



香港社會醫學學院  
**HONG KONG COLLEGE OF COMMUNITY MEDICINE**  
founder College of the Hong Kong Academy of Medicine  
*Incorporated with limited liability*



**ADMINISTRATIVE MEDICINE**

**Part I Examination**

**Sample Paper ( 1½ hours )**

**Paper IIB**

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Candidates must answer **all** parts of this question

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*Style, clear grammatical English and legibility will be taken into consideration by the Examiners. Answers should be written in a form appropriate to the audience specified in the question. Weighting of marks for each part of the question is shown in parenthesis.*

**DO NOT OPEN PAPER UNTIL THE  
INVIGILATOR INSTRUCTS YOU TO BEGIN**

You are an Administrative Medicine Executive working in a health district, which has a population of 7 millions. Dataset on population profile and service utilization were made available to you by the Director of Professional Services and Planning who is scheduled to participate in a meeting organized by the Board of the health district.

You are asked to brief the Director of Professional Services and Planning on the following:-

- (a) List the top 10 medical conditions that have the greatest impact on the public hospital. Daily operation is taken to mean the logistics required to ensure all patients needing hospitalization are admitted. *(5 marks)*
- (b) Work out, and present, the top 5 medical conditions that consume the greatest amount of resources per patient in the public hospital system assuming that each bed-day occupied cost HK\$2,000.00. *(10 marks)*
- (c) Perform a health care needs assessment of the diabetic population in the health district using the prevalence figures in Table B. Where appropriate, the resources required for specified component of care should be stated. *(15 marks)*

**QUESTION CONTINUES ↪**

- (d) Comment on the variation in service utilization by locality of cerebrovascular accident (CVA). What other information should be asked for in order to explore these variations further? Do you agree that locality C is the most efficient in managing CVA cases in that its hospitalization rate is the highest but bed-day occupied per patient is one of the lowest? Explain your rationale. *(20 marks)*

Table A Health District Population Profile

Age (Yrs)	Male (thousand)	Female (thousand)	Total (thousand)
0 – 34	1,310	1,320	2,630
35 – 64	1,800	1,770	3,570
>65	350	450	800
Total	3,460	3,540	7,000

Table B Prevalence of diabetes mellitus

Age Group	Prevalence	
	Male	Female
0 – 34 yrs	1.5%	1.4%
35 – 64 yrs	9.5%	10.2%
>65 yrs	21%	29%

**QUESTION CONTINUES ↪**

Table C Hospitalisation rate by specific medical condition in year 2000

Medical Condition	Hospitalisation Rate per million population
1. Acute upper respiratory infection	1,650
2. Cancer of the lung	810
3. Cataract	1,500
4. Cerebrovascular accident	2,300
5. Chronic obstructive pulmonary disease	1,640
6. Chronic renal failure	623
7. Conditions complicating pregnancy	2,100

QUESTION CONTINUES ↪

Medical Condition	Hospitalisation Rate per million population
8. Diabetes Mellitus	1,430
9. Fracture neck of femur	654
10. Intracranial injury	1,310
11. Ischaemic heart disease	1,800
12. Peptic ulcer	2,500
13. Pneumonia	2,470
14. Tuberculosis	574

QUESTION CONTINUES ↪

Table D Bed-day occupied by specific medical condition in Year 2000

Medical Condition	Bed-day occupied (BDO) per year	% of total BDO
1. Cerebrovascular accident	375,000	4.9
2. Chronic obstructive pulmonary disease	211,000	2.8
3. Pneumonia	194,000	2.5
4. Cancer of the lung	198,000	1.8
5. Fracture neck of femur	127,000	1.7
6. Ischaemic heart disease	102,000	1.3
7. Chronic renal failure	101,000	1.3
8. Diabetes Mellitus	98,500	1.2
9. Tuberculosis	87,400	1.1
10 Peptic ulcer	84,300	1.0

QUESTION CONTINUES ↪

Table E Cerebrovascular Accident – service utilization by locality

Location	Hospitalisation Rate per million population	Bed-day Occupied per patient
Health District Average	2,260	18.48
Locality A	1,980	10.40
Locality B	2,230	23.84
Locality C	2,500	15.15
Locality D	2,300	20.36
Locality E	2,200	30.01
Locality F	2,200	15.22
Locality G	2,300	13.11
Locality H	2,430	19.75

END OF PAPER