## CHAPTER 2

## **BACKGROUND INFORMATION** OF NAKORNTHON HOSPITAL



## 2.1 General Information

Nakornthon Hospital is a 500 -bed private hospital (now register to open at 150 beds) in area of Tambon Samaedum, Bangkhuntien Bangkok. Nakornthon Hospital built up in 1995. Most area is about 6 rais1 ngarn and 37tarangva and the grand opening ceremony was on November 10, 1996.

With special full time doctors and full option of medical instruments support the doctors and patients. Regarding the main shareholder has idea to build up a standard hospital to service the people in Thonburi area and surrounding area such as Samut -Prakarn, Samut-Sakorn, Samut-Songkarm and etc.

Table 2.1 Catchment area boundary 5 km. from Nakornthon Hospital

ZONE	CITIZEN(per.)	AREA(Sq.km)	THE MAJORITY	THE MAJORITY
			OF PEOPLE	OF HOUSES
			(per./Sq.km.)	:
Bangkhunthien	105,616	120.687	875	38,462
Chomthong	174,611	26.265	6.648	25.874
Pasichareon	142,174	17.834	7.972	41,106
Nhongkham	109,320	35.825	3,052	39,623
Rajburana	94,620	15.782	5,995	29.165
Bangkhae	172,026	44.456	3,807	61,793
Bangbon	72,736	34.745	2.093	33.228
Total	871,093	295.599	2,946.88	330,377

Remark;

Per.

Mean Person

Sq.km. Mean Squarekilometre

Report of marketing research at Nakornthon Hospital in 2000

Source:

Table 2.2 Catchment area boundary 10 km. from Nakornthon Hospital

ZONE	CITIZEN(per.)	AREA(Sq.km)	THE MAJORITY	THE MAJORITY
			OF PEOPLE	OF HOUSES
			(per./Sq.km.)	
Thung khru	87,690	30.741	2,850	34,072
Ta Ihing chan	99,695	29.479	3,382	28,948
Bang Kho Lham	120,388	10.921	11,024	33,182
Thonburi	188,610	8.551	22.057	41.152
Bangkokyai	89,763	6.186	14,511	26,410
Bangkoknoi	162,502	11.944	13,605	42.475
Klongsan	113,817	6.051	18,810	27,880
Total	862,384	73.132	11,792	234,119
Boundary 5 km.	871,093	295.599	3,015	296,305
From Nakornthon				
Hospital				
Total	1,733,477	368.731	4,701.20	530,424

Source:

Report of marketing research at Nakornthon Hospital in 2000

Table 2.3 Catchment area boundary >10 km. from Nakornthon Hospital

ZONE	CITIZEN(per.)	AREA(Sq.km)	THE MAJORITY	THE MAJORITY
			OF PEOPLE	OF HOUSES
			(per./Sq.km.)	
Samut Prakarn	977,388	1,004.10	973.39	359,078
Samut Sakorn	421,738	872.39	483.43	157,696
Samut Songkarm	205,696	416.69	493.64	46,357
Total	1,604,822	2,293.18	699.82	563,131
Boundary 5 km.	1,733,477	368.731	4.701.20	530.424
From Nakornthon				
Hospital				
Total	3,338,299	2,661.911	1,254.098	1.093,555

Source:

Report of marketing research at Nakornthon Hospital in 2000

Table 2.4 Summarize catchment area

	Boundary 5 km. From	Boundary 10 km. From	Boundary more than
	Nakornthon Hospital	Nakornthon Hospital	10 km. From
			Nakornthon Hospital
CITIZEN (per.)	871,093	1,733,477	3,338,299
AREA (Sq.km.)	295.599	368.731	2,669.91
THE MAJORITY OF	2,946.88	4,701.20	1,254.09
PEOPLE (per./Sq.km.)			
THE MAJORITY OF	330,377	530,424	1,093,555
HOUSES			
PRINARY RIVALS	Bang Mod Hospital	Rajburana Hospital	Kasemraj Hospital
	Rama II Hospital	Ramasuksawad	Somdet Phrachao
	Bangpakok 2 Hospital	Hospital	Taksın Hospital
		Bangpakok 1 Hospital	Bangpakok 3 Hospial
			Krungthon Hospital
SECONDARY RIVALS	CLINIC	CLINIC	CLINIC

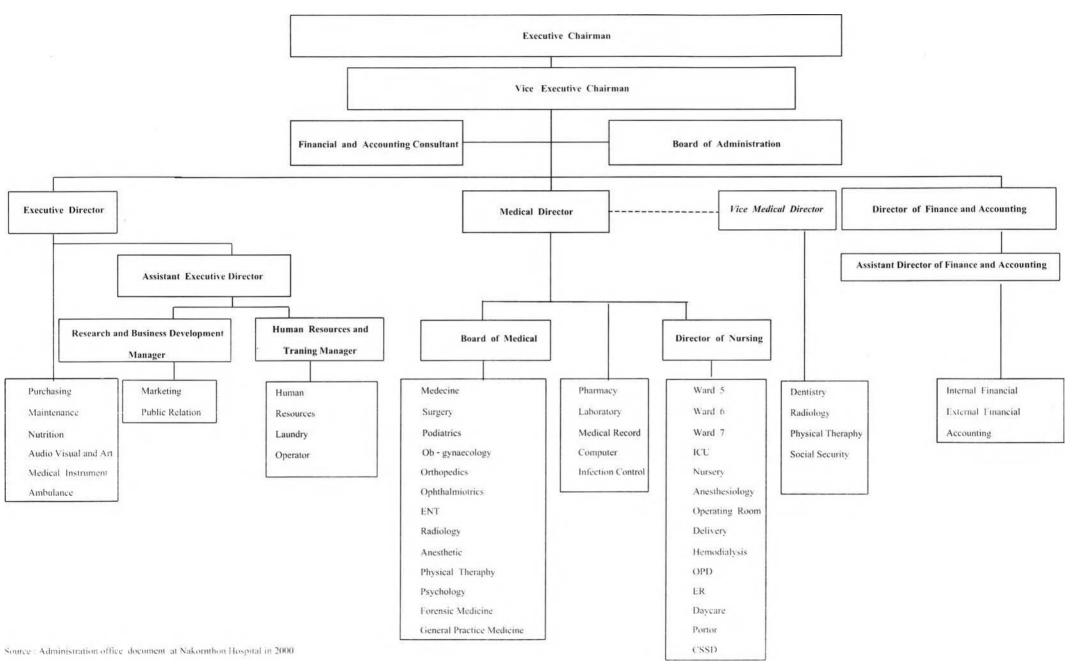
Source:

Report of marketing research at Nakornthon Hospital in 2000

Nakornthon Hospital started to service to SSS patient since 1999 up to now.

The structure of the management team and staff which about 360 persons show on organization chart as follow;

FIGURE: 2.1 NAKORNTHON HOSPITAL ORGANIZATION STRUCTURE



Nakornthon Hospital service to Non-SSS patients since year 1995 and start to service social security insured since year 1999. With the reason that the increasing in proportion of industrial workers and urban residents in apparent. The economic crisis changed health behavior and demand for overall health service. For surrounding hospital areas are the factories which have a lot of labor force. The number of patients is increasing every year.

Table 2.5 Proportion of Non-SSS outpatient to Social Security Scheme outpatient at Nakornthon Hospital in 2000

Month	Non- SSS Out-Patient	SSS Out- Patient	Total	% Of Non-SSS	% Of SSS
Jan	6.582	5.862	12,444	52.89	47.11
Feb	6,717	6,331	13,048	51.48	48.52
Mar	6,728	7,044	13,772	48.85	51.15
Apı	5,986	6,333	12,319	48.59	51.41
May	6,964	7,804	14.768	47.16	52.84
Jun	7,125	7,724	14,849	47.98	52.02
Jul	7,888	7,990	15,878	49.68	50.32
Aug	7,103	7,632	14,735	48.20	51.80
Sep	7,406	8,239	15,645	47.34	52.66
Oct	7,327	8,419	15,746	46.53	53.47
Nov	7.360	8,296	15,656	47.01	52.99
Dec	7,539	8,360	15,899	47.42	52.58

Source: Report of SSS department at Nakornthon Hospital in 2000

From table 2.5 the proportion of two kind of patients almost equal (50:50). Due to Nakomthon Hospital has just give service to SSS in 1999, there were not much people come to visit at first. The regularly increasing of total insured people could make the higher proportion of visiting. This show number of the total SSS patients that may be become highly proportion in the future.

Table 2.6 Proportion of Non-SSS inpatient to SSS inpatient at Nakornthon Hospital in 2000

Month	Non-SSS In-Patient	SSS In-Patient	Total	% Of General	% Of SSS
Jan	455	93	548	83.03	16.97
Feb	503	117	620	81.13	18.87
Mar	425	113	538	79.00	21.00
Apr	388	137	525	73.90	26.10
May	507	169	676	75.00	25.00
Jun	521	169	690	75.51	24.49
Jul	516	152	668	77.25	22.75
Aug	378	105	483	78.26	21.74
Sep	437	140	577	75.74	24.26
Oct	502	155	657	76.41	23.59
Nov	520	126	646	80.50	19.50
Dec	495	151	646	76.63	23.37

Source: Report of SSS department at Nakornthon Hospital in 2000

From table 2.6 the proportion of SSS Inpatient trend to be higher. The reason may be come from the increasing of SSS insured people at Nakornthon Hospital and type of illness need to stay in the hospital. Anyway the number of non-SSS patients still increases. For hospital management must be concentrate on the utilization review of expenditure both kind of patients due to they are different in term of payment. (fee for service for Non-SSS and capitation for SSS)

Table 2.7 Utilization rate of SSS Out-patient and In-Patient at Nakornthon Hospital

Year	Number of	OPD visiting	IPD case	Utilizatio	on rate
	insured people			OPD	IPD
2000	42,971	90,034	1,627	2.10	0.04

In 2000 Number of medical service utilization for OPD and IPD at Nakornthon hospital were 2.10 and 0.04 times.

Table 2.8 Top 10 Illness Social Security Scheme Inpatient at Nakornthon Hospital in 2000

NO.	CODE ICD-10	TOTAL (Case)	PERCENTAGE
1	A09	92	5.7
2	K359	66	4.1
3	N10	32	2.0
4	J039	18	1.1
5	J069	18	1.1
6	J459	15	0.9
7	O03	15	0.9
8	K279	14	0.9
9	R42	13	0.8
10	O210	12	0.7
11	Other illness	1,332	81.9
	TOTAL	1,627	100

Note; See appendix B for international code disease (ICD-10)

Diarrhea (A09), acute appendicitis (K359), acute tubulo – interstitial nephritis (N10), acute tonsillitis (J039), and pneumonitis due to solids and loquids (J069) were cause of illness for top 5 illness of SSS inpatients at Nakornthon Hospital by sequencely. The communicable diseases is major threatening such as diarrhea. Some of people health problems in hospital's area was accordance with socioeconomic of Thailand in the past few year. (see change in health status of the people in Thailand (1997) in chapter1)

For more convenience to provide adequate service centers and medical care providers covering some hospital's areas, Contracting out private clinics to a network of Nakornthon Hospital in 2000 have 4 sub-contractors clinics which are

- 1. Pra-Ram-II-Karn-Pat
- 2. Bang-Pra-Kaew Poly clinic
- 3. Pra-Muk-Karn-Pat
- 4. Rom-Trai-Poly clinic

See table 2.9 Utilization of Clinic Subcontractor for SSS in 2000

Table 2.9 Utilization of Clinic Subcontractor for SSS in 2000

	Phraram II Clínic	Bangprakaew Clinic	Romsai Clinic	Phamuk Clinic		Phraram II Clinic	Bangprakaew Clinic	Romsai Clinic	Phamuk Clinic
Month	Case	Case	Case	Case	Total	Percentage	Percentage	Percentage	Percentage
JAN	30	3	22	-	55	54.55	5.45	40.00	0.00
FEB	84	14	27	-	125	67.20	11.20	21.60	0.00
MAR	89	16	41	-	146	60.96	10.96	28.08	0.00
APR	90	10	34	-	134	67.16	7.46	25.37	0.00
MAY	118	12	43	-	173	68.21	6.94	24.86	0.00
JUN	122	15	60	-	197	61.93	7.61	30.46	0.00
JUL	120	21	53		194	61.86	10.82	27.32	0.00
AUG	161	11	49	1	222	72.52	4.95	22.07	0.45
SEP	154	23	53	-	230	66.96	10.00	23.04	0.00
ОСТ	151	18	51	-	220	68.64	8.18	23.18	0.00
NOV	174	21	64	-	259	67.18	8.11	24.71	0.00
DEC	162	20	56	-	238	68.07	8.40	23.53	0.00
Total Case	1,455	184	553	1	2,193	65.41	8.34	26.18	0.07

Source: Report of Social Security Department at Nakornthon Hospital in 2000

From table 2.9 show that there were few volume of service for sub-contractor of Nakornthon Hospital. The total outpatient at clinic was 2,193 visits. The proportion of outpatient for clinics and hospital was 2.4 percentage. (2,193 visits: 90,034 visits) From the number of case of each sub-contractor can assumed that location of sub-contract was the most significant for usage.

By networking with private clinics, reducing outpatient waiting time in hospital, and the insured people can receive medical care near their workplace or near their homes; thus increasing the accessibility to medical service and reducing the workload of the hospital staff

For Nakornthon Hospital's policies about social security insured people in the future year will depend upon the country's economics growth and the hospital's economics situation also how efficient management.

Moreover, Nakornthon Hospital has concerned in quality improvement such as ISO9002 certified and continuous total quality improvement by doing Hospital Accreditation (HA) to be more acceptable to non-sss patients and social security insured for health care service and make resource allocation more efficient.