

CHAPTER 3

STRUCTURAL ANALYSIS OF THE HOSPITAL INDUSTRY

Before formulating the firm's strategy, it is essential to relate its operations with that of its environment. Considering the fact that competition drives all firms to produce what the market demands, it may be interesting to note the various forces characterizing the state and intensity of competition in the case of the hospital industry. All these factors are rooted in the industry's underlying economic structure and goes well beyond the behavior of current competitors. The collective strengths of these forces--entrants, substitutes, suppliers, buyers, and the competitors--determine the ultimate profit potential in the industry where profit is measured in terms of long-run return on invested capital. It is a fact that not all industries have the same profit potential including the hospital industry itself.

3.1 NEW ENTRANTS

A) Barriers to Entry

New entrants to the hospital industry bring new capability, the desire to gain market share and often substantial resources. The threat to entry into the hospital industry depends on the barriers to entry that are present, coupled with the reaction from

competitors that the entrant can expect. Below outlines the major sources of barriers to the hospital industry.

A.1 Capital Requirements - the need to invest large financial resources to compete, creates a barrier to entry as in building a hospital that requires a huge amount. For a 50-95 bed capacity hospital, capital investments may hover from 20 to 37 million pesos according to Reynaldo Lantingan, a local civil works contractor. A striking implication to it is the entrant will charge rate above those existing competitors to cover its initial investment. For a public hospital, its operation may progress depending on the justified revenue set by policymakers and decision-makers.

A.2 Product or Service Differentiation - existing ties established with customers may result in promotion of good image and loyalties to previous efficient services. Being a pioneer in the hospital industry commands a plus factor but for an entrant, one has to spend heavily to keep existing customers from competitors. In fact, building an image is a risky move since it has no salvage value if entry fails. Hospital service develops a reputation for the type and quality of service it produces. The more abstract and complex the service is, the greater the need and potential for developing a reputation that will serve as a barrier to entry. Among many public hospitals, differentiation is seen in serving the marginalized (CDE) markets--economic groupings whose household monthly income is between 4200 and 47000 pesos.

A.3 Switching Cost - when a hospital switches from one supplier to another, the costs of retraining staff and ancillary equipment, and time and cost of testing or qualifying a new source offers another major entry barrier. Consequently, better performance or better price in the service of an entrant must be established in order for the customer to switch from an existing provider. For instance, in intravenous solutions (IV) and kits for hospital use, procedures for attaching solutions to patients differ among competitive products and the hardware for hanging the IV bottle are not compatible. Here switching encounters great resistance from nurses' responsibility for administering the treatment and requires new investment in hardware. The experience too, in public hospital to switch to new products is indeed costly.

A.4 Economies of Scale - the opportunity for scale of economies is based on hospital bed capacity. The more beds available in a given large ward as in the case of some tertiary public hospital achieve a lower operational cost since the nursing station (all staff members) can be fully utilized.

A.5 Access to Physicians - this barrier takes the form of an existing hospital not allowing its physician to serve in other hospitals. The difficulties in acquiring good physicians and skilled nurses apply in this case. There is a dearth of important medical specialists in the area such as psychiatrist, radiologist, nephrologist, pulmonologist, etc.

A.6 Cost Disadvantage Independent of Scale - established hospitals have cost disadvantage not replaceable by potential entrants no matter what their size and attained economies of scale. The most critical advantages are the factors such as the following: Established hospitals may have cornered favorable locations before market forces raise prices to capture their full value, a private entrant may find this situation difficult.

A.7 Government Policy - a stiff penalty such as closure order, temporary restraining order, suspension, non-renewal of license, deaccreditation/declassification are charged to hospitals that do not comply with government imposed policies such as pollution and environmental control, and good labor clauses. For a public hospital to build, it passes through bureaucratic processes. A potential entrant's expectation about the reaction of existing competitors will also influence the threat to entry. If existing hospital will respond negatively to make the entrant's stay in the industry an unpleasant one, then entry may well be difficult.

B) Exit Barriers

Closure or sale of an existing hospital is a common exit. The exit barriers are high as hospital or equipment is easy to convert to other uses. A hospital can be converted into offices, apartments, hostels, condominiums, etc. Or in the case of equipment can be auctioned off to other hospitals.

Downsizing is another useful alternative. A hospital may close its non-servicing TB pavilion in favor of a heavily used medical or pediatric ward.

A few innovative medical centers in the United States have turned their service areas into private managed organization offering free-standing emergency, baby center, surgicenter, nursing homes, etc.

3.2 SUBSTITUTES

The Philippines hospital industry is quietly competing in a broad sense with industries producing substitute services (table 2.7).

Table 2.7 Common Substitutes for Hospital Services

Alternative Services	Service Providers	Service Details
Faith Healing (not legally accepted, often branded as hoax)	Spiritist practitioner	Does psychic surgery
Hilot (legally accepted)	Barangay health worker	Does basic obstetric-gynecologic procedures
Medical and Nursing Clinics (legal)	Physicians Nurses Paramedical staff	Does approved scientific consultation, assessment, simple surgery and dispensation of drugs
Traditional and Alternative Medicines (not yet legal)	Available to Every Lay Person	Make used of herb and “anatomic forces”

Source: Peria, A. MRR Thesis, 1993

In the short-run, the pressure of substitutes are not a threat to the hospital industry but only complimentary to medical care for the indigent people living in the rural areas where there are very few hospitals and health professionals.

3.3 INTENSITY OF RIVALRY AMONG HOSPITALS

“Gentlemanliness” is the term that characterizes the hospital industry. In many highly-urbanized areas, rivalry among existing competitors takes the familiar form of jockeying for position using advertising battles, superior product introduction, increased customer satisfaction and warranties. Niching in services offered capitalizes on the strength of the hospital’ resident specialists and consultants--a common practice among large private hospitals in Metro Manila.

In the SOCSARGEN area, the rivalry is evidently one of “gentlemanliness”, but this may become intensive given a number of prevailing structural factors: a) slow hospital industry growth may turn competition into a market share game for private hospitals seeking expansion, and b) rivalry in the hospital industry becomes volatile, if for example, a diversified hospital engaged in health maintenance, distribution, etc. may place great importance on achieving success in the industry in order to further its overall corporate strategy causing even more destabilization because of expansionary or predatory motive. Certainly, such a situation may not be a threat to any public hospital.

Again in the SOCSARGEN area, the rivalry is complimentary with the private hospitals serving the upper and middle class clientele while the public ones concentrate on the low-end classes.

3.4 BARGAINING POWER OF SUPPLIERS

Suppliers can exert bargaining power over participants in the hospital industry by threatening to raise prices or reduce the quality of purchase services. Powerful suppliers can squeeze profitability out of an industry unable to recover cost increases in its own prices.

The following suppliers' group to the hospital industry and the conditions which mirror their bargaining power.

a) Physicians and Nurses

The physician's strong bargaining power is certain on his control on level of hospital usage, being influential in choosing the hospital for the patient. A hospital must establish close bond with the medical staffmembers for them to bring their patients to the said hospital. Contrary to the public hospital policy, private hospitals do not pay the physician a salary. Physicians earn incomes from the patients they treat in the hospital, in an institution free from market discipline. In fact, some individual

physicians may even influence decisions about the hospital size, spending level, and the scope of services.

On the other hand, the nurses' bargaining power is simply attributed to the system where the hospital dictates the salary. For a theoretically "perfect competition", an exodus and thus, a dearth of nurses can result to a strong bargaining power.

Table 2.8 Government Health Manpower in the SOCSARGEN Area

LGUs	Physicians	Nurses
South Cotabato	14	66
General Santos City	6	23
Sarangani	5	25

Source: DOH Region XI, 1994

Table 2.8 revealed that public hospitals in SOCSARGEN area have limited health professionals. In reality, with this kind of scenario, the researcher believed that the bargaining power of medical professionals including the nurses are so strong that they can neglect their professional function because of one obvious reason: a limited staff to handle a case.

b) Pharmaceutical Companies

Sometimes intervention and support of government may affect and weaken the bargaining power of pharmaceutical companies. Regulatory provisions may lower the cost of medicines making them affordable to

indigents. Lapses in many policies are detrimental to many companies. For instance, the proliferation of “non-research” drugs manufacturers may spawn bad image to its own industry or threaten the health security of the population. Implementing the generics drug policy has caused major effect in the country’s pharmaceutical industry principally on cost of producing a branded product vis-à-vis a generic one.

c) Medical Equipment

Manufacturers of medical equipment especially high-tech ones have strong bargaining power since they can dictate the price. The continuous research and development efforts of the manufacturers will render some required equipment obsolete hence threatening the hospital industry in the process. The laboratory section of the hospital is often the target of immediate obsolescence in equipment. In retrospect, the conditions determining suppliers’ power are not only subject to change but also often out of hospital’s control.

3.4.3 SUPPLY CHARACTERISTICS

The number of hospitals in the country (Table 2.9) has reached the 1,632 total mark in 1993. With 537 or 33 % government-owned and 1,095 or 67 % privately held. While we have seen an almost 100 % increase in the number of hospitals in 1990

compared to the 1975 level, there was a precautionary dip of 6 % in the 1993 figure. Subsequently, the capacity was affected. From previous high of 87,133 beds in the entire hospital system in the country in 1990, it went down to 71,865 beds at the end of 1993 or a drop of 18 %. The situation was brought about by devolution of health care facilities into the hands of LGUs. Problems on not fully absorbing the operating cost of the LGU hospitals led to downsizing. In the private sector, it was primarily spawned by a series of closures as a consequence of high debt to fund their operations brought about by revenue declined due to low occupancy rate. Government owns 33 % of the total hospitals and 54 % of the total beds. Fifty-eight percent (58 %) of private hospitals are small, primary hospital. Many of these small hospitals are not more than health care centers, and are not acute care institutions. These institutions are not capable of providing care for the more serious diseases requiring hospital care.

Table 2.9 Government and Private Hospitals, Number and Capacity
Philippines FY 1975 to CY 1993

Year	Number of Hospitals			Bed Capacity		
		Government	Private		Total	Private
1975	969	363	603	69,774	28,082	41,692
1990	1,733	598	1,135	87,133	49,273	37,860
1993	1,632	537	1,095	71,865	35,629	36,2335

Source: DOH BLR, 1994

In 1993, Region 11 had 195 hospitals and in General Santos City, there were 9 hospitals. The local hospital industry was undaunted with the downtrend at the national scene as it will be expecting two more private hospitals soon.

Hospital industry regionwide may experience remarkable decline when Surigao del Sur finally joins in the newly created CARAGA region.

The ideal 500 persons for every hospital bed, the bed-to-population ratio would worsen in the city as a result of the rapid urbanization. And the same is true in the entire region. Consequently, the problem in poor maintenance of facilities will rise.

Additionally, in terms of accessibility to government hospitals, 86.4 % of the population live 17.5 km. away from a DOH hospital. Considering the large geographical dispersion of the Philippine islands, this appears to be reasonable accessibility for such a large dispersed population. In General Santos City, there are three hardly accessible barangays at least 17.75 km far: San Jose, Sinawal, and Upper Labay.

Table 2.10 Bed-to-Population Ratio

Year	Philippines	General Santos City
	Bed-to-Population Ratio	Bed-to-Population Ratio
1990	697	645
1991	780	679
1992	874	641
1993	932	675

Source: National Census and Statistics Office, 1993

Another important factor was the bed-to-population ratio (Table 2.10) which revealed the strong need to build additional hospital beds particularly among local government owned-hospitals. Incurring large capital expenditures such as building a hospital would be an impractical move among local chief executives.

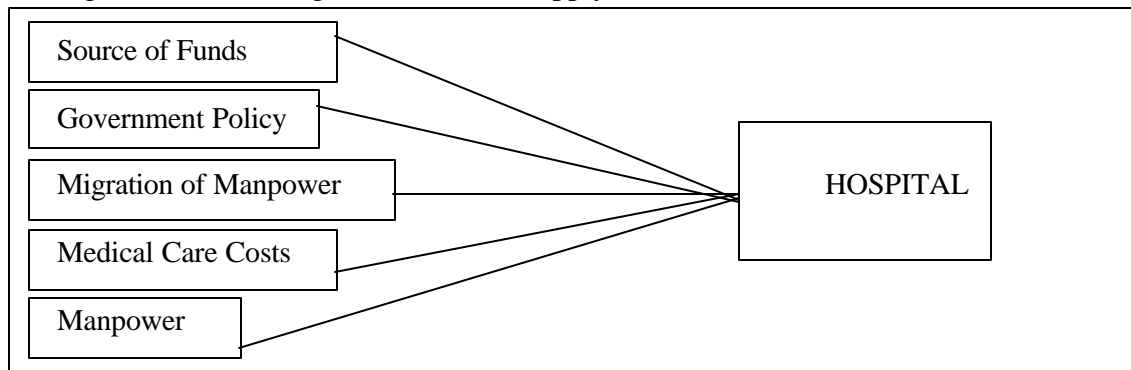
3.4.2 FACTORS AFFECTING SUPPLY

This section examines the extrinsic factors that affect the supply condition. Figure 1 shows the relevant factors.

The DOH held control and regulation on the supply of hospitals. Establishment of public hospitals is either initiated by local legislative council or in the case of a DOH facility, by act of Congress. Surprisingly, GSDH was neither created by Congress nor by the city legislature.

Another thing is government hospitals are dependent on public funds which in turn, are sources from regular departmental budget allocation, grants and aids from UN agencies and other international funding agencies. Congressional funding are another funding source as well as government-run revenue generating institutions: Philippine Amusement and Gaming Corporation (PAGCOR) and Philippine Charity Sweepstakes Office (PCSO).

Figure 1. Intervening Factors in the Supply



In the private set-up, hospital owners have distinct financing strategies. One goes for internal fund sourcing (block stock offerings, employee stock option, etc.) or credit extensions from the banks. For foundations, grants and donations are common sources of financial support. Their dependence on external sources for funds leave hospitals highly-vulnerable to currency fluctuations in the economy.

Based on the ideal ratio of 500 persons per physician, the country's sad health care status is worse with one physician to 8,273 persons based on the 1990 census. The uneven distribution of manpower resources could even be more worrisome due to insufficient number of medical personnel. Many health professionals are concentrated in the urban areas because of the availability of sophisticated facilities, better compensation, fear of career retardation in rural areas, and improved chances of securing higher paying jobs abroad. Devolution of health services has further demoralized many health workers based on the findings in a 1993 DOH strategy paper.

The medical sector has been plagued with manpower outflow all these years. The attraction of high salaries abroad lured the country's competent health professionals to go overseas.

The uneven distribution and insufficiency of medical manpower and health facilities have led to escalating cost of medical care as well as inefficient health care delivery system. In fact, the introduction of the Generics Act no longer serve its best purpose in the long run as medical care has become ineffective. Following the general decline in inflation rate in 1993 and 1994, the increase in the cost of medicine has been

quite low. But the fact remains that the medicines continue to be expensive and are often inaccessible for common illness. The medicine cost are even higher in the hospitals.

3.5 BARGAINING POWER OF BUYERS

The buyers in the hospital industry are the patients. They have limited choice of hospitals due to inadequate supply of health facilities.

Their bargaining power is dependent on their paying capacity and health condition at the time of need. They can have a strong bargaining power if obtaining medical care is a significant reduction on his income. They tend to be price sensitive and defer the treatment to meet of basic needs which are food and shelter or seek substitutes to satisfy their health care need. However, a patient who is less price sensitive considers cost a minor concern for health services.

The physician's influence weakens the bargaining power of the patient. The competency of the physician is an important factor for the patient to choose a hospital and normally, patients choose where the physicians are affiliated with.

3.5.1 POPULATION, AGE AND SEX

The Philippine's population rate has steadily declined from 2.53 % in 1980 and to 2.35 % in 1990. This is far from the international standards of 1.7 % and below. This is attributed to moderate increase in the birth rate and increasing life expectancy. On the

other hand, General Santos City has an alarming growth rate of 5.30 % in the last five years. Its current population count is almost 350,000 individuals.

Of the total gender and age distribution in Region 11, around 34 % is children and 27 % are adolescents. Significantly, the younger people (less than 20 years old) are the major source of health care demand in the past 20 years because they have less immunity to disease. The incidence of illness is highest among the middle and old aged groups because of the degenerative aging process. The rate of incidence of illness among adolescence and adults increase only during periods of epidemics. Among children and adults, the major health problems are prevalent communicable diseases and nutrient deficiencies due to inadequate childcare. The old age group is more susceptible to degenerative diseases of the heart, vascular systems and malignant neoplasm.

3.5.2 FAMILY INCOME AND EXPENDITURES

Generally, people with higher income prefers to avail of tertiary hospitals in the big cities because of more sophisticated equipment and facilities as well as more skilled health professionals than hospitals in the rural areas. As the income of patient increases, the net disposable income to pay for his medical needs also increase.

Income level will determine what people can spend. While this seems pretty obvious, we often forget that differences in income levels also mean differences in expenditure patterns. For example, the lower the income, the larger the percentage of

expenditures on food and other basic needs. While the percentage may be higher, the actual amount, on absolute figure is still much lower.

In fact, between 1988 and 1991, the share of the richer 10 percent increased from 35.8 % in 1988 to 38.6 % in 1991. The share of the poorest 30 percent of the population dropped from 9.3 % to 8.4 %-- a bleak picture of the overall purchasing capacity of the population.

3.5.3 HEALTH INDICATORS

Two important health indicators traditionally recognized in many countries including the Philippines are mortality and morbidity.

There are three macroeconomics health indicators for mortality: Infant Mortality Rate (IMR), Maternal Mortality Rate (MMR), and Crude Death Rate (CDR.). Table 2.11 reflects the true state of local public health in General Santos City.

Generally, it is the poorer provinces and the poor within those provinces that do not register their births and deaths. The distortion of mortality statistics that are available i.e., the cause of death that we will be looking at, will be more skewed towards those of the middle and high income groups.

Table 2.11 Health Indicators in General Santos City

Indicators	Year				Average Growth Rate
	1991	1992	1993	1994	
Crude Birth Rate	36.27	32.90	41.70	31.17	-3.70
Crude Death Rate	4.93	4.93	5.57	5.20	-3.32
Infant Mortality Rate	25.82	29.65	23.45	19.17	27.59

Source: City Planning and Development Office, 1994

Morbidity is influenced by the environment as well as health beliefs and practices. Diseases can be prevented with proper and timely measure. This is contingent on the paying capacity of the population, the accessibility and efficiency of the health care delivery system.

General Santos City with a predominantly young population has a disease pattern consisting of infectious diseases and malnutrition. The environmental-related diseases are still the most prevalent cause of sickness not only in the Philippines but specifically in Region 11 and General Santos City because of lack of good water system and poor sanitary system.

According to oft-mentioned DOH strategy paper, the most promising initiatives are the primary health care (PHC) and other public health programs, with the trend moving away from communicable diseases towards the chronic and degenerative diseases. The aging population which increases in life expectancy will result in more demand for hospital services and thus, will probably require the hospitals to move towards more high technology treatment at significantly high cost--the most expensive side of the hospital delivery. Life expectancy has increased over the years. It was

estimated that in 1990, only 68 % of deaths in the country were registered even if the law requires the filing of death certificates that will include the cause of death. Many of these deaths were those of infants whose births are never registered as well.

3.5.4 FACTORS AFFECTING CHOICE OF HOSPITALS

A physician is held an authority on health-related matters and thus, carries more weight than that of the patient. Somehow, the patient's choice of hospital boils down to the recommendation of the physician.

Several factors are cited to strongly influence the choice of hospitals. Physician competence/reliability is often the most influential factor followed by proximity of hospitals. Cleanliness and referrals fare well as influencers.

3.6 SUMMARY

The entry barrier of new hospital is high due to large capital investment requirements in building a hospital. Product and service differentiation will be tantamount to additional cost to a new entrant. For a potential hospital entrant, switching cost, economies of scale, access to physicians and cost disadvantage independent of scale are also factors to consider as these pose substantial barriers. In addition to those mentioned, government policy is another important barrier factor.

The pressure of the substitute services and in some cases, to products do not cause any worries to tertiary hospitals. In fact, they compliment with the industry.

The intensity of the rivalry among local industry competitors is not so pronounced. The industry climate is one of “gentlemanliness”. There is much inter-hospital relationship among hospitals in terms of physician’s accessibility to tertiary hospitals.

The physician has strong bargaining power because he has influence in choosing the hospital for patient, while the nurses have less bargaining power because some do prefer to work on high-paying jobs abroad and the fact that there are too many nurses.

The rapid turnover of nurses has resulted in high cost of training new nurses in the local hospital.

The paying capacity of the patient and his condition influence his bargaining power. It is strong if medical cost gets a large portion of the patient’s income but weak for a less price sensitive patient who can afford to pay health care services regardless of amount. The bargaining power of a patient is also weak if there are several hospitals to choose from.

The improvement in economic and environmental conditions is expected to decrease morbidity and mortality rates.

In addition to the accessibility of health services in a given locality, the demand for hospital services is dependent on an area’s health profile, patient paying capacity, health awareness of the people, the level of disease prevalence, and sanitary conditions.

Though indirect, the influence they hold over patient's choice of hospital, physicians also affect levels of hospital usage.