

TITLE: The disease burden of ENT in-patient cases in 2020 according to My-DRG code at a teaching hospital

Introduction

Ear, Nose and Throat (ENT) cases are one of the top global diseases in 2015 with hearing loss was the 4th most common chronic disease. Furthermore, otitis media was the third most common short-term disease and increment up to 100% for head neck neoplasm cases from 2005 – 2015. This study aims to establish the most common ENT in-patient cases according to My-DRG classification at one of the teaching hospitals in Malaysia as to understand the disease burden of ENT cases and the relevance of such admission for future management.

Methods

Retrospective data from electronic medical record for ENT admission in 2020 were obtained. Information related to admission such as primary data and secondary diagnosis and free text procedures were extracted. The data was coded by trained coders which combine both ICD-10 for the diagnosis and ICD9-CM for the procedures and imported into a case-mix grouper to generate the DRG codes. The final data was sorted according to the severity based on Malaysia Diagnosis-Related Group (My-DRG) and ICD-10.

Results

A total of 680 in-patient ENT cases were treated at the hospital in 2020. The top five DRGs for ENT cases were Other Factors Influencing Health Status – mild (Z-4-12-I) (n = 145 (21.2%)), Other Factors Influencing Health Status – Moderate (Z-4-12-II) (n = 48 (7%)), and Other Ear Nose Mouth & Throat Operations – Minor (U-1-20-I) (n = 42 (6.1%)), Operation of Thyroid Parathyroid & Thyroglossal Duct – Minor (E-1-20-I) (n = 27 (4%)), and Tonsil & Adenoid Operations – Minor (U-1-15-I) (n = 24 (3.5%)). Among the total cases, there were 497 mild cases, 137 moderate cases, and 46 severe cases. For the mild cases, the most common DRG was Other Factors Influencing Health Status - Mild (Z-4-12-I) (n = 145 (29%)). The mean Average Length of Stay (ALOS) was 5.52 days. The range of LOS = 1 – 50 days. The mean age = 48.36 years old (Range: 0 – 88). The male patients were 283 (56.9%) and the female patients were 214 (43.1%). For the moderate cases, the most common DRG was Other Factors Influencing Health Status – Moderate (Z-4-12-II) (n = 48 (35%)). The mean ALOS was 8.7 days. The range of LOS = 1 – 143 days, mean age = 54 years old (Range = 0 - 88). The male patients were 81 (59%) and the female patients were 56 (41%). For the severe cases, the most common DRG was Other Factors Influencing Health Status – Severe (n = 19 (41.3%)). The mean ALOS was 13.8 days. The range of LOS = 2 – 109 days, mean age = 56.9 years old (Range = 24 - 81). The male patients were 26 (56.5%) and the female patients were 20 (43.5%).

Conclusions

In conclusion, ENT admissions did not reflect the status of a teaching hospital. As a tertiary hospital, the hospital is expected to function in managing more complex and

complicated cases. Hence, this study can be used to inform the hospital management to manage efficiently.