

# Provision and Public Expenditure of Radiotherapy Services in Greece (2013-2020)

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## Introduction

It is evident that the pandemic has brought many changes observed in the programming and operation of medical settings, including radiology centers. With the outbreak of the Covid-19 pandemic many radiotherapy units were either called to temporarily suspend their operations or converted to treatment units for Covid-19 patients. Despite the problems of patient access to radiotherapy services at the start of the pandemic, these were subsequently addressed to a significant extent, with the result that today a relatively small proportion of oncology patients report some difficulty or inability to access them. The present study presents the longitudinal use of radiotherapy services and the amount of (public) expenditure for their reimbursement for the years 2013-2020. Additionally, an evaluative approach to the adequacy and accessibility of radiotherapy services is carried out and proposals are made to address the everyday problems faced by oncology patients.

## Methods

Provision and reimbursement data referring to Radiotherapy services in Greece (2013-2020) were drawn from the MoH and the National Organization for the Provision of Health Services (EOPYY). The data also included hospitals' ownership, spatial distribution and amount of cancer patients and provided sessions, as well as the type of radiotherapy treatment.



## Results

We observe a strong upward trend in the total number of sessions and in the expenditure, which is combined with the increase in the available facilities and consequently in the use of public facilities since 2017 (the year of installation of the new equipment in public hospitals).

Year	Number of RT Sessions		Total
	In Public Facilities	In Private Facilities	
2013	232,574	132,986	365,560
2014	248,409	160,617	409,026
2015	245,393	174,443	419,836
2016	232,071	176,320	408,391
2017	257,383	189,300	446,683
2018	286,503	177,117	463,620
2019	337,480	179,143	516,623
2020	336,023	180,054	516,077

The analysis is accompanied by comparative indicators on the spatial distribution of RT sessions, equipment and use of services, and on the coverage of needs in accordance with international guidelines.

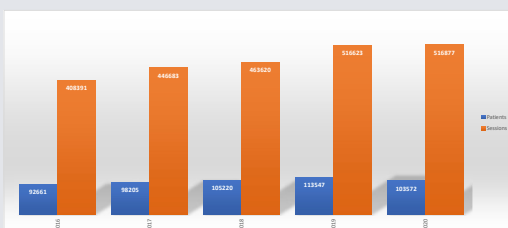
**Table 1.** Distribution of Radiotherapy Sessions in Public and in Private Facilities (2013-2020)

Year	Total Expenditure for RT Sessions (in €)		Total
	For Public Facilities	For Private Facilities	
2013	18,564,495	18,630,985	37,195,480
2014	19,373,735	21,625,454	40,999,189
2015	19,416,459	24,896,716	44,313,175
2016	20,356,610	27,935,467	48,292,077
2017	21,437,620	28,195,591	49,633,211
2018	25,076,695	26,491,298	51,567,993
2019	29,909,885	26,769,888	56,679,773
2020	27,149,960	24,167,782	51,317,742

**Table 2.** Distribution of Radiotherapy Expenditure for Public and for Private Facilities (2013-2020)



**Figure 2.** Regional distribution of Radiotherapy Sessions (2020)



**Figure 1.** Total number of Patients treated and Radiotherapy Sessions (2016-2020)

Thus, while sessions in private facilities in absolute numbers remain relatively stable, their percentage of the total has been reduced to 35% for 2020 (from 43% in 2016) and their reimbursement to 47% (from 58% in 2016).

## Conclusions

Commenting on the evolution of the number of radiotherapy treatments in the public and private sector, we observe a strong upward trend in the total number of sessions, which is combined with the increase in the available facilities and consequently in the use of public facilities since 2017 (the year of installation of the new equipment in public hospitals).

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The corresponding upward trend recorded in the total expenditure on radiotherapy by the Greek NHS and in the expenditure to public facilities (with the exception of 2020) is considered rather expected, given the increase in the availability and use of services in public facilities.

The increasing trend recorded in both the total number of sessions, but particularly those performed in public facilities, emphasize and substantiate the need for new facilities and the extension of the full-day operation of the existing ones.

## References

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