

# Costs and resource use of Prostate cancer before and after diagnosis in Finland

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## Introduction

- Prostate cancer (PC) is the second most common cancer and the fifth leading cause of cancer death in men globally [1].
- PC poses a substantial financial burden on societies. However, there are no previous nationwide studies following up the societal costs due to PC in Finland.
- In Finland, the healthcare costs closely reflect total costs as patients' out-of-pocket costs are relatively low.

## Objectives

- To assess the financial impact of PC in Finland by estimating the annual costs, and by comparing the costs one year before and after diagnosis among patients with PC.

## Methods

- A nationwide retrospective registry-based study where patients were identified from the Finnish Cancer Registry.
- The study cohort included newly diagnosed patients in 2017 and prevalent patients in 2018.
- Data on healthcare resource use (HCRU) were obtained from national specialized and primary healthcare registers. Data on reimbursed medicine purchases and reimbursed sick leaves were collected from the registers of the Finnish Social Security Institution.
- The HCRU was valued to monetary units using the latest available national unit costs [2]. The unit costs were inflated to 2022 values.

## Results

- In total, 5463 newly diagnosed patients with PC were identified in 2017. Median age at diagnosis was 70 years, and 287 patients died within one year from diagnosis.
- The direct medical costs per patient-year were estimated at €4.6K and €14.7.K within one year before and after diagnosis, respectively (Figure 1).
- During the first year after diagnosis, 56% of HCRU costs were PC-specific; outpatient visits in specialized care being the key cost driver.
- Costs due to sick leaves increased 312% after PC diagnosis to 450€/PPY
- All-cause direct medical costs among the 42533 prevalent patients (39033 patient-years) in 2018 were €340M (Figure 2).
- Around 36% of these total annual costs were PC-specific; outpatient medication and outpatient visits in specialized care being the key cost drivers.
- Among prevalent patients with PC, sick leaves accounted for €5M in 2018. Around 50% of these costs were PC-specific.

## Limitations

- Although the unit costs for outpatient visits and inpatient stays in specialized care include in-hospital medication costs, no detailed per-medication analysis for costs were possible.
- The costs due to productivity losses are incomplete while only costs due to sick leaves were taken into account.

## Conclusion

- Prostate cancer diagnosis is associated with a substantial increase in healthcare costs. Understanding cost dynamics is essential for enhancing more effective resource allocation and improving care access.

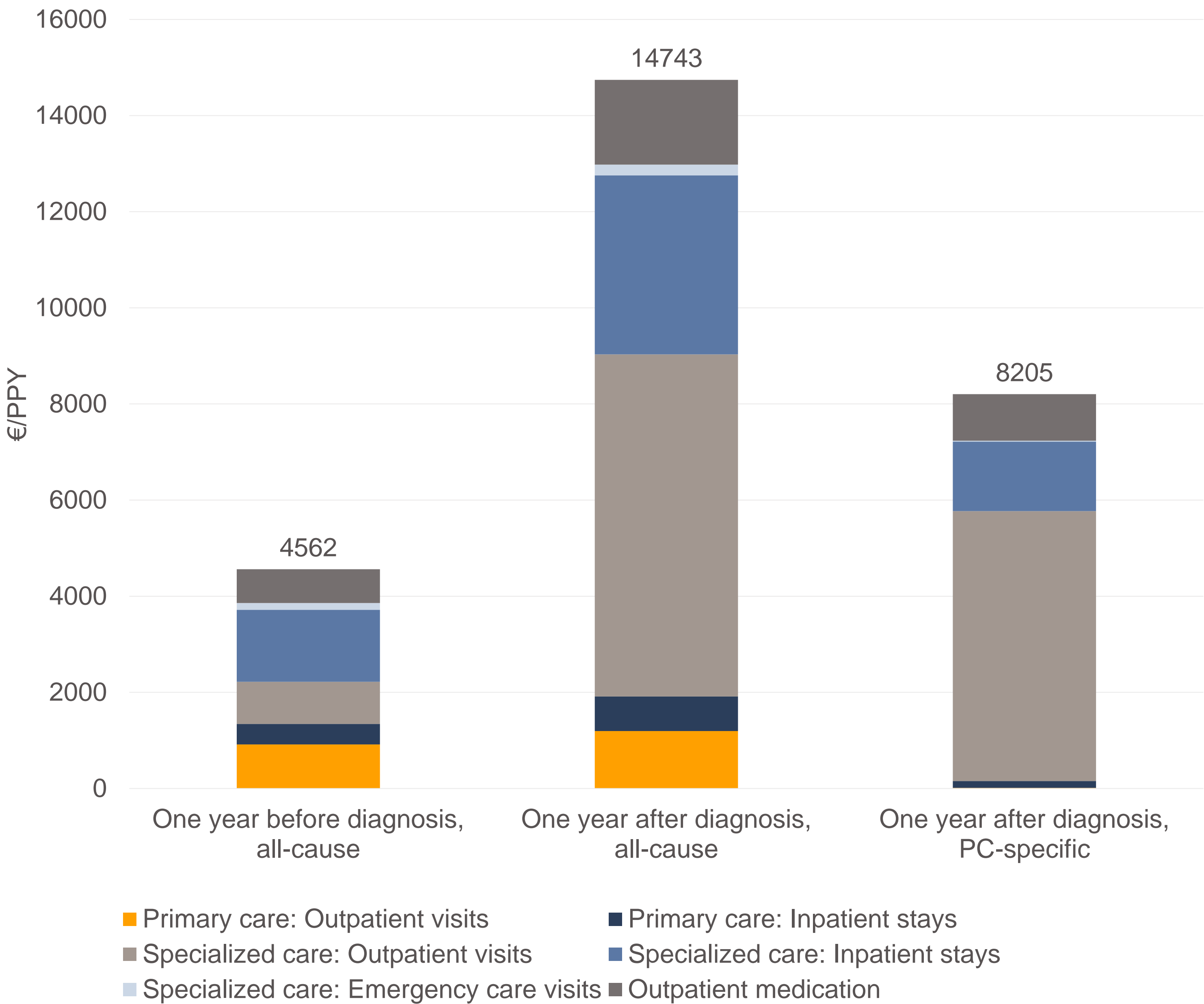


Figure 1. All-cause and PC-specific direct medical costs one year before and after PC diagnosis

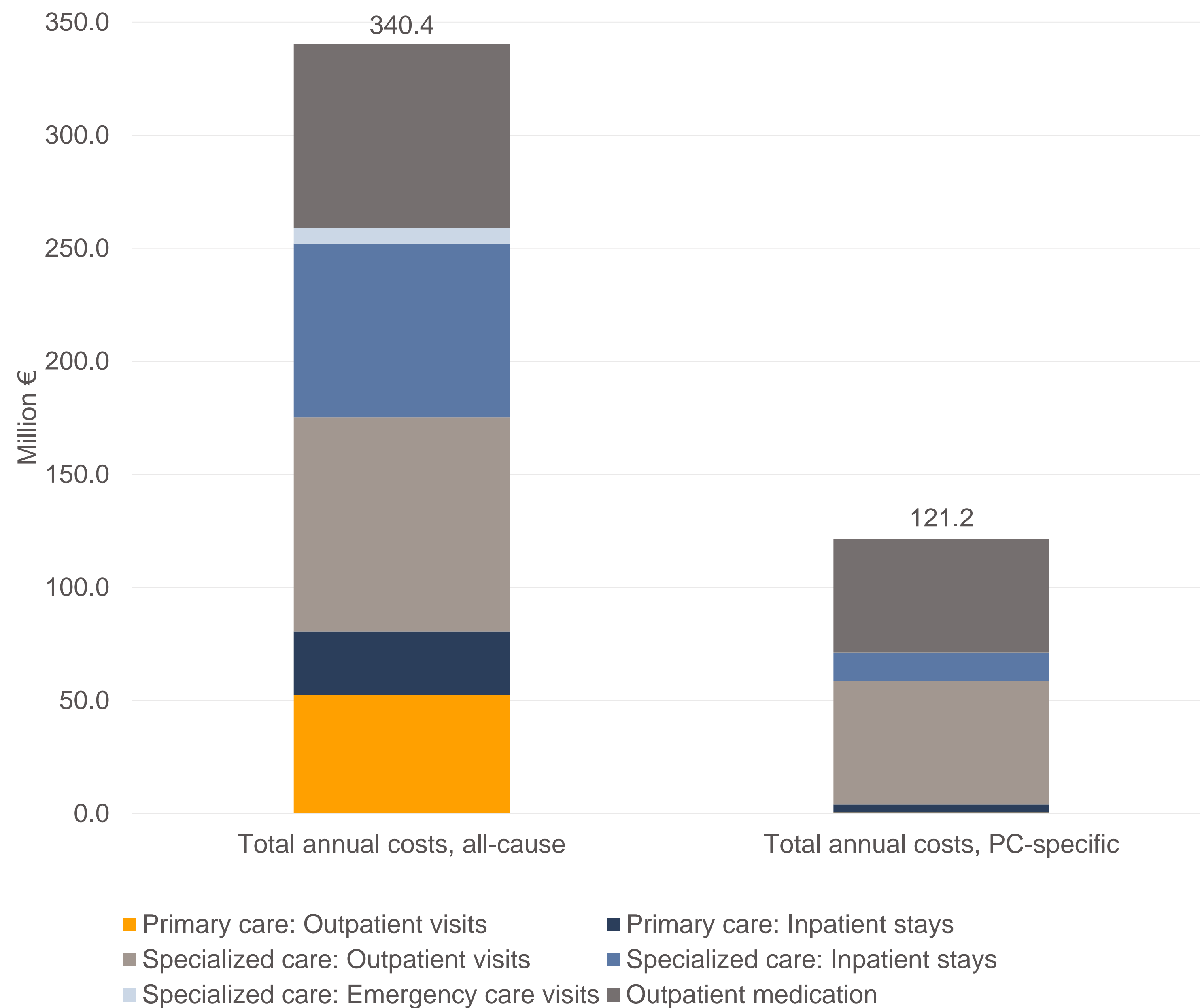


Figure 2. Annual all-cause and PC-specific direct medical costs among prevalent PC patients

## References

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