

*Paula Maria Caldinhas, MD, MSc (I)
Paulo Ferrinho PhD(II)*

*I Institute of Hygiene and Tropical Medicine at
the New University of Lisbon*

*II WHO Collaborative Center for Health
Workforce Policies and Planning*

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Day-surgery and surgical waiting time

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Day-surgery and surgical
waiting time
Caldinhas, P.M. & Ferrinho, P.*



*Corresponding author: Paula Maria Caldinhas. Instituto de Higiene e Medicina Tropical,
Universidade Nova de Lisboa. Rua da Junqueira, 100 - Lisboa, Portugal, 1349-008. E-mail: paula.caldinhas@ihmt.unl.pt*

Abstract

Surgical waiting time remains an important issue regarding access to health care provision. It is considered to be excessive in most OEDC countries (over twelve weeks or ninety days). The development of day surgery has been one of the strategies that proved effective in reducing surgical waiting time. This study aims to establish a correlation between surgical waiting time and the percentage of day-surgery cases, in hospitals with surgical services, in the Portuguese National Health Services, during 2006-2007: An observational, analytical and ecological study was conducted to establish the correlations existing between surgical waiting time and the percentage of day-surgery procedures realized, as well as associations with other variables, through regression and correlation analysis. Results: A negative, statistically significant Spearman's correlation was observed between the percentage of day-surgery cases and the waiting surgical time for elective procedures.

Keywords: Day. Surgery. Time. Waiting. Access. Correlation.

Day-surgery and waiting surgical time: an observational study

Day - Surgery

(outpatient surgery, ambulatory)

An “outpatient surgery” or day-surgery is understood as a planned surgical intervention carried out under general, loco-regional or local anesthesia, usually during hospitalization, which can be safely performed in adequate facilities, according to the existing “*lege artis*”, following admission and subsequent discharge within 24 hours and not including minor surgery

Advantages

Patient level:

Lower incidence of post-op. complications (e.g.hospital infections)

Quicker recovery and return to work /activities

Organizational and costs level:

Improving access to elective surgery by reducing waiting time

Reducing costs and hospital staying

Day-surgery and surgical waiting time: an observational study

Prolonged waiting time for elective surgery

Portugal- 58% of surgical elective cases > 12 weeks of wait) (data OCDE 2004):

Consequences :

Access (equity)

Clinical aggravation

Costs (total cost of care)

Professional (Absenteeism)

Causes:

Demografic changes (ageing)

Increased demand

Variation of clinical and

Organizacional performance of health services.

FRAMEWORK

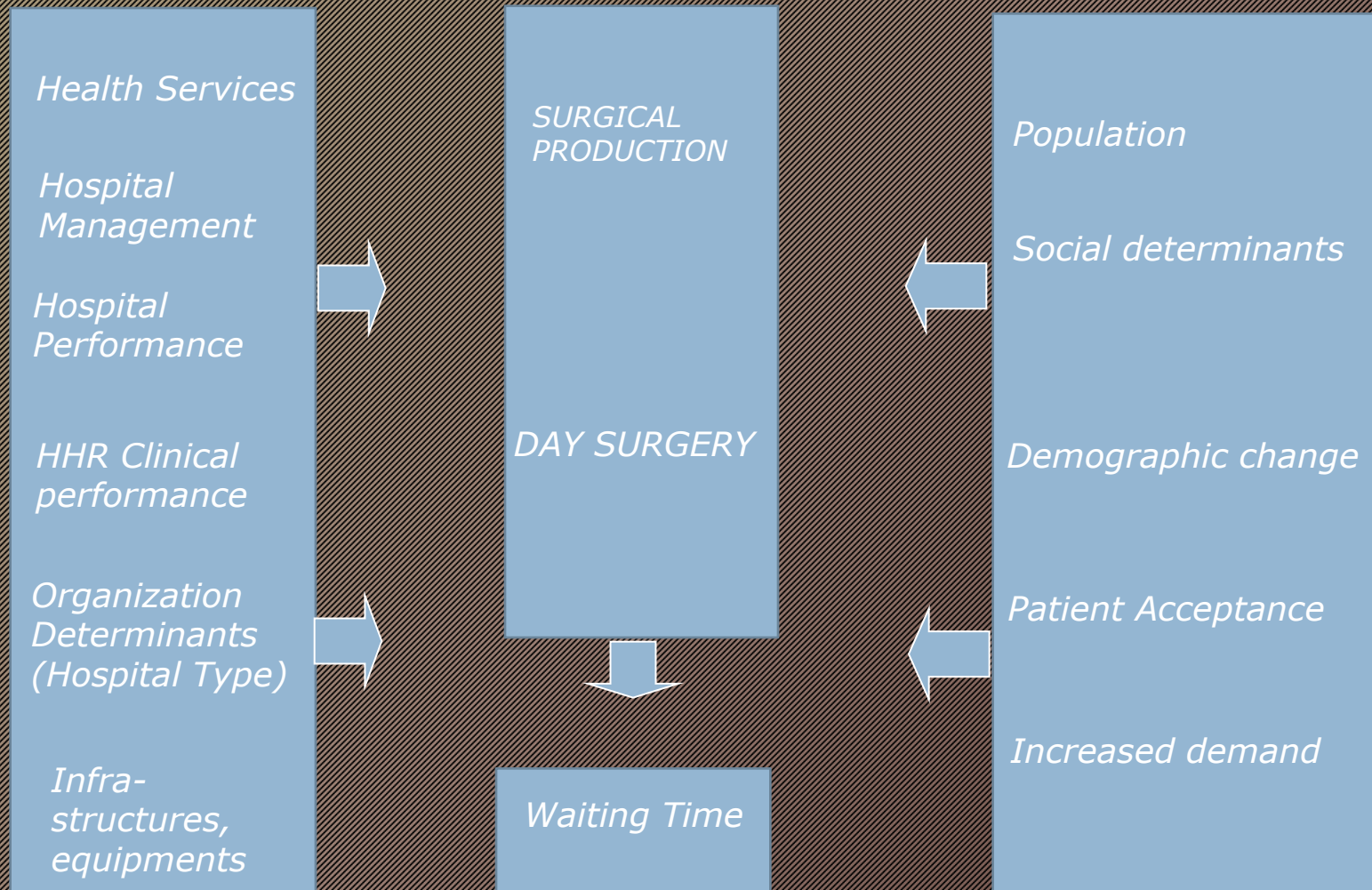


Table 1: Waiting time in OCDE countries 2003

<i>Countries (OCDE)</i>	<i>Nº of surgical cases (%) (waiting > 12sem)</i>
Portugal	58%
UK	41,7%
Italy	36,3%
Spain	18,5%
Germany	19,4%
Netherlands	15,2%

source: (Fleming et al., 1992, citado em "Explaining Waiting Times Variations for Elective Surgery across OECD Countries", Siciliani L., Hurst J., Outubro 2003).

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Study objectives

- To study associations between surgical waiting time and the percentage of day surgeries
- To investigate possible associations with other study variables that were potential determinants

Day-surgery and surgical waiting time: an observational study

Methods

- Observational study
- Population: 73 hospitals with surgical services, from the National Health Service (Portugal)
- Statistical analysis: Descriptive, Correlation and Multiple Regression

Data source:

(ACSS - Health Service Management Center)

(SIAC - Contract and Follow-up Information System)

Unidade Central de Gestão de Inscritos para Cirurgia

(UGIC - Central Unit of Management of Patients Listed for Surgery)

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Dependent variable (I)

Day surgery waiting time (quantitative variable) in each of the health institutions studied.

“Waiting time” is defined as the number of calendar days between the moment when a surgical intervention is indicated by a specialist and the moment when it is performed.

Independent variables (II)

The percentage of outpatient surgical procedures performed in each hospital.

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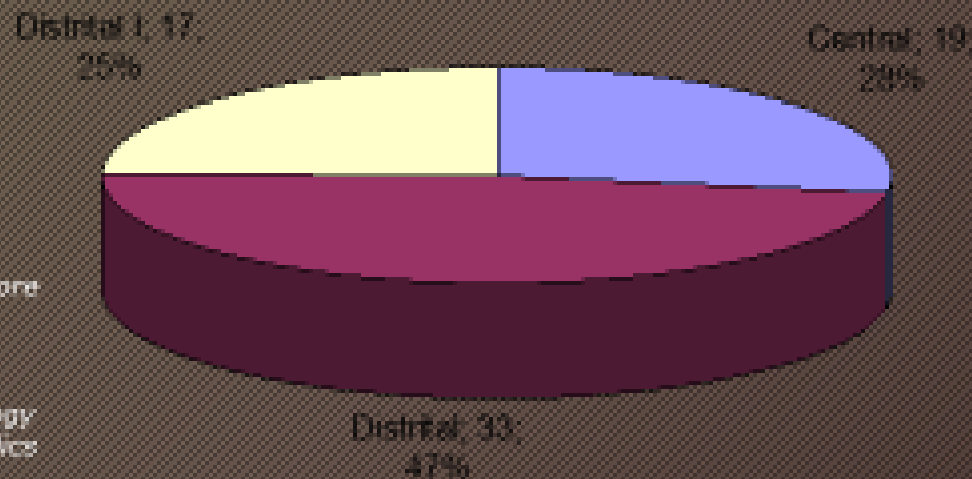
Interfering or potentially confounding variables included (III)

- Total surgical production
- Bed capacity, occupancy rate
- Hospital management type (EPE, SPA)
- Population covered by each Hospital/Health Unit
- Number of operating rooms, conventional ward and outpatient nurses, surgeons, anesthesiologists, physicians.
- Number of hospitalization days,
- Number of released patients (365 days) and number of patients released per bed

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tipo de hospital

Descriptive: Distribution of study population per hospital type



Level 1 district hospitals, are those usually limited to more basic specialties: Internal Medicine, General Surgery, Obstetrics, Gynecology, Pediatrics, Orthopedics

District Hospitals are those whose geographic intervention area corresponds to a district or part of it and which can be classified according to their levels of difference or specialties: basic district hospital, intermediate level district hospital or distinct level district hospital

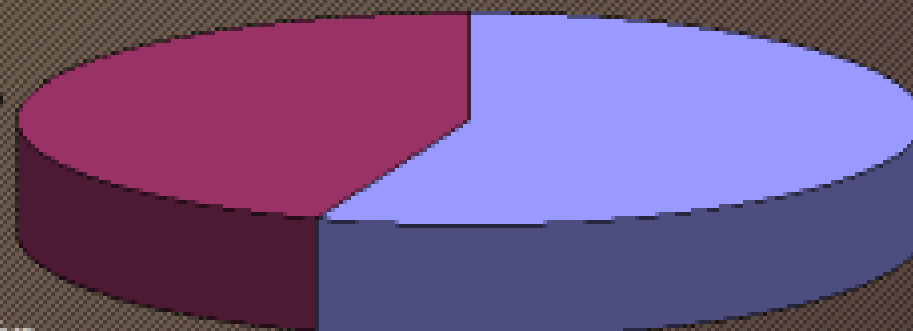
Central Hospital corresponds to the most sophisticated and distinct level of care and is capable of providing care for all clinical situations, includes scientific research and it may have a teaching function and be associated with universities.

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tipo de gestao

*Descriptive:
Distribution per type of management*

SPA; 32; 44%

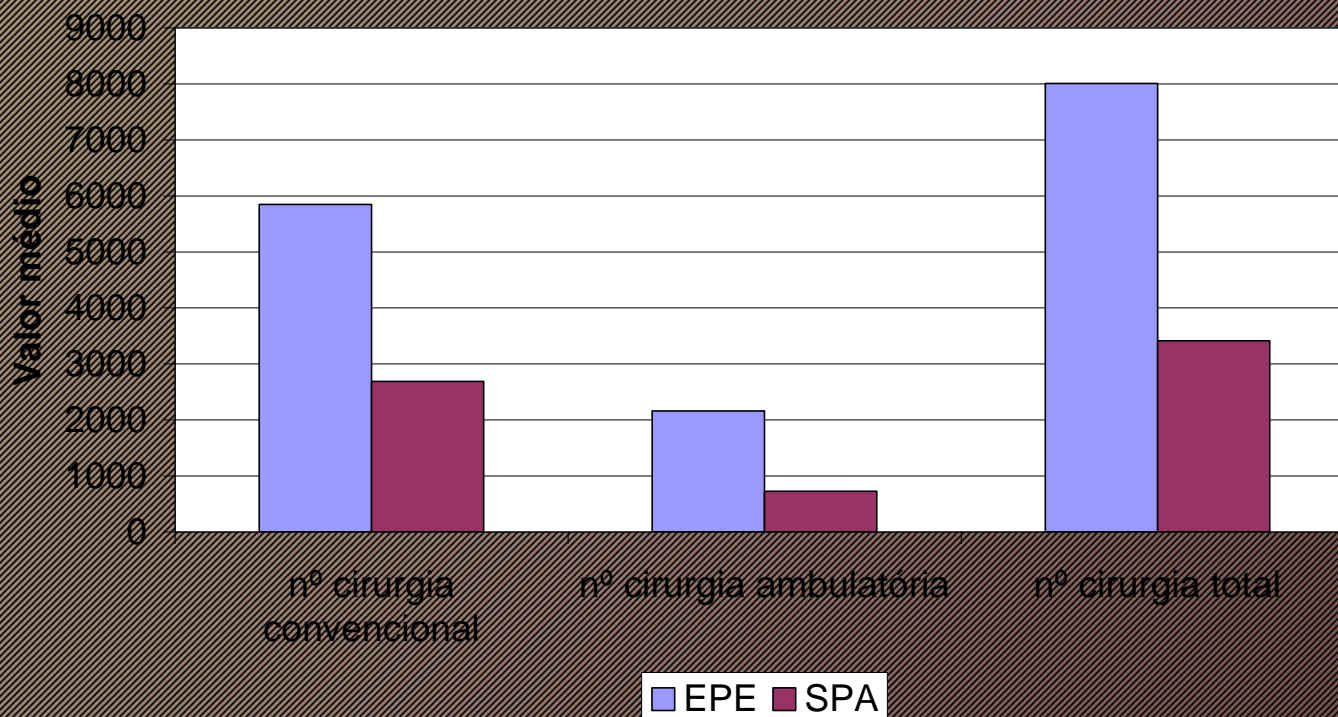


EPE; 40; 56%

SPA (Public Administrative Sector) hospitals: public hospitals with a legal personality, administrative and financial autonomy, with or without patrimonial autonomy, which, despite their autonomy, greatly depended on the Ministry of Health in terms of funding, management and recruiting of human resources;

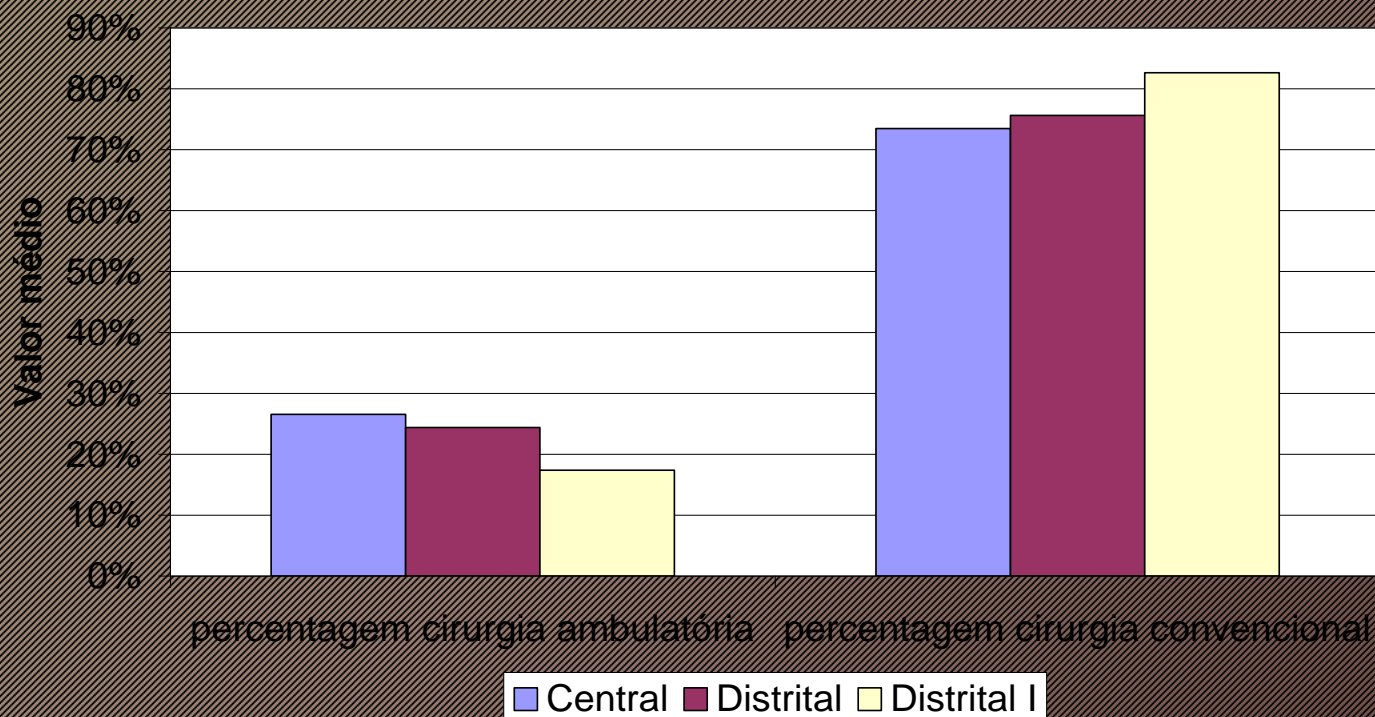
Hospitals EPE (EPE - Company public hospitals) - public hospitals with a legal personality; administrative, financial and patrimonial autonomy; and a company nature. This is a model that has been increasingly used in all SNS hospitals;

Day-surgery and surgical waiting time: an observational study



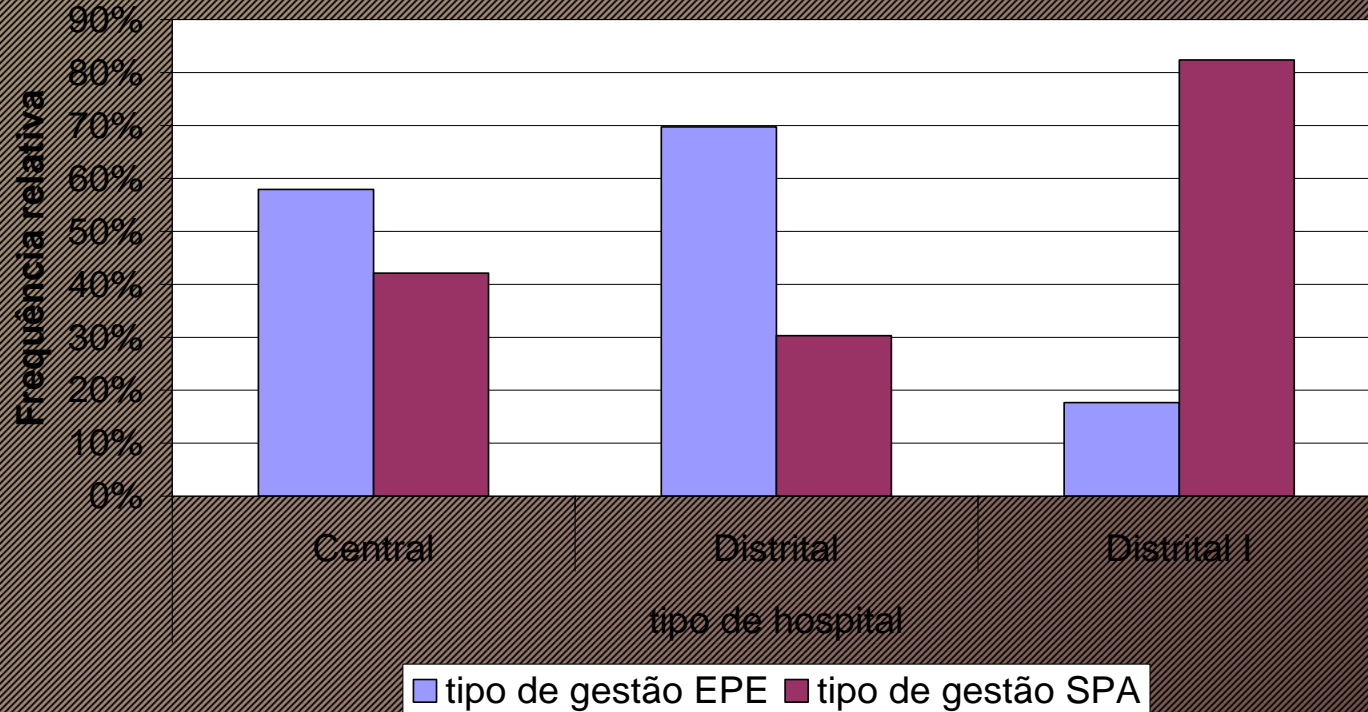
Nº surgeries (conventional x ambulatory) per hospital type

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Percentage of (day-surgery) per hospital type

Day-surgery and surgical waiting time: an observational study



Percentage of (day-surgery) per management type

Day-surgery and surgical waiting time: an observational study

Results & Conclusion

- A negative significant Spearman correlation ($p < 0,05$), was found between the percentage of day-surgery and the waiting time for elective surgery
- Regression analysis found that an increase of 1% in DS results in a 2,32 (days) decrease in waiting time (media).
- Promoted as a strategy to improve access to health services.
- Potentially determining factors of waiting time for day surgeries could be identified: “hospital management type” and “number of surgical wards available” were those that had the greatest influence.

Updates

Source: ACSS

Administração
Central do Sistema
de Saúde > Relatório
síntese da atividade
cirúrgica programada
>2015

- Portugal - Surgical waiting time of approximately 90 days (between 60 and 120, depending on Hospital/Health Institution and 662.642 surgical elective procedures (2015)¹
- OECD 2007 to 2014- waiting times for elective surgeries (hip replacement) started to go up (250 to 350 days) in some OECD countries.²

1- Data source SIGIC (Sistema Integrado de Gestão de Inscritos para Cirurgia),
“Relatório Síntese da Atividade Cirúrgica Programada - Ano 2015”

2- OECD Health Statistics OCDE 2015



Source

ACSS -Administração Central do Sistema de Saúde > Relatório síntese da atividade cirúrgica programada >2015

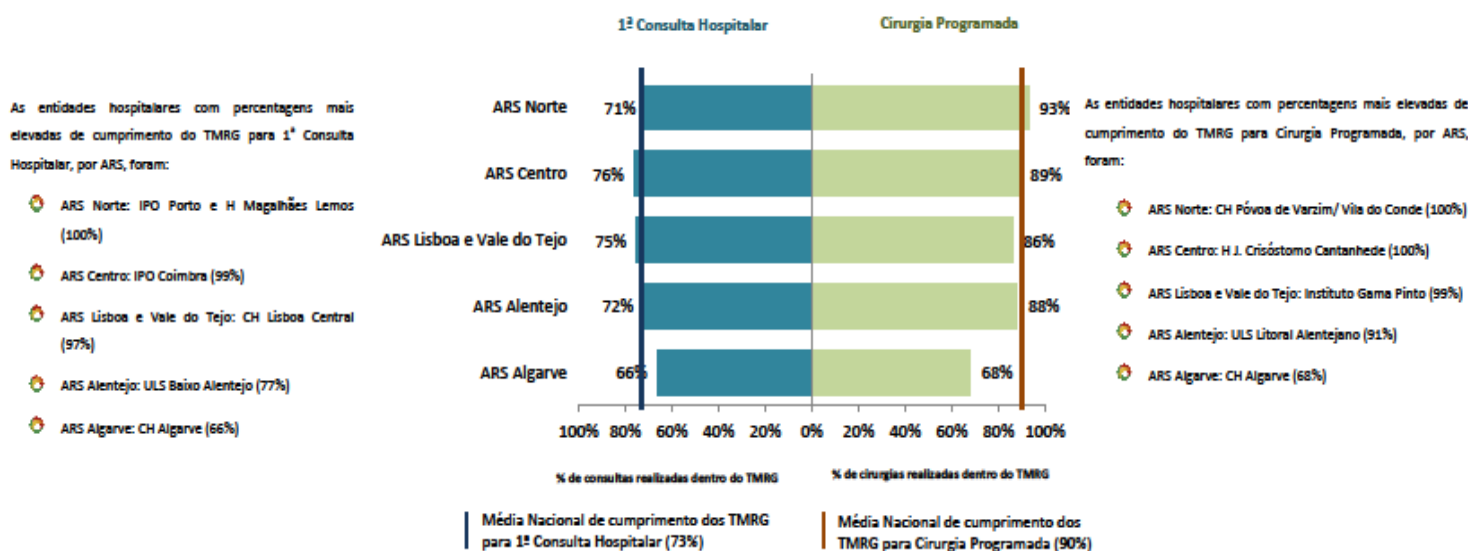


Tempos Máximos de Resposta Garantidos no SNS

Número 1
Dados a abril de 2016

NACIONAL

Percentagem de 1ª Consulta Hospitalar e de Cirurgia Programada realizadas dentro do Tempo Máximo de Resposta Garantido (TMRG)



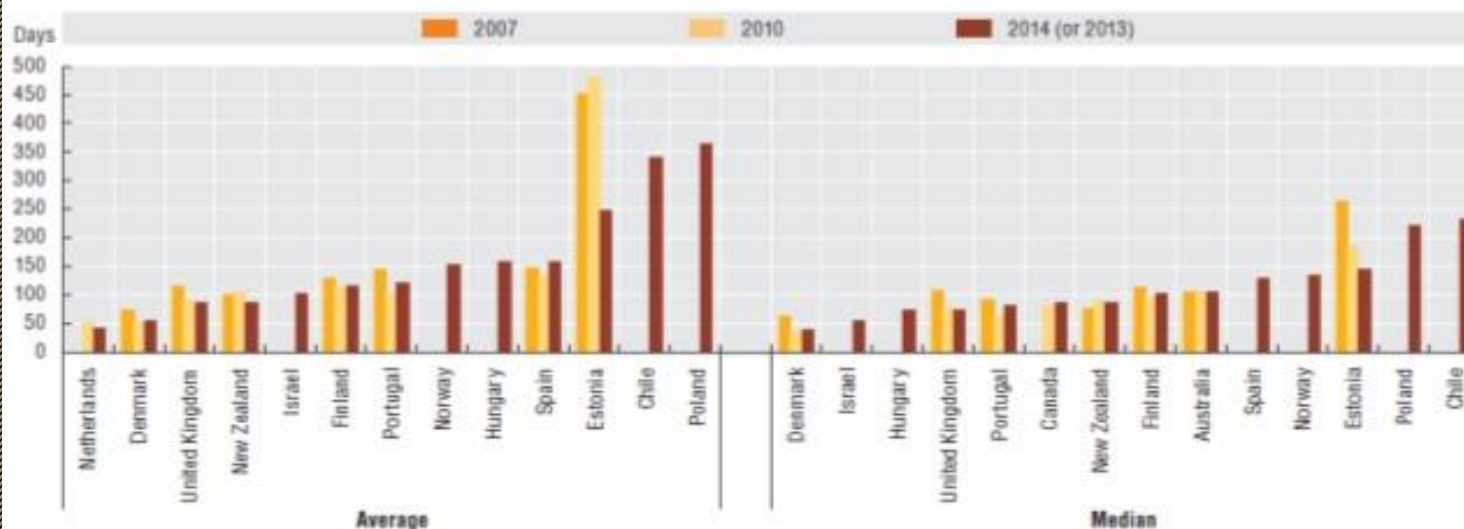
Nota: Os tempos nacionais e regionais apresentados correspondem aos tempos globais de resposta à população, incluindo as instituições do SNS e entidades protocoladas/convencionadas.

Fonte: Unidade de Gestão do Acesso / ACSS
SI SIGIC
SI CTH

Waiting time (national average) for elective surgeries (data-ACSS /SINAS hospital)

Waiting times for hip replacement have also decreased or remained stable in several countries, but have started to go up in others

Hip replacement, waiting times from specialist assessment to treatment, 2007 to 2014 (or 2013)



Source: OECD Health Statistics 2015, OECD

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