

CHAPTER 4

RESULTS



This chapter explores the empirical results of the study. The results followed the research objectives that are presented as follows:

1. Hospital cost
2. Unit cost
3. DRGs costs of 5 common diseases
4. Sensitivity analysis

4.1 Hospital Cost

4.1.1 Capital depreciation cost

Total capital depreciation cost of Pranangklaeo hospital in fiscal year 2000 was 83,493,288 baht. The components of capital costs were 39% and 61% from equipments and buildings respectively that is shown in table 4.1.

Table 4.1 : Total capital depreciation cost in fiscal year 2000

Equipment costs	Building costs	Total depreciation capital cost
32,797,291 baht	50,695,937 baht	83,493,228 baht
39%	61%	100%

The highest costs came from the building costs. Total equipment depreciation costs were 32,797,291 baht and total building depreciation costs were 50,695,937 baht. Food catering cost center (A05) had the highest capital depreciation costs that were 15,979,369 baht. The next highest capital depreciation costs was in the operating room cost center (B01) that was

8,730,758 baht and it had the highest cost of medical equipments that was 13,357,075 baht. The housekeeping cost center (A03) had the lowest costs of capital costs. The capital depreciation costs of each cost center is shown in table 4.2.

Table 4.2 : Capital depreciation cost of each cost center

Code	Cost center	Medical equipment	Office equipment	Equipment depreciation cost	Building depreciation cost	Total depreciation cost
A01	Administration		10,966,231	3,776,521	1,669,103	5,445,624
A02	Finance		1,546,384	532,540	1,007,965	1,540,505
A04	Laundry	24,500	359,865	132,367	65,670	198,236
A03	Housekeeping		83,676	28,816	24,366	53,202
A05	Food catering		798,838	275,102	15,704,268	15,979,369
A06	Supply	827,200	873,200	585,579	356,241	941,820
B01	Operating room	13,357,075	849,072	4,892,274	3,838,484	8,730,758
B02	Anesthesiology	3,113,009	52,711	1,090,202	1,535,393	2,625,596
B03	Laboratory	2,798,854	209,259	1,035,926	2,828,962	3,864,888
B04	X-ray	3,050,576	213,903	1,124,212	455,029	1,579,241
B05	Pharmacy	2,402,046	2,319,228	1,625,900	2,417,559	4,043,459
B06	Physiotherapy	2,404,410	443,651	980,808	1,173,250	2,154,057
C01	Emergency room	2,192,440	607,602	964,271	468,270	1,432,541
C02	OPD Medicine	14,133	180,675	67,087	2,243,594	2,310,681
C03	OPD Surgery	70,877	180,675	86,629	220,361	306,990
C04	OPD Ortho	177,510	142,660	110,259	216,660	326,940
C05	OPD Obs-Gyn	409,050	212,665	214,105	564,257	778,362
C06	OPD Pediatrics	8,840,414	1,069,835	3,412,865	376,171	3,789,036
C07	OPD ENT	12,300	13,500	8,865	188,086	196,971
C08	OPD Optha	2,002,555	63,152	711,383	173,413	884,796
C09	Dental	1,752,118	188,469	668,294	834,552	1,502,846
C10	Medical ward	1,610,840	312,018	662,189	2,056,172	2,718,360
C11	Pediatrics ward	8,488,614	788,884	3,194,960	1,471,018	4,665,978
C12	Surgical ward	555,399	327,598	304,084	933,771	1,237,855
C13	Obs-Gyn ward	2,581,790	242,696	972,689	2,556,928	3,529,616
C14	Surgical ICU	5,806,256	206,776	2,070,752	225,107	2,295,858
C15	Medical ICU	3,535,006	35,994	1,229,771	660,219	1,889,990
C16	EENT ward	409,348	100,467	175,569	1,896,708	2,072,277
C17	Monk ward	460,070	1,934,656	824,689	341,550	1,166,239
C18	Ortho ward	1,421,054	419,170	633,731	933,771	1,567,503
C19	Medical private ward	428,200	114,442	186,874	809,855	996,729
C20	Pedia private ward	351,800	140,475	169,528	829,234	998,762
C21	Surgical private ward	8,906	57,240	22,779	809,855	832,634
C22	Obs-Gyn private ward	58,100	16,390	25,653	809,855	835,508
	Total	69,164,450	26,072,057	32,797,291	50,695,937	83,493,228

4.1.2 Labor costs

Total labor cost of Pranangklaio hospital in fiscal year 2000 was 153,576,266 baht. Labor cost components were 122,861,012.80 baht (80%) and 3,075,253.20 (20%) baht from salaries, wages and fringe benefits respectively. It is shown in the table 4.3.

Table 4.3 : Total labor cost

Salary and wage (baht)	Fringe benefit (baht)	Total(baht)
122,861,012.80	3,075,253.20	153,576,266

Operating room cost center had the highest labor cost that was 16,616,261 baht (11%) because they work for 24 hours per day.

4.1.3 Material costs

Total material cost of Pranangklaio hospital in fiscal year 2000 was 62,798,947 baht. The material cost components were medical material costs that were medicines, medical devices, laboratory material, reagents , x-ray films, dental material and non medical costs such as stationeries etc.

The major components of non medical material costs was stationery costs was 4,137,464 baht and cleaning supplies cost was 2,790,673 baht.

4.1.4 Total hospital costs

Total hospital cost of Pranangklaio hospital in fiscal year 2000 was 300,284,339 baht. The material, labor and capital cost components was 21% and 51% and 28% respectively.

Operating room cost center (B01) was the highest total direct cost that was 31,595,059 baht (10.52%) and the next highest was administration cost center (A01) that the total direct cost was 19,294,371 baht (6.43%). The total direct costs of each cost center is shown in the table 4.4 below.

Table 4.4 : Total direct costs of each cost center

Code	Cost center	Material cost	Labor cost	Capital depreciation cost	Total direct cost
A01	Administration	3,470,203	10,408,112	5,445,624	19,323,939
A02	Finance	113,532	3,061,422	1,540,505	4,715,459
A03	Laundry	2,714,588	934,380	198,236	3,847,204
A04	Housekeeping	12,205,842	1,161,600	53,202	13,420,644
A05	Food Catering	1,642,171	246,841	15,979,369	17,868,381
A06	Supply	3,519,483	3,327,760	941,820	7,789,063
B01	Operating room	6,248,040	16,519,180	8,730,758	31,497,978
B02	Anesthesiology	1,394,885	9,043,185	2,625,596	13,063,666
B03	Laboratory	9,906,849	5,376,098	3,864,858	19,147,835
B04	X-ray	2,168,703	4,654,796	1,579,241	8,412,740
B05	Pharmacy	6,176,001	6,640,859	4,043,459	16,860,319
B06	Physiotherapy	319,424	2,888,593	2,154,057	5,362,074
C01	Emergency room	321,993	9,258,413	1,432,541	11,012,947
C02	OPD Medicine	31,660	2,624,549	2,310,681	4,966,890
C03	OPD Surgery	79,640	1,184,163	306,990	1,570,793
C04	OPD Ortho	71,565	2,231,827	326,940	2,630,332
C05	OPD Obs-Gyn	37,352	1,321,473	778,362	2,137,186
C06	OPD Pediatrics	22,896	1,989,805	3,789,036	5,801,737
C07	OPD ENT	28,918	904,951	196,971	1,130,840
C08	OPD Ophtha	21,247	990,495	884,796	1,896,538
C09	Dental	682,289	3,798,008	1,502,846	5,983,143
C10	Medical ward	1,641,450	9,104,800	2,718,360	13,464,610
C11	Pediatrics ward	1,145,084	9,128,674	4,665,978	14,939,736
C12	Surgical ward	1,901,441	7,419,753	1,237,855	10,559,049
C13	Obs-Gyn ward	1,979,527	6,458,448	3,529,616	11,967,591
C14	Surgical ICU	666,337	4,307,177	2,295,858	7,269,373
C15	Medical ICU	507,306	6,238,870	1,889,990	8,636,166
C16	EENT ward	328,796	4,217,763	2,072,277	6,618,836
C17	Monk ward	680,257	2,978,551	1,166,239	4,825,047
C18	Ortho ward	1,792,922	6,225,161	1,567,503	9,585,586
C19	Medical private ward	238,667	1,875,624	996,729	3,111,020
C20	Pedia private ward	265,204	2,479,636	998,762	3,743,603
C21	Surgical private ward	264,274	2,197,380	832,634	3,294,288
C22	Obs-Gyn private ward	210,401	2,783,750	835,508	3,829,659
	Total	62,798,947	153,992,096	83,493,228	300,284,271

4.2 Unit Cost

4.2.1 Total full cost of patient services (PS)

The component costs of patient services are direct and indirect costs. The step down allocation method was used to determine the indirect costs (appendix). The total full cost of PS indirect cost was 161,309,302 baht. The total PS full cost was 300,284,271 baht.

The direct , indirect and full costs for OPD and IPD PS are shown in the table 4.5 and the table 4.6 below.

Table 4.5 : Total full cost of OPD patient services

Code	Cost center	Indirect cost	Direct cost	Full cost
C01	Emergency room	7,385,095	11,012,947	18,398,043
C02	OPD Medicine	16,581,170	4,966,890	21,548,060
C03	OPD Surgery	6,402,140	1,570,793	7,972,933
C04	OPD Orthopedics	4,580,490	2,630,332	7,210,822
C05	OPD Obs-Gyn	5,034,278	2,137,186	7,171,464
C06	OPD Pediatrics	3,960,877	5,801,737	9,762,614
C07	OPD ENT	1,610,662	1,130,840	2,741,502
C08	OPD Ophthalmology	2,154,936	1,896,538	4,051,474
C09	Dental	2,151,261	5,983,143	8,134,404
	Total	49,860,909	37,130,405	86,991,313

It can be seen from the table 4.5 that the highest total full cost of OPD PS was OPD medicine (C02) and the next highest was emergency room (C01). The lowest total full cost was OPD ENT(C07).

Table 4.6 : Total full cost of IPD patient services

Code	Cost center	Indirect cost	Direct cost	Full cost
C10	Medical ward	18,270,930	13,464,610	31,735,540
C11	Pediatrics ward	13,236,832	14,939,736	28,176,568
C12	Surgical ward	14,410,347	10,559,049	24,969,396
C13	Obs-Gyn ward	22,562,678	11,967,591	34,530,269
C14	Surgical ICU	2,434,236	7,269,373	9,703,609
C15	Medical ICU	2,331,650	8,636,166	10,967,816
C16	EENT ward	7,194,216	6,618,836	13,813,052
C17	Monk ward	6,938,066	4,825,047	11,763,113
C18	Ortho ward	13,310,082	9,585,586	22,895,667
C19	Medical private ward	2,438,835	3,111,020	5,549,855
C20	Pedia private ward	2,514,965	3,743,603	6,258,568
C21	Surgical private ward	2,501,195	3,294,288	5,795,483
C22	Obs-Gyn private ward	3,304,361	3,829,659	7,134,020
	Total	111,448,393	101,844,564	213,292,957

It can be seen from the table 4.6 that the highest total full cost of IPD PS was Obs -Gyn ward (C13).

4.2.2 OPD unit cost

To determine OPD unit cost that uses the number of OPD visits.

$$\text{Unit cost (OPD)} = \text{Full cost} / \text{Number of visit}$$

The highest OPD unit cost was emergency room center (C 01) that was 518 baht per visit. The lowest OPD unit cost was OPD obs-gyn center (C05) that was 176 baht per visit. Total average OPD unit cost was 251 baht per visit. It is shown in the table 4.7 below.

Table 4.7 : OPD unit cost per visit

Code	Cost center	Full Cost	Number of outpatient	
			visits	Unit cost per visit
C01	Emergency room	18,398,043	35,508	518
C02	OPD Medicine	21,548,060	111,415	193
C03	OPD Surgery	7,972,933	44,659	179
C04	OPD Orthopedics	7,210,822	30,118	239
C05	OPD Obs-Gyn	7,171,464	40,786	176
C06	OPD Pediatrics	9,762,614	33,691	290
C07	OPD ENT	2,741,502	13,081	210
C08	OPD Ophthalmology	4,051,474	18,631	217
C09	Dental	8,134,404	18,249	446
	OPD total	86,991,313	346,138	
	OPD average unit cost			251

Cost components

To determine the cost components by using material, labor and capital step down allocation method to find the total full cost of material, labor and capital in each cost center of OPD and IPD patient services (appendix). The percentage of each cost component for each cost center of OPD and IPD patient services can find as follows:

$$\%MC_j = 100 * (MC_j / FC_j)$$

where; $\%MC_j$ = the percentage of material cost component in PS center j

MC_j = the total material cost in PS center j

FC_j = the total full cost in PS center j

$$\%LC_j = 100 * (LC_j / FC_j)$$

where; $\%LC_j$ = the percentage of labor cost component in PS center j

LC_j = the total labor cost in PS center j

FC_j = the total full cost in PS center j

$$\%CC_j = 100*(CC_j / FC_j)$$

where; $\%CC_j$ = percentage of capital cost component in PS center j

CC_j = the total capital cost in PS center j

FC_j = the total full cost in PS center j

Cost components of OPD unit cost

Proportion of OPD unit cost components are different each cost center. Emergency room (C01) was the highest OPD unit cost per visit. It consists of material, labor and capital cost that was 15: 65: 20. The proportion of labor cost was the highest proportion of cost components for emergency room. OPD pediatrics (C06) was the highest capital cost component that was 47% from total cost components. Because OPD pediatrics center had the third highest equipment depreciation cost. OPD unit cost of each cost component is shown in the table 4.8 below.

Table 4.8 : OPD cost components

Code	Cost center	Unit cost per visit	Material cost (%)	Labor cost (%)	Capital cost (%)
C01	Emergency room	518	15	65	20
C02	OPD medicine	193	29	43	28
C03	OPD surgery	179	29	48	23
C04	OPD orthopedics	239	24	57	19
C05	OPD obs-gyn	176	31	45	25
C06	OPD pediatrics	290	17	36	47
C07	OPD ENT	210	26	55	19
C08	OPD ophthamo	217	23	45	33
C09	Dental	446	17	59	24
	Average OPD	251	24	50	27

4.2.3 IPD unit cost

To determine IPD unit cost that is used the number of admission days and cases.

IPD unit cost/ admission day = Full cost / No. of admission day

IPD unit cost / case = Full cost / No. of case

Medical ICU cost center (C15) was the highest IPD unit cost that is 4,111 baht per admission day and surgical ICU cost center (C14) is the next highest that was 3,911 baht per admission day. It is shown in the table 4.9 below.

Table 4.9 : IPD unit cost per admission day and case

Code	Cost center	Full Cost	Number of inpatient		Number of cases	Unit cost per case
			days	Unit cost per day		
C10	Medical Ward	31,735,540	22,744	1,395	4,660	6,810
C11	Pediatrics Ward	28,176,568	14,531	1,939	3,198	8,811
C12	Surgical Ward	24,969,396	19,775	1,263	3,379	7,390
C13	Obs-Gyn Ward	34,530,269	14,309	2,413	7,784	4,436
C14	Surgical ICU	9,703,609	2,481	3,911	281	34,532
C15	Medical ICU	10,967,816	2,668	4,111	207	52,985
C16	EENT Ward	13,813,052	8,762	1,576	1,897	7,282
C17	Monk Ward	11,763,113	9,654	1,218	1,808	6,506
C18	Ortho Ward	22,895,667	19,243	1,190	3,079	7,436
C19	Medical Private	5,549,855	3,867	1,428	377	14,721
C20	Pedia Private	6,258,568	3,921	1,596	466	13,430
C21	Surgical Private	5,795,483	3,952	1,466	410	14,135
C22	Obs-Gyn Private	7,134,020	3,689	1,934	913	7,814
	Total	213,292,957	129,616		26,293	
	Average ipd unit cost			1,646		8,112

Cost components of IPD unit cost

Proportion of IPD unit cost components were different each cost center. Medical ICU was the highest IPD unit cost that was 4,111 baht per admission day. The cost component of labor cost was the highest that was 66%. The cost components consist of material, labor and capital cost. It is shown in the table 4.10 below.

Table 4.10 : IPD cost components

Code	Cost center	Unit Cost/day	Material cost (%)	Labor cost (%)	Capital cost (%)
C10	Medical ward	1,395	20	51	29
C11	Pediatrics ward	1,939	17	51	32
C12	Surgical ward	1,263	24	52	25
C13	Obs-gyn ward	2,413	23	49	28
C14	Surgical ICU	3,911	14	56	30
C15	Medical ICU	4,111	11	66	23
C16	ENT ward	1,576	17	51	32
C17	Monk ward	1,218	23	49	28
C18	Orthopedics ward	1,190	25	50	26
C19	Medical private ward	1,428	18	49	33
C20	Pedia private ward	1,596	16	54	30
C21	Surgical private ward	1,466	18	53	29
C22	Obs-gyn private ward	1,934	16	58	25
	Average IPD unit cost	1,646	20	52	28

4.3 IPD with DRGs cost of 5 Common Diseases

Reimbursement policy for Health Card and Low income group used DRGs. DRGs was implemented for budgeting of the Health Card and Low income group Health scheme. The Health Insurance Office used DRGs payment for reimbursement rate at 4,000 baht per relative weight for public hospitals under the Ministry of Public Health. Since October 2001 the newly elected Thai government has implemented the Universal Coverage Health Insurance scheme throughout the country. Therefore the Health Card and Low income group Health scheme was replaced by this Universal Coverage Health

Insurance scheme. At present, the reimbursement rate for referral patient is 10,000 baht per relative weight for general hospitals except the high cost care. The high cost care such as cancer with radiotherapy or chemotherapy, emergency and trauma claims at Health Insurance Office for reimbursement. For a referral in the same province, the hospital has to pay for the referral but referral across provinces the Health Insurance Office pay for referral. The payment system is in the transitional period and now is under consideration to change. However, the high cost care, emergency and trauma were exclude in this DRGs cost study.

In this study on DRGs, the hospital provided a spreadsheet DRGs data file for IPD patients in fiscal year 2000. This file included DRGs code, primary diagnosis (pdx), length of stay (los), relative weight (rw), standard weight of length of stay (wtlos), outlier trim point (OT) and adjusted relative weight (adjRW) for each IPD patient . Some DRGs of 5 common disease data are shown in appendix.

An adjRW is associated with wtlos, los, OT and discharge type. If the patient's length of stay is shorter than wtlos, then it is called a low outlier. If the patient's length of stay is longer than OT it is called a high outlier. If the patient's length of stay falls within the range between low outlier and OT, then relative weight will be equal to the relative weight. However, if the patient's length of stay is outside this range, then an adjusted relative weight is calculated as it is show in the formula below.

Adjusted relative weight for discharge type, discht =1(with approval):

$$\text{if } \text{los} < \text{wtlos}/3, \quad \text{adjRW} = K_{\text{low}}(\text{los}) * \text{RW}$$

$$\begin{aligned} \text{if } wtlos/3 < los < OT, \quad \text{adjRW} &= RW \\ \text{if } los > OT, \quad \text{adjRW} &= RW * \{1 + (RW/(2*wtlos)) * (los - OT)\} \\ \text{where; adjRW} &= \text{adjusted relative weight} \\ K_{low}(los) &= \text{low outlier of los (appendix)} \\ OT &= \text{outlier trim point} \end{aligned}$$

Adjusted relative weight for discharge type, discht >1(against advice, escape ,death) :

$$\begin{aligned} \text{if } los < wtlos/3, \quad \text{adjRW} &= K_{low}(los) * RW \\ \text{if } wtlos/3 < los < wtlos, \quad \text{adjRW} &= (RW / wtlos) * los \\ \text{if } wtlos < los < OT, \quad \text{adjRW} &= RW \\ \text{if } los > OT, \quad \text{adjRW} &= RW * \{1 + (RW/(2*wtlos)) * (los - OT)\} \end{aligned}$$

The source of DRGs code, pdx, DRG relative weight, outlier trim point and wtlos come from Thai DRGs version 2, MOPH in year 2000.

For 5 common diseases were found frequently in the hospital data record. Average adjRW is 0.8981 as it is shown in the table 4.11 below. The DRGs cost per rw can be determined from average IPD unit cost per case (with capital cost) and average adjRW as following :

$$\begin{aligned} \text{DRG cost per rw} &= (\text{IPD unit cost per case}) / (\text{average adjRW}) \\ &= 8,112 / 0.8981 \\ &= 9,033 \text{ baht} \end{aligned}$$

Therefore DRGs cost per RW with capital cost is 9,033 baht

Table 4.11 : Summary of DRGs information

DRGs data item	Total	Average
Number DRGs Patients	16,383	
Patient LOS	118,634	7
Adjusted RW	14,713	0.8981

Note : It was not all IPD cases to record for DRGs patients.

For a given disease with a given RW the estimate DRG cost for DRGs code 70 (with capital cost):

$$\begin{aligned}
 \text{Estimate DRGs cost} &= (\text{adjRW}) * (\text{DRG cost per RW}) \\
 &= 0.2976 * 9,033 \\
 \text{Estimate DRGs cost} &= 2,688 \text{ baht}
 \end{aligned}$$

The DRGs cost per rw can be determined from average IPD unit cost per case (exclude capital cost) and average adjRW as following:

$$\begin{aligned}
 \text{DRGs cost per rw} &= (\text{IPD unit cost per case}) / (\text{average adjRW}) \\
 &= 5,816 / 0.8981 \\
 &= 6,476 \text{ baht}
 \end{aligned}$$

Therefore DRGs cost per rw with exclude capital cost is 6,476 baht.

For a given disease with a given RW the estimate DRG cost for DRGs code 70 (exclude capital cost) :

$$\begin{aligned}
 \text{Estimate DRGs cost} &= (\text{adjRW}) * (\text{DRG cost per RW}) \\
 &= 0.2976 * 6,476 \\
 \text{Estimate DRGs cost} &= 1,927 \text{ baht}
 \end{aligned}$$

The reimbursement rate is 4,000 baht per RW for DRGs code 70 is following:

$$\begin{aligned} \text{Estimate reimbursement rate per RW} &= 0.2976 * 4,000 \\ &= 1,190 \text{ baht} \end{aligned}$$

Therefore estimate DRGs cost (with and exclude capital cost) are greater than reimbursement rate at 4,000 baht per RW. It can be seen from table 4.12 below.

Table 4.12 : DRGs cost (with capital cost) of 5 common diseases

Diagnosis (PDX)	DRGs Code	Average adjRW	Estimate DRGs cost	Reimbursement per RW at 4,000 baht	Reimbursement per RW at 10,000 baht
Upper respiratory infection (J069)	70	0.2976	2,688	1,190	2,976
Hypertension (I10)	134	0.7505	6,779	3,002	7,505
Peptic ulcer (K279)	178	0.4115	3,717	1,646	4,115
Urinary tract infection (N390)	322	0.3518	3,178	1,407	3,518
Appendicitis (K359)	167	1.2124	10,952	4,850	12,124

Table 4.13 : DRGs cost (exclude capital cost) of 5 common diseases

Diagnosis (PDX)	DRGs Code	Average adjRW	Estimate DRGs cost	Reimbursement per RW at 4,000 baht	Reimbursement per RW at 10,000 baht
Upper respiratory infection (J069)	70	0.2976	1,927	1,190	2,976
Hypertension (I10)	134	0.7505	4,860	3,002	7,505
Peptic ulcer (K279)	178	0.4115	2,665	1,646	4,115
Urinary tract infection (N390)	322	0.3518	2,278	1,407	3,518
Appendicitis (K359)	167	1.2124	7,851	4,850	12,124

From the table 4.12 and 4.13, the reimbursement rate at 4,000 baht per RW was less than estimate DRGs cost (with and exclude capital cost) while reimbursement rate at 10,000 baht per RW is greater than estimate DRGs cost (with and exclude capital cost) for all diagnosis (pdx).

4.4 Sensitivity Analysis

Sensitivity analysis is performed in a scenario setting under the assumption that only one input parameter is changed while the others remain fixed.

Changing cost components is selected for this sensitivity analysis are a change of discount rate 7% to 10%. Civil servant salaries both increase and decrease to 10%. Table 4.13 shows the cost structure and average unit cost for each of those changes compared to the baseline cost.

Table 4.14 : Cost structure and average unit cost with changing scenarios

Scenario	Capital cost	Material cost	Labor cost	OPD/visit	IPD/admission day
Baseline	83,493,228	62,798,947	153,992,096	251	1,646
Scenario 1	98,558,712	62,798,947	153,992,096	262	1,732
Scenario 2	83,493,228	62,798,947	163,040,672	259	1,696
Scenario 3	83,493,228	62,798,947	144,943,520	244	1596

Scenario 1: Discount rate change from 7% to 10%

It can be seen from the table, if the percentage discount rate is 10%, the capital depreciation cost will go up 18%.

Average OPD cost per visit , average IPD cost per day will increase 4.4% and 5.3% respectively. As it is shown in the table, the capital cost and unit cost are sensitive to changing the discount rate .

Scenario 2 : Civil servant salaries increases 10%

It can be seen from the table, if the percentage civil servant salaries increase 10%, the total labor cost will go up 5.9%.

Average OPD cost per visit and average IPD cost per day will increase 3% and 3% respectively.

Scenario 3 : Civil servant salaries decrease 10%

It can be seen from the table, if the percentage civil servant salaries decrease 10%, the total labor cost will go down 5.9%.

Average OPD cost per visit and average IPD cost per day will decrease 3%, and 3% respectively.