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# Dadiangas General Hospital: A Strategic Approach to Scaling Greater Heights

As he normally did before ending his day at office, Mr. Fernando A. Vilorio, Jr.,<sup>i</sup> the hospital administrator of Dadiangas General Hospital (DGH),<sup>ii</sup> did a final check of his email. He saw that a new email had just arrived: a memo from the Chairman of the Board directing him to prepare all the necessary courses of action to implement a new expansion project of the hospital as soon as possible. The memo caught him off guard and stunned him. He wondered what had made the Chairman rush on this when he had barely raised it as a proposal without substantial deliberations by the Board of Directors (BOD). Mr. Vilorio thought to himself that this would be another moment of long argument between him and the Chairman, as they often did on vital issues.

Quickly recomposing himself, however, he recognized the potential of the said project for helping DGH scale greater heights to become a premier hospital in the area. Indeed, he had previously thought of this project himself as an idea that could be viable in the next two or three years. “Maybe I should seriously consider it as viable now,” he thought. Yet, he knew that there were issues to be resolved before this idea could, in fact, materialize. He pondered, “How should I lead the management to properly evaluate the viability of the project? What strategic actions should the project entail to make it viable?” Sensing that he needed some help on the matter, he sent an email to the management committee (Mancom) to inform them of an emergency meeting the following morning at 9:00 to discuss this urgent matter.

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<sup>i</sup> Names of persons mentioned in this case are not their real names as requested by the management of the hospital.

<sup>ii</sup> This is a not the real name of the hospital as requested by the management.

## Hospital Industry in the SOCCSKSARGEN Region

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Over the past years, the hospital industry in the SOCCSKSARGEN Region,<sup>iii</sup> particularly in General Santos City (GSC), had experienced tremendous growth, evidenced by the rapid expansion of existing hospitals as well as construction of new ones. These emerging hospitals were trying either to match or exceed the bed capacity of the top two hospitals in the area. As a pioneering hospital in GSC, the DGH had maintained its position as the second biggest hospital, not just in the city but in the entire region as well. This position included size, in terms of bed capacity and market share. The DGH management had recognized that their hospital's position would be greatly challenged sooner than expected by the entry of a new tertiary hospital and the aggressive expansions of existing hospitals in the entire region.

DGH wanted to retain its current market position, yet Mr. Viloría was wary of the emerging industry competition. He was hesitant to simply rush the proposed expansion of DGH because of the huge investment that the project would require. Even more troubling was that neither a financial evaluation of the viability of the expansion nor a comprehensive discussion of the plans of among the board members on this matter had been done.

The prior problems of DGH in the late 1990s contributed to Mr. Viloría's dilemma. It was during this time that DGH has made its first bold move to reach the 100 bed capacity level. However, the lack of proper planning -- particularly in the operation and marketing aspects -- had made it difficult for the hospital to meet the targeted revenues. It was also aggravated by the high costs of investment financing due to lack of financial planning. This resulted in the hospital experiencing cash flow problems, which led to difficulties in meeting periodic amortization of its bank loans in the succeeding years. Mr. Viloría thought to himself, "We can't let this can't happen again if the planned expansion is pushed through." Thus, he called a meeting with his management team to discuss the planned expansion tomorrow.

### Overview of the Dadiangas General Hospital

The DGH was a pioneering hospital in General Santos City, established in 1962 by Dr. Fernando R. Viloría, a general surgeon who migrated from Luzon to settle down in this city. It started as single proprietor business, but he envisioned it to be the leading health services provider not just in the city but in the entire region. The hospital started as a primary hospital with a 25-bed capacity that served as the very first privately-run medical facility in GSC.

In 1975, the hospital was granted a license to operate as a tertiary general hospital (Level II) which it carried until the mid-1990's. This development prompted Dr. Viloría and his wife to pursue vigorously their vision of making DGH become a major health care provider not just in the city but also in the entire SOCCSKSARGEN Region. This vision was aimed at delivering health care services to all the people in the area, regardless of their status in the society. Moreover, this vision had become the driving force that led to the growth of DGH through the years. The promotion of its license to tertiary level was also a welcomed development because it opened opportunities for the hospital to provide additional and better hospital and medical services. The opportunity allowed the hospital to grow and further establish itself as a major hospital in the area.

In 1987, the couple finally decided to incorporate the hospital in order to cope up with the growth and demand for additional hospital and medical services. The hospital was registered with the Securities

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<sup>iii</sup> SOCCSKSARGEN is in the province of South Cotabato in the Mindanao island group in the Philippines. The acronym denotes the region's four provinces (South Cotabato, Cotabato, Sultan Kudarat and Sarangani) and the General Santos City.

and Exchange Commission with an authorized capital stock of PhP10 million (USD 200,742<sup>iv</sup>). Initial paid up capital was only PhP625,000<sup>v</sup> (USD 12,547) upon its incorporation. However, in mid-1990's, the company's authorized stocks were fully subscribed and paid up to finance the hospital's first major expansion in 1996. It was during this time that Mr. Vilorio, son of the founder, was asked to resign from his employment as a finance and administrative manager of regional office of a big Manila-based company, so that he could serve the family corporation as the hospital administrator given that he was the only sibling with a formal business degree -- a certified public accountant (CPA) by profession -- coupled with his experience in the industry.

In 1996, the hospital undertook a major expansion project to meet increasing demand. This project included expansion of the hospital building that increased its bed capacity from 25 to 125, and the construction of two-building medical plaza (I and II) to house the medical clinics of known medical specialists in the area. Total costs of these projects amounted to PhP 55 million (USD 1,104,1920), which was sourced out from additional issuance of stocks of PhP 9.375 million<sup>vi</sup> (USD 188,215) and bank loan of PhP 50 million,<sup>vii</sup> (USD 1,003,814) including provision for working capital of PhP 4.375 million (USD 87,827). The projects were completed in the 3<sup>rd</sup> quarter of 1997. This expansion project was entirely supervised by Mr. Vilorio and served as his first major initiation into the DGH and the family business.

The medical plazas had 20 rooms cum medical clinics that were fully rented out to more than 30 well-known medical specialists, some of whom shared the same clinic and just allocated time between them.

The 1996 expansion project was also coupled with major upgrading of medical equipment and machinery. This resulted in the enhancement of its major facilities at the operating/delivery room, laboratory, x-ray and other ancillaries. These improvements allowed DGH to have the latest and most advanced or, if not, at least at par with other tertiary hospitals in the area in terms of its medical equipment and machinery. Likewise, these improvements had also resulted in a significant increase in the occupancy rate of the hospital.

In 1997, after the completion of the expansion project, DGH had secured full accreditation from the Philippine Health Insurance Corporation (PhilHealth) for all its 125 bed capacity. However, over the next seven after the expansion project was completed, DGH encountered tough challenges, particularly in the financial aspects of its operations. The hospital was beleaguered by liquidity problems, primarily because of the Asian financial crises in 1997. In general, the country's economy had not improved much over the next ten years after it was severely affected by the crisis. The impact of this crisis was also felt by DGH, as evidenced by its liquidity problems. During this period, DGH was only able to attain an average liquidity ratio of 0.73:1, which indicated that it had a cash deficiency of 27% for every maturing P1.00 of current obligations. This problem caused the company to resort to issuance of post-dated checks to respond to the demands of suppliers and creditors. In addition, the financial leverage of DGH had not also been desirable during the same period. With the majority of the company's total assets being financed by external borrowings, the undesirable financial condition of DGH had forced it to defer some payments of its loan obligations to the banks. During this period, the company's average annual debt-to-equity ratio was about 2.06.

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iv The Forex rate of 1 USD =49.8159PHP as of February 2, 2017 has been used in this and all subsequent USD/PHP conversions unless otherwise noted. <http://www.xe.com/currencyconverter/convert/?From=USD&To=PHP>

v Taken from the Audited Financial Statement of DGH in 1993

vi This additional issuance of shares increased its authorized capital stock as reflected in the SEC approved amended Articles of Incorporation of DGH in January 18, 1996

vii Covered with eight (8) Promissory Notes corresponding to the number of loan releases made from January 1996 to November 1997; taken in the records from the Finance and Administration Department

In 2000, the DGH was granted by the Department of Health the highest hospital classification to operate as a general tertiary and training hospital (Level III) with an authorized bed capacity of 125 beds. The upgrading of DGH's classification gained authorization from the Philippine Obstetrics and Gynecological Society and the Association of Philippine Medical Colleges to offer training programs in Obstetrics and Gynecology and Post Graduate Internship, respectively. At present, it has three (3) residents in OB-Gynecology and another three (3) post-graduate interns as recipients of its training program.

Unfortunately, DGH was unable to capitalize on these major accomplishments. In fact, the results of hospital operations were inconsistent from 2001-2005 (see Table 1). Revenue growth rates during those periods were relatively low, although in 2003, DGH reached the 100 million mark for the first time. Noticeably, the company's net income after tax over these years was very poor at an annual average of a mere 1.5%. Accordingly, this could be attributed to low utilization of assets coupled with the high costs of borrowings as part of the long-term impact of the financial crises in 1997.

**Table 1**  
**Financial operations performance of DGH, 2001-2005**

	2005	2004	2003	2002	2001
Gross revenues	PhP 150.3	PhP 128.5	PhP 102.4	PhP 97.9	PhP 93.9
Increase in peso amount	PhP 21.7	PhP 26.2	PhP 4.5	PhP 4.0	PhP 11.3
Rate of increase over previous year	16.91%	25.57%	4.58%	4.29%	13.71%
Gross profit margin					
Pharmacy	24.4%	24.9%	25.6%	28.6%	27.1%
Hospital services	34.7%	36.8%	33.3%	33.6%	36.1%
Operating profit margin	12.0%	10.8%	9.5%	11.1%	15.3%
Return on sales	2.1%	2.3%	0.4%	0.1%	2.5%
Return on assets	1.4%	1.3%	0.2%	0.1%	1.1%
Return on equity	2.8%	2.7%	0.4%	0.1%	2.3%
Earnings per share	22.43	20.89	3.32	0.81	17.22

*Note: Derived from the Audited Financial Statements of DGH covering the years 2001-2005; amounts in million pesos*

DGH primarily catered to medical and healthcare for the SOCSKSARGEN areas, which comprise the provinces of South Cotabato, Sultan Kudarat, Sarangani and the cities of General Santos, Marbel and Tacurong.

## DGH Management Structure

As established, DGH was a family-owned and managed enterprising business of the Viloría family. As a family corporation, the Viloría family held 92.5% of the total paid up capital of DGH. The remaining 7.5% was offered to selected prominent medical doctors during the expansion project in 1996. This amount was part of the issuance of fresh capital arising from the increase in authorized capital stock. Most of these prominent physicians, other than being close family friends, were well-known medical practitioners in the city. Offering minimal shares to non-family members was son Mr. Viloría's idea; he convinced the family that this would be a strategic move more than opening and sharing some ownership stakes to non-family members. These minority owners had no major participation in managing the operations of DGH.

The typical organizational structure in a Philippine family-owned corporation had a patriarchal management structure wherein the father (patriarch) often led the family in managing the operations of

the business. A major characteristic of this structure was a highly centralized decision-making system in which most of the decisions were made by the patriarch or, if made by any other members of the family, had to have the blessing or consent of the father. The management practices of DGH were no different.

In DGH, Dr. Vitoria was the chairman of the board of directors and president of DGH, which was comprised of the matriarch, the seven professional children and an independent director, who was a very close friend and contemporary of the patriarch. In a typical management meeting, Dr. Vitoria would discuss his observations on the current operations and the needs of the hospital that required immediate attention. He would also discuss his plans and courses of actions which he thought were needed to further improve the services offered by the hospital. At the end of the meeting, he would give specific tasks to the members, particularly those who were given managerial functions in the hospital. A formal board meeting rarely took place, however. Dr. Vitoria did not see any need to have a separate board meeting, considering that he met with them on a regular basis, that is, during management meetings and during gatherings of the family on the weekends.

The majority of the family members were given managerial and administrative functions. Mrs. Lenny A. Vitoria managed the purchasing functions and the pharmacy operations. She also used to handle finance and accounting prior to the appointment of her son, Vitoria, Jr. as the new hospital administrator. Three other children, all of whom were medical doctors, handled various positions in the hospital and medical aspects of DGH operations. Finally, Mr. Vitoria was the latest member to be given major position as the hospital administrator, beginning in 1995. The three other siblings -- a medical doctor, an ENT doctor-specialist and a nurse -- were all based in the United States.

The family, including the spouses of the Vitoria children, comprised the management committee (Mancom) until changes were instituted by the new hospital administrator in early 2000s.

## **The New Catalyst and Trailblazer**

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Mr. Vitoria was an independently-minded person with a strong-willed personality. These traits made his father call him a stubborn son during his teen age days. He contradicted his father's desire for him to pursue a medical degree in college. Instead, he pursued an accountancy degree program and eventually became a licensed CPA. In so doing, he was the only non-medical degreed graduate among the Vitoria siblings. At first, he got his father's ire for taking the accountancy program. But Dr. Vitoria realized later that his son's decision was as good as his intention to get his children involved in running the hospital. He thought it was fate to have a child with a business mind-set to complement his lack of acumen to run and manage the hospital business that he so desired to scale up one day and optimize its business potential. Indeed, he seemed to found a gem – a catalyst and a trailblazer, in his son to realize his vision. Thus, he designated Vitoria, Jr. as the hospital administrator.

Unfortunately, things didn't work out smoothly as intended. Mr. Vitoria remained independent-minded and always challenged his father's decisions and the family's decisions as well, in general. He took pride from his professional experiences, where he rose from a general accountant to a finance and administrative manager of a regional office of a Manila-based company in less than three years. He held such positions for more than six years until he was asked to help in the family's hospital business. His father specifically wanted Mr. Vitoria to help the family scale up the operations of the hospital and retain its current position as the second leading hospital in terms of bed capacity and market share. That was the reason why Mr. Vitoria always challenged every decision that would have material implications, especially to the financial resources of the hospital. His greatest challenge, though, was to instill a more corporate management

structure that would replace the current typical practices<sup>viii</sup> of family-owned enterprises. As a typical family enterprise, the patriarch had the central authority in almost the entire management and operations of the business. Such was no different until Mr. Vilorio made some changes to professionalize the organizational structure of DGH.

It took Mr. Vilorio enormous effort to convince his father that such organizational structure was the first step toward scaling up the business. He had to convince the patriarch and other members of the family of the need to designate professional managers to help them in the managing the hospital because the growth of the operations was becoming huge for them to manage by themselves. He told the family about his personal encounters with family enterprises that had successfully transformed this way and achieved tremendous growth. Several of his encounters were family enterprises that were now big players in their respective industries. He used this information to convince the board members to accede to his plan to re-organize the management structure, including hiring of professional managers to manage selected positions in the hospital.

Thus, the first major change he instituted was set up an organizational structure (see Figure 1) which he thought was more receptive to the planned growth of the hospital. This major change also led to the appointment of highly qualified personnel to lead key departments, such as heads of the nurse stations, dietary, laboratory, medical records, quality control and finance and accounting. Mr. Vilorio also engaged a few consultants to help streamline hospital operations, and to review and establish pertinent policies and procedures, which eventually resulted in the formulation of an operations manual for key business processes, as well as a manpower structure, including setting up of more formal salary schemes to replace the relatively discretionary approach to salary structure.

In the new organizational structure, there were now professional Mancom members as compared to the old structure in which only members of the family comprised the management committee. Qualified personnel (professionals), upon careful evaluation of their competencies and capabilities, were formally appointed as department heads and were granted, at the least, limited authority to make decisions on matters pertaining to their respective departments. This was a sort of transformative mechanism instituted by Mr. Vilorio to professionalize DGH and to spread out the decision-making processes to improve and hasten delivery of hospital services. The new management committee was composed of the hospital administrator, as the head, and the heads of the medical services, finance and administration, quality control and assurance, marketing, human resource, and the senior house officer. However, in the case of the marketing department, only an officer-in-charge was temporarily designated pending further assessment by the Mancom. The marketing department was a new unit that Mr. Vilorio wanted to be institutionalized as a result of his evaluation of the performance of the expansion project in 1997. He noted that the absence of a marketing unit may have contributed to the relatively poor turnover on invested assets at an annual average of 0.93 only.

One observation about the new Mancom composition was that only the finance officer remained while the rest were newly designated [either promoted or hired] professional managers. Ms. Josephine Ignacio had acted as the finance officer for more than 15 years already. Joy, as she was called, had been a family-trusted officer who handled well the finances of the hospital. But beyond being the finance officer, she had also acted as the 'de facto' hospital administrator prior to the designation of Mr. Vilorio. Thus, she had gained tremendous knowledge of the "in's and out's" of the hospital operation's finance and administration.

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<sup>viii</sup> A typical example of family-owned practices, in the local (domestic) context, is that the decision of the patriarch is almost always the final decision. Such practice is a common observable practice in similarly structured enterprises in other local areas in the Philippines.

Mr. Vioria had previously commented that Joy was the “X-factor” in the Mancom because she had the trust and confidence of the family. To her credit, she saw the entry of Mr. Vioria in the hospital as an opportunity to push for more financial reforms on which she, on her own, had failed to make substantial progress before.

The restructuring and creation of the new Mancom had given Mr. Vioria some legroom to manage and institute desired changes. However, he still encountered a recurring problem in pushing what he considered important management action, that is, key decisions remained tied up to the patriarch who still called the shots for such kind of decisions. The latest of these was the newest expansion that the patriarch intended to implement at earliest time possible. In recent times, these instances, i.e., dealing with major decisions, had become contentious issues between father and son.

Another of Mr. Vioria’s major accomplishments was the formulation of the hospital’s operations manuals covering medical-related services and general services, particularly the quality assurance and finance and accounting processes. As advocate of the total quality management (TQM) concept, he had undertaken initiatives to integrate quality management in the hospital’s operations. He started laying the foundation in all the hospital’s medical services departments. This was also the primary reason for his creating the Quality Assurance Department, which was designated to take the lead in this initiative. He engaged several consultants/specialists to provide technical assistance and capability-building support to the various medical services departments. Thus, a series of TQM seminars were undertaken to orient staff, enhance technical capacity, and integrate this concept as a mantra in delivering medical services to patients. Likewise, continuing evaluations of all the medical-related business processes were also conducted. These evaluations resulted in detailed documentations of policies and procedures which, eventually, enabled the concerned departments to develop their respective Manual of Operations. This initiative of Mr. Vioria was one of the few projects that gained full support from the patriarch and other family members from the very beginning.

In 2005, these efforts had drawn the attention of the Philippine Health Insurance Corporation (PHIC or PhilHealth), which made DGH a model hospital for the implementation of the new regulatory guidelines that would be imposed to various health care providers, including the hospitals. The PHIC cited how DGH’s initiatives embraced the concept quality management in its operations. A year earlier, the PHIC had promulgated new guidelines for the accreditation of health care providers to participate in the National Health Insurance Program (NHIP) as part of the implementing rules and regulations of Republic Act Nos. 7857 and 9241, known as the National Insurance Act of 1995. These guidelines mandated health care providers to comply with the PhilHealth Benchbook Standards.<sup>ix</sup> The PhilHealth accreditation was a regulatory requirement for health care providers, including hospitals, to participate in the National Health Insurance Program (NHIP) which provides health insurance coverage for PhilHealth members. A study of hospital management systems had noted that failure to secure this accreditation would significantly affect the competitiveness and attractiveness of a health care provider.<sup>1</sup>

The integration of total quality management in DGH medical services had produced a significant milestone for DGH. In 2007, DGH was the first tertiary hospital in the region (and one of few among the hospitals in the country) that was able to secure full accreditation status from PhilHealth for passing the

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<sup>ix</sup> This was a mandatory regulatory requirement for accreditation imposed on health care services provider in the Philippines as mandated in Sections X to XVII of the Implementing Rules and Regulations on Republic Act 7875 as amended by Republic Act 9241 known as the National Insurance Act of 1995.

quality standard evaluation. DGH was bestowed as fully compliant to the PhilHealth Benchbook Standards for Health Care Providers.<sup>x</sup>

## The Proposed Expansion Project

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Mr. Vilorio had not expected the memo from the patriarch about an expansion coming this early. As the patriarch had written in his memo, he wanted DGH to embark on another round of expansion to increase the bed capacity of the hospital by 50 more beds. This would be constructed vertically, which meant that a third floor level would be erected for this purpose. The hospital's building structure had been designed to expand vertically to accommodate two more floor levels with a potential area of more than 2,200 square meters for each floor. A few months prior to the memo, the patriarch had started pitching this plan to the BOD members to increase the bed capacity of the hospital. His plan was simply based on his observations of the prior three months, when DGH had exceeded its bed capacity. During those periods, Dr. Vilorio noticed that several beds were placed along the hallways to accommodate patients. So, he was talking to the family members who were members of the BOD about the possibility of implementing his planned expansion. The members nodded to the idea but had not taken it seriously. They were a bit wary about the readiness of the hospital to implement it, particularly given the financial and manpower resources of DGH. Mr. Vilorio shared the same concern on this matter.

Although Mr. Vilorio had thought of the same project, he didn't see it coming this soon -- with the patriarch wanting it implemented within the first quarter next year -- because an evaluation of the financial condition of the company had to be completed first. When Mr. Vilorio had first thought of this project, he saw it coming down the line in two or three years. During the year, he had not taken a more careful look at the financial statements except in monitoring the cash flow condition of DGH. He had requested the finance head to keep him abreast on this matter. He knew that reviewing the financial statements would enable him to determine whether DGH would have the financial resources or would need to secure external borrowing to embark on another project that would require huge amount of investment. He had to review the financials carefully this time around. to make sure that what had happened in the past would not be repeated again. A real struggle for DGH in terms of liquidity had taken place back then, with the company incurring unwanted financial costs out of its borrowings.

Another sibling, Dr. Eugene, the chief of clinics, had preferred that part of the proposed expansion project would provide better accommodation facilities to cater to patients from the higher income classes. He had specifically recommended that at least ten rooms of this type be included if the proposed project were to be implemented. But then, he left the financial analysis to be taken care of by Mr. Vilorio, since the latter knew best about it.

## General Santos City and the SOCCSKSARGEN Region

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General Santos City (GSC) lies at the Southern part of the Philippines. The city is located southeast of Manila and Cebu, and Southwest of Davao. The municipalities of Alabang, Malungon and Maasin of Sarangani Province and the municipalities of Polomolok and T'boli of South Cotabato surround the city. GSC belongs to the First Congressional District of South Cotabato and is one of the three major cities of SOCCSKSARGEN.

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<sup>x</sup> Fast-forward in 2009, DGH has secured an ISO 9000 accreditation, the first hospital in the region to do so.

The GSC is the economic and trade center in the SOCCSKSARGEN area. It boasts well-established and important infrastructure facilities such the international airport and the fish port complex, which is the second biggest and the most modernized facility of its kind in the country today. GSC is also known as the Tuna Capital of the Philippines, where most of the country's tuna processors and exporters are located, being home to the six of the country's seven major tuna canning factories. In effect, GSC's tuna industry accounted for about 90% of the country's tuna industry production (Philippines Fisheries Profile, 2013<sup>2</sup>) and generated over 100,000 jobs for the city.

The increasing economic activities in GSC had generated P1.89 billion (USD 37.94 million) of new investments in 2000.<sup>3</sup> Investments in social and personal services substantially accounted for 76% of the total investments. Accordingly, the economic boom in GSC that started in early 1990's had significant impact on the rapid urbanization of the city. Its population growth rate grew by 5.1%, which almost doubled the region's average rate of 2.6%. As of 2000 census, the SOCCSKSARGEN has a population of approximately 2,099,677.<sup>4</sup> The percentage distribution of the total population showed that GSC and Sarangani accounted for 19.61% and 19.56%, respectively, or a combined total of 39.17%. And yet, they accounted for most of the geographic distribution of in-patients served by DGH by a combined percentage of 85%. This simply implied the proximity of these areas to the geographic location of DGH. This affirmed some studies that the market coverage of a hospital was confined to its geographic location.

Likewise, the recent political development and reorganization made Koronadal City (most commonly known as Marbel City), a component city of South Cotabato, as the new regional center for the newly reorganized Region XII (SOCCSKSARGEN Region). Prior to the regional reorganization, the regional center was situated in Cotabato City in the province of North Cotabato. The Province of South Cotabato was known for its export of high valued crops such as pineapples, banana and asparagus. In 2001, these products had a combined export value of approximately US\$350 million<sup>5</sup>. These developments were expected to continue spurring growth in economic and trade activities in the province as well as contribute to the increasing rate of urbanization in area.

### Philippine Hospital Industry

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The study by Herrera et al. (2010) had described the Philippine healthcare system as consisting primarily of the government and private health, diagnostic and treatment facilities.<sup>6</sup> These facilities were spread proportionately but unevenly over the entire country. The government health facilities were regulated through the Department of Health (DOH). However, health facilities at the local level were decentralized to the local government units. These public healthcare facilities normally offered free medical services. On the other hand, private healthcare providers charged corresponding fees for their medical services. The Herrera study also quoted an Asian Development Bank Report (2007) that showed the disparity between medical services from private and public (government) facilities.<sup>7</sup> Private healthcare facilities were heavily used by patients because of better quality medical services. Contrastingly, public healthcare facilities were commonly used in rural areas and were perceived to provide low quality health services, in general.

In 1995, the government had enacted the National Insurance Act of 1995 to provide Filipinos with access to quality healthcare. The Act established the NHIP to provide universal healthcare coverage to the public. The PHIC was mandated to administer and ensure that the NHIP attained its purpose. In 2010, it was estimated that there were more than 20 million Filipinos enrolled as members of PHIC. More than 51% of the membership consisted of employed individuals in both the public and private sectors. About 22% of

the total members come from the Mindanao region. Moreover, PHIC had accredited about 80% of the total healthcare facilities in the country.

In 2009, DOH reported that approximately 60% of the total hospitals in the country were privately owned and managed. Over a ten-year period from 1994 to 2003, the total number of hospitals had increased from 1,632 to 1,738. During this period, the government hospitals had increased by 23% while the private hospitals had decreased by about 2%.<sup>8</sup>

**Table 1**  
**Number of Hospitals**

Year	Number of Hospitals		
	Government	Private	Total
1993	537	1,095	1,632
1994	503	1,068	1,571
1995	589	1,111	1,700
1996	600	1,138	1,738
1997	9645	1,172	1,817
1998	616	1,097	1,713
1999	648	1,146	1,794
2000	623	1,089	1,712
2001	640	1,068	1,708
2002	661	1,077	1,738

Source: National Statistical Coordination Board. *The Philippine Statistical Yearbook, 2004*

In terms of bed capacity, the government hospitals had more than doubled its bed capacities as compared to private hospitals. Over the years 1993 to 2002, the government hospitals had an average of 50.52% more bed capacities over private hospitals. This was in spite of the fact that there were more private hospitals than government hospitals. Accordingly, this was due to the number of provincial and regional hospitals where bed capacities ranged from 100 to 400.

**Table 2**  
**Government and Private Hospitals Bed Capacity**

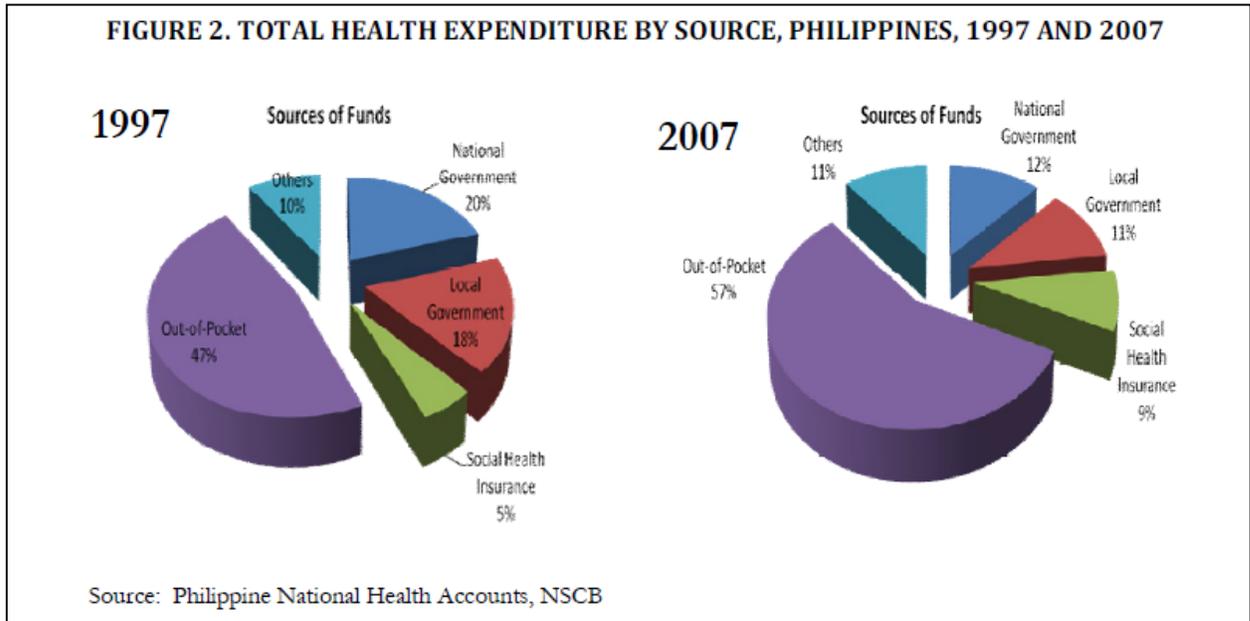
Year	Bed Capacity			Bed Capacity per 10,000 population
	Government	Private	Total	
1993	35,629	36,236	71,865	10.7
1994	38,696	36,403	75,099	10.9
1995	43,229	37,571	80,800	11.8
1996	43,582	38,207	81,789	11.7
1997	42,070	39,835	81,905	11.4
1998	42,877	38,323	81,200	11.1
1999	43,477	40,014	83,491	11.2
2000	42,384	38,632	81,016	10.6
2001	40,202	39,242	79,444	10.2
2002	45,395	39,771	85,166	10.7

Source: National Statistical Coordination Board. *The Philippine Statistical Yearbook, 2004*

### Health Expenditures

As an integral component of the economy, the health care industry contributed substantial expenditure to the economy. Figure 2 shows the increasing peso value of health-related expenditures

incurred by the entire economy from PhP 87 billion (USD 1.76 billion)<sup>xi</sup> in 1995 to PhP 225 billion (USD 4.24 billion) in 2007.<sup>9</sup> It also provides a glimpse of the growth of health industry in relation to its peso contribution to the entire economy of the country.



Note: Snapshot from DOH Report ([www.doh.gov.ph](http://www.doh.gov.ph))

Figure 2 explains the distribution of health expenditures by sources of funds. During these periods, private sources (particularly coming from personal or out-of-pocket, private insurance, HMOs and employer-based plans) contributed approximately 57% of the total funds for health expenditures of the entire industry. A significant portion of private sources came from personal or out-of-pocket accounts of individuals, accounting for more than 79.10%. The HMOs also contributed at least 11.4% out of the total private sources during the same period. Moreover, the contributions from personal or out-of-pocket and HMOs accounted for more than 40.5% and 6.50%, respectively, to the entire health industry funds during these periods.

## Industry Boundaries

The hospital industry is actually a part of the greater health care industry (system), not just in the Philippines but in the global perspective as well. In the Philippines, the hospital industry could be clearly differentiated out from the greater industry system based on the definition of “hospital” as per R.A. 4226.<sup>10</sup> The definition stated that major and direct players in the hospital industry may only be confined to those institutions, whether government or privately operated, devoted primarily to the maintenance and operation of health facilities for the diagnosis, treatment and care of individuals suffering from illness, disease, injury or deformity or in need of obstetrical or other medical and nursing care, where there are installed beds or cribs or bassinets for twenty-four hour use or longer by patients in the treatment and care of these individuals.

<sup>xi</sup> Conversion to USD based on 1 USD =49.5697PHP on January 10, 2017  
<http://www.xe.com/currencyconverter/convert/?From=USD&To=PHP>

In a more specific definition of its boundaries, the DOH classified these hospitals according to their service capabilities as general or special; primary, secondary or tertiary level. These classifications, particularly the primary, secondary and tertiary levels, resulted in market segmentation in terms of types of services to be rendered by each hospital, such that the market segments of the primary hospitals are limited to those whose health needs only require its services based on its capabilities as approved by the DOH. On the other hand, the tertiary-classified hospitals practically cover the entire market. This is primarily because of the broader scope of services that tertiary-classified hospitals can deliver to the market.

Hospital services tend to be bought and sold locally.<sup>11</sup> In other words, the distinct geographic location of a hospital will determine and limit the extent of its market coverage. This observation holds true to the hospital industry in the Philippines. The geographic location limits competition to hospitals that are situated within the same geographic boundaries. It further indicates that there is less competition between and among hospitals that are located in different geographic locations.

These factors, i.e. hospital classification and geographic location, provide clearer components to the structure of the hospital industry in the country today, such that the lower the hospital is classified, the more constrained its market in terms of services and geographic coverage.

In the same way, the market boundaries of DGH are restricted to the SOCSKSARGEN areas. These areas include the General Santos City (GSC) and the provinces of South Cotabato, Sarangani and Sultan Kudarat. As of 2000 census, the SOCSKSARGEN has a population of approximately 2,099,677, of which approximately 20% come from GSC.

Population (2000 Census)	
<b>SOCSKSARGEN (total) *</b>	<b>2,099,677</b>
Gen. Santos City	411,822
Sarangani	410,622
South Cotabato	690,728
Sultan Kudarat	586,505

*\*Note: Still a part of Region XI as of 2000 Census (NSCB<sup>12</sup>).*

### Industry Competition

As mentioned above, more than 60% of the total hospitals were privately owned and managed. The top three regions, which accounted for more than 40% of these private hospitals, were situated in Luzon. Southern Tagalog Region (Region IV), Central Luzon (Region III) and the National Capital Region accounted 16.3%, 12.6% and 11.8%, respectively. In Mindanao, Southern Mindanao had the most number of private hospitals with 11.4%, ranking fourth in the entire country. These regions were identified as the most populated areas in the country<sup>13</sup> and were considered regional centers of Luzon and Mindanao.

The geographic location and classification of the hospitals provide the most significant criteria for competitive positioning among major hospital industry players. In the Philippines, the geographic competitive positions of hospitals were normally cramped from several municipalities up to the provincial areas and, to some extent, to the regional areas as well. The DOH classification of hospitals implied their level of competitiveness in terms of the number and scope of services rendered.

At the municipal areas, the primary-classified hospitals typically served this particular geographical market. The secondary-classified hospitals served a wider geographical market, encasing both the municipal and provincial geographical markets. Meanwhile, the tertiary-classified hospitals had the widest geographical markets, catering up to the regional areas. They also had competitive advantage over the lower-classified hospitals in terms of the number of hospital services. Moreover, those tertiary-classified

hospitals which were considered medical centers enjoyed further competitive advantage over the other hospitals because they had more highly specialized hospital services. According to the Avestruz (1995) study, medical centers had the highest occupancy rate at 82% among hospitals.<sup>14</sup>

Among the four criteria for competitive positioning in the hospital industry were, first, the price of hospital services. Private hospitals priced services considerably higher than government hospitals, and the high pricing encompassed all aspects of hospital services from accommodation to various medical and nursing care services.<sup>15</sup> This served as the primary reason why government hospitals had higher (at times, extremely high) occupancy rates as compared to private hospitals. Second was a hospital's access to noted specialists and/or specialists' affiliation with the hospital. The quality of the physicians affiliated with the hospital played a significant role in patients' choice of hospital.<sup>16</sup> The hospital's occupancy rates were also affected by this factor. Third, continuing upgrading of technology and equipment was observed to provide advantage in delivery of hospital services. Private hospitals with higher classification had better opportunity and capacity to acquire new technology and equipment. Finally, the hospital referral networking system enabled a hospital to provide quality patient care without straining its resources too much by linking with other hospitals in the system. The networking system covered the areas of patient care, training and research. Recipients of the networking system were mostly tertiary-classified hospitals, which were also considered as medical centers. This was mainly attributed to their high level of diagnostic and therapeutic capability in general types of diseases.

As of 2004, there were 59 hospitals operating in the SOCSKSARGEN area. Private hospitals accounted for 43 or 72.88% of the total number hospitals, while the 16 pertained to government hospitals. The different classification of these hospitals is summarized below:

Type/Location	Number of Hospitals per DOH Classification			
	Tertiary	Secondary	Primary	Others
<b>Private hospitals</b>				
Gen. Santos City	2	2	1	3
South Cotabato	1	1	1	11
Sarangani	0	0	0	1
Sultan Kudarat	0	1	1	18
<b>Government</b>				
Gen. Santos City	0	0	1	0
South Cotabato	1	0	0	4
Sarangani	0	0	0	5
Sultan Kudarat	0	0	1	4
<b>Totals</b>	<b>4</b>	<b>4</b>	<b>5</b>	<b>46</b>

Source: Department of Health. Bureau of Health Facilities and Services. "List of licensed government hospitals and other health facilities, as of December 2004." 2004<sup>17</sup>

### Barriers to Entry

In ten years period covering 1993-2002, health care facilities, particularly hospitals and their bed capacities, increased by 6.5% and 18.81%, respectively.<sup>18</sup> A substantial portion of these increases, however, was attributed to government expenditures related to establishment of new hospitals and expansion of existing facilities. Entry into the hospital industry was not easy, primarily due to intensive capital requirements. The costs of building construction and medical equipment required substantial cash outlay for would-be new entrants. Likewise, stringent regulatory requirements from the DOH and PHIC also contributed to the high cost requirement for the establishment of new hospitals. Specifically, DOH Administrative Order No. 70-A provided the rigid minimum requirements not just for existing hospitals but, more importantly, to the establishment of new hospitals.<sup>19</sup>

In the SOCSKSARGEN area, there had been very minimal movements in terms of number of hospitals. In fact, in Gen. Santos City, the number of hospitals remained the same for the years 2002 to 2007. There were, however, a few expansions that led to increases in bed capacities of existing private hospitals. But such expansions did not change the classification levels of those hospitals. Likewise, the presence of four tertiary and four secondary hospitals would also pose huge barriers to new entrants in the area. These hospitals were established for over a decade already and were considered to have greater economies of scale. Access to networks of noted specialists and physicians would also pose as one of the primary barriers to entry.

## Substitutes and Complements

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The traditional healthcare services provided by hospitals, particularly those which involved in-patient health care services, remained relatively unthreatened by substitutes and complementary products or services. These services remained the exclusive business of hospitals to date, insofar as the Philippine health industry was concerned. Even the emergence of the latest technologies and health facilities, as well as new improvements in some medical processes and procedures, had not yet provided alternatives to patients. Some of these latest trends may have already been practiced in the country but had been confined only to those highly specialized tertiary hospitals located in the NCR. These were also regarded as very costly given that these had the latest technologies and developments.

Likewise, home health care services also emerged as a substitute for hospital services in the US and other highly developed countries, enabling nurses and physicians to monitor patients and provide some treatments at home rather than in the hospital. However, these were not yet very popular in the local market because they were perceived to be very expensive services.

New technologies would continue to emerge from genetic research, but it was very difficult to predict whether these technologies would substitute for or complement in-patient care services.

## Supplier Power

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The main suppliers of hospitals included labor, medical equipment companies and pharmaceutical suppliers. These suppliers had indirect power.<sup>20</sup> Supply and demand of labor forces for medical practitioners, particularly nurses, had been especially tight in recent years due to their exodus to other countries where demand was high and pay was substantially higher as compared to domestic pay rates. This resulted in high turnover rates, especially for nurses. Hospitals were also challenged to provide better remuneration.

Suppliers of medical equipment and pharmaceutical and medical supplies also exerted a relatively important degree of power over hospitals, due primarily to the supplier relationship-specific investment between them and the hospitals. This relationship undermined the threat of hold-up in the allocation of equipment, pharmaceutical and medical supplies by suppliers to the hospitals.

This relationship-specific was also observed by DGH due to the following reasons:

1. To ensure continuous allocation of various supplies;
2. To ensure easy access or priority in allocation of medical equipment offered by suppliers; and,
3. To avail of purchase commitments that require favorable payment schemes in order to loosen up cash flow requirements.

## Buyer Power

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The main buyers of hospital services are the patients and doctors/physicians. Between these two buyers, the doctors wield a significant degree of power. This power is more evident for noted specialists and doctors who can attract patients and determine whether their patients need hospital care and to which hospital the patient goes. Thus, their preferences are considered a major determinant for the demand of hospital services.

DGH was able to get a good network of noted specialists and physicians in the area, due to its being the oldest and most established hospital in GSC. Most of these noted specialists and physicians had even established their clinics at the Medical Plaza of DGH. Likewise, most of them were also minority stockholders of DGH. Accordingly, the real intention of the family-owners (majority stockholders) of having these doctors as part-owners (or as minority stockholders) was to establish long-lasting affiliation between them and the DGH. This was considered a strategy that would ensure continuous and easy access to the services of the best medical practitioners in the area.

A prominent doctor who located his clinic in this building had a very candid appreciation on the construction of the medical plazas:

*“This was a very strategic move by the management of the DGH as it recognizes the ‘buying’ power of medical practitioners to bring-in patients to the hospital.” He continued that “DGH has set the trend among local hospitals to accommodate doctor’s need for well-spaced medical clinics. Thus, being the first, DGH has captured the best among the local medical practitioners.”*

## Management Committee Meeting

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The previous night had not been kind to Mr. Viloría, because he was bothered by the memo he had received earlier. It took him some amount of time to ponder what to do with the desire of the patriarch to implement another major expansion for DGH. He thought of different scenarios but could not create a clear picture of how to address it, especially given that he didn’t like the idea of another confrontation with the Chairman. He was resigned to the idea that his Mancom would be able to contribute substantial inputs in the Mancom meeting.

Mr. Viloría, Jr. reported much earlier than his usual time coming to the office. Immediately, he phoned in Joy, and asked her if she could also report to work earlier to have a short talk before the Mancom meeting. He also requested her to bring with her the latest financial reports of DGH before coming up to meet him. Upon her arrival, she gathered the latest financial reports and went straight to Mr. Viloría’s office.

“Good morning sir FAV,” Ms. Ignacio greeted Mr. Viloría as she entered his office, using the name he was called by all personnel of DGH. Mr. Viloría greeted her in return and, when she was seated, he asked her, “Joy, have we improved on our latest financial condition, particularly the cash flow position in the first semester this year?”

She replied cautiously, “Only a little improvement, sir. But these past few months I was able to talk to several suppliers and secured their approval for extension of payments for about 45 days. It saved us more than enough that enabled us to pay the loan amortization of about PHP 7.5 million (USD 150,558) that became due earlier this month.” She continued that the extension period would be enough time to

further resolve some discrepancies in the account of PHIC to finally collect the unsettled accounts of more than PhP 15 million (USD 301,115) in the previous months. She continued by telling him that the remaining long-term loan balance of more than PhP 25 million (USD 501,859) would soon be settled in the next five quarters, that is, within the next 15 months.

The last update given by Joy on the status of the outstanding bank loan was really the specific detail that Mr. Viloría wanted to hear from her. So, he further asked, “Can we possibly negotiate another long-term borrowing from the bank if we still have this outstanding balance? Or what do you think the bank will tell us if we do this?” Candidly, she replied, “I think they will be stricter now in assessing our capacity to pay. Probably because they wouldn’t want to extend another special arrangement with us to accommodate the financial issues that we encountered in the past years.” She was referring to the several requests for extension in the payment of the periodic loan payment amortizations which happened due to difficulties in generating cash flows. In addition, she said, “We can try to negotiate from another creditor bank, but that doesn’t give us assurance that whatever amount we can avail of would be approved, plus we might not have the same flexibility that we have with our current bank-creditor.”

As an accountant himself, Mr. Viloría fully understood what Joy was telling him. Just as short and brief he wanted this talk, he thanked Joy for the information she had given him. Before she left, he told her that he would explain later during the Mancom meeting the reasons why he had asked for a brief meeting with her.

About 15 minutes before the scheduled Mancom meeting at 9 a.m., Mr. Viloría, started to walk toward the Conference Room, passing through the HR Department office. Walking in the opposite direction toward him was Mr. Gabriel Mendoza, one of the business consultants engaged by DGH. Mr. Mendoza was specifically tasked with assisting management in strengthening the organization’s structure, corporate policies and control mechanisms. “Good morning, Gab,” Mr. Viloría greeted him. He started a brief conversation and then posed a question to him, “Gab, if DGH were to embark on another expansion, what advice would you give me?”

Gab was quick in his answer: “Better start it right, FAV. I mean, evaluate it properly. Also, it would be good if, this time around, you do a strategic planning.” Mr. Mendoza was straightforward in his answer, given his recollection of what had happened during the first major expansion project of the hospital in the mid-1990s. As DGH’s consultant for the past years, he had sufficient information on the past performances as well as key issues and concerns of the hospital. Aside from being an organizational development practitioner, he was also a consultant on strategic planning and management. Mr. Viloría understood where Gab was coming from and without asking him for more elaboration, thanked him and proceeded straight to the conference room where Mancom members were already waiting for him.

The Mancom comprised of nine regular members and a special member. Most of them were the heads of the various departments of DGH, which included the medical services department (MSD), quality assurance department (QAD), finance and administration department (FAAD) and human resource department (HRD). Other members were the hospital administrator, who served as the chairperson of the Mancom, the two assistant hospital administrators for hospital services group (HSG) and support services group (SSG), respectively, and the Senior House Officer, who served as the technical officer for the hospital services group and reported directly to the hospital administrator. The special member was Dr. Eugene, the chief of clinics. Except for Mr. Viloría, Dr. Eugene and Joy, all other members of the Mancom were new to the committee because, prior to Mr. Viloría reorganization of the committee, members had been restricted to the family, except for Joy, as the finance head. However, in certain circumstances, the chairperson had invited the hospital’s consultants to special Mancom meetings to secure assistance in the deliberation of

specific issues. In this particular meeting, though, none of the consultants were available because of either prior commitments or conflicts of schedule, such as in the case of Mr. Mendoza, who had an equally important meeting with several unit supervisors of the hospital on the same time.

At the start of the Mancom meeting, Mr. Vloria explained that the reason for the special and urgent meeting was the memo he received from the Chairman, who had directed him to prepare for another major expansion that he wanted the hospital to undertake as soon as possible. When Mr. Vloria finished explaining purpose of the meeting, he asked the members their insights and recommendations on the subject matter.

First to speak was Ms. Yvette Divinagracia, head of the MSD. She was a licensed nurse and a holder of a master's degree in hospital administration. She had vast exposure to the medical field both as a technical staff member and officer as well as a clinical instructor over her professional career of more than 20 years. She had been with DGH for seven years, starting as the supervisor of the Nursing unit. Her work diligence paid off when she was promoted to be the head of the Medical Services department. She was an outspoken member, known to always to be a "walk the talk" kind of person. She was excited to hear of the planned expansion and opined that the planned expansion would be timely because she believed it really was needed now. She cited the frequent occurrences of full capacity that had already occurred. She also relayed the feedback she had gotten from several patients who were looking for better room accommodations and amenities. She continued that those looking for more spacious rooms with better amenities came from affluent patients who wanted some kind of hotel-type services. Specifically, she explained that these kind of services were already being offered by bigger hospitals, especially those in Manila,<sup>xii</sup> and named a few of them. She ended with a suggestion that if the plan would push through, it should be made to cater to the more affluent population in the city and the entire region of SOCCSKSARGEN. Dr. Eugene butted in and told the group that he had already made this suggestion when Dr. Vloria had raised the idea of an expansion.

Other members seemed to be consumed by their excitement after hearing this suggestion. Thus, a serious setting was suddenly changed, with a more enthusiastic sharing of views and discussions. Most of the members agreed with the suggestion of Ms. D and Dr. Eugene that, should the plan push through, it should offer better services and amenities to target the high-income earning population who belonged to the income class A and B.

Amidst the excitement, several critical concerns were also raised to the group. Mr. Manny Reyes, the head of the HRD and who had the most corporate exposure among the managers, cautioned the committee on the current problem of high personnel turnover. The planned expansion could further amplify the current situation. Moreover, it could magnify on a bigger scale if the expansion would cater to high-end demand because it would require experienced and better trained medical staff. In fact, DGH had lost several high-performing medical staff members who had resigned recently to work abroad for higher pay. Indeed, many of the newly hired medical staff only stayed with DGH for two to three years on average. As observed, this phenomenon was attributed to the new regulation issued by the government, in coordination with the Philippine Nurses Association and the Philippine Overseas Employment Administration.

Ms. Susan dela Cruz, the head of the QAD, readily agreed with the concern raised by the HRD head. She emphasized that the training costs had been increasing over the past years because of the high turnover of medical staff. She also added that training, particularly for quality management (QM), was more

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<sup>xii</sup> Manila is the capital of the Philippines where the bigger and most advanced hospitals, which offer hotel-like accommodations and services, are located.

costly, so she suggested that appropriate measures be established to ensure that QM-trained medical staff were retained. This was critical because DGH intended to establish its QM protocols in preparation for the planned application for ISO 9000 certification.<sup>xiii</sup>

However, the more pressing concern was the issue raised by Joy as she told Mr. Viloría that now she understood why she was asked about several financial matters early this morning. She said, “Sir FAV, I strongly suggest that we conduct first and foremost a feasibility study on the planned expansion to make sure that we don’t experience again what happened during the expansion we had in mid-1990s. But, I’d like it to be a more extensive feasibility study and not just being prepared for loan purposes.” This time around, as she continued, a better planning process should be conducted in relation to the expansion.

After she had said her piece, all members nodded in agreement to the suggestion to conduct a planning. As a matter of fact, it should be a strategic planning, as emphasized by Mr. Reyes. Dr. Dionisio underscored the need for DGH to conduct a strategic planning since it has not yet done so in the past. He shared his experiences with other hospitals, particularly in Davao and Cebu cities, who were conducting strategic planning on a regular basis. He also stressed that there were hospitals who did it on a yearly basis while others were doing it on a bi-annual basis. On this note, Ms. Susan added that perhaps it was now timely to formalize the creation of the marketing department. Ms. Susan had strongly supported its creation when it was suggested in the past by Mr. Viloría but had not really progressed because it needed to be approved by the board. Mr. Manny expounded a bit on the importance of strategic planning. He said, “A strategic planning would allow us to conduct a SWOT analysis that will help us identify strategic problems which need to be addressed and resolved appropriately. It would also entail identifying industry factors, especially those opportunities and challenges that have material implications in relation to the proposed expansion project.”

After a series of discussions with varied responses reactions, it had become clearer to Mr. Viloría that the Mancom, while thrilled with the prospect of making DGH bigger, would want a more intensive evaluation of the planned expansion. Mr. Mendoza’s candid advice earlier came across his mind again. He thought that what Gab had told him him – along with the recommendation of the committee to do a strategic planning -- were the very same thing that he’d been thinking the whole night. His concern, however, was the relative inexperience of the management to do strategic planning. He also recalled that the management had never conducted an intensive review of any of its capital expenditures, even during the expansion in the mid-1990s as well as those involving acquisitions of high-costs equipment and facilities.

## The Dilemma

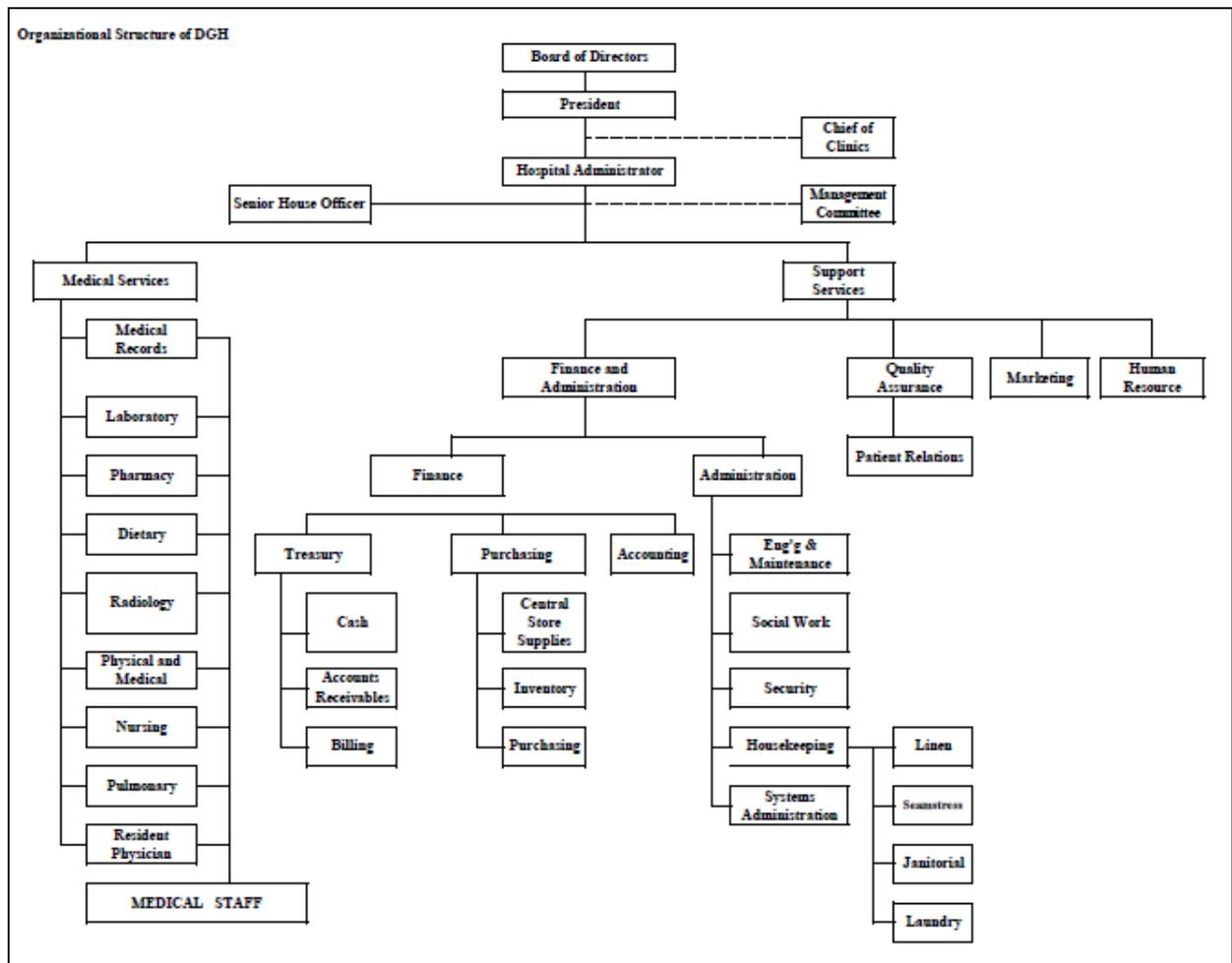
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Mr. Viloría knew that the proposed project would be tough to pursue but recognized that it could propel DGH to scale greater heights of growth. With the Mancom’s support for an intensive evaluation, he could now support the Chairman on this proposed expansion project. Yet, questions continued to linger on his mind: how should the management come up with appropriate evaluation mechanisms for the proposed project? How would DGH management assess the project’s financial and operational viability? What would this project entail DGH management to do to make it viable?

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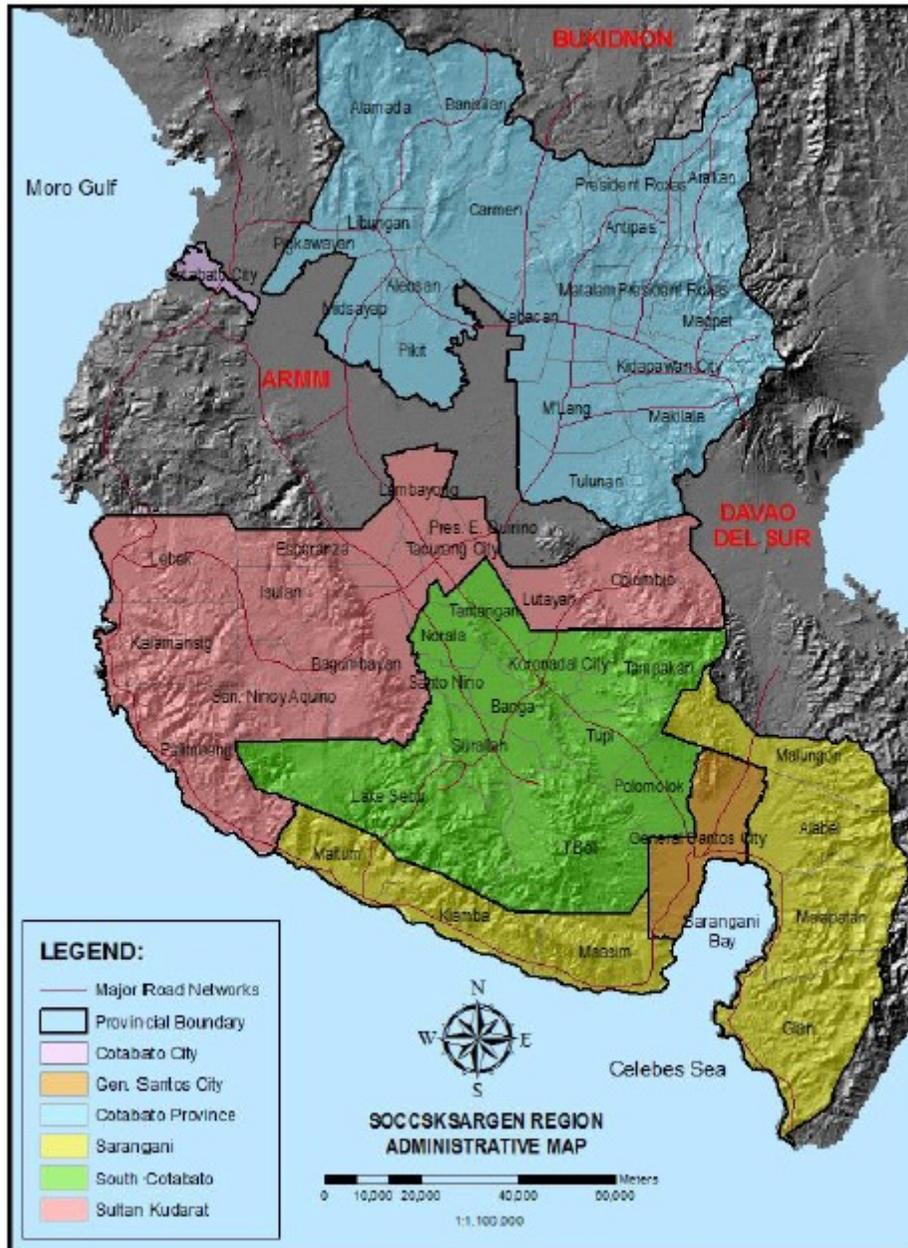
<sup>xiii</sup> In 2009, DGH has secured an ISO 9000 accreditation on Quality Management

**Figure 1**  
**The Organizational Structure of DGH**



Source: DGH document, 2007

**Figure 2**  
**Location Map of SOCCSKSARGEN Region**



Source: SOCCSKSARGEN Regional Development Plan 2011-2016 (National Economic and Development Authority Region XI)

## Endnotes

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<sup>1</sup> Avestruz, Fred. "A Study of Philippine Hospital Management Administrative System". Discussion Paper Series No. 95.16, [www.pids.gov.ph](http://www.pids.gov.ph). 1995

<sup>2</sup> Seafish Ethics Profiles – Philippines. September 2015. Downloaded from [http://www.seafish.org/media/publications/PhilippinesEthicsProfile\\_201509.pdf](http://www.seafish.org/media/publications/PhilippinesEthicsProfile_201509.pdf)

<sup>3</sup> Office of the City Planning and Development Coordinator. General Santos City Socio-economic Briefer, 2002

<sup>4</sup> National Statistical Coordination Board. The Philippine Statistical Yearbook 2004

<sup>5</sup> Ibid

<sup>6</sup> Maria Elena B. Herrera and Francisco L. Roman. Overview of Health Sector Reform in the Philippines and Possible Opportunities for Public-Private Partnerships. Working Paper 10-002. 2010

<sup>7</sup> Ibid

<sup>8</sup> Acuna, Thaddeus. Dadiangas General Hospital: A Strategic Plan for 2007-2011. A capstone requirement for Master in Management. Unpublished. 2007

<sup>9</sup> The Philippine Health System at a Glance. [doh.gov.ph](http://doh.gov.ph)

<sup>10</sup> Republic Act No. 4226 - Hospital Licensure Act. Sec. 2 (a) Definition of "hospital"

<sup>11</sup> David Besanko, David Dranove, Mark Shanley, Scott Schaefer. 2004. Economics of Strategy. 3<sup>rd</sup> Edition, International Edition. Hoboken, N.J. John Wiley & Sons

<sup>12</sup> National Statistical Coordination Board. The Philippine Statistical Yearbook 2004

<sup>13</sup> Ibid

<sup>14</sup> Avestruz, Fred. "A Study of Philippine Hospital Management Administrative System". Discussion Paper Series No. 95.16, [www.pids.gov.ph](http://www.pids.gov.ph). 1995

<sup>15</sup> Ibid

<sup>16</sup> Ibid

<sup>17</sup> Department of Health. Bureau of Health Facilities and Services. List of licensed government hospitals and other health facilities, as of December 2004

<sup>18</sup> National Statistical Coordination Board. The Philippine Statistical Yearbook 2004

<sup>19</sup> Department of Health. Administrative Order No. 70-A: Revised rules and regulations governing the registration, licensure and operations of hospitals and other health facilities in the Philippines

<sup>20</sup> David Besanko, David Dranove, Mark Shanley, Scott Schaefer. 2004. Economics of Strategy. 3<sup>rd</sup> Edition, International Edition. Hoboken, N.J. John Wiley & Sons