



# **Health Services Provision from the Perspective of the Academia**

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President  
Hong Kong Academy of Medicine  
U21 Health Sciences Meeting  
27th September 2007  
The University of Hong Kong**





**The University of Hong Kong**



## **Hong Kong Academy of Medicine (HKAM)**

A statutory body established in  
1993  
for the training of specialists in  
Hong  
Kong.



## Objects of HKAM

- Promote the advancement of the art and science of medicine;
- To foster the development of –
  - (1) postgraduate medical education and continuing medical education;
  - (2) the study and practice of medicine and its specialties;
  - (3) research;



## Objects of HKAM

- To promote
  - (1) the integrity of the medical profession
  - (2) ethical conduct in the practice of medicine and its specialties; and
  - (3) the improvement of the standards of such practice through training programs approved by the Academy;
- To promote the improvement of health care for Hong Kong citizens;
- To foster a spirit of co-operation among medical practitioners; and
- To facilitate the exchange of information and ideas in relation to all aspects of the art and science of medicine and matters connected with medical profession.



**HKAM has the statutory function of postgraduate education, training of specialists, their maintenance on Specialist Register, lifelong learning, standard and advancement of medical practice, and health care for Hong Kong citizens.**



## **HKAM Colleges**

- Anesthesiologists
- Community Medicine
- Dental Surgeons
- Emergency Medicine
- Family Physicians
- Obstetricians & Gynecologists
- Ophthalmologists
- Orthopedic Surgeons
- Otorhinolaryngologists
- Pediatricians
- Pathologists
- Physicians
- Psychiatrists
- Radiologists
- Surgeons

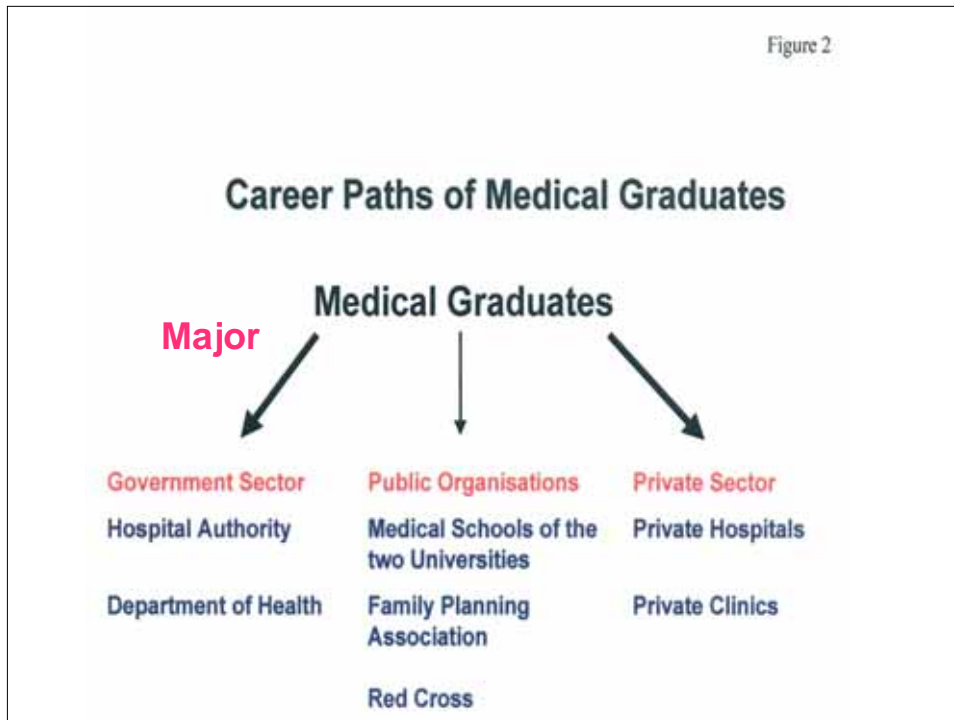


## **Bylaw 2.4**

Fellows shall have :

- a. Completed at least 6 years of supervised post-registration training in a manner approved by the Academy; and
- b. Where appropriate, passed a relevant intermediate examination accredited by the Academy; and
- c. Passed the exit examination or assessment conducted by the relevant College and accredited by the Academy.

Figure 2



## Number of doctors in Hong Kong

Up to August 2007, there were 11,950 registered medical practitioners in HK. 5049 are Fellows of the HKAM, and 2434 are trainees.

### HKAM Fellows

COLLEGE	HA	DH	U	PRIVATE	RETIRE	OTHER	TOTAL
AN	226		13	70	8	11	328
CM	24	33	7	10	7	16	97
DS	6	57	34	92	2	11	202
EM	202	1	2	11	1	2	219
FP	36	33	11	96	5	4	185
OG	111		20	217	16	12	376
OP	88		8	100	2	5	203
OS	199		14	92	1	7	313
OT	53		5	60	2		120
PA	110	18	30	29	8	18	213
PD	210	16	21	221	4	13	485
PH	658	32	58	333	13	28	1122
PS	122		13	53	2	4	194
RA	207	1	15	87	9	15	334
SU	342	1	29	257	13	16	658
	2594	192	280	1728	93	162	5049

AN =anesthesiologists; CM=Community Medicine; DS=Dental Surgeons; EM=Emergency Medicine; FP=Family Physicians; OG=Obstetricians & Gynecologists OP=Ophthalmologists; OS=Orthopedic Surgeons; OT=Otorhinolaryngologists; PD=Pediatricians; PH=Physicians; PS=Psychiatrists; RA=Radiologists; SU=Surgeons Sept 2007



**The HA and DH are the largest  
health-care providers in HK –**

**97% in-patients  
20% 'primary care'**



## **Training**

- Training sites and trainers are largely located in Hospital Authority units and are Hospital Authority staff.
- Trainees are employed by HA.



## **Issues-**

1. Manpower planning based on short-term service need;
2. Service need has priority over training (training is a by-product of service?);
3. HA budget affects trainee employment, hence, affect service provision by specialists.

**Projected Additional Requirement of Medical Specialists by Specialty**

	FHKAM in HA	Add. Req. of HA	HA's Target	FHKAM in HA	(f) - (c)
	14.7.2000	2008	2008	13.9.2007	
	(a)	(b)	(c) = (a)+(b)	(f)	
Accident & Emergency	84	180	264	202	-62
Anaesthesia	136	170	306	226	-80
Community Medicine	8	0	8	24	16
Dental Surgeons	14	0	14	6	-8
ENT	27	30	57	53	-4
Medicine/FM	386	490	876	694	-182
Obstetrics & Gynaecology	117	60	177	111	-66
Orthopaedic & Traumatology	101	140	241	199	-42
Ophthalmology	47	60	107	88	-19
Paediatrics	161	60	221	210	-11
Pathology	87	60	147	110	-37
Psychiatry	63	110	173	122	-51
Diagnostic Radiology	163	80	243	207	-36
Surgery	236	220	456	342	-114
<b>Total:</b>	<b>1630</b>	<b>1660</b>	<b>3290</b>	<b>2594</b>	<b>-696</b>

MSDC-P86 Appendix 3

**New Resident Trainee Intakes by Specialties**

Specialty	2003/04	2004/05
ANA (include ICU)	20	19
A&E	0	14
ENT	0	
BST		20
O&T	4	
SRG (include CTS & Neuro)	8	
CLIN ONC	8	2
ICU		12
MED (include Hospice)	60	62
O&G	9	3
OPH	12	9
PAED	20	8
PATH	4	6
PSY	18	11
RAD (include NM)	14	10
<b>Sub-total</b>	<b>177</b>	<b>176</b>
FM(include OPD & staff clinic)	98	80
GP (03/04)	25	44
FM Total (include OPD & staff clinic)	123	
<b>Total</b>	<b>300</b>	<b>300</b>

CTAC (HA)

Intake of Resident Trainees

	05/06		06/07		07/08	
	Approved	Intake+	Approved	Intake+	Approved	Intake*
A&E	19	24	23	22	45	41
ANA	15	17	22	22	29	27
Clin Onc	3	3	9	9	11	11
ENT	2	2	1	1	2	1
FM	54	53	50	43	50	19
ICU	4	5	11	10	5	4
Med	79	75	71	71	47	46
NS	4	5	8	8	9	7
O&G	16	15	18	18	20	20
O&T	20	18	17	17	16	15
OPH	5	5	11	11	9	9
PAED	11	11	17	18	25	23
PATH	10	10	13	13	4	4
PSY	10	11	12	12	19	19
RAD (inc NM)	16	16	19	18	11	11
SRG	32	30	39	40	38	36
	300	300	341	333	340	293

+ Intake of Jul and Jan  
\* Intake of Jul 07only

Adapted from HA data

**威院配額爆滿 未作超聲波掃描**  
**醫療大倒退 孕婦無保障**

**PWH Quota full; no USS; Health-care regressed; No protection for women**

本報記者張國雄攝。位於新加坡的「威爾斯王子醫院」(PWH)最近因配額爆滿，導致部分孕婦未能獲得超聲波掃描服務，引起社會關注。據悉，該院目前正處於擴建階段，但由於人手不足及設備老化，導致醫療服務質量下降。此外，由於政府削減撥款，醫院在購買先進設備及培訓醫護人員方面受到嚴重影響，導致醫療水平出現倒退。在產科方面，由於產房配額有限，部分孕婦在臨盆時無法獲得及時救治，甚至出現延誤情況，嚴重威脅孕婦及胎兒的安全。此舉引起社會各界強烈不滿，認為政府應增加對醫療服務的投入，保障市民的健康權益。

東方日報 2007



## As the result of SARS.....

### Existing Specialist Manpower

- Specialties of
1. Infectious disease
  2. Clinical Microbiology and Infection
  3. Paediatric infectious disease

An increase in infectious disease specialists

Appendix 1a  
to CTAC-P45



Cluster	Existing Manpower within different Specialties (as at 18 Oct 04)									Existing Manpower in Regulator	
	AMB Infectious Diseases (Medicine)			Clinical Microbiology & Infection (Pathology)			Paediatric Infectious Disease (P.I.D.)			AMB Infectious Diseases & Microbiology combined (primarily AMB)	P.I.D.
	Specialist	Trainee	Total	Specialist	Trainee	Total	Specialist	Trainee	Total		
HKH	0	2	4	1	1	2	0	0	0	1*	0
HKW	0	2	4	2* (P.I.D.)	3 (P.I.D.)	7 (P.I.D.)	3 (P.I.D.)	0	3	1*	0
KCC	1	1	4	1	2	6	0	0	0	0	0
KCC	0	2	4	2	1	6	0	0	0	0	0
KWC	4	1	5	4	1	5	2*	0	2*	0	2
MTE	2	1	3	3 (C.M.I.)	2	5 (C.M.I.)	0	0	0	4 (C.M.I.)	0
NTW	1	1	2	1	1	2	0	0	0	1	0
QIP (CR)	1		1	1		1				2	
Total (Headcount)	9	16	25	15* (30% of 50 AMB)	13 (26% of 50 AMB)	27* (54% of 50 AMB)	10 (P.I.D.) + 2*	0	10 (P.I.D.) + 2*	16* + 0	0 + 2*
Total FTE	9	16	25	14.3 + 4.0*	11 + 5.5*	20.3 + 11	10 + 1.5*	0	10 + 1.5*	15.3 + 0	0 + 2*

Note: \* FRCG and CPHK staff counted as 25% of the full time equivalent.  
\* CCI counted as half full time equivalent. \*\* one specialist counted as half time.

CTAC (HA) 2004



***To accommodate the number  
of new graduates.....***

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CTAC (HA)



**The “General Practice” employment does not offer any training nor supervision; manpower for relief of duties in HA OPD.**

***Where is the assurance of the standard of medical practice?***



**Training** needs service exposure, but the training pool must not be dictated by the service needs, bearing in mind –

- Inaccuracies in manpower planning;
- The time needed for training of a competent doctor.



<b>Staff no. on fte basis</b>	<b>2003-04</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>
<b>Doctors</b>	<b>4542</b>	<b>4526</b>	<b>4569</b>	<b>4617</b>
<b>Nurses</b>	<b>19308</b>	<b>19162</b>	<b>16248</b>	<b>19212</b>
<b>Allied Health</b>	<b>4891</b>	<b>4830</b>	<b>4894</b>	<b>4966</b>
<b>Care-related support staff</b>	<b>6838</b>	<b>6888</b>	<b>7082</b>	<b>7251</b>

LC Paper No. CB(2)2381/06-07(01)



## **Estimated Manpower Demand**

- effects of population growth and ageing on HA service needs**
- additional staff required for reduced work hours**

LC Paper No. CB(2)2381/06-07(01)



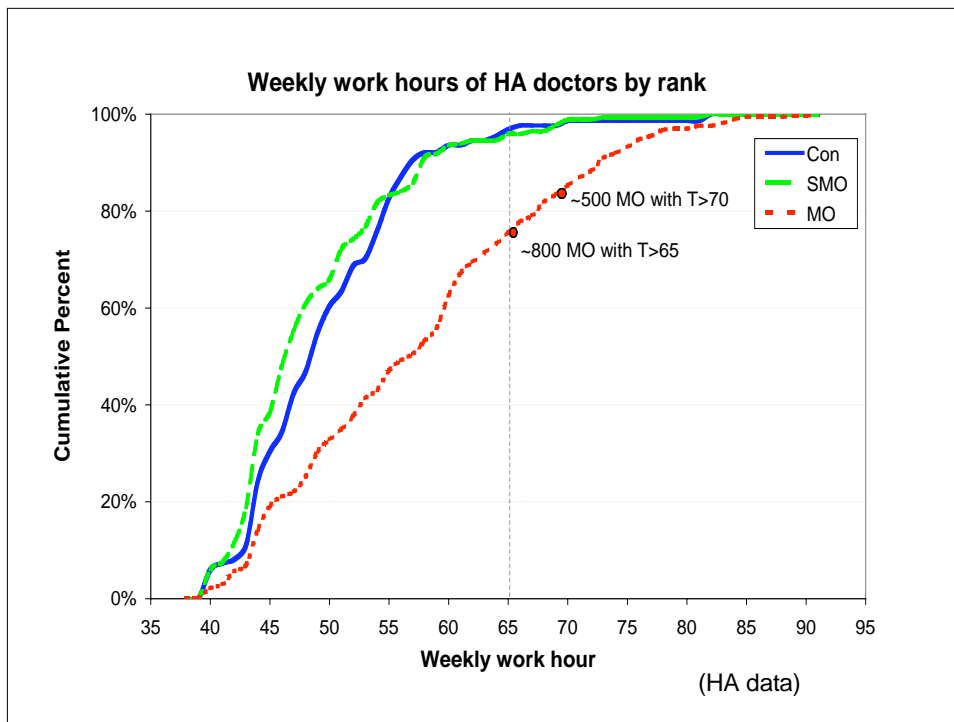
**...With a turnover rate of doctors of 6.6%.....**

**....the demand for new recruits of Doctors would be between 449 and 485 per year for the next 5 years.**

Graduates number will drop from 310 in 07-08 to 250 in 2011-12.....



## **Doctor Work Reform**



In July 2003, the ACGME set out restrictions for work hours to a maximum of 80/week, no more than 30 consecutive hours of work, a minimum of 10 hours off between shifts, and at least 1 day off in 7, averaged over 4 weeks.



## “....how to minimize disruption in physician training while optimizing patient care....”

Academic Medicine Vol 81 January 2006

### List 1

#### Residents' Views of the Results of Work Hour Limitations\*

##### General themes

- Improved working conditions and an improved sense of well-being
- Decision-making capabilities during the day were improved
- Inflexible limits did not leave room for unpredictable clinical situations

##### Patient care and safety

- Patient evaluations were incomplete and rushed
- Treatment decisions and discharges were delayed
- Care was fragmented and information was missed
- Multiple residents taking care of a patient which adversely affected communication with patients and their families

##### Education

- Increased opportunity for reading and outside research projects
- Multiple housestaff caring for a patient resulted in housestaff learning different approaches to patient care
- Fewer opportunities to follow the longitudinal course of care
- Less time to attend conferences
- Less time for teaching

##### Job satisfaction

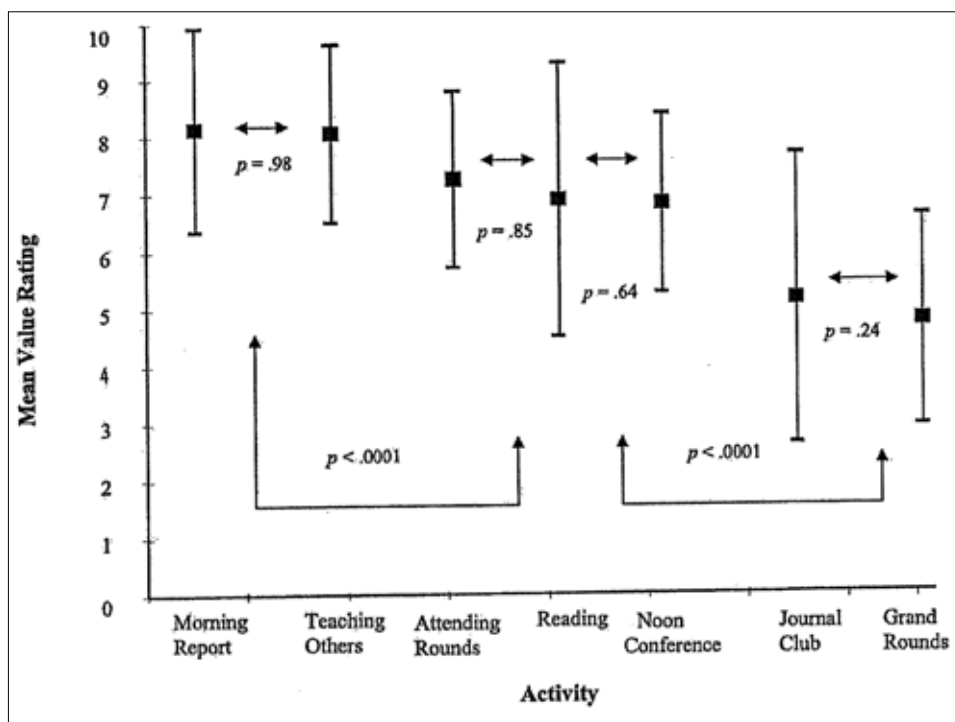
- Increased time outside of hospital for leisure activities
- Feelings of frustration at being forced to leave regardless of patient situation
- Perceived lack of dedication from themselves and from attending physicians

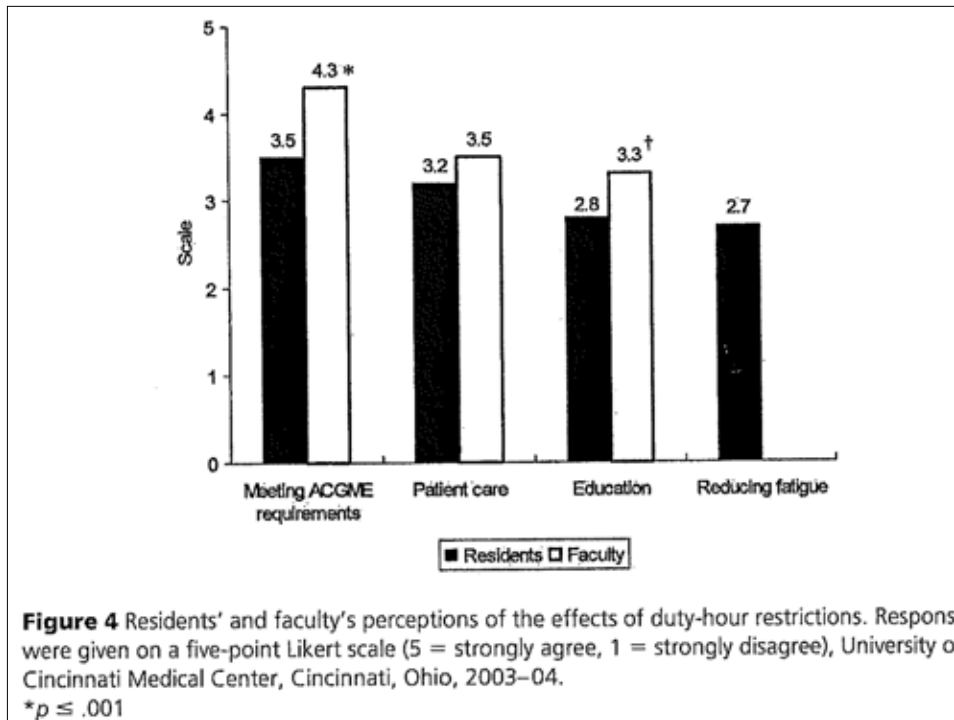
\* Residents' views were elicited during four focus groups. Participants were 26 internal medicine residents at Barnes-Jewish Hospital, Washington University School of Medicine, during February and March 2004.



Residents favored work hour restriction but had serious concerns about the effects of the restrictions on patient care and medical education; .....the most effective way has yet to be identified.

Washington University School of Medicine St Louis  
Internal Medicine





## Implementing duty-hour restriction without diminishing patient care or education: Can it be done?

- difference in view between Faculty and Residents
- residents reported a slight negative impact on education
- residents reported the new system did not reduce fatigue
- may have sacrificed some traditional resident education tenets

University of Cincinnati Medical Center – general internal medicine



## **Restricted working hours on the teaching of medical students**

(Table 1, Continued)

Pediatrics clerkship			Surgery clerkship		
Descriptive statistics, confidence intervals			Descriptive statistics, confidence intervals		
2002-03	2003-03	Mean difference	2002-03	2003-04	Mean difference
Mean (SD) No.	Mean (SD) No.	(95% CI)	Mean (SD) No.	Mean (SD) No.	(95% CI)
4.06 (.92) 141	4.52 (.77) 158	.46** (.27 to .66)	3.38 (.98) 84	3.08 (1.04) 86	-.30 <sup>b</sup> (-.61 to .01)
4.43 (.71) 140	4.47 (.81) 159	.04 (-.14 to .21)	3.67 (1.08) 83	3.73 (.91) 86	.06 (-.25 to .36)
4.29 (.81) 142	4.60 (.60) 156	.31** (.15 to .48)	3.64 (.98) 81	3.44 (1.12) 84	-.20 (-.53 to .12)
4.04 (.94) 141	4.04 (.91) 158	-.005 (-.22 to .21)	3.29 (1.20) 83	3.44 (1.13) 86	.15 (-.20 to .51)
3.50 (.98) 142	3.72 (1.04) 158	.23 <sup>b</sup> (-.002 to .46)	2.77 (1.18) 83	2.34 (1.10) 85	-.43 <sup>b</sup> (-.78 to -.09)
4.13 (.90) 141	4.27 (.74) 157	.14 (-.05 to .33)	3.61 (.97) 84	3.34 (.94) 86	-.27 <sup>b</sup> (-.56 to .02)
3.37 (1.06) 142	3.46 (.91) 158	.09 (-.13 to .31)	2.71 (1.18) 84	2.49 (1.06) 86	-.23 (-.57 to .11)
3.95 (.88) 142	4.03 (.83) 157	.08 (-.11 to .26)	3.57 (1.08) 84	3.16 (1.03) 86	-.41 <sup>b</sup> (-.73 to -.09)
3.70 (.84) 141	3.78 (.69) 158	.08 (-.08 to .26)	3.75 (.80) 84	3.42 (.87) 86	-.33 <sup>b</sup> (-.59 to -.08)
3.39 (.88) 142	3.47 (.60) 158	.09 (-.06 to .24)	3.87 (.88) 84	4.14 (.80) 86	.27 <sup>b</sup> (.02 to .52)
2.50 (.97) 141	2.45 (.98) 159	-.04 (-.27 to .18)	2.43 (.95) 84	2.16 (.89) 83	-.27 <sup>b</sup> (-.56 to .01)

Survey done on medical students -



•**Negative experience in OG/surgery**

•**Stable or increased learning in internal medicine/ Pediatrics**

***“...related to the preparations made (or not) by specific clerkships as restricted work-hour regulations were adopted”***

University of Michigan Medical School



## **Duty-hour restrictions and the work of Surgical Faculty: result of a multi-institutional study**

“...shift of routine work from residents to Faculty, a transfer of responsibility to faculty, more frequent skill gaps at night, a loss of time for research, and the challenges of controlling residents’ hours....”

A study of 233 faculty members from 9 residency programs in Surgery in 8 states.



Doctor Work Reform must not affect training and the provision of health care -

- **dedicated training posts**
- **increase in number of posts to accommodate reduction in work hours**
- **Patient-centered and syllabus-centered training program that defined competence**



# Medical advances and Health-care financing

新儀器 通波仔 減低風險

支架幼細靈活 縮短手術時間



**New angioplasty technique reduces procedure risk; Substantial cost prohibiting availability of its use in the Public Sector.**

心臟病專家黃漢斌於他最新研... 此項研究對心臟病患者... 縮短手術時間... 減低風險... 費用約一至兩萬... 對於一般病人每年約需五至十... 藥物治療百分之五至十五... 心臟病專家黃漢斌表示，此項... 手術已能顯著降低，向重症... 患者提供... 費用約一至兩萬... 對於一般病人每年約需五至十... 藥物治療百分之五至十五... 心臟病專家黃漢斌表示，此項... 手術已能顯著降低，向重症... 患者提供...

東方日報 2007



**The balance between  
technology  
development and the need for  
health-care ration.**

**“...as populations age and vast amounts of high-tech resources are marshaled to manage the last few weeks of the terminally ill, delivering poor quality of life to the patients at very high cost to Society....”** Prime Minister Lee Hsien Loong July 2007



**Can create friction between  
the academics and the  
Administration on health-  
care provision.**



## **Mandatory Postgraduate Medical Education CME/CPD**



**Some 50% of doctors in HK are not subject to any requirement for CME/CPD, as they are not Academy Fellows.**



**Yearly renewal of the practising certificate does not mandate CME.**



**Voluntary CME program offered by the Medical Council of Hong Kong, and successful participants (30 CME/year) will be given a CME certificate; successful completion of 3 consecutive years can use the title “CME Certified”.**



**2712 doctors in HK are not registered with the MCHK CME program (24%).**



**Is Health Care quality of Public being adequately safe-guarded?**

- not mandatory
- not CPD



# **Health Services Provision from the Prospective of the Academia**

*Training and Advances in Medicine*

## **Maintenance of Standard**

