

# SWOT ANALYSIS OF THE CURRENT SITUATION OF MEDICAL PHYSICISTS IN PORTUGAL



R. Figueira<sup>1,2</sup>, E. Poli<sup>1,3</sup>, J. Isidoro<sup>1,4</sup>

<sup>1</sup>DFM - SPF, Portugal, <sup>2</sup>Centro Hospitalar de São João, Porto,

<sup>3</sup>Centro Hospitalar Lisboa Norte, <sup>4</sup>Centro Hospitalar e Universitário de Coimbra, Coimbra

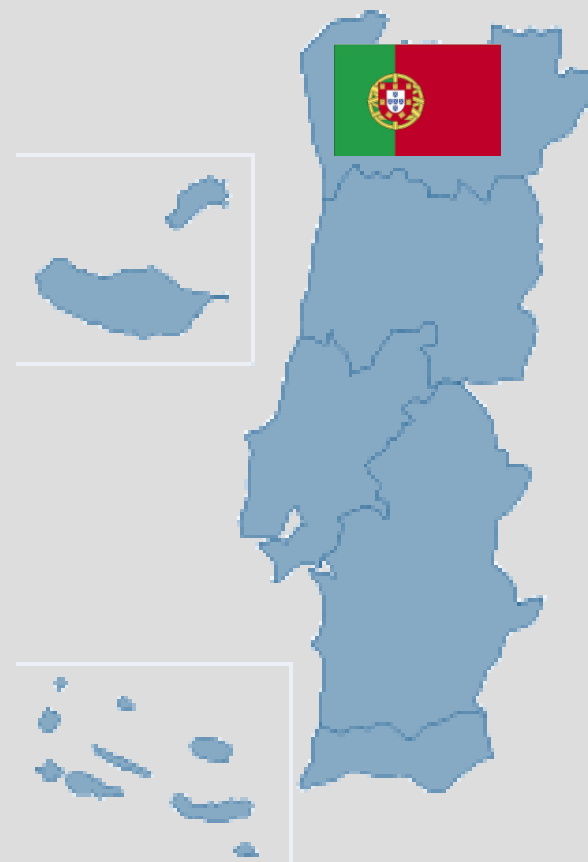


PP147

## Introduction

During 2015 DFM-SPF (Medical Physics Division of the Portuguese Physics Society) conducted a survey for the characterization of the Medical Physics situation in Portugal.

Among other questions, participants were asked to identify the **Strengths**, **Weaknesses**, **Opportunities** and **Threats (SWOT)** of the profession.



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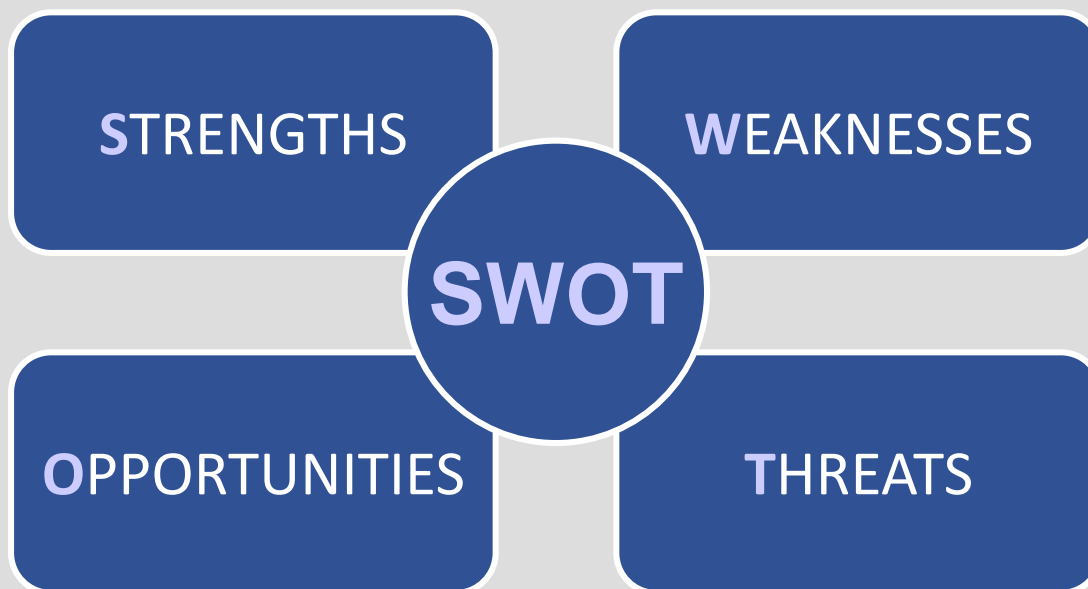
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## Purpose

The purpose was to conduct a SWOT analysis of the current situation of Medical Physics in Portugal, contributing for the strategic development of the profession and for the identification of potential actions to be taken to improve the situation.



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## Materials and Methods

The SWOT analysis was conducted considering a chosen objective for the profession:

**“To improve the status of the profession in Portugal and to bring it closer to the new european standards as defined in the BSS Directive, RP174 and EFOMP Policy Statements”**



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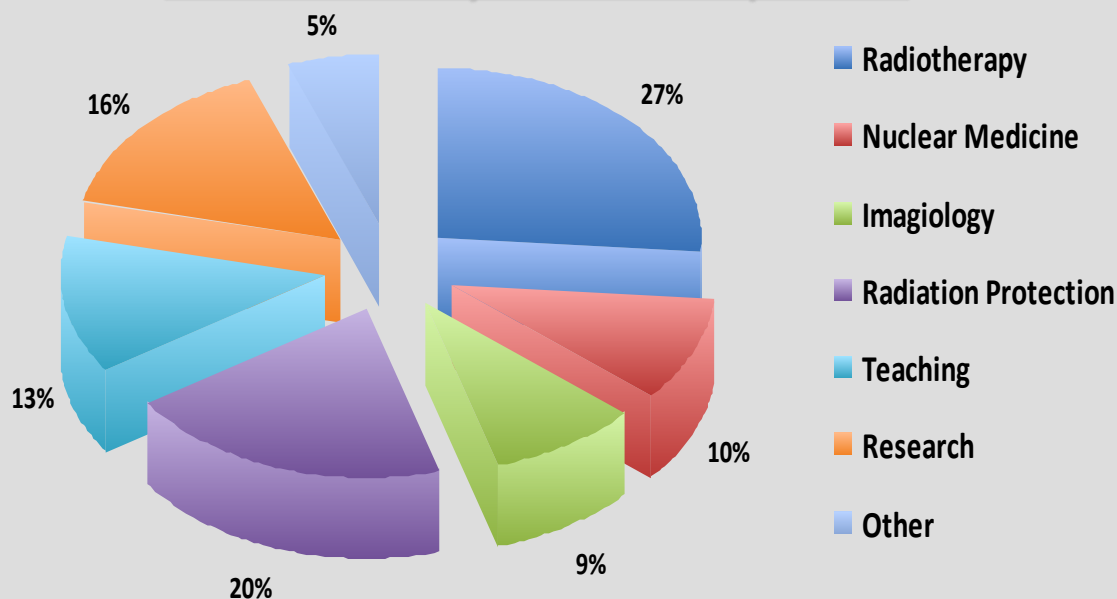
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## Materials and Methods

The responses from 83 professionals were analysed. From previous data, we estimate that about 100 physicists are working full time in hospitals and about another 20 in areas such as teaching or research.

### Areas of activity of the 83 responders



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## Materials and Methods

The collected data was used to create a **SWOT matrix** identifying common **S**trengths, **W**eaknesses, **O**pportunities and **T**hreats.

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
<b>Internal Factors</b>		<b>External Factors</b>	
Likely to have a positive effect on achieving the defined objective for the profession	Likely to have a negative effect on achieving the defined objective for the profession	Likely to have a positive effect on achieving the defined objective for the profession	Likely to have a negative effect on achieving the defined objective for the profession

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## Materials and Methods

The analysis was then directed to design appropriate actions that could successfully lead to strategic outcomes to the profession.

	<b>Opportunities</b> (external, positive)	<b>Threats</b> (external, negative)
<b>Strengths</b> (internal, positive)	<b>Strength-Opportunity strategies</b> Which of the profession's strengths can be used to maximize the identified opportunities ?	<b>Strength-Threats strategies</b> How can we use the profession's strengths to minimize the identified threats?
<b>Weaknesses</b> (internal, negative)	<b>Weakness-Opportunity strategies</b> What action(s) can we take to minimize the profession's weaknesses using the identified opportunities?	<b>Weakness-Threats strategies</b> How can you minimize the profession's weaknesses to avoid identified threats?

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PP147

## Results

According to the professional **Strengths**, the following strategies were identified to accomplish the established objective:

	OPPORTUNITIES (external, positive)	THREATS (external, negative)
STRENGTHS (internal, positive)	<p><b>Strength-Opportunity strategies</b></p> <ul style="list-style-type: none"> <li>-Use the competence of professionals to assist authorities in the transposition of the BSS directive.</li> <li>-Use the international influence to pressure national authorities to require proper support of MP to new centers and equipments.</li> <li>- Use the dedication and commitment of professionals to promote quality and patient safety.</li> </ul>	<p><b>Strength-Threats strategies</b></p> <ul style="list-style-type: none"> <li>-Improving qualification and competence of MP (by CPD) will demonstrate a better fitness for the job than other professionals.</li> <li>- Get support from international organizations to alert authorities about the need to clarify the existing legislation (proper education &amp; training framework, professional recognition)</li> </ul>

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PP147

## Results

The **S**trengths, **W**eaknesses, **O**pportunities and **T**hreats more frequently pointed out were:

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
Internal Factors		External Factors	
<ul style="list-style-type: none"> <li>- Qualification and competence of the existent professionals</li> <li>- Effort, dedication, commitment of the professionals</li> <li>- Relationships with partner organizations as EFOMP, IOMP, as well as collaborative projects with IAEA</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of professional recognition</li> <li>- Unexistence for many years of a training and qualification framework</li> <li>- Reduced number of professionals in areas like D&amp;IR</li> <li>- Lack of internal cohesion and disinterest of some professionals</li> </ul>	<ul style="list-style-type: none"> <li>- Implementation of the new BSS directive</li> <li>- Fast technological evolution</li> <li>- Available resources, namely new RT centers with top level equipment</li> <li>- National/international focus on quality and patient safety</li> </ul>	<ul style="list-style-type: none"> <li>- Pressure from other professional, like radiographers and biomedical engineers</li> <li>- Arrival of foreigners with recognized qualifications</li> <li>- Lack of regulations / Unclear legislation</li> <li>- Economical crisis</li> </ul>



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## Results

According to the professional **Weaknesses**, the following strategies were identified to accomplish the established objective:

	OPPORTUNITIES (external, positive)	THREATS (external, negative)
WEAKNESSES (internal, negative)	<p><b>Weakness-Opportunity strategies</b></p> <ul style="list-style-type: none"><li>- Use the implementation of the new BSS directive as an opportunity to clarify MP tasks and responsibilities (establish professional recognition)</li><li>- Be present on strategic national events to promote the profession (and the requirements of technological evolution) amongst other health professional namely Radiologists</li></ul>	<p><b>Weakness-Threats strategies</b></p> <ul style="list-style-type: none"><li>- Promote awareness of the advantage of MP in the clinical team (expert input from the MP)</li><li>- Promote the creation of a MP professional organization and implementation of professional registration/recognition</li><li>- Promote training courses and CPD</li></ul>

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## Conclusion

A SWOT analysis has been employed with success and in this case was a useful tool in providing guidance to the Portuguese medical physicists to develop a strategic action plan to improve the current situation of the profession.



## References

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