

EHRA SUMMIT 16-17 March 2009

Health Care Disparities in Europe. The case of arrhythmias

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# Arrhythmia Management: from country to country

## PORTUGAL



ASSOCIAÇÃO  
PORTUGUESA DE  
ARRITMOLOGIA  
PACING E  
ELECTROFISIOLOGIA

DA SOCIEDADE  
PORTUGUESA DE  
CARDIOLOGIA

**JOÃO DE SOUSA**  
**APAPE**



ASSOCIAÇÃO  
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CARDIOLOGIA



Western  
European  
country

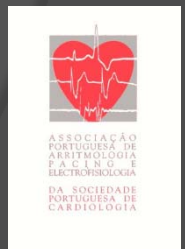


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# Portugal: Healthcare Organization

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- Population: 10.6 million
- Life expectancy: 78.3 years
- Cardiovascular mortality: 34%
- Health Care:
  - National Health Service: Universal
  - Private Insurance: 10%
- Arrhythmology
  - Pacing Centers: 42
  - ICD Centers: 20
  - EP Centers: 16



# APAPE: Portuguese Association of Arrhythmia, Pacing and Electrophysiology

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- Affiliated to the Portuguese Society of Cardiology
- Founded in 1999 (Pacing Association and Electrocardiography Group)
- 270 Members
- Elected Directory: Two year period
- Main Purposes:
  - Pos-graduate training
    - Lisbon Arrhythmia Meeting
    - Pacing / EP meetings
  - Clinical Practice
    - Voluntary internet-based registry
  - Clinical Consensus – Guideline Implementation
    - EHRA Guidelines



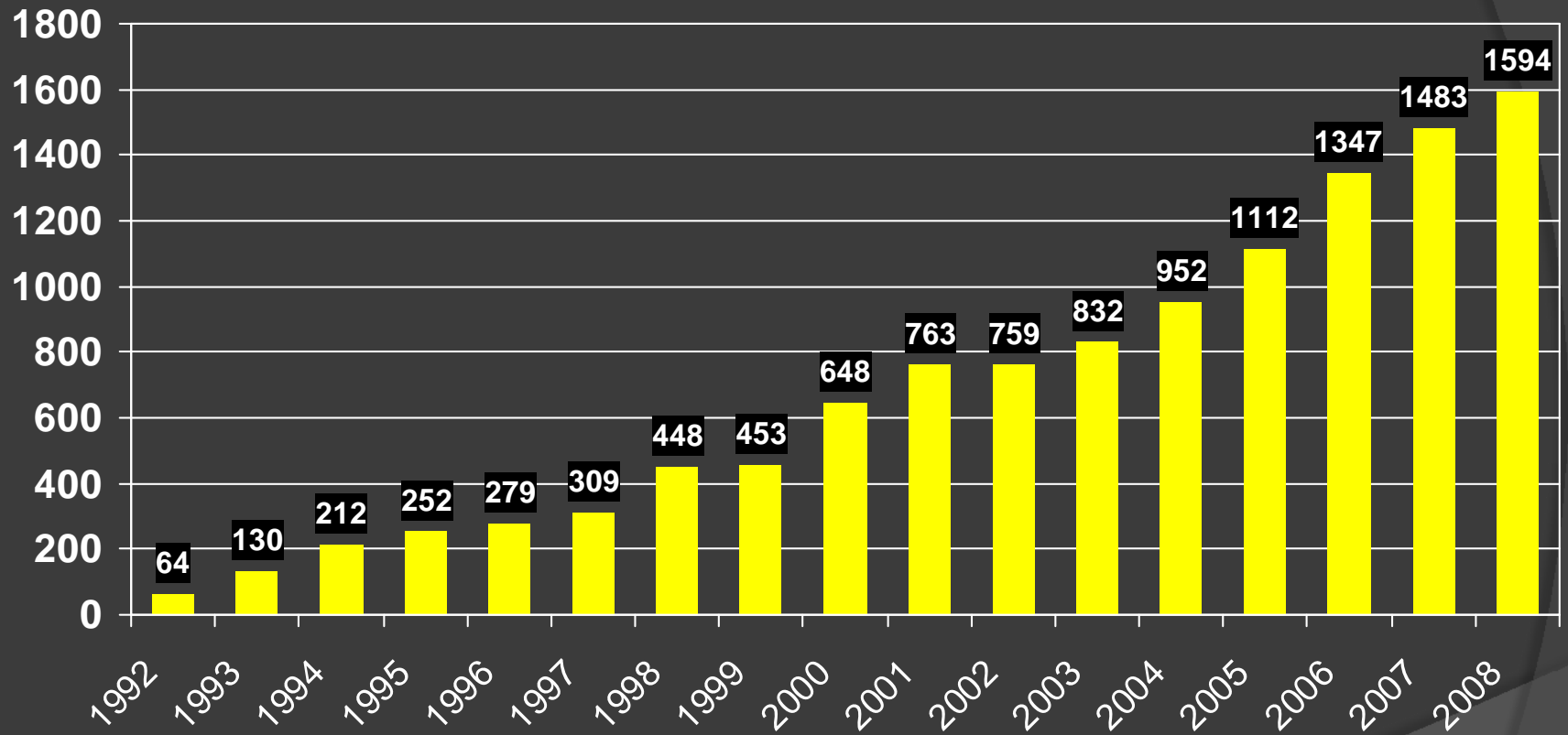
# Accreditation: Medical Board Sub-Speciality in Cardiac Electrophysiology

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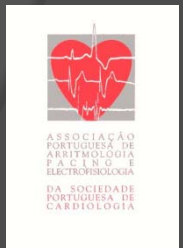
- Created in 2004 as a sub-speciality of Cardiology
- Initial admission by consensus
- Two year dedicated training period in EP after finishing 5-year Cardiology Fellowship
- Final curricular and theoretical examination
- Currently: 18 EP physicians sub-specialists
- Clinical competence in ICD implantation



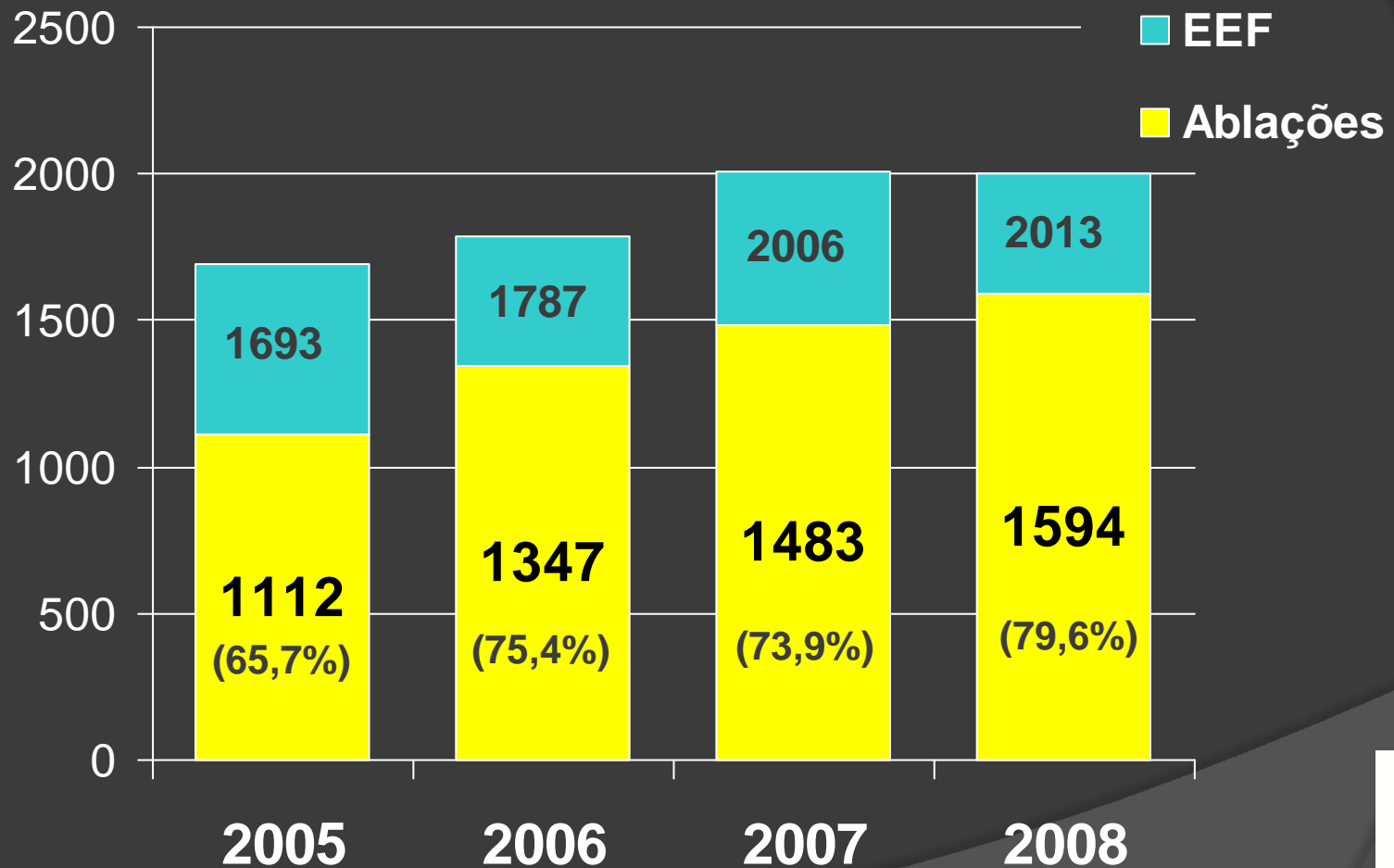
# Ablation / year



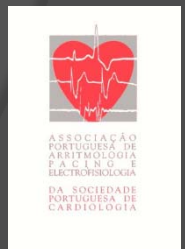
Source: APAPE, 2009



# EPS: Diagnostic / Ablation

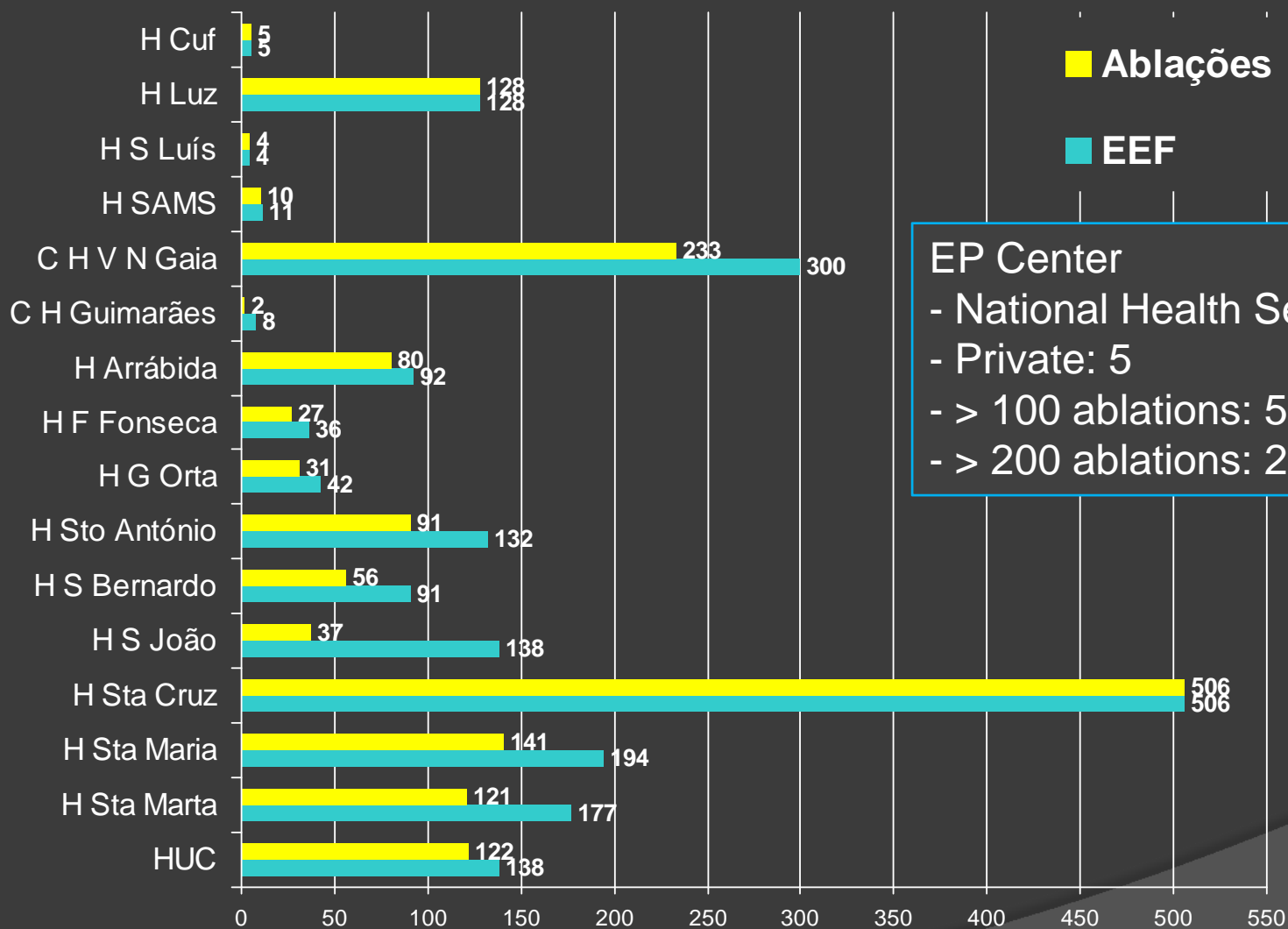


Source: APAPE, 2009

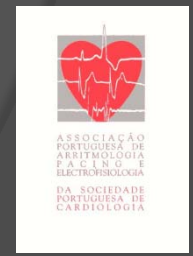




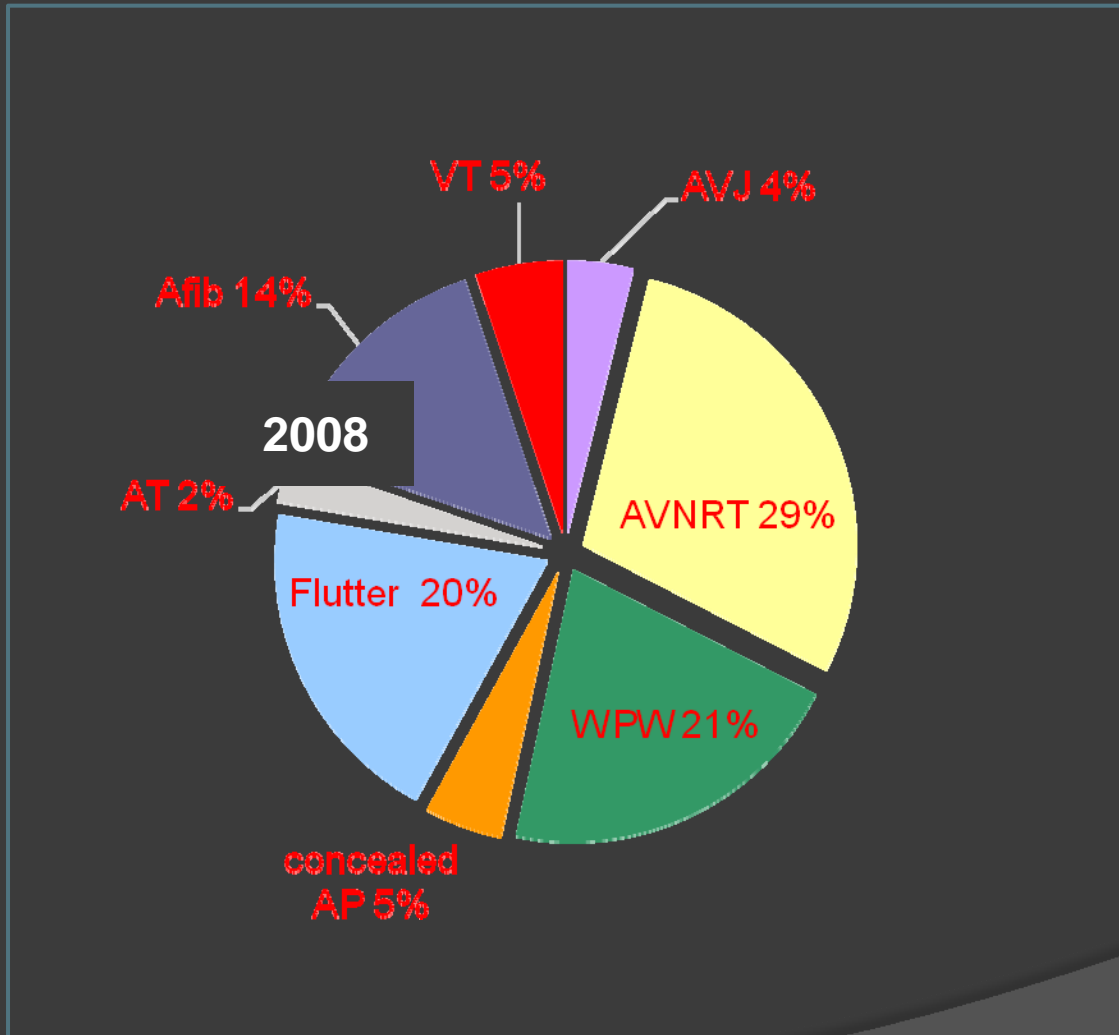
# 2008: EPS/Ablation - Centre



**EP Center**  
 - National Health Service: 11  
 - Private: 5  
 - > 100 ablations: 5 Centers  
 - > 200 ablations: 2 Centers



# 2008: Ablation substracts



Source: APAPE 2009

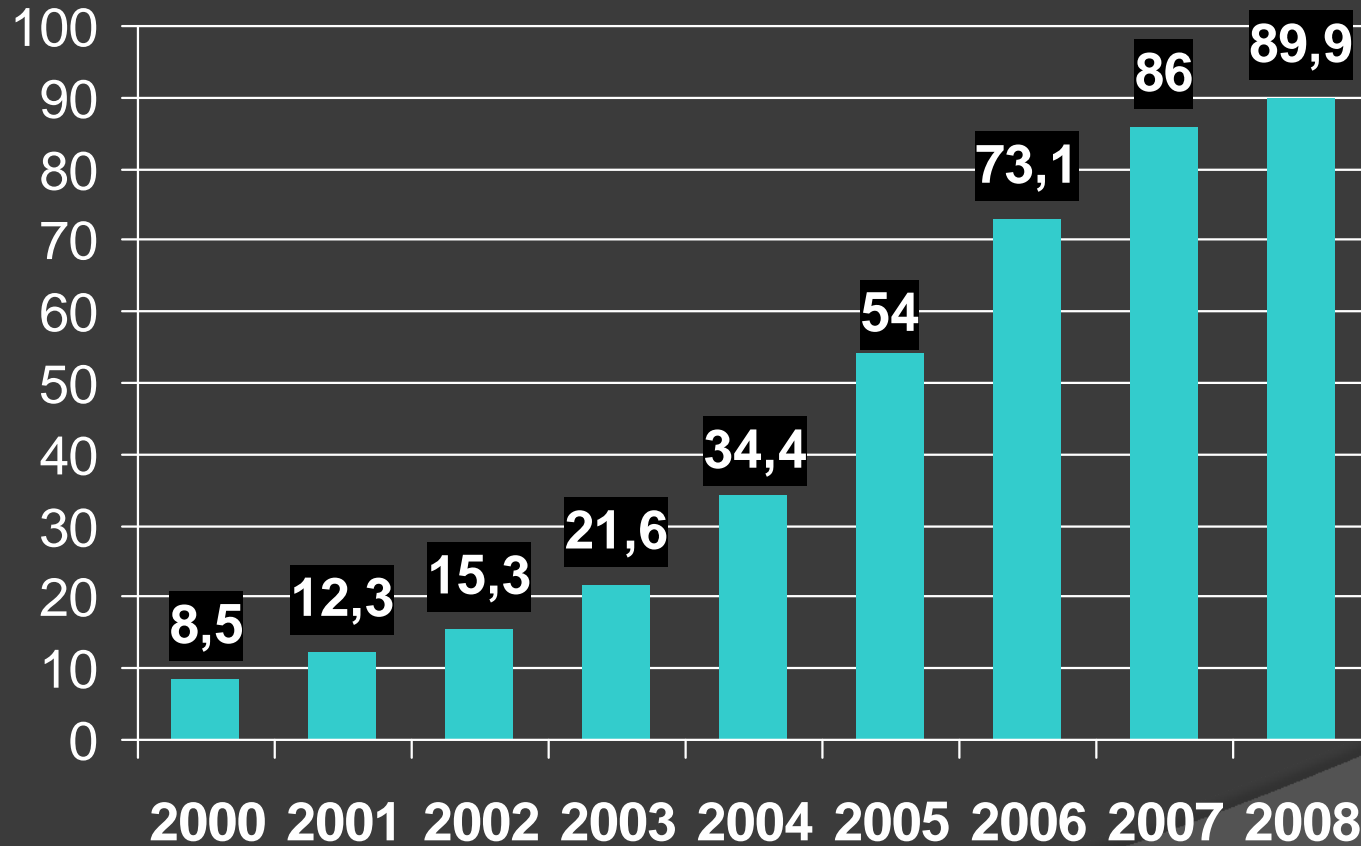
# Complex mapping/ablation procedures

- 7 Centres
  - 5 Public Hospital
  - 2 Private Clinic
  - 1 Stereotaxis (Lisbon)

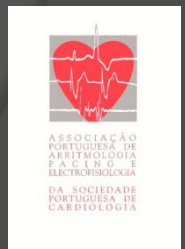
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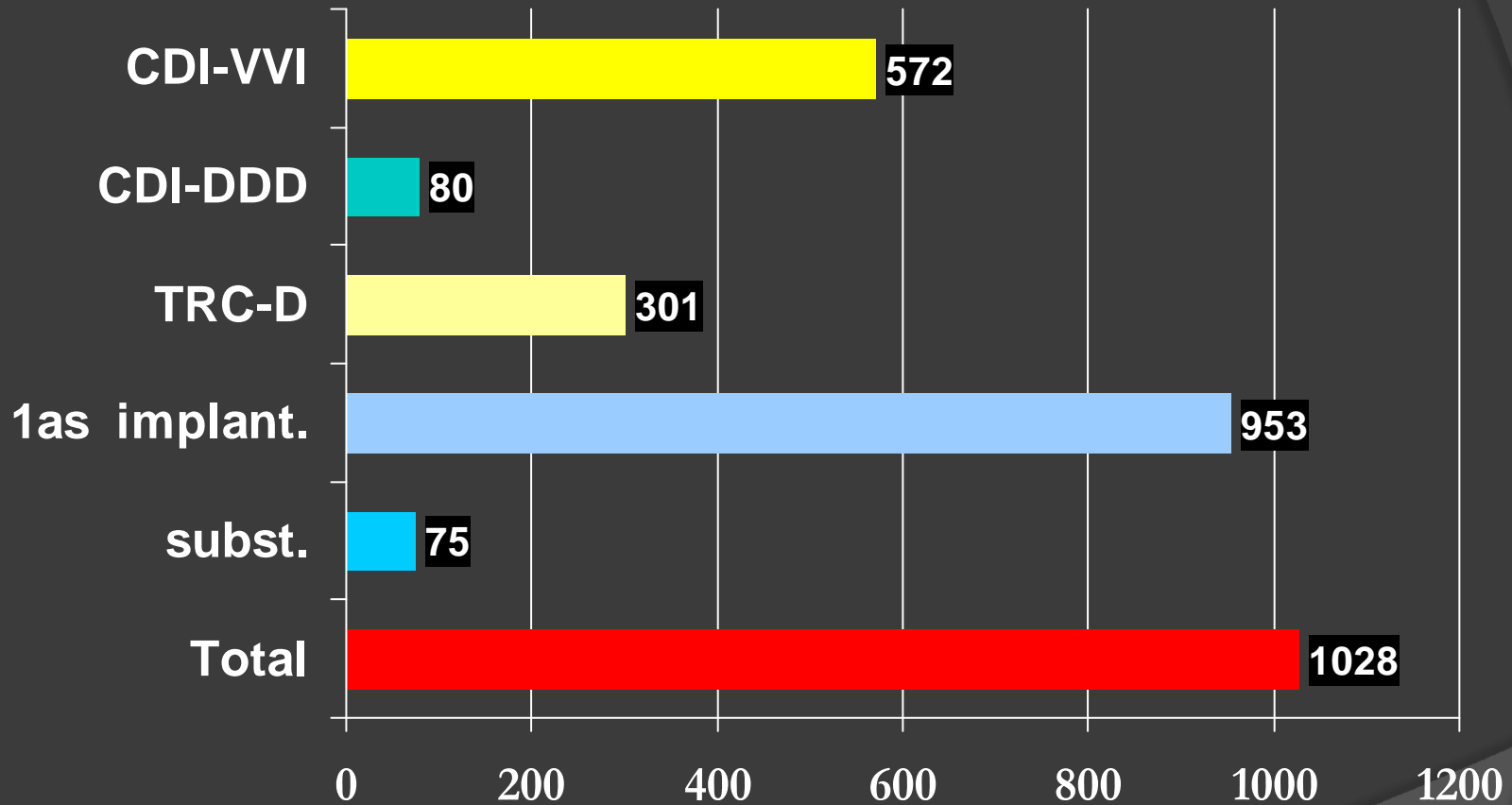
# ICD: Implant / million / year



Source: APAPE 2009

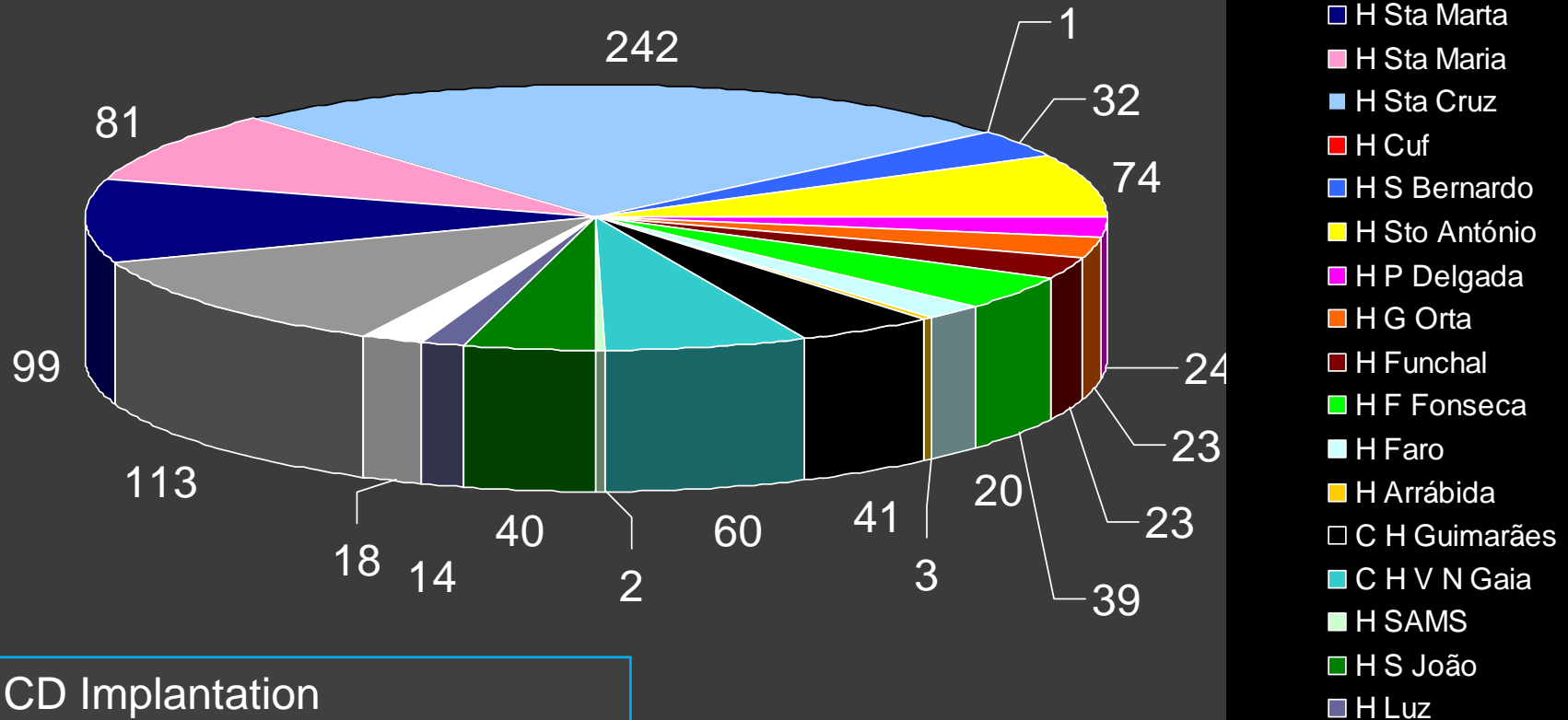


# ICD type



# ICD implantation

## - New implants -



### ICD Implantation

-20 Centers

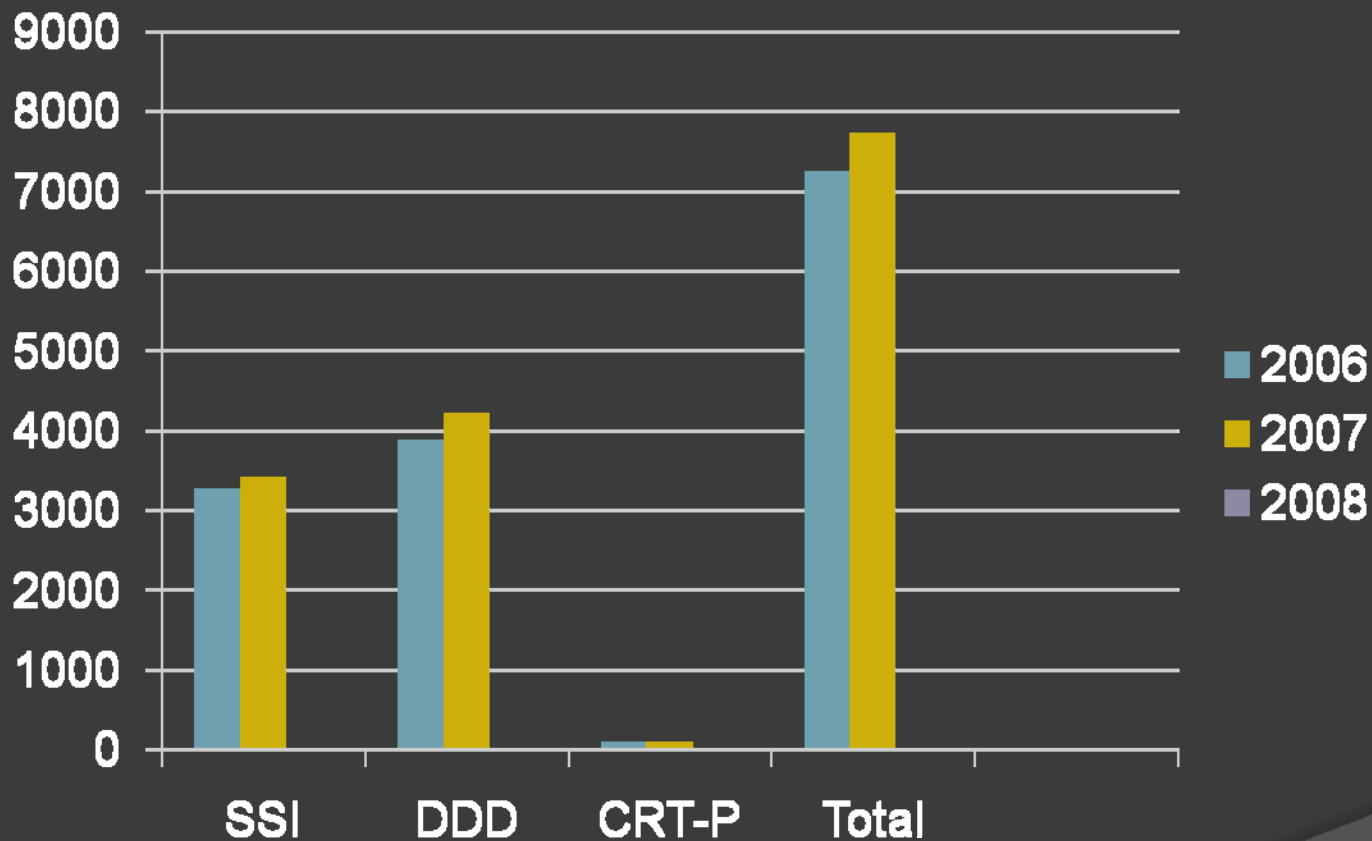
- > 50 new implants: 6 centers

- > 100 new implants: 2 centers

Source: APAPE 2009

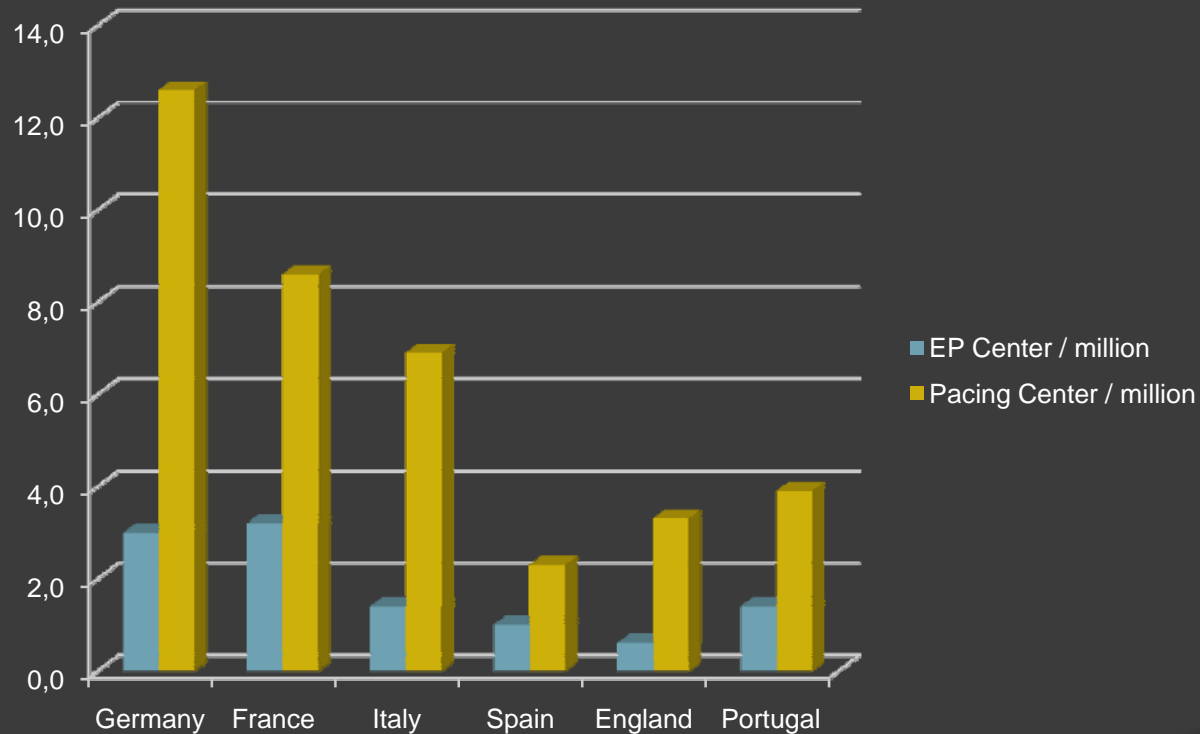


# Pacemaker Implants



# Pacing and EP Centers – 2007

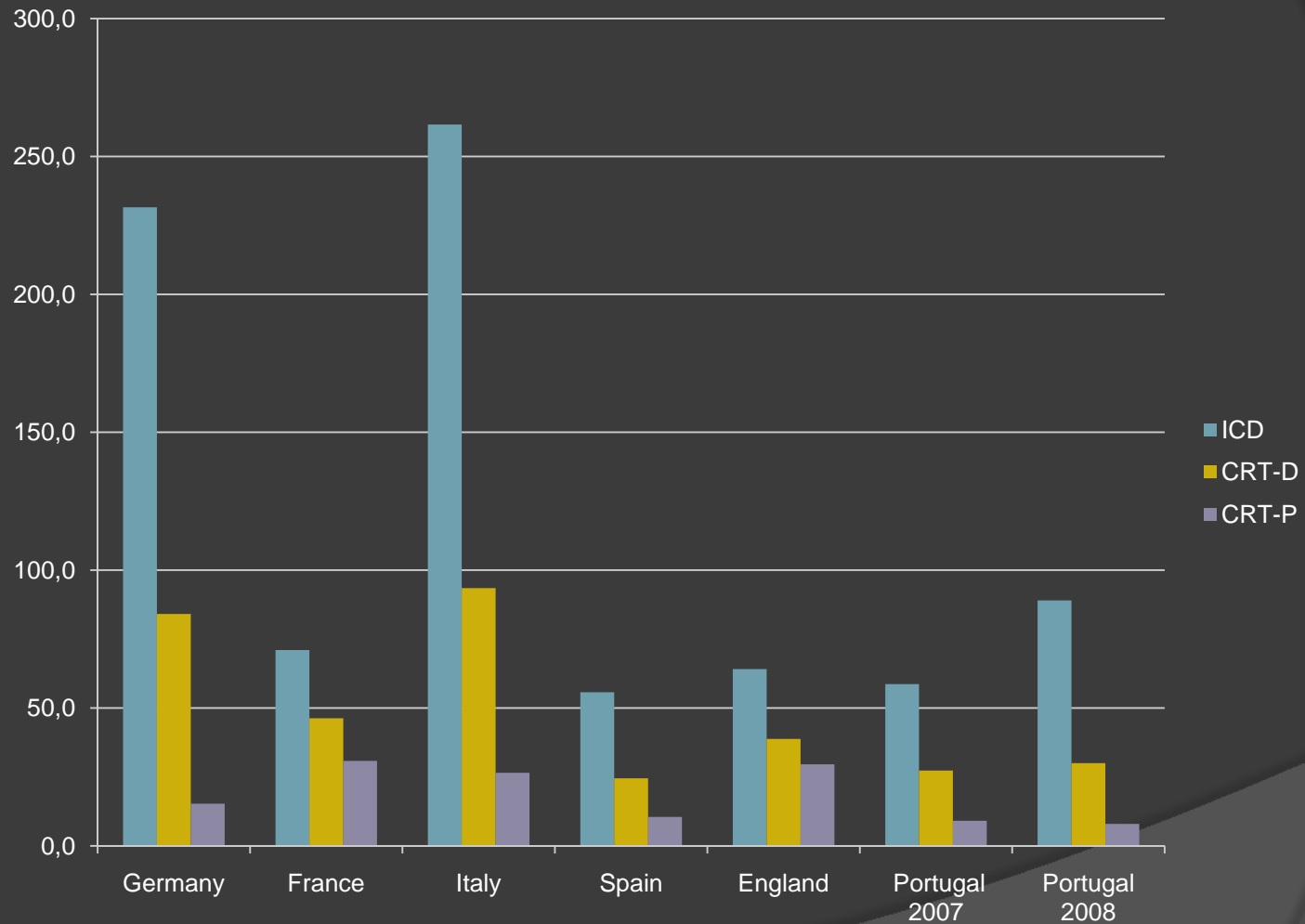
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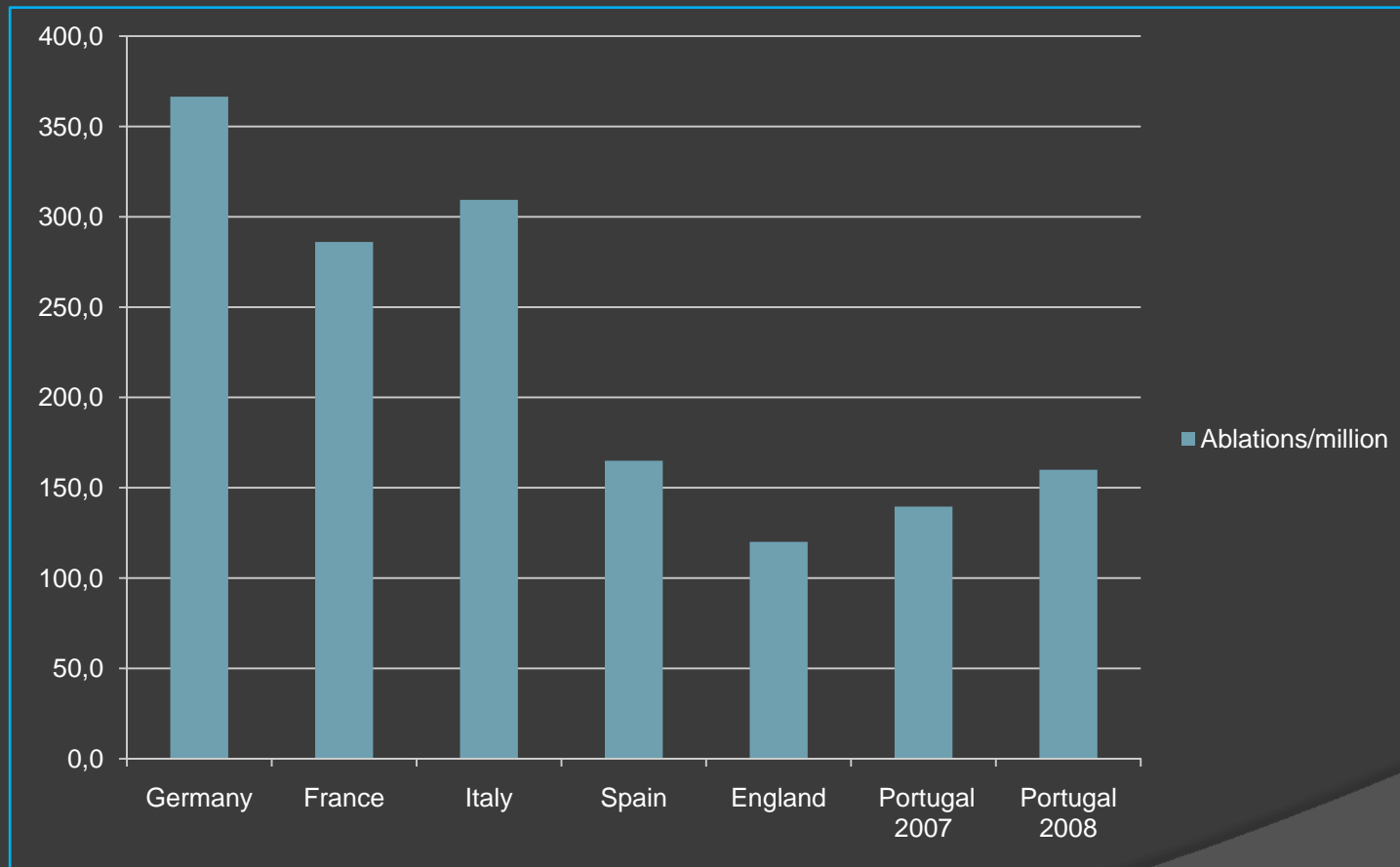
Source: EHRA White Book



# ICD Implants – 2007-08



# Ablation / million population



# How to improve arrhythmia management in Portugal?

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- ⊙ Pos-graduate training
  - Increase number EP specialists
  - Sub-speciality of Cardiac Electrophysiology
- ⊙ Centre improvement:
  - EP physician and equipment
  - Increase number and complexity of invasive procedures
- ⊙ Improve patient referrals for Cardiology and EP centers
- ⊙ Increase clinical / basic investigation centers