



香港社會醫學學院
HONG KONG COLLEGE OF COMMUNITY MEDICINE
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ADMINISTRATIVE MEDICINE

Part I Examination

Tuesday 11 June 2013
17:30 – 19:00 (1½ hours)

Paper IIB

Candidates must answer all parts of this questions

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**

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You are an Administrative Medicine trainee working for the Head Office of a large corporate healthcare organisation with a service population of 7 million people. Consider the following extracted paper abstract and attached table 4 and answer the questions as listed below.

Wennberg D E, Marr A, Lang L, O'Malley S, Bennett G. A randomized trial of a telephone care management strategy. *NEJM* 2010;363:1245-55

"We conducted a stratified, randomized study of 174,120 subjects to assess the effect of a telephone-based care-management strategy on medical costs and resource utilisation. Health coaches contacted subjects with selected medical conditions and predicted high health care costs to instruct them about shared decision making, self-care, and behavioural change. The subjects were randomly assigned to either a usual-support group or an enhanced-support group. Although the same telephone intervention was delivered to the two groups, a greater number of subjects in the enhanced-support group were made eligible for coaching through the lowering of cut-off points for predicted future costs and expansion of the number of qualifying health conditions. Primary outcome measures at 1 year were total medical costs and number of hospital admissions.

At baseline, medical costs and resource utilisation were similar in the two groups."

QUESTION CONTINUES

1. With reference to table 4 below, describe the outcomes of this randomized trial
 - a. on medical and pharmacy costs overall,
 - b. for subjects with chronic conditions,
 - c. for subjects with conditions that put them at risk of surgical interventions,
 - d. for other high-risk conditions and
 - e. all other subjects.

(15 marks; 3 marks each)

2. With reference to Hospital Authority Call Centre at the Ruttonjee Hospital and Table 4 (Wennberg 2010 below) write a briefing paper to the Director of Professional Services and Planning which would discuss the following 3 issues (items a-c).

Structure the briefing paper with:

- introduction (10 marks)

- address the 3 items (a-c) individually

- a. The concepts of comparative effectiveness, including marginal and incremental cost effectiveness.

(15 marks, 5 marks each)

- b. The inverse care law and the concepts of justice (including factors related to disparity in health care access, equity, equality, social and distributive justice among others) and their relevance to healthcare delivery.

(25 marks)

- c. The substitutionary impact of telephone call-management strategies on face-to-face clinical care with reference to the inverse care law.

(25 marks)

- provide a summary and conclusion

(10 marks)

Table 4. Resource Utilization and Costs According to Cohort and Study Group.

Cohort and Variable	Usual-Support Group	Enhanced-Support Group	Difference (Enhanced Support minus Usual Support)		P Value
			Absolute	Relative %	
Total study population					
No. of subjects	87,243	86,877			
No. of person-months of follow-up	970,264	966,848			
Hospital admissions (no./1000 persons/yr)	74.0	66.5	-7.5	-10.1	<0.001
Emergency room admissions (no./1000 persons/yr)	253.8	250.2	-3.6	-1.4	0.41
Average medical and pharmacy costs (\$/person/mo) ^a					
Medical	190.90	182.42	-8.48	-4.4	0.03
Pharmacy	30.88	31.40	0.52	1.7	0.41
Medical plus pharmacy	221.78	213.82	-7.96	-3.6	0.05
Subjects with selected chronic conditions					
No. of subjects	8,515	8,465			
No. of person-months of follow-up	96,327	95,288			
Hospital admissions (no./1000 persons/yr)	226.3	195.3	-31.0	-13.7	0.02
Emergency room admissions (no./1000 persons/yr)	502.3	491.5	-10.8	-2.1	0.61
Average medical and pharmacy costs (\$/person/mo) ^a					
Medical	494.07	443.40	-50.67	-10.3	0.02
Pharmacy	84.18	83.73	-0.45	-0.5	0.87
Medical plus pharmacy	578.25	527.13	-51.12	-8.8	0.02
Subjects with preference-sensitive conditions that put them at risk for surgical intervention					
No. of subjects	9,161	9,190			
No. of person-months of follow-up	103,894	104,612			
Hospital admissions (no./1000 persons/yr)	131.1	122.1	-9.0	-6.9	0.28
Emergency room admissions (no./1000 persons/yr)	358.3	341.6	-16.7	-4.7	0.28
Average medical and pharmacy costs (\$/person/mo) ^a					
Medical	376.74	360.17	-16.57	-4.4	0.29
Pharmacy	48.64	49.25	0.61	1.3	0.78
Medical plus pharmacy	425.38	409.42	-15.96	-3.8	0.32

QUESTION CONTINUES

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Table 4. (Continued.)

Cohort and Variable	Usual-Support Group	Enhanced-Support Group	Difference (Enhanced Support minus Usual Support)		P Value
			Absolute	Relative	
				%	
Subjects with other high-risk conditions					
No. of subjects	19,446	19,364			
No. of person-months of follow-up	218,059	217,452			
Hospital admissions (no./1000 persons/yr)	79.0	69.7	-9.3	-11.8	0.04
Emergency room admissions (no./1000 persons/yr)	290.3	287.5	-2.8	-1.0	0.76
Average medical and pharmacy costs (\$/person/mo)*					
Medical	222.73	215.76	-6.97	-3.1	0.39
Pharmacy	38.04	39.05	1.01	2.7	0.47
Medical plus pharmacy	260.77	254.81	-5.96	-2.3	0.47
All other subjects					
No. of subjects	50,121	49,858			
No. of person-months of follow-up	551,984	549,496			
Hospital admissions (no./1000 persons/yr)	35.3	32.8	-2.5	-7.0	0.14
Emergency room admissions (no./1000 persons/yr)	172.4	172.6	0.2	0.1	0.97
Average medical and pharmacy costs (\$/person/mo)*					
Medical	90.91	90.43	-0.48	-0.5	0.88
Pharmacy	14.99	15.45	0.46	3.1	0.42
Medical plus pharmacy	105.90	105.88	-0.02	0	0.99

* Medical costs were capped at \$200,000 per person.

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