PUSAT PERUBATAN UNIVERSITI MALAYA

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

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Introduction

- UMMC is the first teaching public hospital in Malaysia having 1,617 beds, serving estimated 3 million of the population surrounding it.

- It is also a referral centre for Otorhinolaryngology (ENT) cases among other complicated cases.

- ENT cases accounted for 2% of the total cases admitted with tonsillectomy as the most common ENT procedures at MOH hospitals. (MOHE, 2018)

- ENT – one of the top global diseases (2015) with hearing loss and Otitis Media as the 4th 3rd most common chronic and short-term diseases, respectively. While head and neck neoplasm incidence had also increased (Saunders et al., 2018).

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Aim of study

To establish the most common ENT in-patient cases according to My-DRG classification at UMMC in 2020.

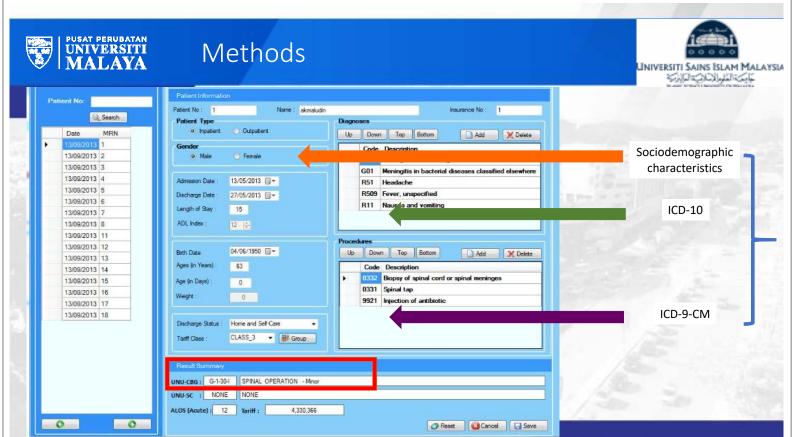To understand the disease burden of ENT cases and the relevance of such admission for future management.

Methods

- Patients' data on hospital admissions were extracted from the Hospital Information System (HIS) and discharge summaries.

- The data include:
  - Sociodemographic characteristics of patients such as patient identification, date of birth, age, admission date, discharge date, gender and discharge status
  - ICD-10 codes for the diagnoses (Primary and secondary diagnoses)
  - ICD-9-CM (Clinical procedures)

- Extracted data were imputed into the case-mix grouper to obtain the DRGs

Methods

- DRGs were arranged according to the number of cases seen and top five DRGs were identified.

- The details of the top five DRGs were reported which include:

  - DRG codes
  - Description of the code
  - Number of cases
  - Mean age (years)
  - Average length of stay (days)

Results - DRGs

- Total episode of hospital admissions in 2020 was 42,804
- Total admission for ENT were 1099 (2.6%) with a total of 32 DRGs.
- 5 top ENT DRGs were
  - Epiglottitis Upper Respiratory Tract Infection Laryngotracheitis & Otitis Media - Mild (U-4-13-I)
  - Other Ear Nose Mouth & Throat Disorders - Mild (U-4-15-I)
  - Oral & Dental & Oral Disorders – Mild (U-4-14-I)
  - Other Ear Nose Mouth & Throat Operations - Minor (U-1-20-I)
  - Ear Nose Mouth & Throat Neoplasms - Mild (U-4-10-I)

#	Selected DRG	Number of cases	Mean Age (years)	ALOS (days)	Range (days)
1	Epiglottitis Upper Respiratory Tract Infection Laryngotracheitis & Otitis Media - Mild (U-4-13-I)	271 (24.7%)	20.61	3.58	1 - 18
2	Other Ear Nose Mouth & Throat Disorders - Mild (U-4-15-I)	176 (16.1%)	53.5	6.8	1 – 22
3	Oral & Dental & Oral Disorders – Mild (U-4-14-I)	142(12.9%)	18.53	9.7	1 – 731
4	Other Ear Nose Mouth & Throat Operations - Minor (U-1-20-I)	87 (7.9%)	48.66	16.03	1 - 82
5	Ear Nose Mouth & Throat Neoplasms - Mild (U-4-10-I)	72 (6.6%)	60.9	4.78	1 - 55

Discussion

- Majority mild cases – it doesn't reflect true workload of UMMC as a tertiary centre
- WHY??
  - Poor coding/ uncoding/ coding error
  - No clinical pathway – variations in management
    - Procedures were cancelled, patients were not fit (should screen thoroughly)
    - Admit patients unnecessarily

Conclusion

- Establishment of clinical pathway is crucial to ensure standard management for all patients
- Training for coders, medical personnel that involve in coding to minimize coding error
- Use casemix as the assessment for the quality of care

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