The presence of carcinoid syndrome (ICD-10: D16.7) was identified in 127 patients (7.2%). The median duration of carcinoid syndrome was 1.9 years (IQR: 0.4–3.9). The median length of stay (LOS) was 6.1 days (IQR: 3.0–10.9) among patients with carcinoid syndrome.

Mean annual cost for patients with malignant lung NET was $43,084 per patient, which includes $7,068 in pharmacy and $36,016 in medical costs (Figure 1). The average total cost per patient for all NETs was $12,009 per patient, with the mean pharmacy cost was $3,860 and medical cost was $8,149. The mean total cost for patients without lung NET was $6,929 per patient, with the mean pharmacy cost was $3,379 and medical cost was $3,550. The mean total cost for patients without cancer was $3,207 per patient, with the mean pharmacy cost was $1,064 and medical cost was $2,144.

CONCLUSIONS

- Mean annual cost for patients with malignant lung NET ($43,084) is 4.4-fold higher than those with cancer in general.

- More than half of the patients were admitted to the hospital, with a mean stay of 9.2 days. The mean annual cost of hospitalization among all cancers in the first year was $34,000.

- Medications used for treatment such as surgery and chemotherapy were common.

- One-third of patients received systemic therapy, most commonly with somatostatin analogues, and lung NET-specific pharmaceutical costs represented approximately 10% of the total.

- Additional effective therapies may lead to better outcomes for patients and may mitigate healthcare resource and cost utilization.

LIMITATIONS

- Lung NET specific health care utilization and costs are likely to be significantly underestimated as they exclude hospitalizations with a primary diagnosis of disease related complications (e.g., pneumonia as the primary diagnosis).

- These results only reflect patients with commercial insurance and do not include those with Medicare, Medicaid, or uninsured individuals. Results may not be nationally representative.

- Costs calculated on patients with lung NET diagnosis code in year 2014, as it is possible patients were newly diagnosed during the year, the costs calculated here may be an underestimate.

- Lung NET patients were identified using ICD-9-CM codes; neither pathologic nor stage could be confirmed in this administrative database.

REFERENCES


