



Vilamoura – 22 a 24 Abril de 2012

PRIMARY PCI IN PORTUGAL

- ONE YEAR AFTER STENT FOR LIFE -

**HOW TO REDUCE IN-HOSPITAL DELAYS:**  
**THE PORTUGUESE EXPERIENCE**  
**(INCLUDING MANCHESTER)**



**Hospital**  
Braga

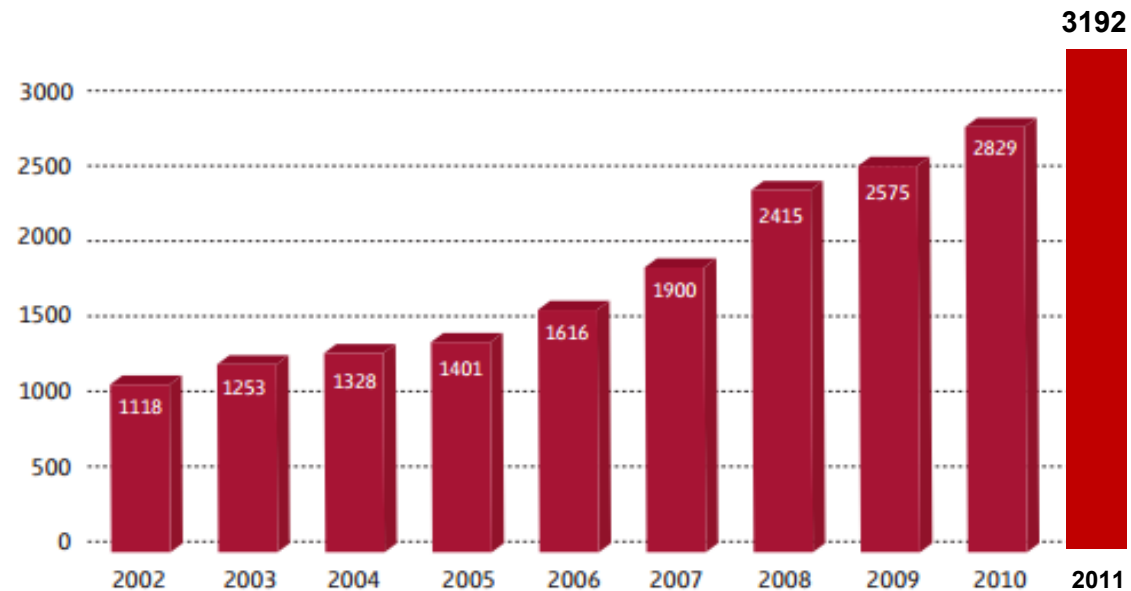
João Costa

Hospital de Braga

# Primary PCI in Portugal

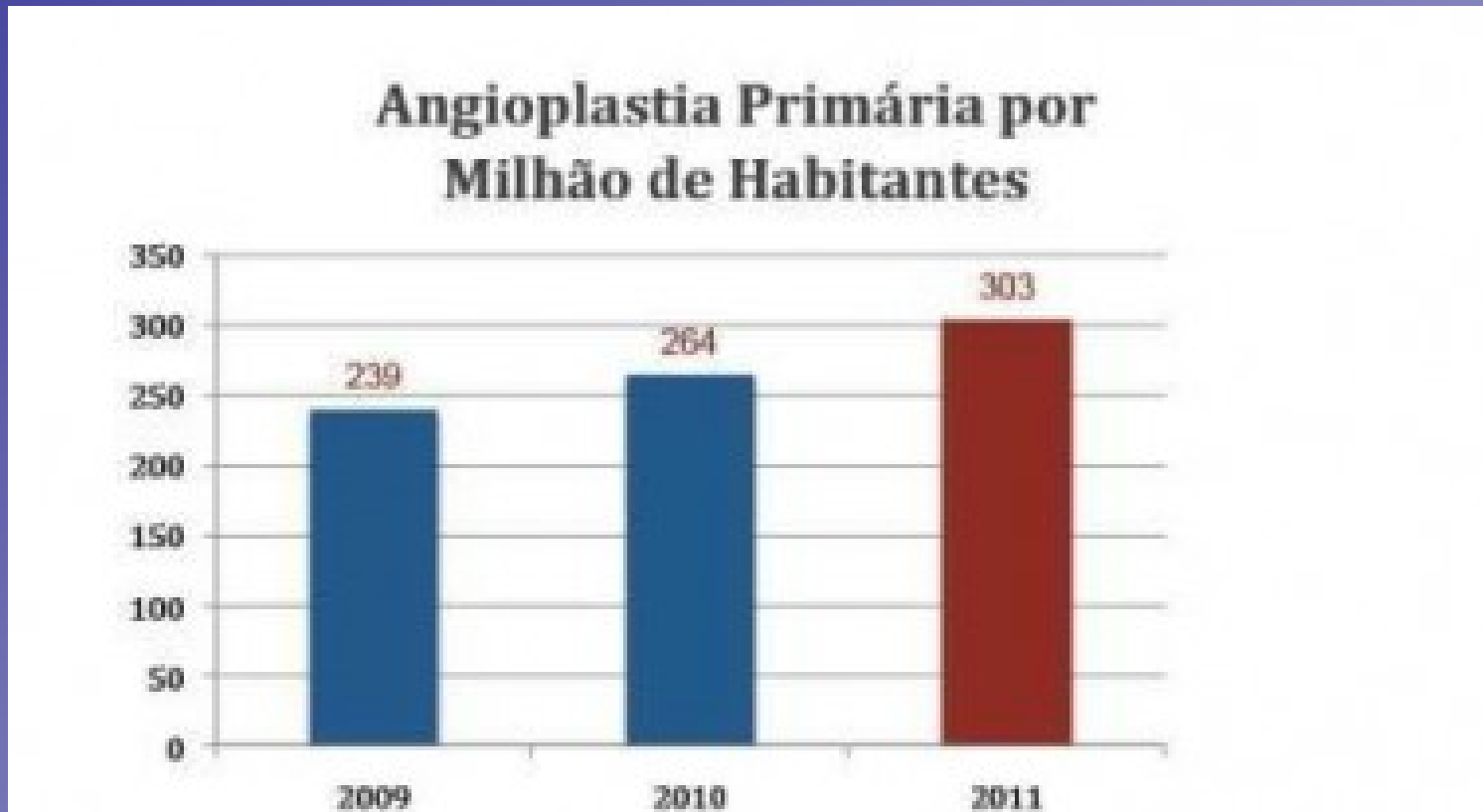
## Enfarte Agudo de Miocárdio: Reperusão por Angioplastia Primária

DOENTES SUBMETIDOS A ANGIOPLASTIA PRIMÁRIA (ICP PRIMÁRIA) NO ENFARTE AGUDO DO MIOCÁRDIO



# Primary PCI's per year per million inhabitants

## PORTUGAL



# Portugal 2011

Increase in number of pPCI's



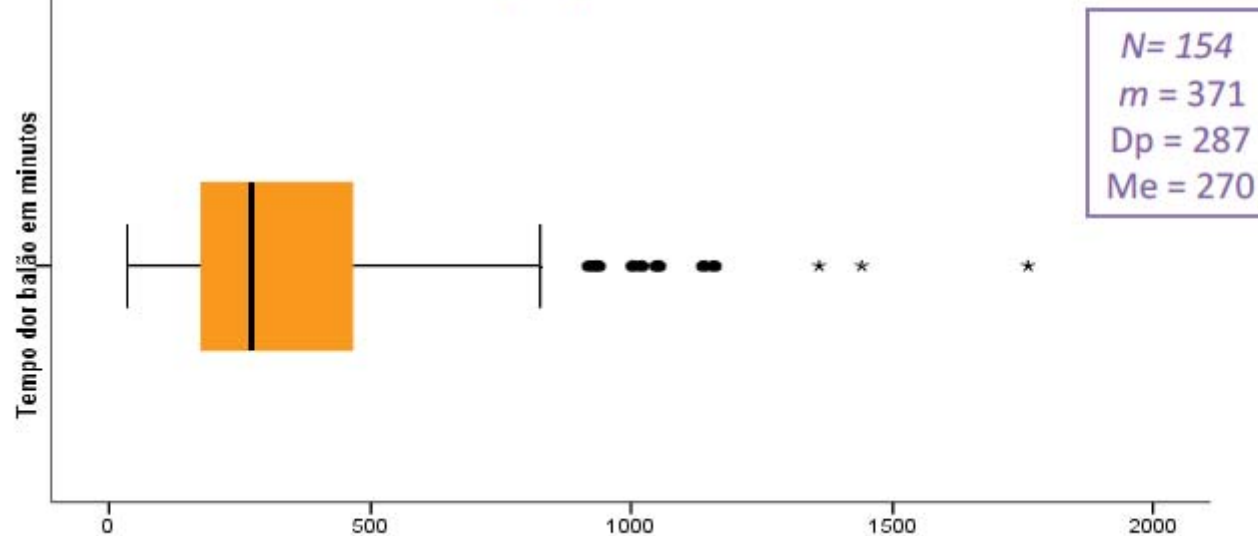
Time to reperfusion remains high

# “Momento Zero” – Stent for Life - 2011



## “Momento Zero”

Time from symptoms onset to P-PCI

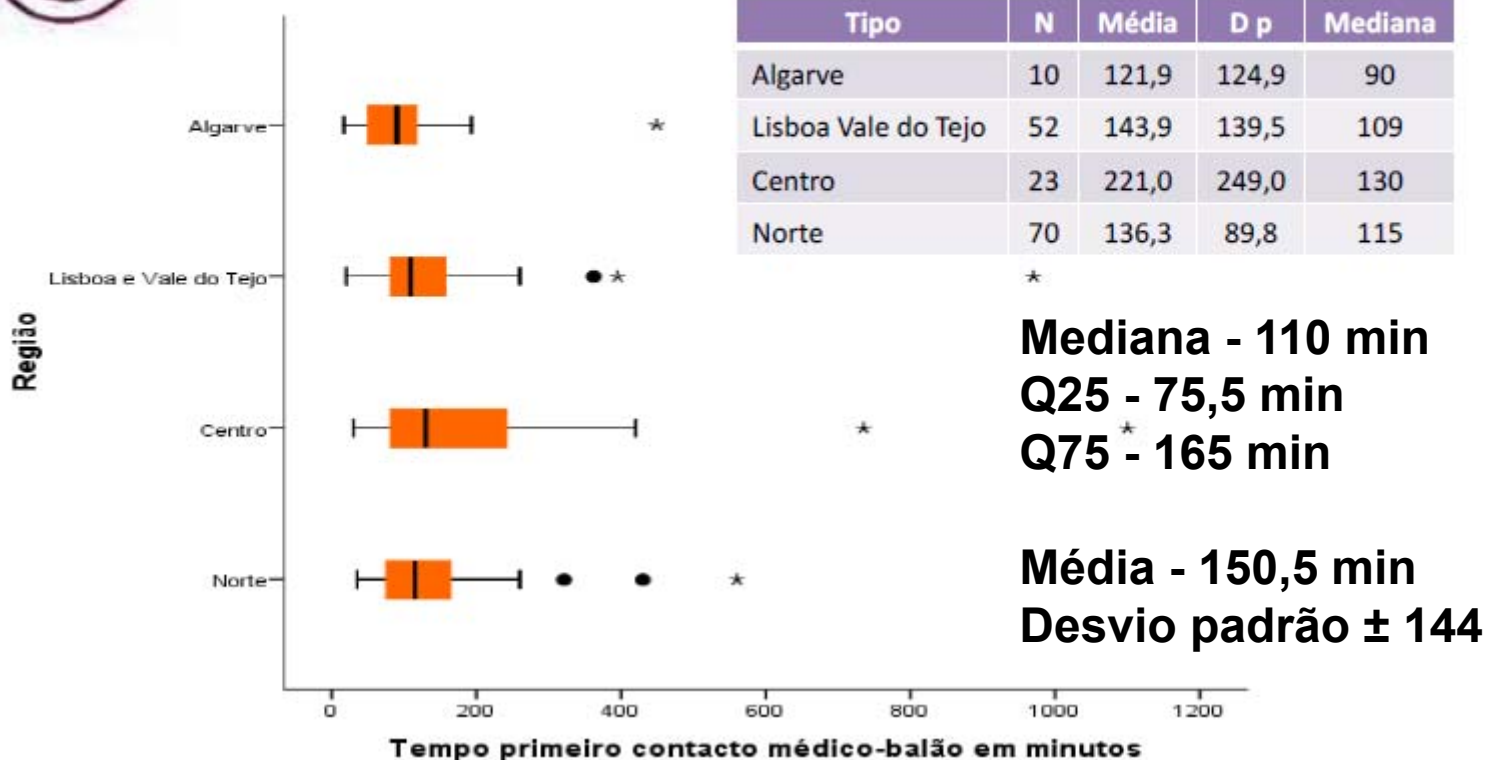


# “Momento Zero” – Stent for Life - 2011



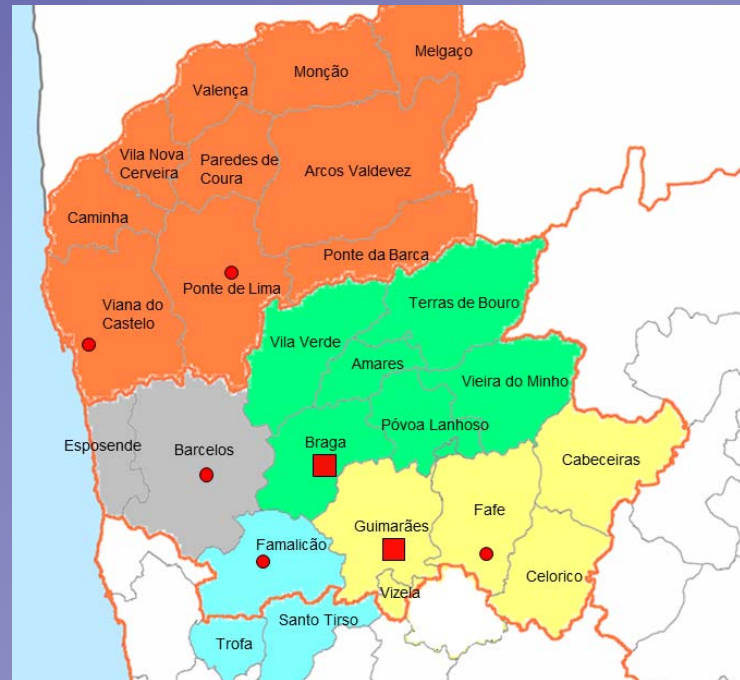
## “Momento Zero”

Time from FMC to P-PCI

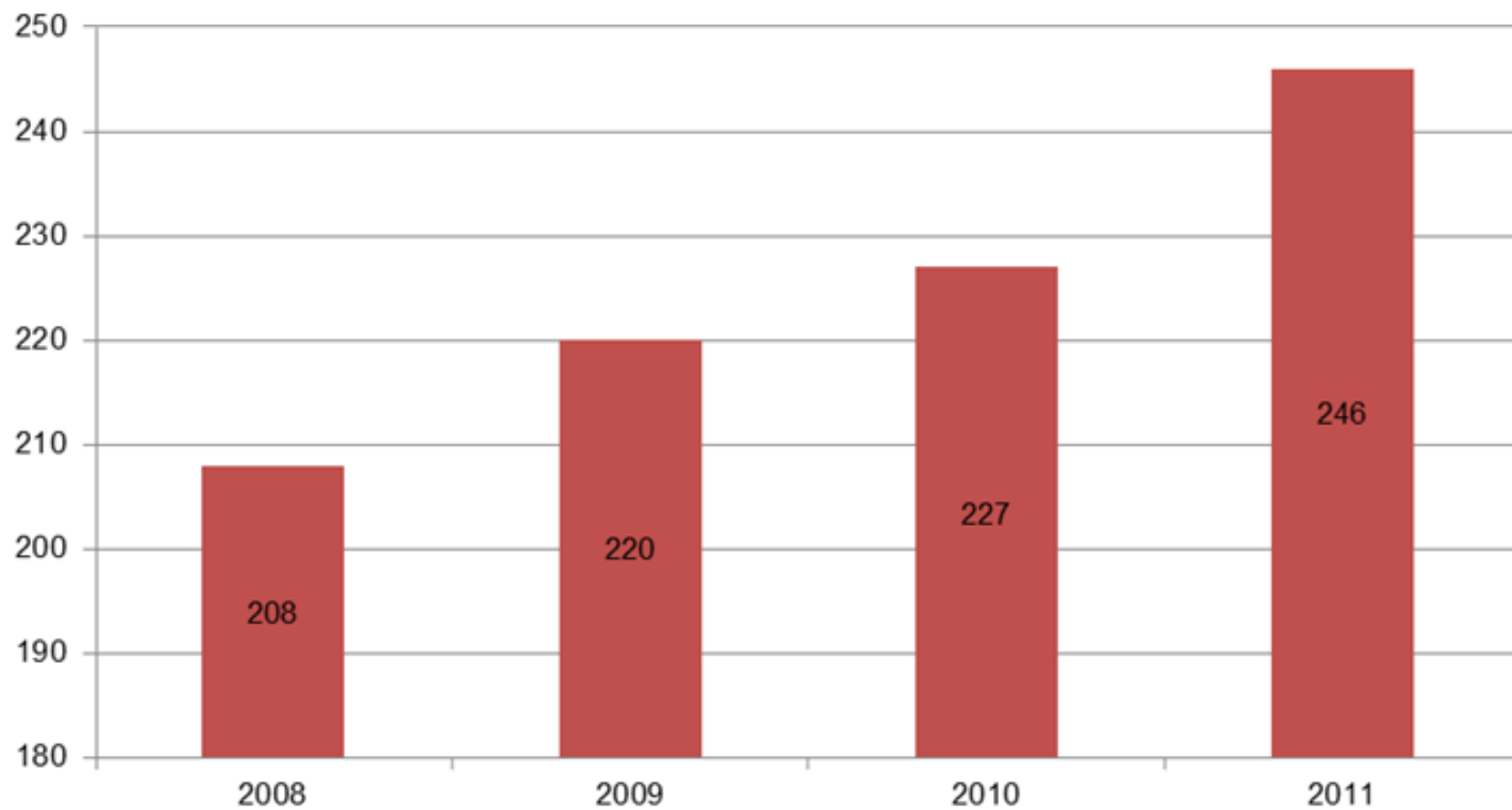




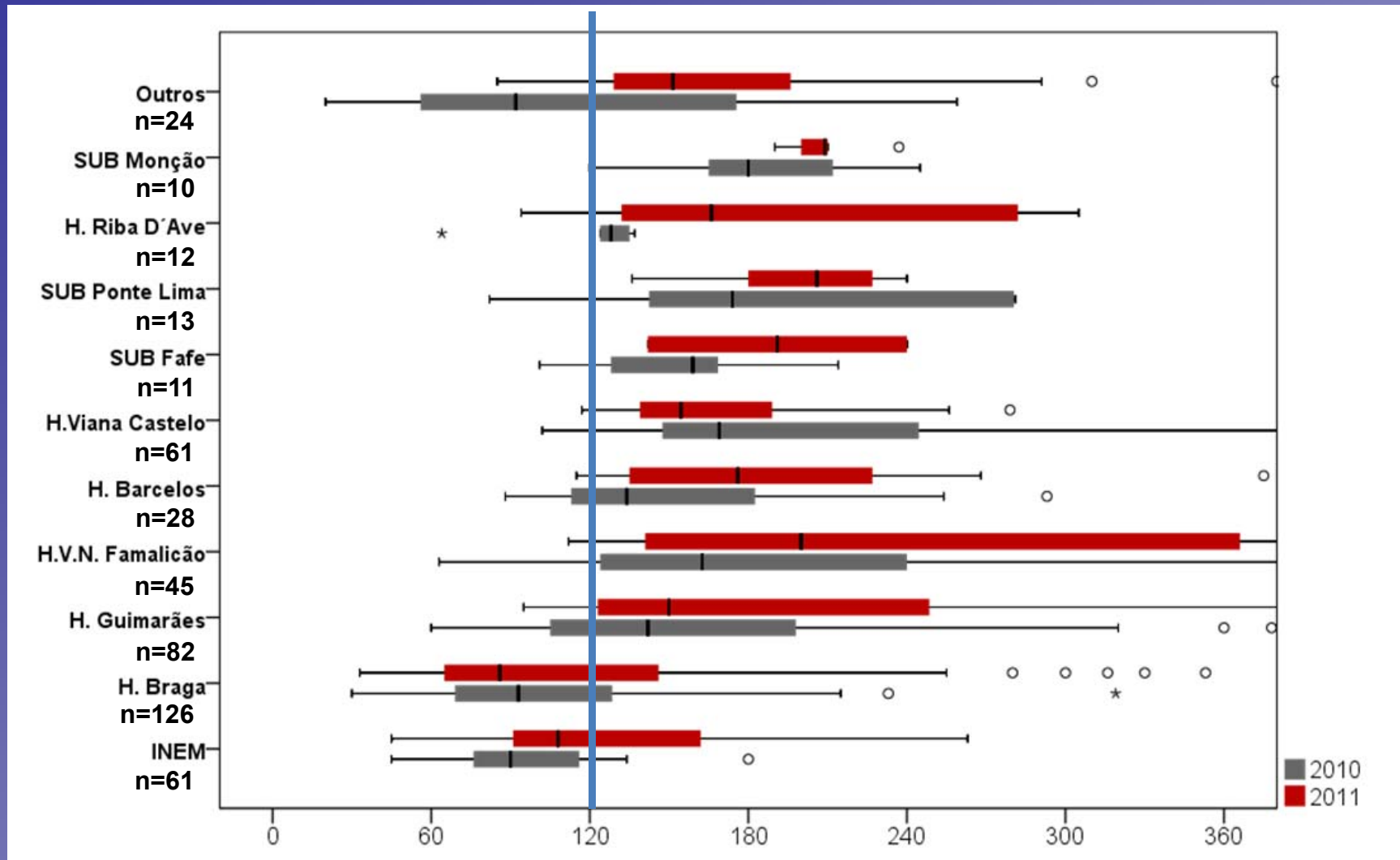
# Primary Angioplasty Program - Minho - (PAPMi)



## Primary Angioplasty Programa - Minho

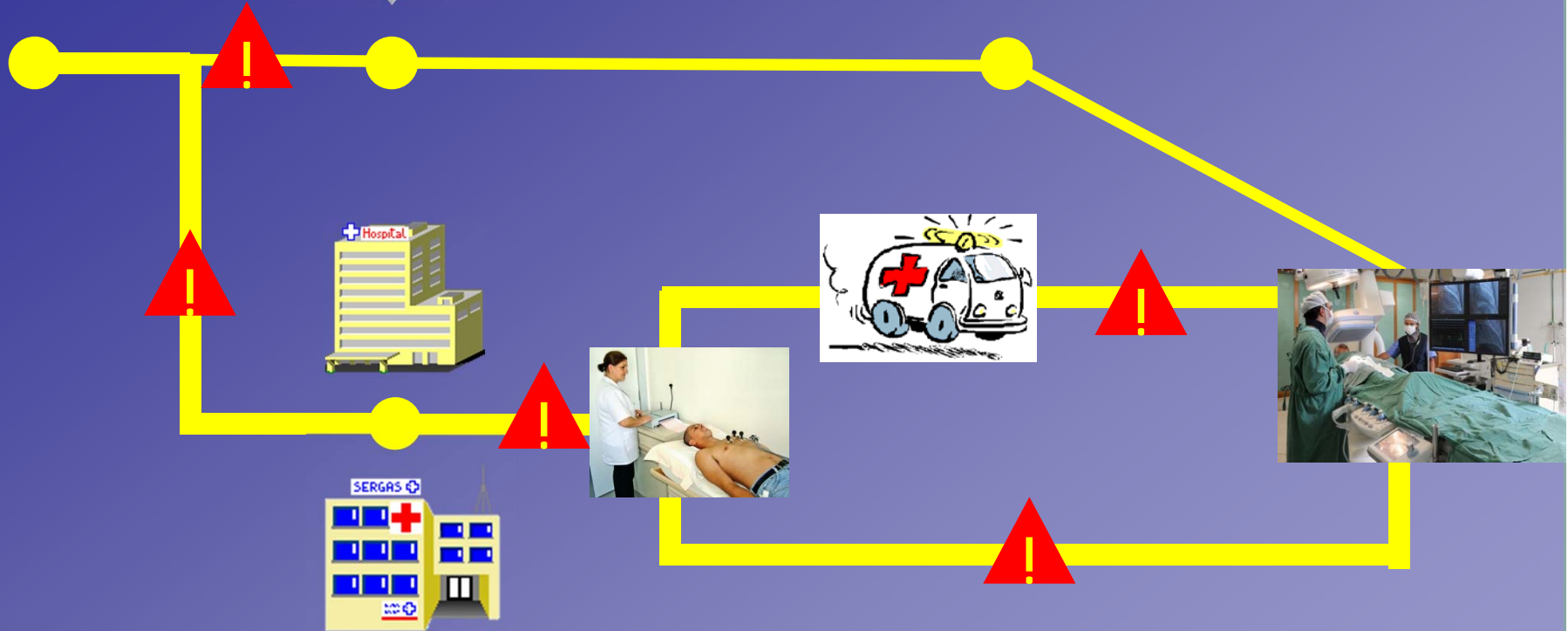


# Primary Angioplasty Program - Minho FMC – reperfusion (pPCI)



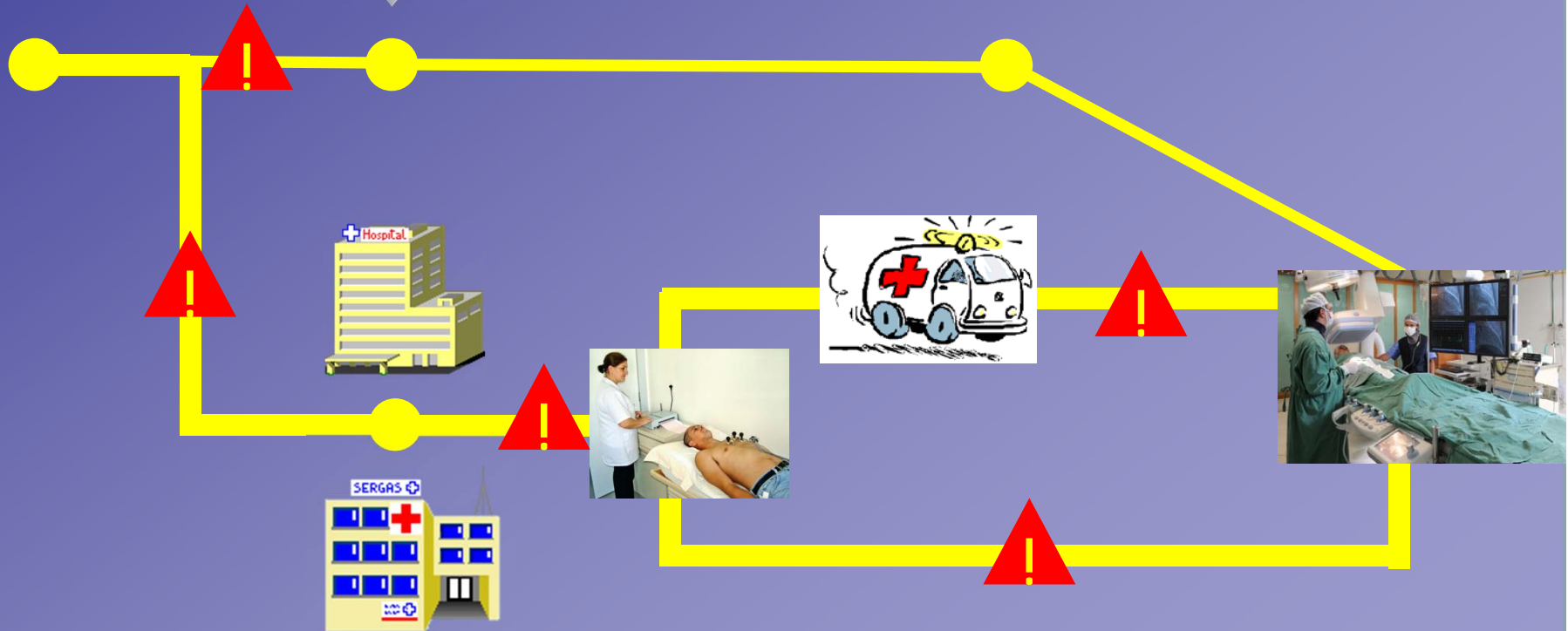
Long delays...

Why?



- Patients take much time to ask for help
- There are few patients who call for EMS - INEM
- Delay in performing ECG / diagnosis
- Delay between the ED and CathLab
- Time spent on inter-hospital transport is high

To improve we should act at once  
in every problems





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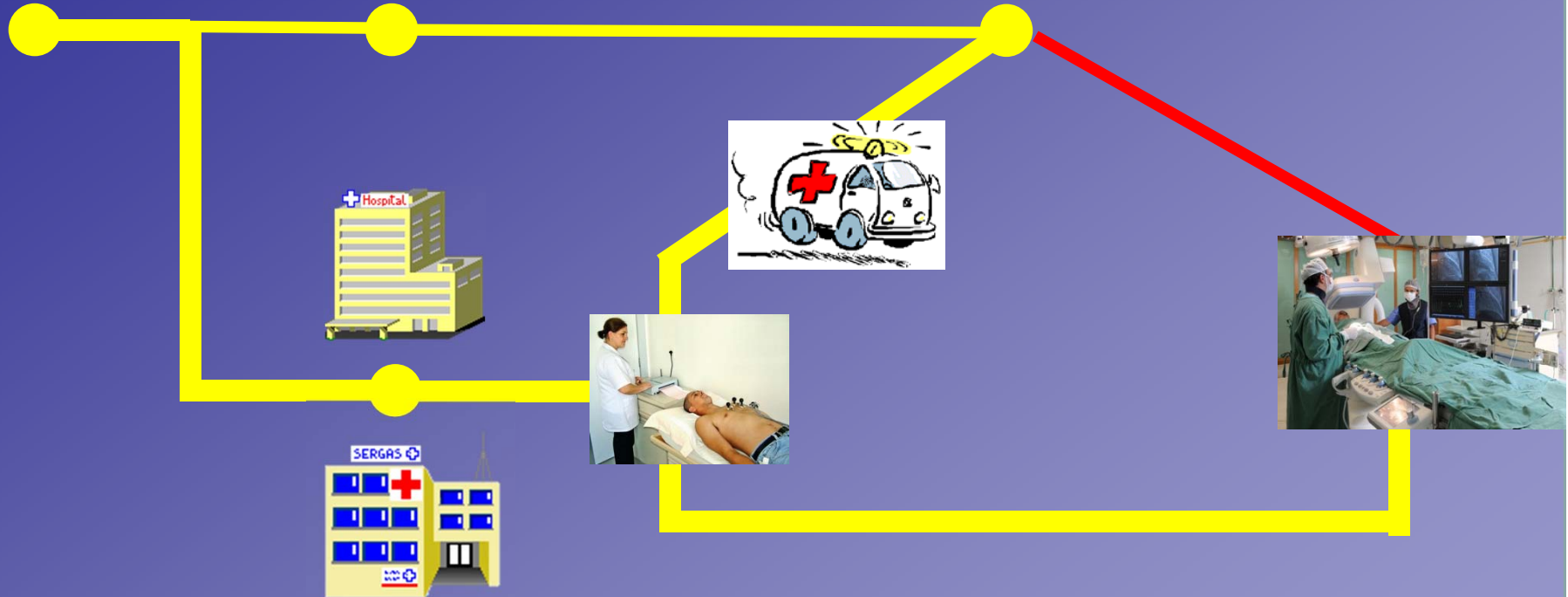
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# STEMI patients

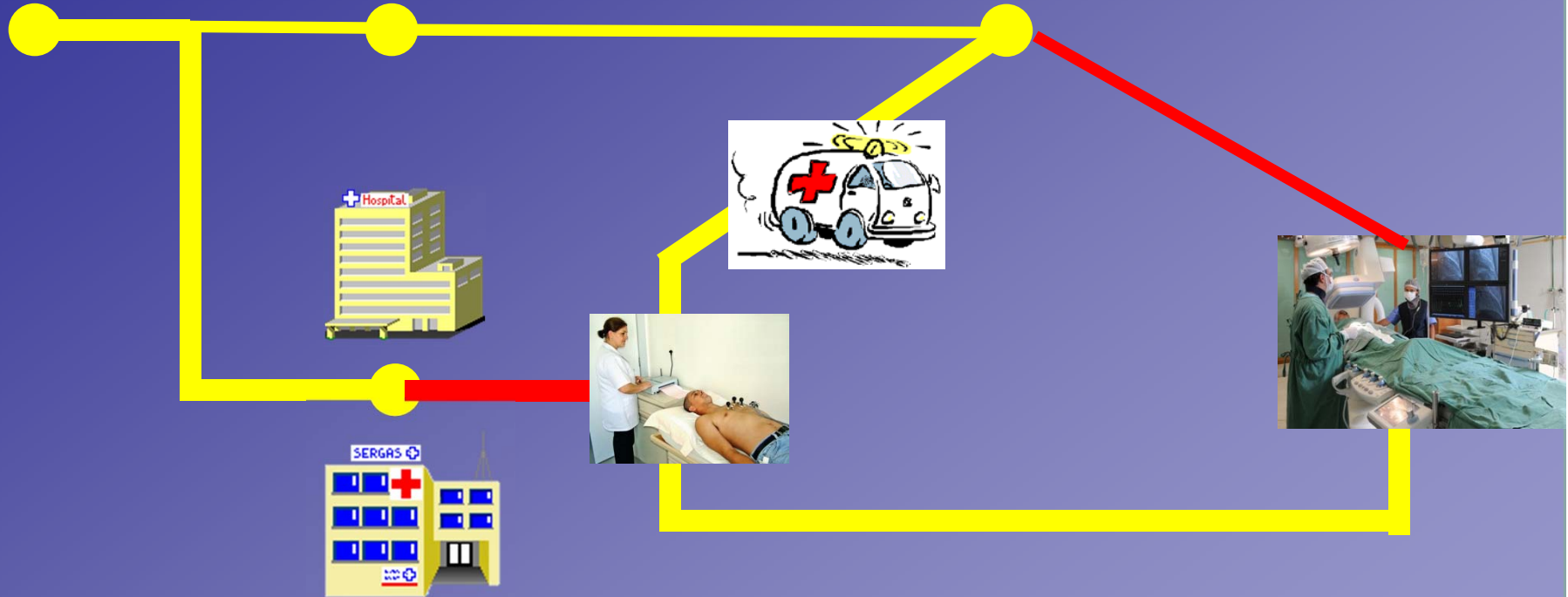
- Patients with STEMI present in the hospital in two situations:
  1. Patients already diagnosed with STEMI  
(brought by EMS-INEM or transferred from other hospitals)
  2. Patients without a diagnosis of STEMI  
(those presented at ED by self decision)



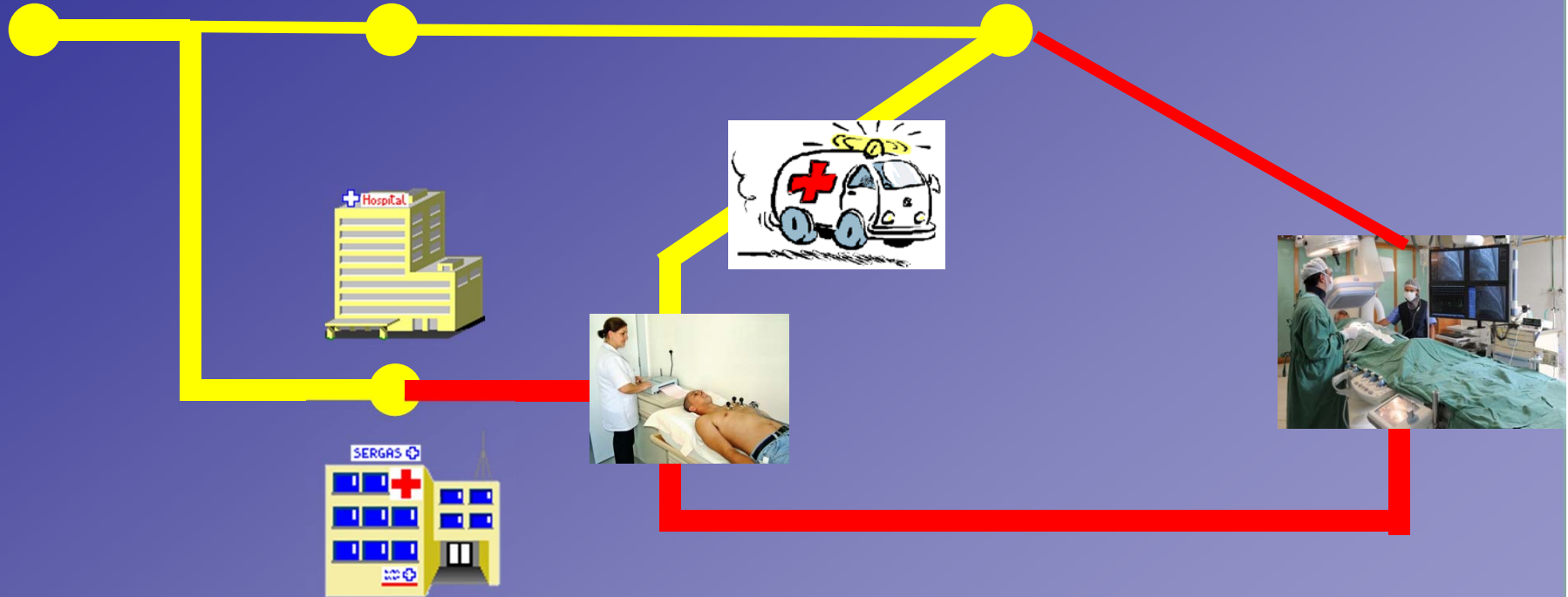
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# 1. Patients already diagnosed with STEMI



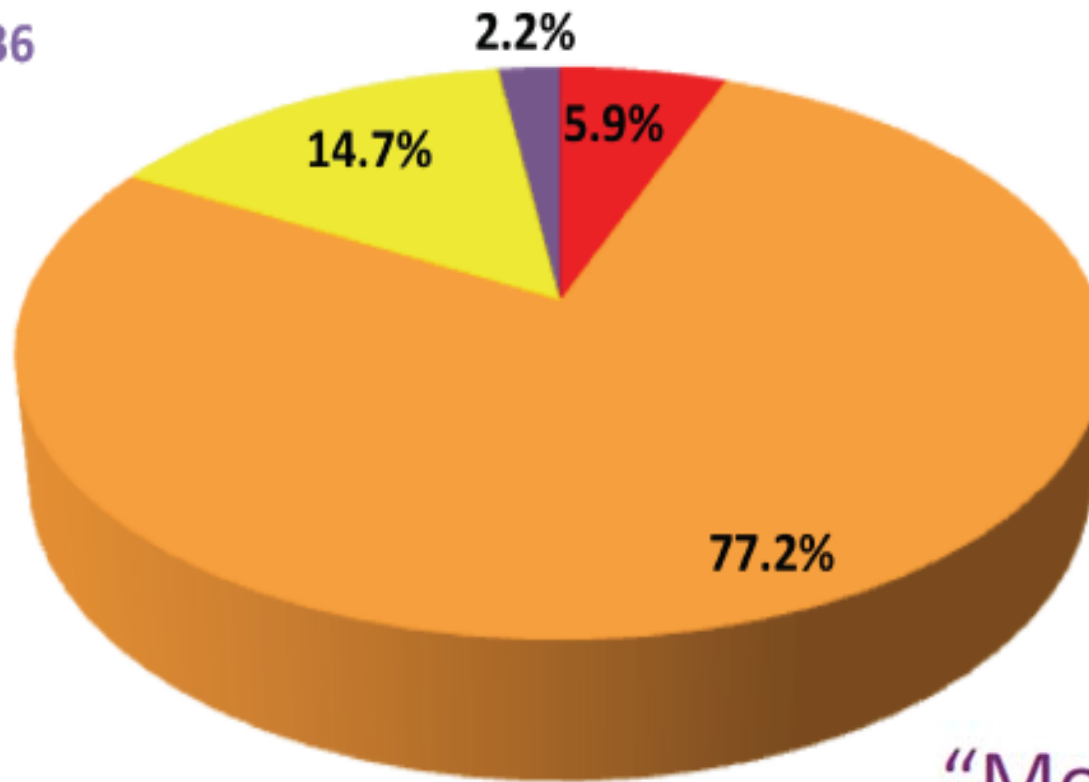
# STEMI patients

- Patients with STEMI present in the hospital in two situations:
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(brought by EMS-INEM or transferred from other hospitals)
  2. Patients without a diagnosis of STEMI  
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## 2. Patients without a diagnosis of STEMI

### Manchester triage

N=136



- Vermelho
- Laranja
- Amarelo
- Outro

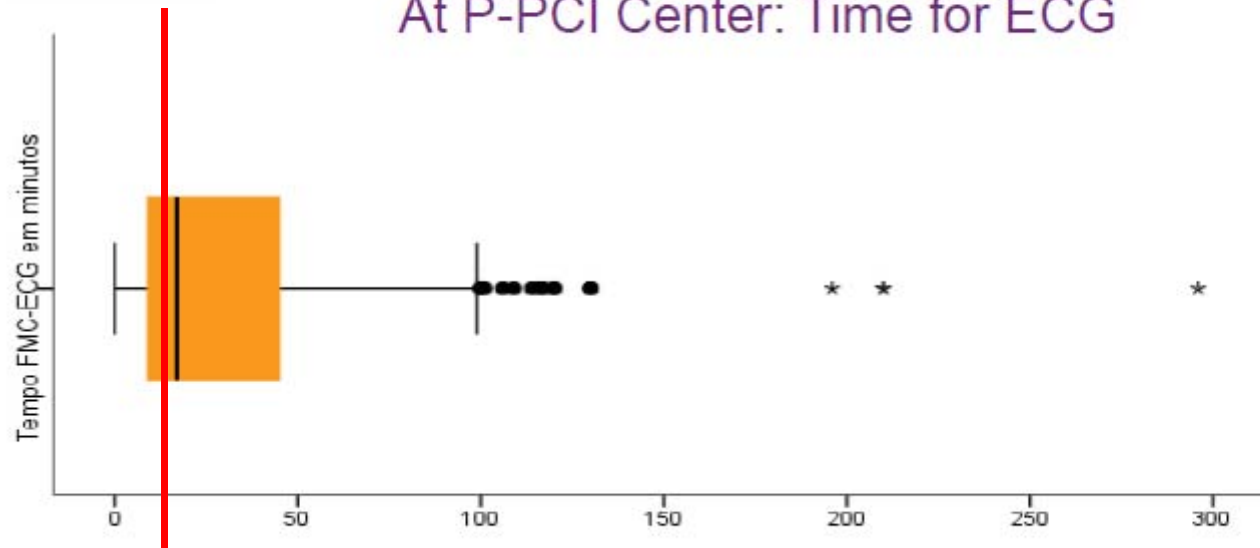
“Momento Zero”

# Time for ECG - Stent for Life 2011



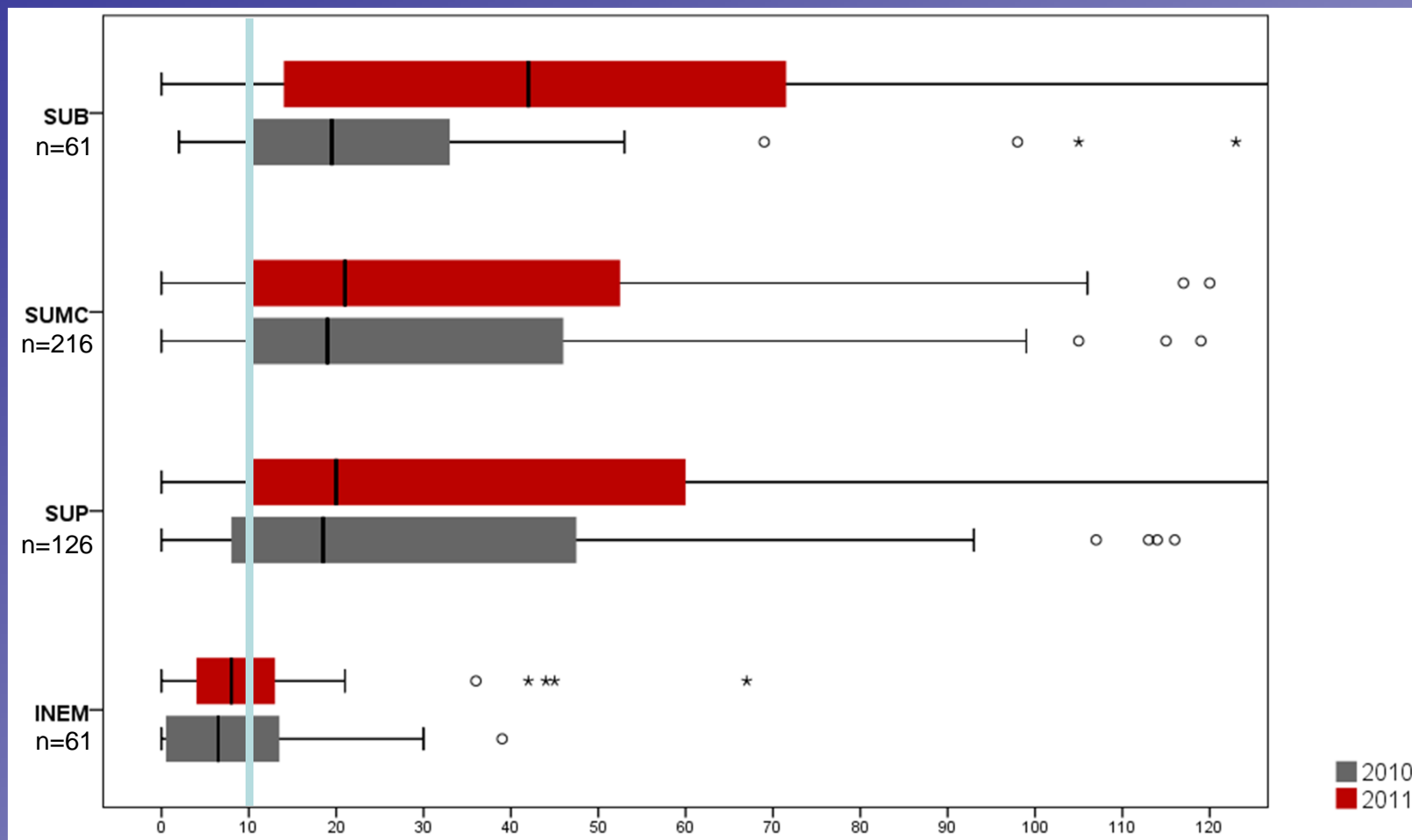
## “Momento Zero”

At P-PCI Center: Time for ECG



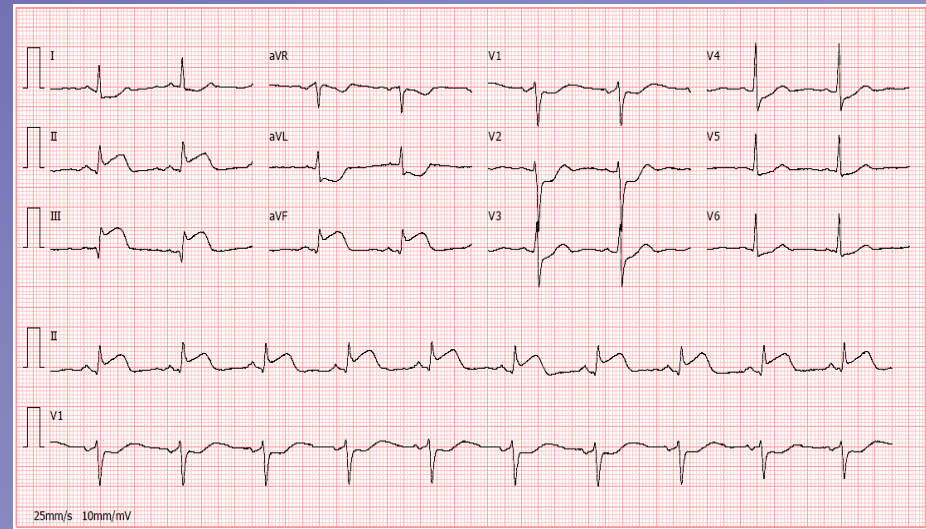
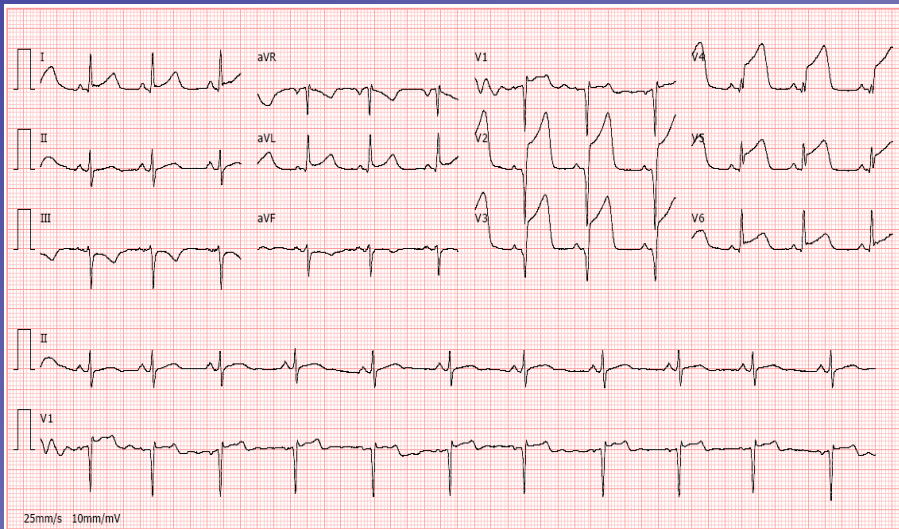
$N = 153$   
 $m = 36$   
 $Dp = 47$   
 $Me = 17$

# Time for ECG – PAP Minho



# Solutions

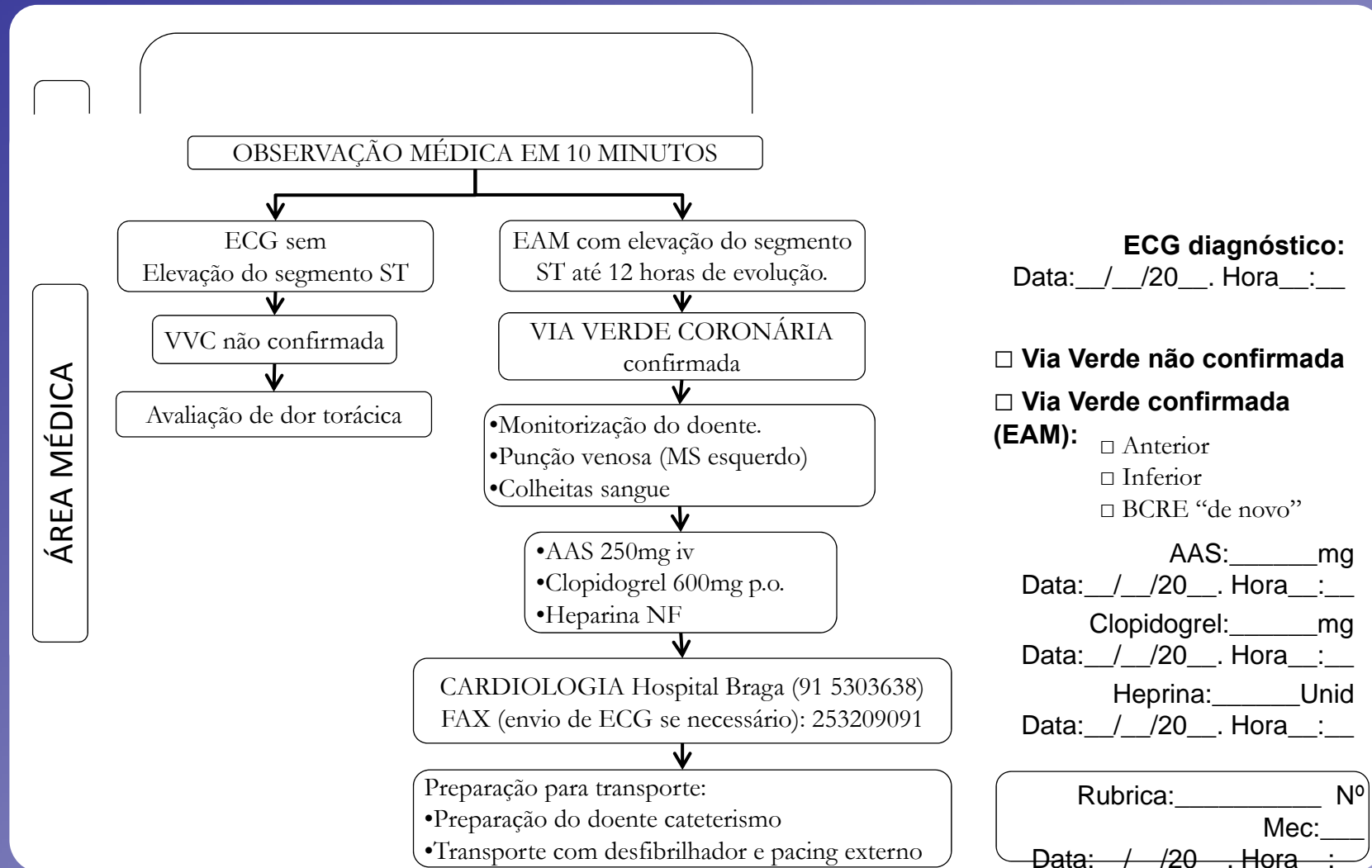
Manchester triage + immediate ECG  
(Chest or epigastric pain)



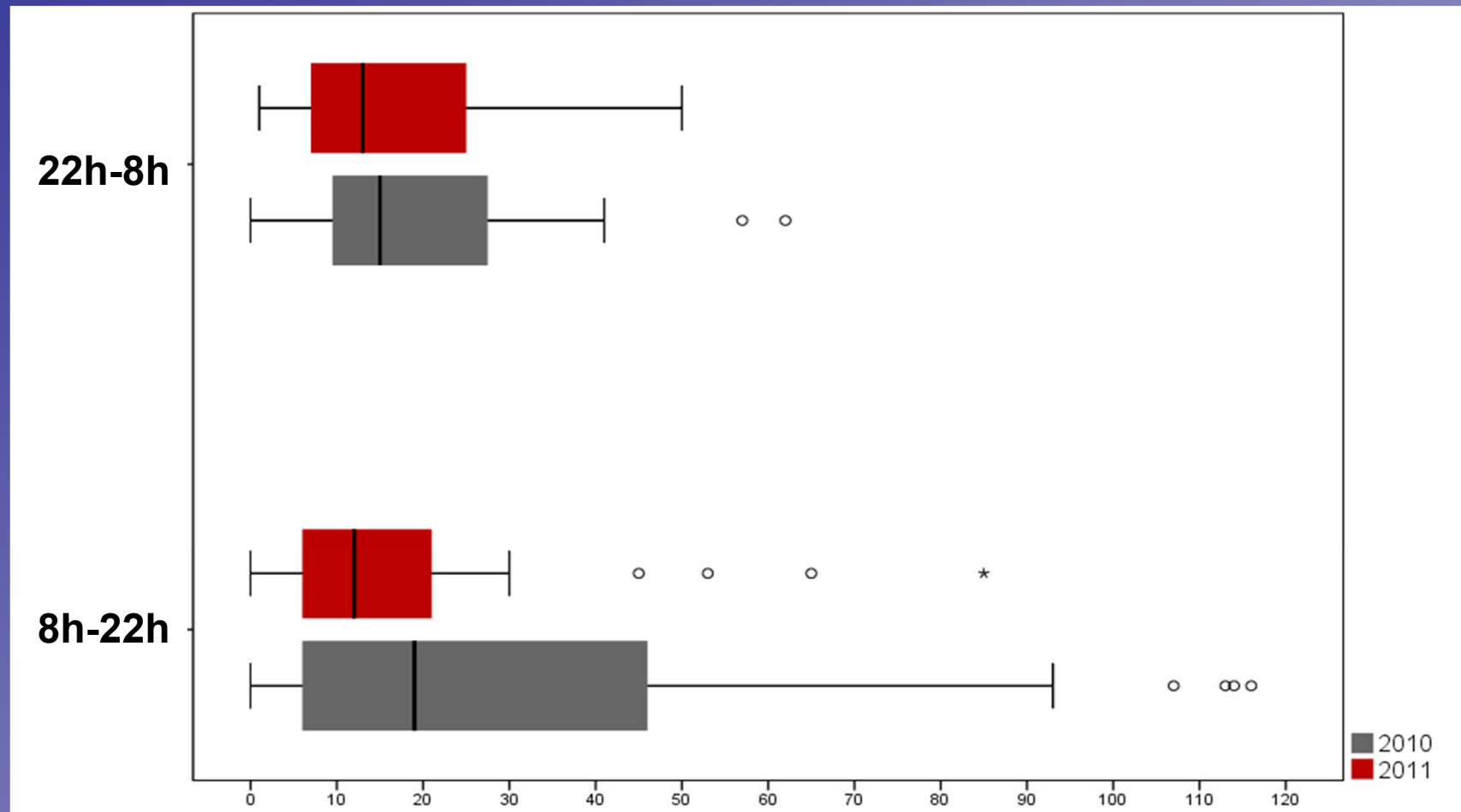
# Solutions

- Dedicated ECG technician in ED
- Formal training of triage staff for assessing ACS
- Implementation of a well-defined protocol with attitudes and responsibilities for all (doctors, nurses, other health care professionals)

# Protocolo de Via Verde Coronária (VVC)



# Time for ECG with and without dedicated ECG technicians in ED



# Conclusions

- Patients arriving at hospital with a diagnosis of STEMI should go directly to the Cath Lab (no stop in ED)
- Add ECG to Manchester triage
- Dedicated ECG technician in ED
- Formal training of triage staff for assessing ACS
- Implementation of a well-defined protocol with attitudes and responsibilities for all (doctors, nurses, other health care professionals)

