**Healthcare resource utilization and direct costs of interstitial lung disease management in Germany**

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Background

There is lack of evidence on the economic burden of interstitial lung diseases in Germany. Our aim was to determine healthcare expenditure of managing different stages of ILD using the GAP risk assessment system within 3 years after diagnosis.

Methods

The EXCITING registry collected physician-reported information including in and outpatient visits and medication of ILD patients. We applied unit costs to estimate healthcare resource use. Costs of disease management were treatment and diagnosis. We included 246 patients who incurred costs within the period. We used generalized linear gamma regression to quantify the extent to which patient characteristics predicted costs of disease management in each GAP stage.

Results

35%, 25%, 29% and 11% of patients were in GAP stages 1, 2, 3 and unknown. The total costs per patient were 17.735€, 22.479€, 26.676€ and 22.013€ respectively. The proportion of inpatient care doubled from stage 2 (13%) to stage 3 (26%). Medication costs declined from ~80% in earlier stages to 72% in stage 3. IPF treatment cost had the highest surcharge factor of 9.7, owing to 42.058€, compared to other ILD subtypes. Smoking led to a 21% and living in an urban area to a 44% hike in costs. Inpatient care accounted for double the costs. Exacerbation and pulmonary hypertension led to a cost decrease of 57% and 37% respectively. Sex, death, suffering from a reflux and incident cases of ILD had no significant effect on costs.

Conclusion

The economic burden of ILD increases with disease progression. We should encourage smoking cessation and invest in rural infrastructure to allow for uniform expenditure in healthcare, in relation to urban areas.