



REFERENCES

- Assavanonda, A. Fears state cuts will axe number medical jobs : Graduate doctors face uncertain future. Bangkok Post (24 September 1999) : 3
- Barron, J.M. & Lynch, G.J. (1989). Economics. 2nd ed., Boston : IRWIN.
- Blaug, M. (1972). The Rate of Return to Investment in Education in Thailand. Mimeograph.
- Boelen, C. (1997). The Five Star Doctor : An asset to health care reform?. HRDJ; 1: 6-12.
- Boonyoen, D. (1999). Health System and human Resources Development : The Changing Roles of Public and Private Sectors. HRDJ; 1:2, January.
- Carl, J. S.. (1992). Health Care and Its Costs: Can the U.S. afford adequate health care?. The American Assembly, Columbia University: W.W. Norton & Company: New York, London.
- Chaimongkol, J. (1996). Cost Analysis of Production of Physician in Pre-clinical level of Faculty of Medicine, Chulalongkorn University. M.Sc. Thesis, Chulalongkorn University, Bangkok.
- Charoendee, S. (1998). Cost Comparison between the Existing Package and an Integrated Core Package of HIV/AIDS Activities: A Case Study of Tambon Lor Health Centre in Phayao Province. M.Sc. Thesis, Chulalongkorn University, Bangkok.
- Chuharas, S., Tangchareonsathien, V. and Kittidilokkul, S. (1998). The role of Public and Private Sector in Manpower Production: A Debate. Bangkok: Health System Research Institute.
- Chunharas, S. (1998). "Human Resources for Health Planning: A review of the Thai Experience". HRDJ. Vol.2 No.2: 98-108.
- Creese, A. & Parker, D. (1994). Cost Analysis in Health care : A training Manual for Program Manager. England: WHO.
- Daengsavang, S. (1983). Medical Education in Thailand. (Microfilm).
- Daniel, C.R. and Hirsch, S.R. (1971). Economics and Education : Principle and Application. USA: The Free Press.
- Drummond, M.F. et al. (1997). Method for the Economic Evaluation of Health Care Programmes. Oxford New York Toronto: Oxford University Press.

- English, J.M. (1915). Project Evaluation : A Unified Approach for the Analysis of Capital Investments. New York : Macmillan Publishing Company.
- Elchanan, C. & Terry, G.G. (1989). The Economics of Education. USA : Pergamon Press.
- Feldstein, P.J. (1993). Health Care Economics. New York: Delmar Publishers, Inc.
- Garrin, G. and Evlo, K. (1995). A methodology for the calculation of health care costs and their recovery. World Health Organization, Switzerland.
- Gittingger, J.P. (1984). Compounding and Discounting Tables for Project Analysis : with a Guide to Their Applications. 2nd ed. Revised and Expanded. EDI Series in Economic Development. Baltimore and London : The Jonh Hopkins University Press.
- Hall, T.L. (1998). "Why plan human resources for health?". HRDJ, Vol.2 No.2 : 77-86.
- Hannes, G.P., and Kerr, L.W. (1998). "Scientific Thinking, Medical Thinking and Medical Education: Questions Derived from Their Evolution in the 20th Century". HRDJ, Vol.2 No.3: 155-182.
- Henderson, J. (1999). Health Economics & Policy. Ohio, USA: South-Western College Publishing.
- Hunter, J.K. (1999). "Cost Analysis of a Nursing Center for the Homeless". Nursing Economic\$, Vol.17 No.1: 20-28.
- Husain, M.Z. (1997). "Human Resources Development: A new look". HRDJ, Vol.1 No.2.
- Kongsawatt, S. (1991). A Study of Unit Cost of The Out – patient in the Department of Medicine, Chulalongkorn Hospital; M.Sc. Thesis, Chulalongkorn University, Bangkok.
- Milintangkul, U. (1997). Equivalence Determination of Qualifications and Degrees for Education and Training of Health Professions in THAILAND. HRDJ, Vol.1 No.2.
- MOPH, (1994). Thailand Health Profile 1994. The Ministry of Public Health.
- MOPH, (1997). The report of the MOPH to support the government public health policy and the Eight National Health Development (1st- 30th September 1997), MED 97-03.
- MOPH, (1996). Public Health Statistics AD 1996. The Ministry of Public Health.

- National Education Council, (1985). Expenditure and investment in government and private universities in Thailand. Bangkok. (in Thai).
- Pananiramai, M. and Suksiriserekul, S. (1996). "Forecasting Illness Pattern and Physician Requirement"; TDRI Quarterly; Vol.11 No.11.
- Pornputtichai, K. (1997). Cost Analysis of Bone Marrow Transplantation in Hematologic Disorders at Chulalongkorn Hospital, Thailand. M.Sc. Thesis, Chulalongkorn University, Bangkok.
- Satsanguan, P. and Leopairote, P. (1992). Unit costs of public hospitals in Thailand. Faculty of Economics, Thammasart University.
- Sheehan, J. (1973). The Economics of Education. London: George Allen & Union Ltd.
- Sherpard, D.S. et al. (1998). Analysis of Hospital Costs: A Manual for Managers. Institute for Health Policy, Heller School, Brandies University, MA, USA.
- Sirikanokwilai, N., Wibulopolprasert, S. and Pengpaiboon, P. (1998). "Modified population – to –physician ratio method to project future physician requirement in Thailand". HRDJ, Vol.2 No.3:197 – 209.
- Srivanichakorn, S. & Van, D.M.(1998). Conditions, Constraints, and Strategies for Increased Contribution of General Practitioners to the Health System in Thailand; HRDJ, Vol.2 No.1: 48-59.
- Suvimon, P. (1995). Cost Analysis of Heart Transplantation at Chulalongkorn Hospital in Thailand. M.Sc. Thesis, Chulalongkorn University, Bangkok.
- Varavithya, C. (1982). Medical Curricula in Thailand: A Comparative Study of Medical and Health-Related curricula in Thailand. Singapore: Maruzen Asia, Pte. Ltd.
- Wannawake, J. (1991). A Study of Unit Cost of the Out – patient in Chulalongkorn Hospital. M.Sc. Thesis, Faculty of Medicine, Chulalongkorn University, Bangkok.
- WHO, (1988). Collaborative in Health Development in South – East Asia 1948-1988. Fortieth Anniversary Volume (Revised). Regional Office for South-East Asia : New Delhi.
- WHO, (1996). Medical Education in South-East Asia. New Delhi.
- WHO, (1996). Doctors for health: A WHO global strategy for changing medical education and medical practice for health for all. Geneva.
- WHO, (1980). Guideline for health manpower planning. Geneva: p.127-164.

Wibulpolprasert, S. et al. (1997). Policy options for health manpower production in the next two decades. A research report; Bangkok: Health Manpower Development Institute Health System Research Institute, Health Policy and Plan Bureau. (in Thai).

Young, D.W. (1994). Financial Control in HEALTH CARE: A Managerial Perspective. USA : An Aspen Publication.

APPENDICES

APPENDIX I

Curriculum Structure of Doctor of Medicine Program
(Developed in 1997)

Duration : 6 years

Credit : 259 credits (Compulsory 256 credits, Free elective 3 credits)

Curriculum Structure:

Curriculum Structure	Number of credit (for whole Programme)
	259 Credits
General Subject	33
- Biology and Mathematics	18
- Social Science	6
- Humanity	3
- Language	6
Specific Subject/ Basic Science	223
- Basic Science	83
- Professional	140
Free Elective	3
Total	259

APPENDIX II

Medical Curriculum (1st –6th year)

1st year

1st Semester

<u>Code</u>		<u>Subject</u>	<u>Credit</u>
213	110	General Psychology	2
311	105	Biological Science	3
311	105	Biological Science Laboratory	1
312	112	Basic Organic Chemistry	3
312	113	Basic Organic Chemistry Lab	1
315	104	Basic Physics I	2
315	181	General Physics Lab I	1
321	102	General Mathematics	3
411	106	English for Health Sciences I	3
xxx	xxx	Free Elective	0-3
		Total	19-22

2nd Semester

216	xxx	Physical Education Activity	1
315	105	Basic Physics II	2
320	101	Microcomputer Applications	2
350	111	History of Medicine	1
363	111	Biochemistry I	3
370	111	Behavioral Science	2
374	111	Community Medicine I	1
374	121	Community Medicine Field Practice I	1
411	206	English for Health Science II	3
415	110	Man and Social	2
962	100	Principle Economics	2
		Total	20

2nd Year1st Semester

361	211	Gross Anatomy	5
361	231	Microscopic anatomy	4
363	211	Biochemistry II	3
363	221	Basic Medicine Genetics	1
367	211	Physiology I	3
xxx	xxx	Free Elective	0-3
		Total	16-19

2nd Semester

361	221	Gross Anatomy	4
361	241	Neuro-Anatomy	3
362	211	Basic Microbiology	3
367	221	Physiology II	6
374	211	Community Medicine II	1
374	221	Community Medicine Field Practice II	1
		Total	18

3rd Year1st Semester

361	311	Embryology	2
362	311	Medical Microbiology	4
364	311	Parasitology	5
365	311	Pathology I	5
366	311	Pharmacology I	3
374	311	Community Medicine III	1
374	321	Community Medicine Field Practice III	2
		Total	22

2nd Semester

350	311	Medical Ethics	1
355	311	Clinical Method I	2
355	321	Clinical Method II	4
365	321	Pathology II	5
366	321	Pharmacology II	4
372	311	Basic Radiology	2
374	331	Clinical Epidemiology and Biostatistics	3
		Total	21

4th Year

371	411	Forensic Medicine I	1
374	411	Community Medicine IV	4
375	411	Surgery I	12
376	481	Obstetrics and Gynecology I	12
378	411	Orthopedics I	5
379	411	Medicine I	12
380	411	Rehabilitation Science	2
		Total	48

Students will be divided into 4 groups, each group must rotate to study in these area for 12 weeks

I	Medicine I	12	weeks
II	Surgery I	12	weeks
III	Obstetric -Gynecology I	12	weeks
IV	Orthopedics I	3	weeks
	Forensic Med.	3	weeks
	Community Medicine.	3	weeks
	Rehabilitation	3	weeks

5th Year

368	581	Pediatrics	12
369	581	Ophthalmology	4
370	581	Psychiatry	4
371	511	Forensic Medicine II	1
372	581	Clinical radiology V	3
373	381	Anesthesiology	3
374	581	Community Medicine V	4
375	581	Surgery II	6
377	581	Otorhinolaryngology	4
379	581	Medicine II	6
		Total	48

Students are divided into 4 groups, each group rotate 12 weeks;

I	Medicine II	6 weeks
	Surgery II	6 weeks
II	Pediatrics	12 weeks
III	Ophthalmology	4 weeks
	Otorhinolaryngology	4 weeks
	Com. Med. V	4 weeks
IV	Radiology	3 weeks
	Psychiatry	3 weeks
	Anesthesiology	3 weeks
	Forensic Medicine 3	weeks

6th Year

368	681	Pediatrics II	8
375	681	Surgery II	12
376	681	Obstetrics and Gynecology II	6
378	681	Orthopedics II	6
379	681	Medicine III	12
xxx	xxx	Free Elective	0-3
		Total	44-47

Student are divided into 4 groups, each group rotate for 12 weeks

I	Medicine III	12 weeks
II	Surgery III	12 weeks
III	Obstetric-Gynecology II	6 weeks
	Orthopedics	6 weeks
IV	Pediatrics II	6 weeks
	Free Elective	6 weeks

APPENDIX III

Table A1 Capital cost of Medical Education Programme in Academic year 1998 (4th Year)

Items	Quantity	Cost/Unit (Baht)	Total cost (Baht)	Useful life (year)	Annualization factor	Annual cost (Baht)	Used for Specific activities	Annual cost for MEP
Building	1	99,266,815.00	99,266,815.00	25	9.077	10,936,081.86	MEC office	10,936,082.00
Equipment (MEC office)								
1. Office table	12	2,500.00	30,000.00	5	3.791	7,913.48	Gen. Admin	7,913.48
2. Computer table	4	2,500.00	10,000.00	5	3.791	2,637.83	Gen. Admin	2,637.83
3. Steel cupboard	5	2,000.00	10,000.00	5	3.791	2,637.83	Gen. Admin	2,637.83
4. Armchair	13	500.00	6,500.00	5	3.791	1,714.59	Gen. Admin	1,714.59
5. Telephone set	5	1,200.00	6,000.00	5	3.791	1,582.70	Gen. Admin	1,582.70
6. Air conditioning	4	28,500.00	114,000.00	5	3.791	30,071.22	Gen. Admin	30,071.22
7. Computer set	4	23,500.00	94,000.00	5	3.791	24,795.57	Gen. Admin	24,795.57
8. Printer	4	12,000.00	48,000.00	5	3.791	12,661.57	Gen. Admin	12,661.57
9. Type - writer	4	3,000.00	12,000.00	5	3.791	3,165.39	Gen. Admin	3,165.39
10. Radio with tape player	1	2,300.00	2,300.00	5	3.791	606.70	Gen. Admin	606.70
11. UPS	4	4,100.00	16,400.00	5	3.791	4,326.04	Gen. Admin	4,326.04
12. Facsimile machine	1	30,000.00	30,000.00	5	3.791	7,913.48	Gen. Admin	7,913.48
13. Plastic book covered machine	1	3,400.00	3,400.00	5	3.791	896.86	Gen. Admin	896.86
14. Refrigerator	1	6,800.00	6,800.00	5	3.791	1,793.72	Gen. Admin	1,793.72
15. Documented destroying machine	1	20,000.00	20,000.00	5	3.791	5,275.65	Gen. Admin	5,275.65
16. Key-keeper cupboard	1	5,000.00	5,000.00	5	3.791	1,318.91	Gen. Admin	1,318.91
17. Copying machine	1	20,000.00	20,000.00	5	3.791	5,275.65	Gen. Admin	5,275.65
18. Vacuum	1	5,200.00	5,200.00	5	3.791	1,371.67	Gen. Admin	1,371.67
19. Document cupboard	3	2,500.00	7,500.00	5	3.791	1,978.37	Gen. Admin	1,978.37
20. Slide Projector	2	2,550.00	5,100.00	5	3.791	1,345.29	Gen. Admin	1,345.29
21. Over head Projector	1	9,000.00	9,000.00	5	3.791	2,374.04	Gen. Admin	2,374.04
22. VDO Player	4	1,250.00	5,000.00	5	3.791	1,318.91	Gen. Admin	1,318.91
23. Color television set 29"	3	24,800.00	74,400.00	5	3.791	19,625.43	Gen. Admin	19,625.43
Equipment (Library)								
1. Folding chair	18	145.00	2,610.00	5	3.791	688.47	Library used	220.31
2. High backed chair	29	600.00	17,400.00	5	3.791	4,589.82	Library used	1,468.74
3. Plastic book covering machine	1	9,800.00	9,800.00	5	3.791	2,585.07	Library used	827.22
4. Book binding machine	2	9,800.00	19,600.00	5	3.791	5,170.14	Library used	1,654.44
5. Vacuum	1	4,260.00	4,260.00	5	3.791	1,123.71	Library used	359.59

Table A1 (Continued)

Items	Quantity	Cost/Unit (Baht)	Total cost (Baht)	Useful life (year)	Annualization factor	Annual cost (Baht)	Used for Specific activities	Annual cost for MEP
6. Air conditioning	10	28,500.00	285,000.00	5	3.791	75,178.05	Library used	24,056.98
7. Type writer	3	16,000.00	48,000.00	5	3.791	12,661.57	Library used	4,051.70
8. Plastic book ecovering machine	1	3,400.00	3,400.00	5	3.791	896.86	Library used	287.00
9. Tape player	1	21,000.00	21,000.00	5	3.791	5,539.44	Library used	1,772.62
10. Journal stand	3	4,000.00	12,000.00	5	3.791	3,165.39	Library used	1,012.93
11. Slope book shelf	8	6,000.00	48,000.00	5	3.791	12,661.57	Library used	4,051.70
12. Portable book shelf	11	14,750.00	162,250.00	5	3.791	42,798.73	Library used	13,695.59
13. Book shelf	9	9,500.00	85,500.00	5	3.791	22,553.42	Library used	7,217.09
14. Index card cupboard	1	33,460.00	33,460.00	5	3.791	8,826.17	Library used	2,824.37
15. Sound lab table	1	3,000.00	3,000.00	5	3.791	791.35	Library used	253.23
16. Low table	2	4,500.00	9,000.00	5	3.791	2,374.04	Library used	759.69
17. Reading table	3	7,800.00	23,400.00	5	3.791	6,172.51	Library used	1,975.20
18. Office table	5	3,860.00	19,300.00	5	3.791	5,091.01	Library used	1,629.12
19. Type writer table	1	4,000.00	4,000.00	5	3.791	1,055.13	Library used	337.64
20. Encyclopedia table	1	3,500.00	3,500.00	5	3.791	923.24	Library used	295.44
21. Newspaper stand	1	4,500.00	4,500.00	5	3.791	1,187.02	Library used	379.85
22. Telephone	2	1,200.00	2,400.00	5	3.791	633.08	Library used	202.59
23. Color television set 21"	1	17,500.00	17,500.00	5	3.791	4,616.20	Library used	1,477.18
24. Book cart	2	7,000.00	14,000.00	5	3.791	3,692.96	Library used	1,181.75
Equipment (Audio-visual department)								
1. Computer set	1	25,000.00	25,000.00	5	3.791	6,594.57	Audio-visual	461.62
2. Television 14"	3	6,480.00	19,440.00	5	3.791	5,127.93	Audio-visual	358.96
3. Cannon Camera	1	60,940.00	60,940.00	5	3.791	16,074.91	Audio-visual	1,125.24
4. VDO Camera	1	52,000.00	52,000.00	5	3.791	13,716.70	Audio-visual	960.17
5. Armed chair	9	600.00	5,400.00	5	3.791	1,424.43	Audio-visual	99.71
6. Computer set with printer	1	191,400.00	191,400.00	5	3.791	50,488.00	Audio-visual	3,534.16
7. Computer Notebook	1	162,533.00	162,533.00	5	3.791	42,873.38	Audio-visual	3,001.14
8. Dulication Slide	1	62,000.00	61,999.99	5	3.791	16,354.52	Audio-visual	1,144.82
9. Slide Projector	3	14,873.00	44,619.00	5	3.791	11,769.72	Audio-visual	823.88
10. Air conditioning	3	28,500.00	85,500.00	5	3.791	22,553.42	Audio-visual	1,578.74
11. CD Player	1	20,407.00	20,407.00	5	3.791	5,383.01	Audio-visual	376.81
12. VDO Projector	1	320,000.00	320,000.00	5	3.791	84,410.45	Audio-visual	5,908.73

Table A1 (Continued)

Items	Quantity	Cost/Unit (Baht)	Total cost (Baht)	Useful life (year)	Annualization factor	Annual cost (Baht)	Used for Specific activities	Annual cost for MEP
13. Steel cupboard	3	4,000.00	12,000.00	5	3.791	3,165.39	Audio-visual	221.58
14. Office table with chair	3	25,000.00	75,000.00	5	3.791	19,783.70	Audio-visual	1,384.86
15. Color television 21"	1	17,500.00	17,500.00	5	3.791	4,616.20	Audio-visual	323.13
16. Telephone	2	12,000.00	24,000.00	5	3.791	6,330.78	Audio-visual	443.15
17. Slide projector	1	9,400.00	9,400.00	5	3.791	2,479.56	Audio-visual	173.57
Equipment (Conference room)								21,920.27
1. Armed chair	47	600.00	28,200.00	5	3.791	7,438.67	Education	7,438.67
2. Lecture Chair	72	500.00	36,000.00	5	3.791	9,496.18	Education	9,496.18
3. Overhead projector with stand	3	12,200.00	36,600.00	5	3.791	9,654.44	Education	9,654.44
4. Air conditioning	3	23,500.00	70,500.00	5	3.791	18,596.68	Education	18,596.68
5. Offce table	2	11,750.00	23,500.00	5	3.791	6,198.89	Education	6,198.89
6. Water cooler	1	9,500.00	9,500.00	5	3.791	2,505.94	Education	2,505.94
7. Screen 155"x175"	1	4,000.00	4,000.00	5	3.791	1,055.13	Education	1,055.13
Medical Equipment								
1. Microscope (2 eye pieces)	5	50,000.00	250,000.00	5	3.791	65,945.66	Education	65,945.66
2. Ophthalmoscope	1	13,375.00	13,375.00	5	3.791	3,528.09	Education	3,528.09
3. Sphygomanometer	12	7,200.00	86,400.00	5	3.791	22,790.82	Education	22,790.82
							Total Capital cost	11,319,805.65
Note: Proportion used of Library = 32 % , Audiovisual = 7 %, Discount rate 10 %								

Table A.2 Annual Training Cost (Human Capital Cost)

Items	Startup	Annualization factor	Annual cost for ten years
Human capital cost			
1. Basic Medical Education	20,000.00	7.721735	2,590.09
2. Medical Education	340,100.00	7.721735	44,044.51
3. Clinical teaching	80,000.00	7.721735	10,360.37
4. Evaluation and Assessment	30,000.00	7.721735	3,885.14
Total Training cost	470,100.00	N/A	60,880.10

Note: Discount rate=5%, useful life = 10 years

Table A.3 MEC Space utilization by Activity

Activities	Space (Squre metre)	Percentage (%)	Annual Capital Cost
1 General administration	179.30	1.96	213,988.35
2.Housekeeping	7.00	0.08	8,354.26
3.Registry	10.00	0.11	11,934.65
4. Student Affairs	7722.00	84.28	9,215,940.12
5. Library	468.00	5.10	558,541.83
6. Audiovisual	126.00	1.38	150,376.65
7. Education Development	651.00	7.10	776,946.00
8. Curriculum Evaluation	0.00	0.00	0.00
Total	9,163.30	100.00	10,936,081.86

Note: Annual bulding cost about 1193.47 Baht / Squre metre

Table B.1 Fixed cost (salary) of MEC staff in Academic year 1998

No.	Salary	Incremental fund for dependents	School fee for dependents	Hospitalization fee	Allowance	Others	Total
1	126,480	1200	520	186	0	0	128,386
2	93,360	0	0	495	0	0	93,855
3	98,280	0	640	485	0	0	99,405
4	185,040	600	0	2,854	0	0	188,494
5	179,520	0	0	1250	0	15,000	195,770
6	113,640	0	2,354	3,277	0	0	119,271
7	168,120	0	0	0	0	0	168,120
8	76,320	0	0	0	0	0	76,320
9	49,200	0	0	0	0	0	49,200
10	49,200	0	0	0	0	0	49,200
11	49,200	0	0	0	0	0	49,200
12	102,240	1,200	5,540	0	0	0	108,980
13	104,280	1200	0	0	0	0	105,480
14	94,560	0	0	245	0	0	94,805
15	63,840	0	3,890	55	0	0	67,785
16	49,200	0	0	0	0	0	49,200
17	340,800	0	0	0	0	0	340,800
18	49,200	0	0	0	0	0	49,200
19	49,200	0	0	0	0	0	49,200
20	49,200	0	0	0	0	0	49,200
Total	2,090,880	4200	12944	8847	0	15000	2,131,871

Table B.2 Fixed cosr (salary) of MEC Staff Project in Academic year 1999

No.	Salary	Incremental fund for dependents	School fee for dependents	Hospitalization fee	Allowance	*Others	Total
1	129,120	1200	520	186	0	0	131,026
2	95,760	0	0	495	0	0	96,255
3	100,920	0	640	485	0	0	102,045
4	188,640	600	0	2,854	0	0	192,094
5	183,360	0	0	1250	0	15,000	199,610
6	116,160	0	2,354	3,277	0	0	121,791
7	171,840	0	0	0	0	0	171,840
8	78,360	0	0	0	0	0	78,360
9	50,400	0	0	0	0	0	50,400
10	50,400	0	0	0	0	0	50,400
11	50,400	0	0	0	0	0	50,400
12	104,280	1,200	5,540	0	0	0	111,020
13	104,280	1200	0	0	0	0	105,480
14	96,480	0	0	245	0	0	96,725
15	65,520	0	3,890	55	0	0	69,465
16	50,400	0	0	0	0	0	50,400
17	346,440	0	0	0	0	0	346,440
18	50,400	0	0	0	0	0	50,400
19	50,400	0	0	0	0	0	50,400
20	50,400	0	0	0	0	0	49,200
Total	2,133,960	4200	12944	8847	0	15000	2,173,751

*Other : House rental

Table B.3 Fixed cost (salary) of the MEC staff Project in Academic year 2000

No.	Salary	Incremental fund for dependents	School fee for dependents	Hospitalization Allowance	Others	Total	
				fee			
1	131,640	1200	520	186	0	133,546	
2	98,280	0	0	495	0	98,775	
3	103,320	0	640	485	0	104,445	
4	192,240	600	0	2,854	0	195,694	
5	187,200	0	0	1250	0	15,000	203,450
6	118,800	0	2,354	3,277	0	0	124,431
7	175,680	0	0	0	0	0	175,680
8	80,400	0	0	0	0	0	80,400
9	51,600	0	0	0	0	0	51,600
10	51,600	0	0	0	0	0	51,600
11	51,600	0	0	0	0	0	51,600
12	104,280	1,200	5,540	0	0	0	111,020
13	104,280	1200	0	0	0	0	105,480
14	98,400	0	0	245	0	0	98,645
15	67,200	0	3,890	55	0	0	71,145
16	51,600	0	0	0	0	0	51,600
17	352,080	0	0	0	0	0	352,080
18	51,600	0	0	0	0	0	51,600
19	51,600	0	0	0	0	0	51,600
20	51600	0	0	0	0	0	49,200
Total	2,175,000	4200	12944	8847	0	15000	2,213,591

Table C.1 Time allocation study (FTE) of instructors (Physicians)
Academic year 1998

Code	Teaching hour / Week	FTE	Total salary	Teaching Cost (FTE * Salaries)
1	0	0	247,300	0
2	0	0	396,320	0
3	0	0	276,480	0
4	2	0.06	322,150	18,409
5	6	0.17	524,220	89,866
6	6	0.17	312,920	53,643
7	6	0.17	177,460	30,422
8	5	0.14	524,220	74,889
9	10	0.29	583,880	166,823
10	2	0.06	181,150	10,351
11	0	0.00	516,680	-
12	2	0.06	481,820	27,533
13	5	0.14	308,410	44,059
14	5	0.14	340,520	48,646
15	8	0.23	195,740	44,741
16	4	0.11	176,780	20,203
17	6	0.17	164,160	28,142
18	8	0.23	241,760	55,259
19	15	0.43	133,440	57,189
20	2	0.06	189,014	10,801
21	5	0.14	321,540	45,934
22	11	0.31	156,580	49,211
23	5	0.14	168,120	24,017
24	11	0.31	264,960	83,273
25	25	0.71	224,260	160,186
26	5	0.14	339,140	48,449
27	15	0.43	148,800	63,771
28	21	0.60	153,600	92,160
29	14	0.40	389,300	155,720
30	21	0.60	202,615	121,569
31	21	0.60	276,480	165,888
32	20	0.57	168,120	96,069
33	21	0.60	318,380	191,028
34	21	0.60	253,440	152,064
35	21	0.60	205,944	123,566
36	15	0.43	148,800	63,771
37	5	0.14	204,540	29,220
38	7	0.20	207,813	41,563
39	4	0.11	280,320	32,037
40	4	0.11	160,560	18,350
41	10	0.29	247,840	70,811
42	5	0.14	205,100	29,300
43	2	0.06	190,901	10,909

Table C.1 (Cont.)

Code	Teaching hour / Week	FTE	Total salary	Teaching Cost FTE * Salaries
44	12	0.34	187,206	64,185
45	8	0.23	130,320	29,787
46	6	0.17	265,440	45,504
47	10	0.29	253,440	72,411
48	5	0.14	254,120	36,303
49	0	0.00	257,199	-
50	0	0.00	418,010	-
51	0	0.00	397,176	-
52	5	0.14	250,480	35,783
53	0	0.00	265,440	-
54	5	0.14	456,576	65,225
55	0	0.00	262,920	-
56	5	0.14	489,480	69,926
57	5	0.14	253,440	36,206
58	0	0.00	326,160	-
59	1	0.03	262,920	7,512
60	0	0.00	326,160	-
61	1	0.03	311,640	8,904
62	5	0.14	250,524	35,789
63	4	0.11	250,480	28,626
Total	453	12.94	17,400,708	3,186,001

Table C.2 Time allocation study (FTE) of instructors (Physicians)**Academic year 1999**

Code	Teaching hour / Week	FTE	Total salary	Teaching Cost (FTE * Salaries)
1	0	0	250,420	0
2	0	0	402,080	0
3	0	0	280,320	0
4	2	0.06	328,270	18,758
5	6	0.17	532,500	91,286
6	6	0.17	319,040	54,693
7	6	0.17	182,140	31,224
8	5	0.14	532,500	76,071
9	10	0.29	590,240	168,640
10	2	0.06	185,830	10,619
11	0	0.00	523,640	-
12	2	0.06	481,820	27,533
13	5	0.14	314,290	44,899
14	5	0.14	346,280	49,469
15	8	0.23	200,420	45,810
16	4	0.11	181,700	20,766
17	6	0.17	168,840	28,944
18	8	0.23	247,520	56,576
19	15	0.43	137,280	58,834
20	2	0.06	192,854	11,020
21	5	0.14	327,660	46,809
22	11	0.31	160,420	50,418
23	5	0.14	171,840	24,549
24	11	0.31	268,800	84,480
25	25	0.71	230,020	164,300
26	5	0.14	343,820	49,117
27	15	0.43	152,640	65,417
28	21	0.60	157,440	94,464
29	14	0.40	396,860	158,744
30	21	0.60	207,295	124,377
31	21	0.60	280,320	168,192
32	20	0.57	171,840	98,194
33	21	0.60	321,500	192,900
34	21	0.60	257,280	154,368
35	21	0.60	210,624	126,374
36	15	0.43	152,640	65,417
37	5	0.14	209,220	29,889
38	7	0.20	212,493	42,499
39	4	0.11	284,160	32,475
40	4	0.11	164	19
41	10	0.29	250,960	71,703
42	5	0.14	210,860	30,123

Table C.2 (Cont.)

Code	Teaching hour / Week	FTE	Total salary	Teaching Cost FTE * Salaries
43	2	0.06	195,581	11,176
44	12	0.34	191,046	65,501
45	8	0.23	133,440	30,501
46	6	0.17	269,040	46,121
47	10	0.29	256,560	73,303
48	5	0.14	257,240	36,749
49	0	0.00	260,319	-
50	0	0.00	423,770	-
51	0	0.00	407,280	-
52	5	0.14	253,440	36,206
53	0	0.00	269,040	-
54	5	0.14	462,960	66,137
55	0	0.00	265,920	-
56	5	0.14	497,760	71,109
57	5	0.14	257,280	36,754
58	0	0.00	333,480	-
59	1	0.03	265,920	7,598
60	0	0.00	333,480	-
61	1	0.03	317,760	9,079
62	5	0.14	253,440	36,206
63	4	0.11	253,440	28,965
Total	453	12.94	17,535,036	3,225,371

Table C.3 Time allocation study (FTE) of instructors (Physicians)
Academic year 2000

Code	Teaching hour / Week	FTE	Total salary	Teaching Cost (FTE * Salaries)
1	0	0	253,540	0
2	0	0	407,840	0
3	0	0	284,160	0
4	2	0.06	334,510	19,115
5	6	0.17	540,780	92,705
6	6	0.17	325,160	55,742
7	6	0.17	186,820	32,026
8	5	0.14	540,780	77,254
9	10	0.29	598,520	171,006
10	2	0.06	190,510	10,886
11	0	0.00	530,600	-
12	2	0.06	481,820	27,533
13	5	0.14	309,410	44,201
14	5	0.14	352,040	50,291
15	8	0.23	205,100	46,880
16	4	0.11	186,380	21,301
17	6	0.17	173,520	29,746
18	8	0.23	253,280	57,893
19	15	0.43	141,120	60,480
20	2	0.06	196,814	11,247
21	5	0.14	333,900	47,700
22	11	0.31	164,260	51,625
23	5	0.14	175,680	25,097
24	11	0.31	272,640	85,687
25	25	0.71	235,780	168,414
26	5	0.14	348,500	49,786
27	15	0.43	156,480	67,063
28	21	0.60	161,280	96,768
29	14	0.40	404,420	161,768
30	21	0.60	211,975	127,185
31	21	0.60	284,160	170,496
32	20	0.57	175,680	100,389
33	21	0.60	326,180	195,708
34	21	0.60	260,400	156,240
35	21	0.60	215,424	129,254
36	15	0.43	156,480	67,063
37	5	0.14	213,900	30,557
38	7	0.20	217,293	43,459
39	4	0.11	288,120	32,928
40	4	0.11	168,360	19,241
41	10	0.29	254,080	72,594
42	5	0.14	216,620	30,946

Table C.3 (Cont.)

Code	Teaching hour / Week	FTE	Total salary	Teaching Cost FTE * Salaries
43	2	0.06	199,301	11,389
44	12	0.34	194,886	66,818
45	8	0.23	136,560	31,214
46	6	0.17	272,160	46,656
47	10	0.29	259,800	74,229
48	5	0.14	260,480	37,211
49	0	0.00	263,559	-
50	0	0.00	429,650	-
51	0	0.00	417,840	
52	5	0.14	256,560	36,651
53	0	0.00	272,160	-
54	5	0.14	469,560	67,080
55	0	0.00	269,040	-
56	5	0.14	506,040	72,291
57	5	0.14	260,400	37,200
58	0	0.00	340,680	-
59	1	0.03	269,040	7,687
60	0	0.00	340,680	-
61	1	0.03	324,000	9,257
62	5	0.14	259,200	37,029
63	4	0.11	256,560	29,321
Total	453	12.94	17,992,472	3,302,306

Table D Variable cost (Material cost, and Non-material cost) by activities in Academic year 1998

Activities	Material cost Items	Cost (Baht/month)	Cost/year	Non-material cost Items	Average cost (Baht / month)	Cost/year	% Allocation**	Total Cost / year
1. General Adminstration	Office material Household material	5,833.33 1,000.00	70,000 12,000	Security guard	1,000.00	12,000.00	. 7%	82,000.00 12,000.00
2. Housekeeping	Household material	5,416.67	65,000	Housekeeper	5,000.00	60,000.00	10%	125,000.00
3. Registry	Office material	416.67	5,000				0.50%	5,000
4. Student Affairs	Office material	625.00	7,500.00				0.50%	7500.00
5. Library*	Office material	928.39	11,140.77	Text book Journal Newspaper	50,000.00 600,000.00 1,650.00	180,000.00 19,800.00	20%	61,165.05 192,000.00 6,336.00
6. Audiovisual*	Office material Household material	5112.14 15330.42	61,321.69 183,965.09	Utilities (telephone call)	396.25	4,755.00	1.50%	4,625.37 12,877.57
7. Education Development	Office material Teaching material Document (Books)	2083.33 2916.67 4166.67	25,000.00 35,000.00 50,000.00	Teaching payment	56090.42	673,085.00	60%	698,085.00 35,000.00 50,000.00
8. Curriculum Evaluation	Office material	1000.00	12,000.00				0.50%	12000.00
Total		44,829.29	537,927.55		114,136.67	1,549,640.00	100.00%	1,303,588.99

* % Allocation was calculated from the quantity usage record and observation in one month of each activity

** Library is 32%, and Audiovisual is 7% provided for Medical Education Programme

APPENDIX IV

Form CC**Survey Sheet Concerning Capital Assets**

Name of Capital	Quantity	Price per unit (Baht)	Total amount (Baht)	Month, Year of acquisition	Time of utilization (year)	Expiration of utilization (Month, Year)

Form LC-1**Labour Cost Recorded Sheet (except overtime)**
KhonKaen Medical Education Centre
Month.....

No.	Salary	Incremental fund for dependents	School fee for dependents	Hospitalization fee	Allowance	Others	Total

Form LC-2

Survey Sheet Distribution in Labour Cost

Name of Surveyor..... Job code.....

MC-1 Material Survey Material section

Record Sheet For Material Costs
For the month of

Activities (Department)	Book	Office material	Household material	Teaching material	Medical equipment	Reparing Maintenance

MC- 2 Finance Section

Record Sheet for Public Utilities
For the month of.....

Cost Centre	Water Supply	Electricity	Mail and Postage	Telephone

FTE Survey Sheet

The Survey Sheet of FTE (Full Time Equivalent)

of the physicians (Instructor) at Medical Education Centre.

Working hour: 35 hour/week. The working hour could be more than 35 hours depending on the time of the physician spends exactly on each activity for one week.

To calculate FTE: 1) The total working hour divided by 35. 2) Only the time spent in the hospital was taken into account, the time working in special clinics or outside the hospital was not included to this study.

Name – Surname.....

Education Degree M.D. Board of.....

Specialist on.....

Department.....

Working Experience..... Yr(s)

Activities	Hour / week	FTE
1. Medical Services		
1.1 Treatment
1.2 Promotion and Prevention
1.3 Rehabilitation
1.4 On call
2. Administration		
3. Workshop, Research, Training (not include teaching)		
4. Teaching		
4.1 Medical students of Medical education Programme
4.2 Students of the other programme (please specify).....
5. Others (please specify).....		
6. Total of Working Hour (1-5)		

APPENDIX V

Medical Education Centre Building

The MEC building is the stand alone 9 storeys building.
The building began to use on 17 September 1998,
The building original cost is 99,266,815 Baht.
The annual building depreciation cost in academic year 1998 is 10,936,081.86 Baht.

**The Total using space is 9,163.30 Sq.metres.
The Annual building cost about 1,193.47 Baht / Squire metre.**

The using space comprising ;

1st Floor

- 1 Office of MEC	60.50	Sq. metre
- 1 Teachers' room	36.00	Sq. metre
- 1 Conference room	48.00	Sq. metre
- 1 Director room	37.80	Sq. metre
- Library		
1 Reading room	71.50	Sq. metre
1 Journal room & stock	258.50	Sq. metre
- 1 Housekeepers' room	7.00	Sq. metre
- 1 Guards's room	7.00	Sq. metre
Using space	525.20	Sq. metre

2nd Floor

- 1 Class room (Lecture)	80.00	Sq. metre
- Medical material technology and Audo-visual Department	54.00	Sq. metre
- Audio-visual Laboratory	72.00	Sq. metre
- 2 Lecture rooms	108.00	Sq. metre
- 1 Librarian & staff room	26.08	Sq. metre
- 1 Library stock	111.60	Sq. metre

Using space **451.68 Sq. metre**

3rd Floor

- 1 Large Conference room (for 150 persons)	267.84	Sq. metre
- 4 Class rooms	156.00	Sq. metre
- 1 Guest teacher' room	39.00	Sq. metre

Using space **462.84 Sq. metre**

4th Floor (Resident)

- 8 Staff teaching rooms 702.00 Sq. metre

5th Floor (Dormitory)

- 10 rooms (6th year medical student) 702.00 Sq. metre

6th – 9th Floor (Dormitory)

- Using space 6,318 Sq. metre

Present Worth of an Annuity Factor or Annualization Factor

Year	PRESENT WORTH OF AN ANNUITY FACTOR— How much 1 received or paid annually for X years is worth today.												PRESENT WORTH OF AN ANNUITY FACTOR— How much 1 received or paid annually for X years is worth today.											
	1%	3%	5%	6%	8%	10%	12%	14%	15%	16%	18%	20%	22%	24%	25%	26%	28%	30%	35%	40%	45%	50%	Year	
1	.990	.971	.952	.943	.926	.909	.893	.877	.870	.862	.847	.833	.820	.806	.800	.794	.781	.769	.741	.714	.690	.667	1	
2	1.970	1.913	1.859	1.833	1.783	1.736	1.690	1.647	1.626	1.605	1.566	1.528	1.492	1.457	1.440	1.424	1.392	1.361	1.289	1.224	1.165	1.111	2	
3	2.941	2.829	2.723	2.673	2.577	2.487	2.402	2.322	2.283	2.246	2.174	2.106	2.042	1.981	1.952	1.923	1.868	1.816	1.696	1.589	1.493	1.407	3	
4	3.902	3.717	3.546	3.465	3.312	3.170	3.037	2.914	2.855	2.798	2.690	2.589	2.494	2.404	2.362	2.320	2.241	2.166	1.997	1.849	1.720	1.605	4	
5	4.853	4.580	4.329	4.212	3.993	3.791	3.605	3.433	3.352	3.274	3.127	2.991	2.864	2.745	2.689	2.635	2.532	2.436	2.220	2.035	1.876	1.737	5	
6	5.795	5.417	5.076	4.917	4.623	4.355	4.111	3.889	3.784	3.685	3.498	3.326	3.167	3.020	2.951	2.885	2.759	2.643	2.385	2.168	1.983	1.824	6	
7	6.728	6.230	5.786	5.582	5.206	4.868	4.564	4.288	4.160	4.039	3.812	3.605	3.416	3.242	3.161	3.083	2.937	2.802	2.508	2.263	2.057	1.883	7	
8	7.652	7.020	6.463	6.210	5.747	5.335	4.968	4.639	4.487	4.344	4.070	3.837	3.619	3.421	3.329	3.241	3.076	2.925	2.598	2.331	2.108	1.922	8	
9	8.566	7.786	7.108	6.802	6.247	5.759	5.328	4.946	4.772	4.607	4.303	4.031	3.786	3.566	3.463	3.366	3.184	3.019	2.665	2.379	2.144	1.948	9	
10	9.471	8.530	7.722	7.360	6.710	6.145	5.650	5.216	5.019	4.833	4.494	4.192	3.923	3.682	3.571	3.465	3.269	3.092	2.715	2.414	2.168	1.965	10	
11	10.368	9.253	8.306	7.887	7.139	6.495	5.938	5.453	5.234	5.029	4.656	4.327	4.035	3.776	3.656	3.543	3.335	3.147	2.752	2.438	2.185	1.977	11	
12	11.255	9.954	8.863	8.384	7.536	6.814	6.194	5.660	5.421	5.197	4.793	4.439	4.127	3.851	3.725	3.606	3.387	3.190	2.779	2.456	2.196	1.985	12	
13	12.134	10.635	9.394	8.853	7.904	7.103	6.424	5.842	5.583	5.342	4.910	4.533	4.203	3.912	3.780	3.656	3.427	3.223	2.799	2.469	2.204	1.990	13	
14	13.004	11.296	9.899	9.295	8.244	7.367	6.628	6.002	5.724	5.468	5.008	4.611	4.265	3.962	3.824	3.695	3.459	3.249	2.814	2.478	2.210	1.993	14	
15	13.865	11.938	10.380	9.712	8.559	7.606	6.811	6.142	5.847	5.575	5.092	4.675	4.315	4.001	3.859	3.726	3.483	3.268	2.825	2.484	2.214	1.995	15	
16	14.718	12.561	10.838	10.106	8.851	7.824	6.974	6.265	5.954	5.668	5.162	4.730	4.357	4.033	3.887	3.751	3.503	3.283	2.834	2.489	2.216	1.997	16	
17	15.562	13.156	11.274	10.477	9.122	8.022	7.120	6.373	6.047	5.749	5.222	4.775	4.391	4.050	3.910	3.771	3.510	3.295	2.840	2.492	2.218	1.998	17	
18	16.398	13.754	11.690	10.828	9.372	8.201	7.250	6.467	6.128	5.818	5.273	4.812	4.419	4.080	3.928	3.786	3.529	3.304	2.844	2.494	2.219	1.999	18	
19	17.226	14.324	12.085	11.158	9.604	8.365	7.366	6.550	6.198	5.877	5.316	4.843	4.442	4.097	3.942	3.799	3.539	3.311	2.848	2.496	2.220	1.999	19	
20	18.046	14.877	12.462	11.470	9.818	8.514	7.469	6.623	6.259	5.929	5.353	4.870	4.460	4.110	3.954	3.808	3.546	3.316	2.850	2.497	2.221	1.999	20	
21	18.857	15.415	12.821	11.764	10.017	8.649	7.562	6.687	6.312	5.973	5.304	4.891	4.476	4.121	3.963	3.816	3.551	3.320	2.852	2.498	2.221	2.000	21	
22	19.660	15.937	13.163	12.042	10.201	8.772	7.645	6.743	6.359	6.011	5.410	4.909	4.488	4.130	3.970	3.822	3.556	3.323	2.853	2.498	2.222	2.000	22	
23	20.456	16.444	13.489	12.303	10.371	8.883	7.718	6.792	6.399	6.044	5.432	4.925	4.499	4.137	3.976	3.827	3.559	3.325	2.854	2.499	2.222	2.000	23	
24	21.243	16.936	13.799	12.550	10.529	8.985	7.784	6.835	6.434	6.073	5.451	4.937	4.507	4.143	3.981	3.831	3.562	3.327	2.855	2.499	2.222	2.000	24	
25	22.023	17.413	14.094	12.783	10.675	9.077	7.843	6.873	6.464	6.097	5.467	4.948	4.514	4.147	3.985	3.834	3.564	3.329	2.856	2.499	2.222	2.000	25	
26	22.795	17.877	14.375	13.003	10.810	9.161	7.896	6.906	6.491	6.118	5.400	4.956	4.520	4.151	3.988	3.837	3.566	3.330	2.856	2.500	2.222	2.000	26	
27	23.560	18.327	14.643	13.211	10.935	9.237	7.943	6.935	6.514	6.136	5.492	4.904	4.524	4.154	3.990	3.839	3.567	3.331	2.856	2.500	2.222	2.000	27	
28	24.316	18.764	14.898	13.406	11.051	9.307	7.984	6.961	6.534	6.152	5.502	4.970	4.528	4.157	3.992	3.840	3.568	3.331	2.857	2.500	2.222	2.000	28	
29	25.066	19.188	15.141	13.591	11.158	9.370	8.022	6.983	6.551	6.166	5.510	4.975	4.531	4.159	3.994	3.841	3.569	3.332	2.857	2.500	2.222	2.000	29	
30	25.808	19.600	15.372	13.765	11.258	9.427	8.055	7.003	6.566	6.177	5.517	4.979	4.534	4.160	3.995	3.842	3.569	3.332	2.857	2.500	2.222	2.000	30	
35	29.409	21.487	16.374	14.498	11.655	9.644	8.176	7.070	6.617	6.215	5.539	4.992	4.541	4.164	3.998	3.845	3.571	3.333	2.857	2.500	2.222	2.000	35	
40	32.835	23.115	17.159	15.046	11.925	9.779	8.244	7.105	6.642	6.233	5.548	4.997	4.544	4.166	3.999	3.846	3.571	3.333	2.857	2.500	2.222	2.000	40	
45	36.095	24.519	17.774	15.456	12.108	9.863	8.283	7.123	6.654	6.242	5.552	4.999	4.545	4.165	4.000	3.846	3.571	3.333	2.857	2.500	2.222	2.000	45	
50	39.196	25.730	18.256	15.762	12.233	9.915	8.304	7.133	6.661	6.246	5.554	4.999	4.545	4.167	4.000	3.846	3.571	3.333	2.857	2.500	2.222	2.000	50	

Capital Recovery Factor

CAPITAL RECOVERY FACTOR—

Annual payment that will repay a \$1 loan in X years with compound interest on the unpaid balance.

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Annual payment that will repay a \$1 loan in X years with compound interest on the unpaid balance.

Year	1%	3%	5%	6%	8%	10%	12%	14%	15%	16%	18%	20%	22%	24%	25%	26%	28%	30%	35%	40%	45%	50%	Year
1	1.010	1.030	1.050	1.060	1.080	1.100	1.120	1.140	1.150	1.160	1.180	1.200	1.220	1.240	1.250	1.260	1.280	1.300	1.350	1.400	1.450	1.500	1
2	.508	.523	.538	.545	.561	.576	.592	.607	.615	.623	.639	.655	.670	.686	.694	.702	.719	.735	.776	.817	.858	.900	2
3	.340	.354	.367	.374	.388	.402	.416	.431	.438	.445	.460	.475	.490	.505	.512	.520	.535	.551	.590	.629	.670	.711	3
4	.256	.269	.282	.289	.302	.315	.329	.343	.350	.357	.372	.386	.401	.416	.423	.431	.446	.462	.501	.541	.582	.623	4
5	.206	.218	.231	.237	.250	.264	.277	.291	.298	.305	.320	.334	.349	.364	.372	.379	.393	.411	.450	.491	.533	.576	5
6	.173	.185	.197	.203	.216	.230	.243	.257	.264	.271	.286	.301	.316	.331	.339	.347	.362	.378	.419	.461	.504	.548	6
7	.149	.161	.173	.179	.192	.205	.219	.233	.240	.248	.262	.277	.293	.308	.316	.324	.340	.357	.399	.442	.486	.531	7
8	.131	.142	.155	.161	.174	.187	.201	.216	.223	.230	.245	.261	.276	.292	.300	.309	.325	.342	.385	.429	.474	.520	8
9	.117	.128	.141	.147	.160	.174	.188	.202	.210	.217	.232	.248	.264	.280	.289	.297	.314	.331	.375	.420	.466	.513	9
10	.106	.117	.130	.136	.149	.163	.177	.192	.199	.207	.223	.239	.255	.272	.280	.289	.306	.323	.368	.414	.461	.509	10
11	.096	.108	.120	.127	.140	.154	.168	.183	.191	.199	.215	.231	.248	.265	.273	.282	.300	.318	.363	.410	.458	.506	11
12	.089	.100	.113	.119	.133	.147	.161	.177	.184	.192	.209	.225	.242	.260	.268	.277	.295	.313	.360	.407	.455	.504	12
13	.082	.094	.106	.113	.127	.141	.156	.171	.179	.187	.204	.221	.238	.256	.265	.274	.292	.310	.357	.405	.454	.503	13
14	.077	.089	.101	.108	.121	.136	.151	.167	.175	.183	.200	.217	.234	.252	.262	.271	.289	.308	.355	.404	.452	.502	14
15	.072	.084	.096	.103	.117	.131	.147	.163	.171	.179	.196	.214	.232	.250	.259	.268	.287	.306	.354	.403	.452	.501	15
16	.068	.080	.092	.099	.113	.128	.143	.160	.168	.176	.194	.211	.230	.248	.257	.267	.285	.305	.353	.402	.451	.501	16
17	.064	.076	.089	.095	.110	.125	.140	.157	.165	.174	.191	.209	.228	.246	.256	.265	.284	.304	.352	.401	.451	.501	17
18	.061	.073	.086	.092	.107	.122	.138	.155	.163	.172	.190	.208	.226	.245	.255	.264	.283	.303	.352	.401	.451	.500	18
19	.058	.070	.083	.090	.104	.120	.136	.153	.161	.170	.188	.206	.225	.244	.254	.263	.283	.302	.351	.401	.450	.500	19
20	.055	.067	.080	.087	.102	.117	.134	.151	.160	.169	.187	.205	.224	.243	.253	.263	.282	.302	.351	.400	.450	.500	20
21	.053	.065	.078	.085	.100	.116	.132	.150	.158	.167	.186	.204	.223	.243	.252	.262	.282	.301	.351	.400	.450	.500	21
22	.051	.063	.076	.083	.098	.114	.131	.148	.157	.166	.185	.204	.223	.242	.252	.262	.281	.301	.350	.400	.450	.500	22
23	.049	.061	.074	.081	.096	.113	.130	.147	.156	.165	.184	.203	.222	.242	.251	.261	.281	.301	.350	.400	.450	.500	23
24	.047	.059	.072	.080	.095	.111	.128	.146	.155	.165	.183	.203	.222	.241	.251	.261	.281	.301	.350	.400	.450	.500	24
25	.045	.057	.071	.078	.094	.110	.127	.145	.155	.164	.183	.202	.222	.241	.251	.261	.281	.300	.350	.400	.450	.500	25
26	.044	.056	.070	.077	.093	.109	.127	.145	.154	.163	.182	.202	.221	.241	.251	.261	.280	.300	.350	.400	.450	.500	26
27	.042	.055	.068	.076	.091	.108	.126	.144	.154	.163	.182	.201	.221	.241	.251	.261	.280	.300	.350	.400	.450	.500	27
28	.041	.053	.067	.075	.090	.107	.125	.144	.153	.163	.182	.201	.221	.241	.250	.260	.280	.300	.350	.400	.450	.500	28
29	.040	.052	.066	.074	.090	.107	.125	.143	.153	.162	.181	.201	.221	.240	.250	.260	.280	.300	.350	.400	.450	.500	29
30	.039	.051	.065	.073	.089	.106	.124	.143	.152	.162	.181	.201	.221	.240	.250	.260	.280	.300	.350	.400	.450	.500	30
35	.034	.047	.061	.069	.086	.104	.122	.141	.151	.161	.181	.200	.220	.240	.250	.260	.280	.300	.350	.400	.450	.500	35
40	.030	.043	.058	.066	.084	.102	.121	.141	.151	.160	.180	.200	.220	.240	.250	.260	.280	.300	.350	.400	.450	.500	40
45	.028	.041	.056	.065	.083	.101	.121	.140	.150	.160	.180	.200	.220	.240	.250	.260	.280	.300	.350	.400	.450	.500	45
50	.026	.039	.055	.063	.082	.101	.120	.140	.150	.160	.180	.200	.220	.240	.250	.260	.280	.300	.350	.400	.450	.500	50

BIOGRAPHY

Miss Prayoon Kamkhaengkwa was born on 7th November 1962 in Udornthani, Thailand. She graduated from the Faculty of Nursing, Khon Kaen University in 1984, and then worked in Khon Kaen University Hospital (Srinagarind Hospital) as a Registered Nurse until 1989. She joined the Medecins San Frontieres (MSF- France) in 1994.

After her last mission in Lao PDR, Miss Kamkhaengkwa rejoined the Ministry of Public Health, worked in Computer Information Centre, Udornthani Regional Hospital, Udornthani Province until present. She teaches Geriatric nursing at Boromrajchon-nee Nursing College, and works as an English teacher volunteer at the Buddhist Sunday School, Udornthani Province as well.

