EE122

Analyses of Cancer Prevalence and Healthcare Costs for Metastatic and Non-Metastatic Cancers Among Employees Using Claims Data

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INTRODUCTION

- Late-stage cancer diagnoses, especially post-metastasis, significantly impact the healthcare expenses of employees
- Risk of cancer increases by 13 times for individuals aged 50 and over compared to those under 50 years old[1]
- Metastatic cancers often require more intensive and costly treatments, leading to higher healthcare costs and decreased treatment success rates[2,3]
- Detecting cancer early can lead to reduced medical costs and improved quality of life for individuals and their families[4-6]
- Early detection initiatives, such as regular cancer screenings, offer the potential to identify cancer at earlier and more treatable stages

OBJECTIVE

- To explore the incidence and prevalence of cancer and the relative costs of metastatic and non-metastatic cancers among employed individuals

METHODS

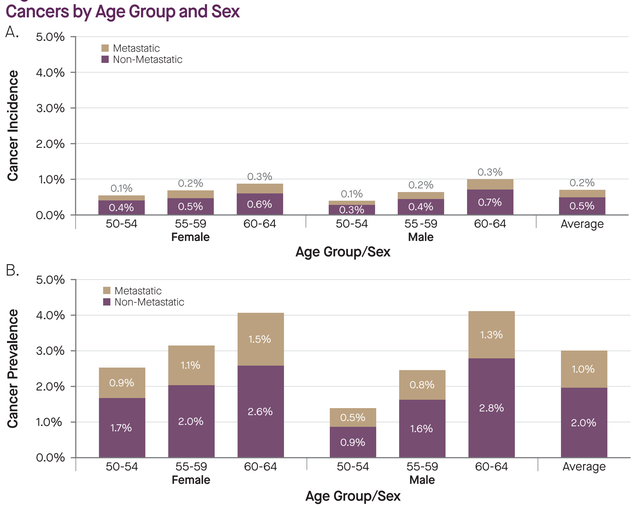
- A retrospective claims analysis was conducted using the IQVIA PharMetrics Plus dataset, a comprehensive collection of de-identified claims data for privately and publicly insured individuals in the US
  - The analysis was conducted on medical claims of 1.34 million enrollees aged 50-64 covered by large employers and on commercial insurance plans in the US from 2018-2022
- The analysis examined claims for metastatic and non-metastatic cancers in 2022 for enrollees with 12 months continuous enrollment in 2021
  - Enrollees with cancer were identified using ICD-10-CM codes, requiring either one inpatient or two outpatient cancer claims at least 30 days apart; total medical claims spending for these enrollees in 2022 was then estimated
  - Metastatic cancers were identified using the presence of either a claim for a secondary cancer or cancers at two anatomic locations at initial diagnosis
  - Cancer was classified as a new incidence if there was no record of cancer in the preceding year (2021)
- To understand the impact of diagnosis after metastasis, the analysis compared paid amounts for enrollees with metastatic versus non-metastatic cancers matched by cancer type, stratified by sex and 5-year age groups

KEY RESULTS: METASTATIC CANCERS ACCOUNT FOR SUBSTANTIAL EXCESS CLAIMS COSTS PER ENROLLEE

Cancer Incidence and Prevalence

- The incidence and prevalence of metastatic and non-metastatic cancer among enrollees increased by age in the year 2022 (**Figure 1**)
  - The average incidence and prevalence of cancer for enrollees aged 50-64 were 0.7% and 3.0%, respectively (**Figure 1**)
  - In the youngest age group of 50-54, the prevalence of cancer in males was nearly half that of females (**Figure 1B**)
- Metastatic cancer diagnoses were 35% of the total cancer prevalence
- 65% of all diagnosed cancers were cancer types with no routine screening recommendations (ie, cancers other than breast, colorectal, and cervical)

Figure 1: Incidence and Prevalence of Cancer for Metastatic and Non-Metastatic Cancers by Age Group and Sex



Healthcare Costs in 2022 For Enrollees Aged 50-64

- Average cancer claims costs per enrollee per year were $1,760 and rose with age (**Figure 2**)
- Costs associated with treating metastatic cancer within the prevalent population accounted for over half of all cancer claims costs (**Figure 3**)
- 30% of metastatic claimants surpassed $100k in costs over one year, compared to 12% of non-metastatic claimants
- Compared to cancers with routine screening recommendations, cancers with no routine screening accounted for over two times the number of claims exceeding $100k (70% vs. 30%) (**Figure 4**)
  - 41% of claims exceeding $100k were for metastatic cancers with no routine screening
- The average claims costs per enrollee with metastatic cancer were $90,336, while the average costs for non-metastatic claims, weighted to the same cancer type distribution, were $30,051 (**Figure 5**)

Figure 2:Average Cancer Claims Costs Per Enrollee in 2022 (by Age Group)

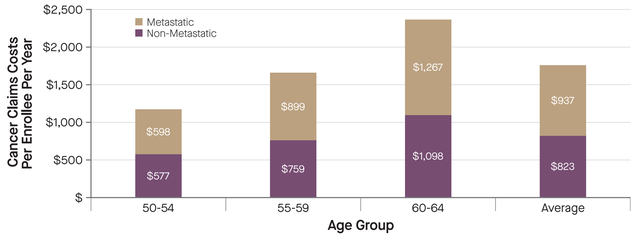


Figure 3: Proportion of Total Claims Costs for Metastatic vs. Non-Metastatic Cancers

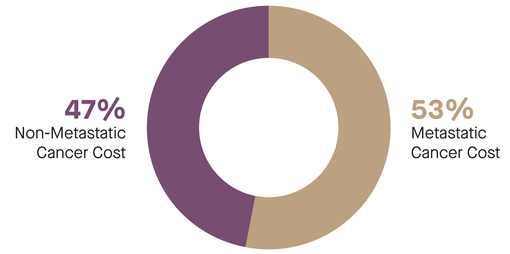


Figure 4: Proportion of Cancer Claims Exceeding $100k Based on Cancer Stage and Eligibility for Routine Screening

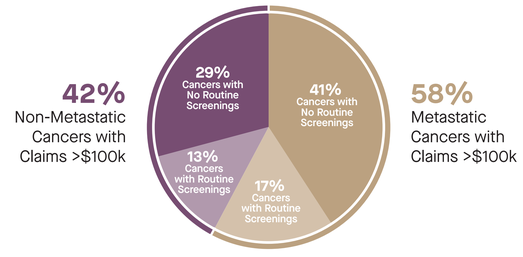
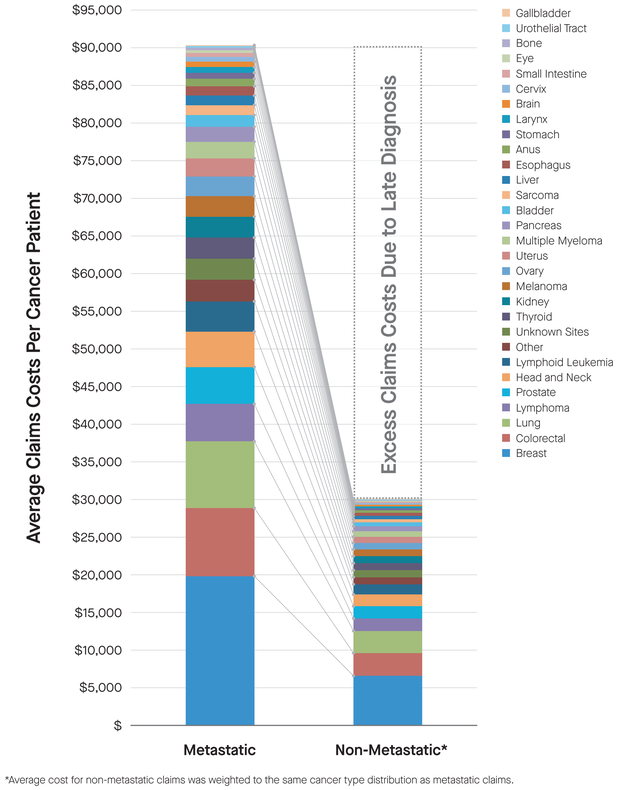


Figure 5: Average Claims Costs Per Metastatic and Non-Metastatic Cancer Patient in 2022 by Site

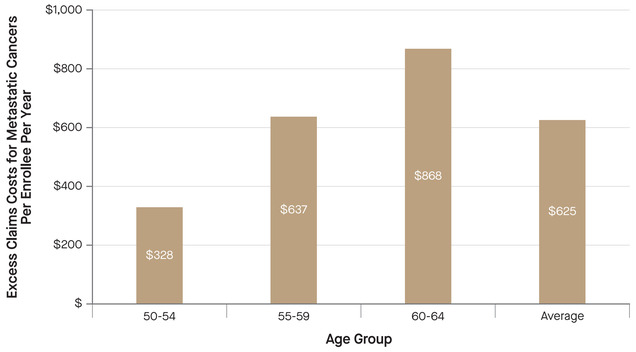


*Average cost for non-metastatic claims was weighted to the same cancer type distribution as metastatic claims.

Excess Claims Costs Due to Late Cancer Diagnosis in 2022 For Enrollees Aged 50-64

- Accounting for prevalence of metastatic cancer, spending on metastatic versus non-metastatic cancer of the same type increased by age and represented a potential difference of $625 per enrollee (**Figure 6**)
- The excess costs accounted for 53% of total claims costs associated with metastatic cancers and 28% of total cancer-related claims costs

Figure 6: Excess Claims Costs for Metastatic Cancers Per Enrollee Per Year by Age Group



LIMITATIONS

- Full stage at diagnosis information was not available from claims and all non-metastatic stages were grouped
- Population differences may exist between those with metastatic diagnoses and those with non-metastatic diagnoses of the same cancer types, which may influence total claims
- Only paid claims were considered, thus excluding patient out-of-pocket costs

CONCLUSIONS

- Healthcare costs rise with age and are significantly higher for metastatic cancer cases compared to non-metastatic cases and cancer types with no routine screening recommendations
- Spending on cancer care among employees aged 50-64 may be substantially reduced if cancers currently diagnosed after metastasis could be found when non-metastatic
- These findings highlight the importance of implementing targeted screening interventions and cost-effective strategies in healthcare planning

References

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