiba | 1 | 4 | 6 | 7 | 7 | 5 |
| Esaote | 0 | 0 | 1 | 1 | 1 | 1 |
| TOTAL | 26 | 100 | 83 | 100 | 139 | 100 |

# Number and Characterization of MRI Units
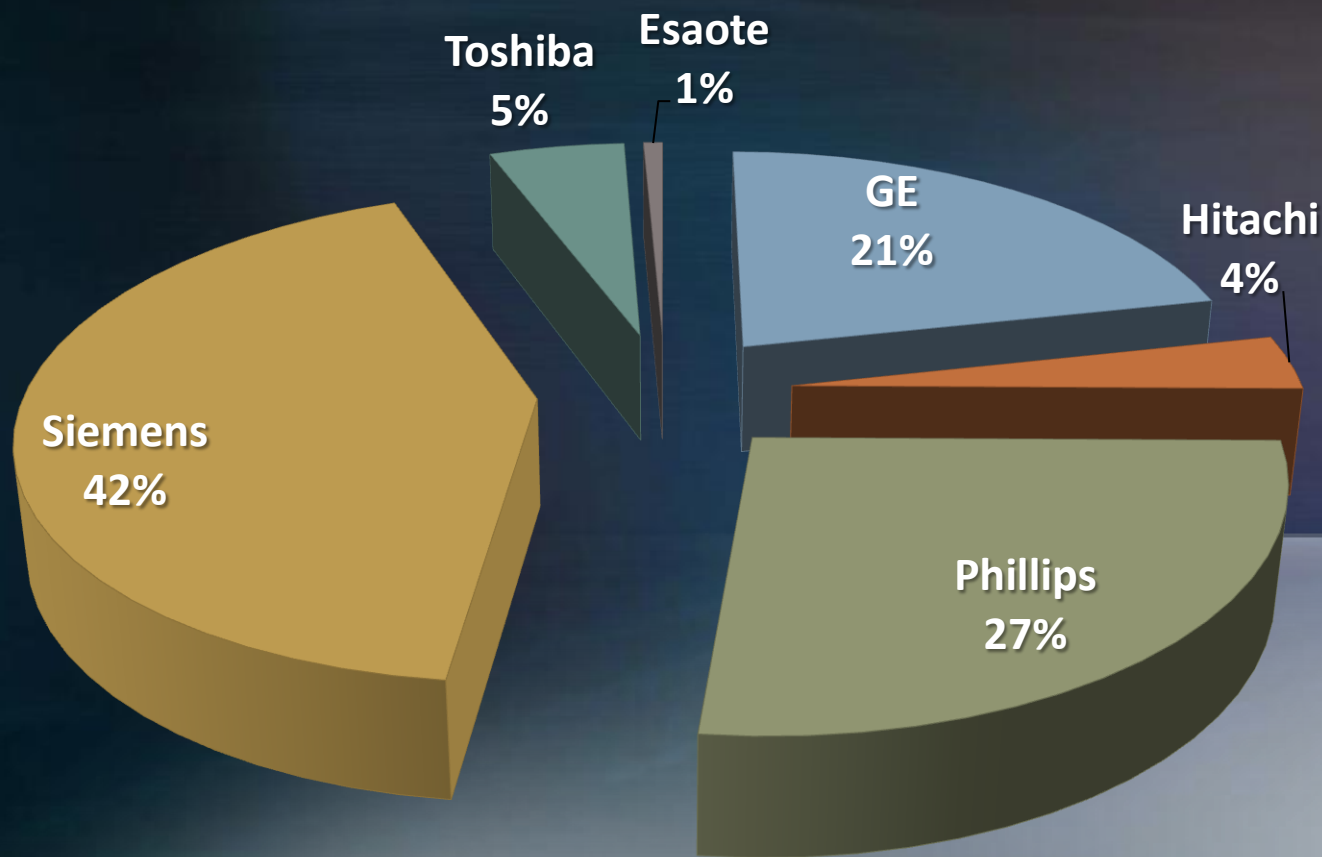


MRI equipment distribution in Portugal, by firm

# Number and Characterization of MRI Units

- *Institutional Distribution*



Public
24%
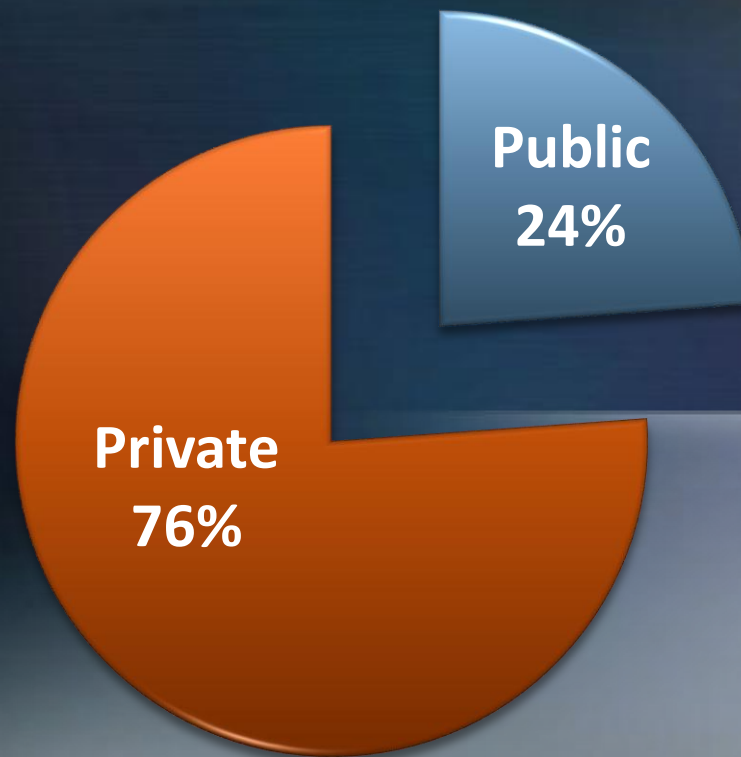
Private
76%

MRI equipment distribution in Portugal, by sector

# 3. Results

## B. Geographic distribution

Public Sector

Private Sector

# Distribution of MRI Units

| HRA | | Resident Pop. | Nº MRI | Racio |
|---|---|---|---|---|
| | North | 3.689.682 | 42 | 1 RM / 87.850 Inhab. |
| | Lisbon | 2.821.876 | 44 | 1 RM / 65.625 Inhab. |
| | Center | 2.327.755 | 27 | 1 RM / 86.213 Inhab. |
| | Alentejo | 757.302 | 1 | 1 RM / 757.302 Inhab. |
| | Algarve | 451.006 | 8 | 1 RM / 56.376 Inhab. |
| | Madeira | 267.785 | 4 | 1 RM / 66.946 Inhab. |
| | Azores | 246.772 | 2 | 1 RM / 123.386 Inhab. |
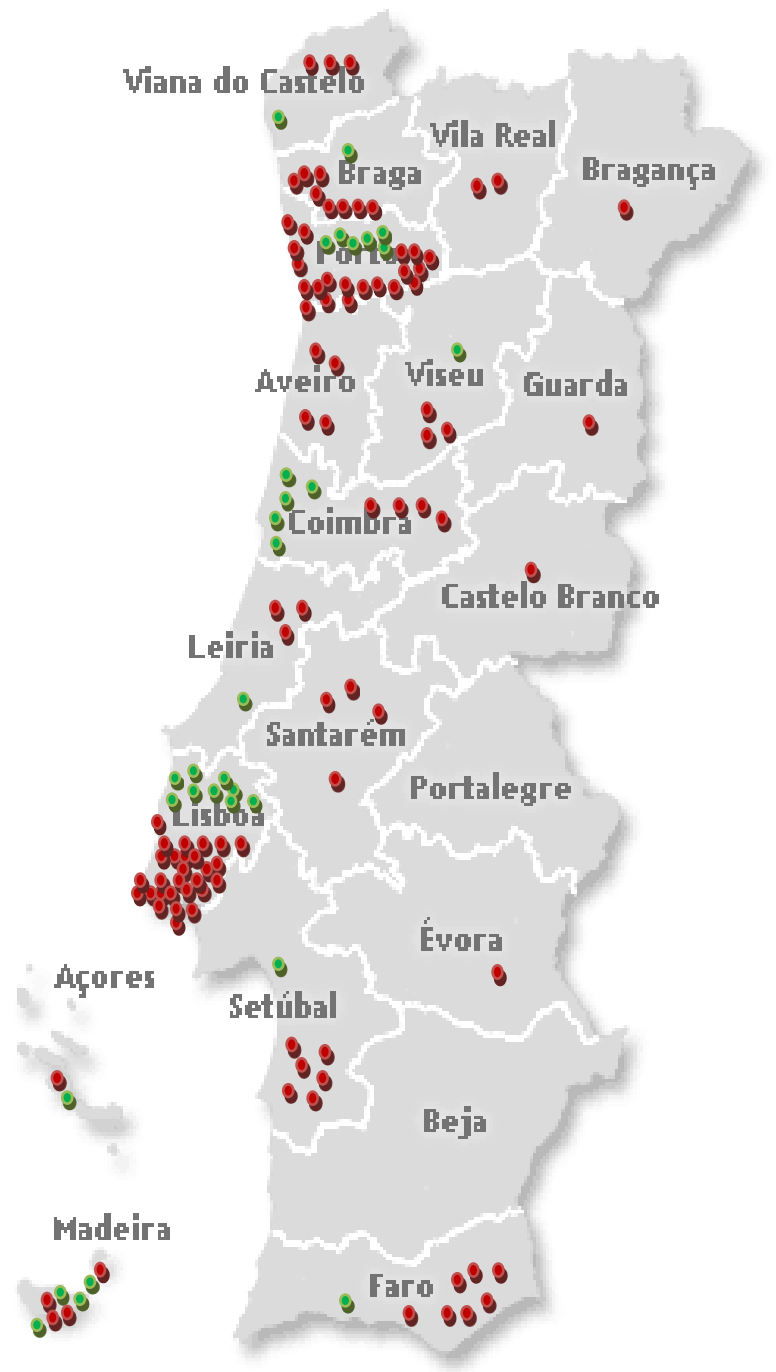
33% North
34% Lisbon
21% Center
1% Alentejo
6% Algarve
3% Madeira
2% Azores
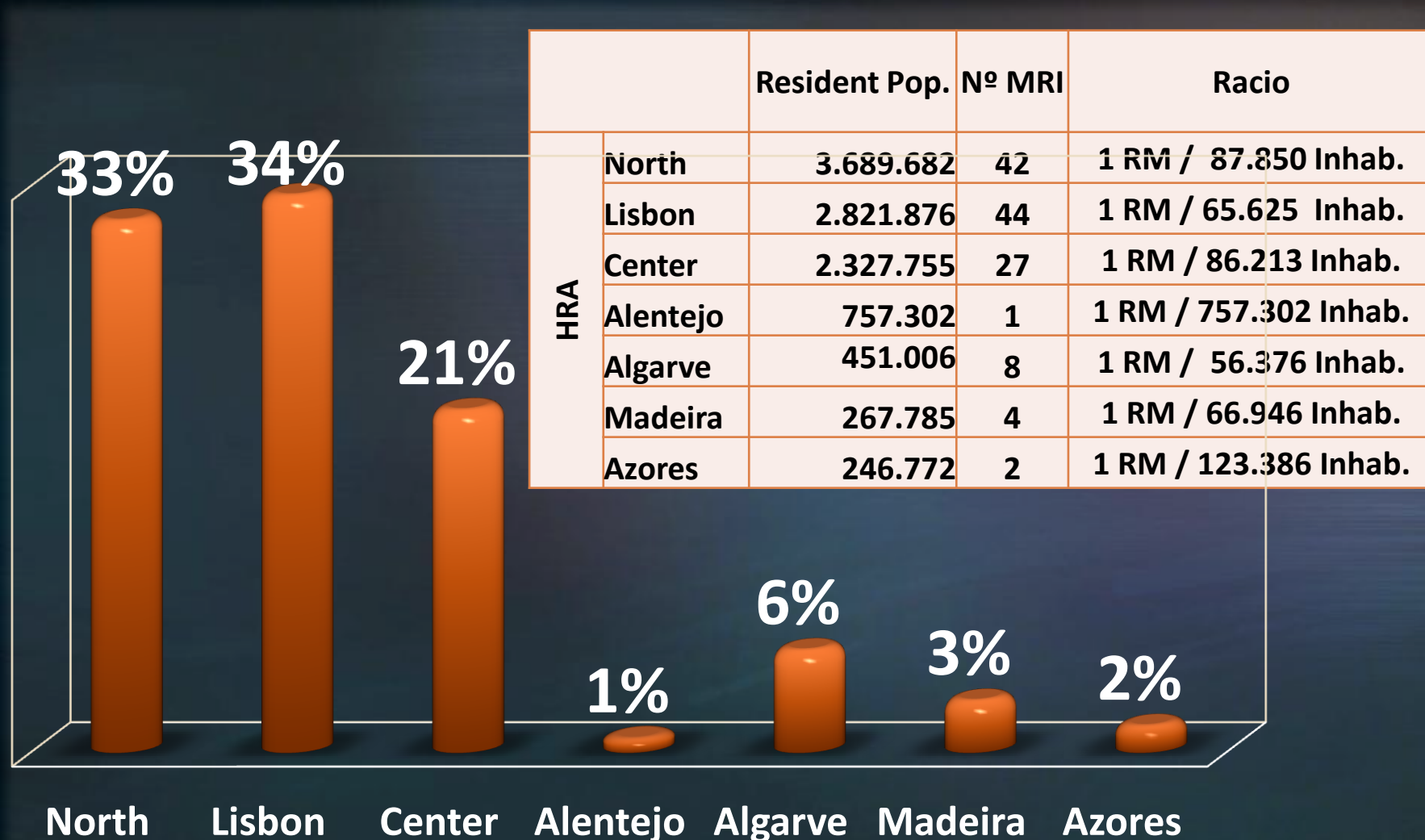
# 3. Results
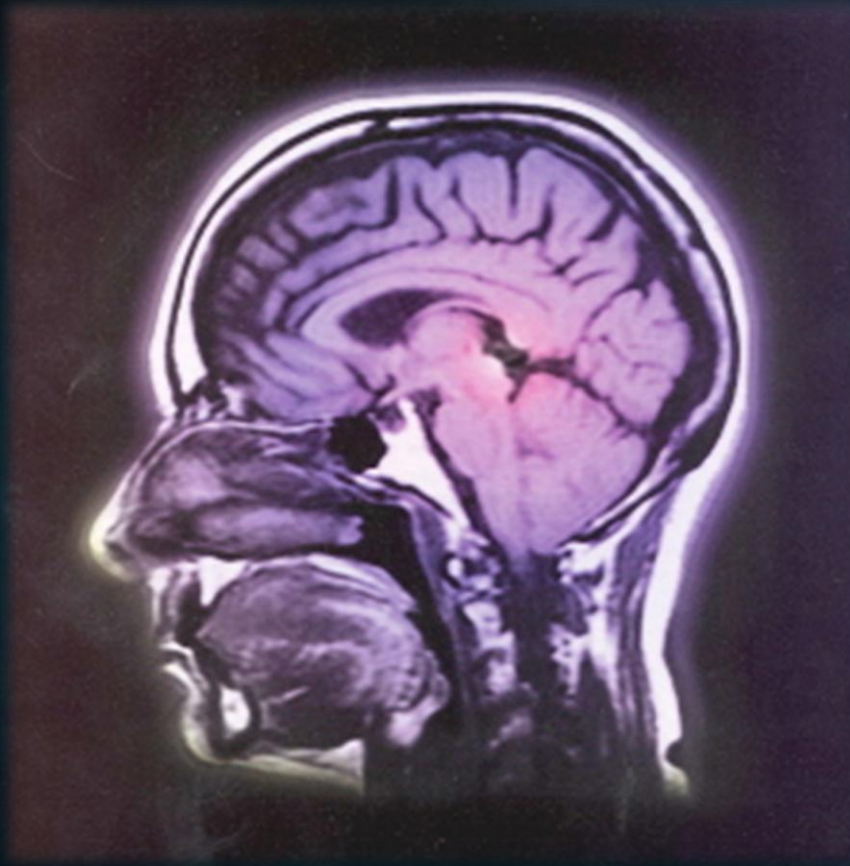


- MRI is a neurodevice with high diagnosis potential

- Portuguese NHS does not fulfil the aim of national constitution

- Portugal is an ageing society

-  There are not yet independent, relevant, in-depth and usable TA studies on this issues

-  There are still too many questions be answered, as:

   - Will the technologies - identified as necessary for the general population - generate the expected benefits?
   - What are the health gains for the population, with the implementation of the technology?
   - Do social and ethical issues have been taken into account, when technological resources are being allocated?

- Portugal does not have (yet)  institutionalized TA

# GrEAT-Avaliação de Tecnologia (Portugal)

INÍCIO   ACTIVIDADES ▼   DOCUMENTOS AT ▼   FORUM   GRUPOS DE TRABALHO ▼   NOTÍCIAS   REDE ▼

GT1 – Avaliação de Tecnologia em Saúde  ▶
GT2 – Indicadores de Avaliação de Tecnologia  ▶
GT3 – Transportes
GT4 – Análise Prospectiva  ▶

## O QUE É O GREAT

GrEAT é o acrónimo de Grupo de Estudo sobre Avaliação de ' seu campo de actuação localizado em Portugal.

Este Grupo de Estudos nasceu da articulação de actividades de colaboração do Programa Doutoral em Avaliação de Tecnologia iniciado em 2009 na Faculdade de Ciências e Tecnologia da Universidade Nova de Lisboa e do ITAS, Instituto de Avaliação de Tecnologia e Análise de Sistemas do Karlsruhe Institute of Technology (Alemanha). Este instituto começou a colaborar com o Programa Doutoral desde o seu início.

Pretende ser uma plataforma para a promoção da reflexão em torno do conceito de "Avaliação de Tecnologia" e agregar todos os interessados na temática.

Classificar isto:  ⭐⭐⭐⭐⭐ ℹ 5 Votes

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Projecto TASTI no centro SPIRAL da Universidade de Liège: Technology

com

# Recommendations

- A support network between different agencies to avoid duplication of resources and information

- In Health TA different disciplinary knowledge and methods should be taken into consideration

- HTA can create bridges between policy and research field

# Questions?

## Thank you....

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