Gamma Medical School Group: At Your Service

On the sunny Monday morning of July 15, 2014, Dr. Val Echavez, a urologist and head of the medical staff at Gamma Medical School Group (GMSG) — a tertiary hospital and medical school in Davao City, Philippines — was quietly sipping a cup of coffee in his office. He smiled as he remembered the fun he had with his family over the weekend at the beach, and started to plan their next getaway; camping at a scenic mountain resort. In the midst of his daydreaming, his mobile phone rang. The medical director was on the line. "Hey Val, what's up? Have you finalized a plan for how to allocate beds in the new hospital building? I'm asking because the Board of Trustees meeting will be this Friday instead of next Friday. So it is short notice, but three board members will be traveling next Thursday. It will be a rush since we have to submit the plan for the final design. Everyone is asking if GMSG will be the best Davao-based hospital after this expansion. Can you discuss this with the team by Wednesday?" Echavez answered, "Sure, I will," but after this conversation, he realized that he had just two days to prepare. The pressure started to creep in. He had no choice but to stop his daydreaming and get to the task at hand.

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The Beginnings of Gamma Medical School Group

GMSG was established in 1975 to fill a gap in rural communities and urban centers of Mindanao where there was a shortage of medical doctors. GMSG started as a consortium composed of a Jesuit school, a Dominican school and hospital, a non-sectarian memorial hospital, and a non-governmental organization. It was registered with the Securities and Exchange Commission as a non-stock, non-profit organization and was approved by the Commission on Higher Education. In 2014, GMSG was comprised of a college of medicine, college of dentistry, a primary health care institute, and center for education, research, and development.

In its early years, GMSG was very popular; its school was the only medical university in Davao City. It had 125 faculty members from a wide range of medical specialties and a local student population of approximately 300. The school was located on a 2.5-hectare site near the center of Davao City, which boasted a stable climate — both in terms of weather and politics.

With its state-of-the art facilities, unique geographic location, and the political stability of the city, GMSG had become an attractive option for foreign medical students. Three times more foreign students attended the university compared with locals.

GMSG’s vision and mission were:

Vision: Gamma Medical School Group, Inc. envisions healthy communities enjoying quality of life.

Mission: Gamma Medical School Group, Inc., inspired by the community orientation of its founders, is committed to:

- Providing humane and integrated health sciences education and services with an emphasis on primary healthcare instruction, research, patient care, community healthcare, and community engagement.
- Developing and nurturing God-centered, competent, compassionate, ethical, and socially responsive graduates, faculty, staff, and healthcare providers.
- Forging strong partnerships and networks with consortium members and other stakeholders in the areas of health and community development.
- Keeping pace with global developments in health sciences education and healthcare services.

GMSG Health Services at the Forefront

To assist the group in realizing its vision and mission, the hospital had a two-pronged objective: 1) to improve the health status of select partner communities in Davao City and nearby provinces, making health services more accessible, affordable, and acceptable to community members; and 2) to provide hands-on health learning experiences for students in the conduct of quality healthcare.

GMSG Hospital became fully operational in 2005 with a 100-bed capacity, 60 private rooms, 24 ward beds, two suites, and seven semi-private rooms. Housed in a four-story building, GMSG hospital boasted open air corridors, a courtyard, and a glass-curtain façade that provided a panoramic view of the city.

The hospital began its operations humbly with just a few doctors and clinics. Initially, the group listed visiting clinicians and specialists in the hospital directory just to complete the medical team line up. Most of these doctors were not visible members of GMSG, but were given active staff privileges for house cases.

GMSG Hospital was not a preferred hospital. In fact, only a few locals knew about it. There were days when the census[i] for admission registered a 10% occupancy rate (around 10 patients). Only a few patients went to its clinics for medical check-ups and consultation. This rendered specialists unproductive. Moreover, the number of walk-in patients was minimal due to limited public transportation and a lack of marketing efforts. When compared to Davao Doctors Hospital and San Pedro Hospital, GMSG was the last option.

Philippine Health Services at a Glance

Philippine healthcare[ii] and medical[iii] services were under the governance of the Department of Health (DOH), which had installed regional offices for faster services

The main DOH programs were focused on 10 health agendas:[1]

1. Improve hospitals and health facilities.
2. Employ more health workers (doctors, nurses, and midwives).
3. Increase health insurance enrollment and improve benefits.
4. Reduce maternal and infant deaths.
5. Reduce non-communicable diseases.
6. Reduce and prevent cancer cases.
7. Lower the cost of medicines.
8. Control dengue outbreaks.
9. Reduce diarrhea outbreaks (gastroenteritis, typhoid, and cholera).
10. Control the growing HIV/AIDS epidemic.

Despite occasional reports of malnutrition and limited facilities, the country' healthcare was competitive; both the quality of medical personnel and services were high. Most health service and medical practitioners graduated from reputable Filipino universities. And most doctors were trained at institutions that maintained global standards and affiliations with advanced countries for additional training. Filipino nurses were also trained at schools with high standards, and were in demand around the world.

The Philippine Health Insurance Corporation (PhilHealth) was a tax-exempt, government-owned-and-controlled corporation under the auspices of the DOH. Its mandate was to ensure a sustainable national health insurance program for all.[2] Aligned with this was Universal Health Care — a flagship program of the Aquino Health Agenda (started during the administration of President Noynoy Aquino).[3]

In early 2014, PhilHealth transitioned its payment mechanism from a fee for service to a case-based rate. The former was found to be ineffective; it allowed prolonged hospital stays, overutilization of diagnostic procedures, and the provision of unnecessary services. The latter was aligned with global standards. It offered one uniform rate for the provision of quality service under modest accommodations, regardless of member category. It promoted a basic standard benefit that was the same for similar

i In hospitals, a census is the average number of patients per day; admitted patients and outpatients are counted separately.
ii Healthcare encompasses all aspects of clinical work including technology, imaging, medication, surgery, rehabilitation, preventive measures, physical therapy, nursing homes, and medical supplies.
iii Medical care describes the services of doctors and nurses.

conditions, regardless of whether the patient was admitted to a government or private institution. Proponents of the payment mechanism claimed that it improved PhilHealth's administrative efficiency and turnaround time for paying healthcare providers.[4]

The Philippines' Medical Tourism Industry

DOH leaders believed that the Philippines could become a medical tourism destination if it ensured implementation of quality standards in both the public and private sectors. This was supported by many agencies, both private and public, such as: the Department of Tourism, Department of Foreign Affairs, Public Private Partnership Center, Philippine Medical Association, Philippine Nurses Association, Philippine Hospital Association, and the Philippine Council for the Accreditation of Health Care Organizations.[5]

Medical tourism was comprised of three clusters: 1) hospitals and specialty clinics; 2) wellness (spas as well as complementary and alternative medicine); and 3) the retirement cluster (retirement communities for foreign nationals).[6] The country was facing a number of challenges. Some of these were mentioned in a 2011 Asian Institute of Management Study:

- The high cost of travel to the Philippines due to the lack of direct flights to and from target markets in North America, Europe, and Northeast Asia.
- A lack of transport infrastructure. (Medical travelers were used to trains, buses, and other organized systems of transportation).
- Security and safety concerns that prompted medical tourists to choose neighboring countries like Taiwan or Thailand.
- A lack of a market niche and unique value proposition that would differentiate Philippine services from other countries' offerings.[7]

If the government did nothing to tackle these issues, the Philippines could lose its competitiveness and displace its well-known strengths, namely: quality care through internally driven quality improvement programs at top-notch health facilities; a clear price advantage; a large pool of qualified, English-speaking health and tourism professionals; a captive market in the Filipino diaspora; proximity to the Pacific and Micronesia; a tropical climate; and cultural openness.

Davao: The Next Medical Tourism Hub

Davao City had some of the best hospitals in the Philippines. These hospitals not only catered to the medical service requirements of Davaoneos, but also a considerable number of patients from other provinces in Mindanao. Davao's specialization services and equipment were comparable with that of Manila and Cebu.[8]. With its wide array of medical services, reasonable costs, comfortable environment, and many tourist destinations, Davao City was ready to help the country meet its medical tourism objectives. These were the city's top private hospitals:

- *Davao Doctors Hospital.* Located along Quirino Avenue, the hospital was the most accessible in downtown Davao. Also, it was the most reputable private institution in Mindanao. With 250 beds, it was a one-stop medical center that provided advanced diagnostic, therapeutic, and intensive care services. Still, its services could be pricey.[9]

- *San Pedro Hospital.* Situated along Guzman Street near restaurants, malls, and schools in central downtown, the Dominican sisters' institution was a preferred hospital with a 295-bed capacity. Moreover, it was known as a training institution committed to the care of the sick and the poor, as well as the education of health professionals.[10]
- *Gamma Medical School Foundation.* Located along GMSG Drive in Bajada, the hospital had a 115-bed capacity and was known for its minimally invasive surgery (MIS) procedures, among other basic specializations. It was a teaching hospital with a medical school housed in the same compound.
- *Brokenshire Memorial Hospital.* Situated in Madapo Hills, this tertiary hospital offered a wide range of medical and surgical services including orthopedics, pediatrics, obstetrics and gynecology, ophthalmology, family medicine, internal medicine, neuroscience, and physical medicine and rehabilitation.[11]

Davao City Population and Health Status

As recorded by the National Statistics Office in the 2010 census, Davao City had a population of 1.45 million.

The census[12] highlighted the following facts:

- There was an average annual population increase of 2.4%.
- The median age was 24 years old; higher than the prior census at 22 years old.
- The working age category (ages 15-64) made up 64.9% of the population, while young dependents (ages 0-14) and elderly dependents (ages 65 and over) comprised 31.4% and 3.7% of the population respectively.
- The overall dependency ratio was 54 for every 100 persons of working age.
- Some 1.4% of the population had a disability.

As shown in **Appendix A**, the local city health office identified the top 10 diseases. Those that had remarkable increases in the five years leading up to 2011 were tonsillitis and pharyngitis, acute respiratory infection, and diarrhea and gastroenteritis. [13]

New blood — The Entry of the Young Specialists

In 2007, there was an influx of young doctors who returned to the city, fresh from specialty training in Manila. To them, GMSG offered an attractive option for establishing their practices compared with the cramped conditions in clinics at the other hospitals around town. GMSG was a practical ground for new specialists to establish their careers.

With the expertise the young specialists brought to the hospital, Dr. Leon Valdez, GMSG Hospital medical director, felt it was time for a turnaround. He positioned GMSG as the premier MIS expert by creating a new department. The expertise was then reinforced with state-of-the-art facilities. The members of this department were from specialties, such as neurosurgery, orthopedics, head and neck surgery, hepato-biliary services, colorectal care, urology, obstetrics/gynecology, pulmonology, and gastroenterology.

Valdez asked the new medical staff to achieve GMSG's vision and be recognized as one of best hospitals in the city. In response, the medical staff prioritized GMSG when scheduling patients. Also, the medical staff established a referral system for the various specialties at GMSG.

The New Medical Director

In late 2008, Valdez left GMSG to become the medical director of Southern Philippines Medical Center, the biggest state-owned hospital in Davao. His successor, Dr. Miguel Onate gained similar support from the medical staff, and worked to sustain the hospital's turnaround efforts. Onate was a specialist in the field of internal medicine with a sub-specialty in neuropsychiatry. Prior joining GMSG, he was the medical director of a primary hospital.

Onate continued the work of making GMSG Hospital the premier MIS specialty hospital. GMSG Hospital was one of two hospitals in Davao that had an MIS department. With the influx of young specialists, GMSG Hospital was able to increase its admission census as well as improve the quality of care for the people of Davao City and the rest of Mindanao. Onate's vision was to dedicate 40% of GMSG Hospital's facilities and operations to MIS.

GMSG was becoming popular due to its low-cost services and active medical staff with comparable medical expertise. The number of patients admitted to the hospital dramatically increased since it became operational with a 90%-100% occupancy rate in 2010. GMSG Hospital had six major clinical departments: medicine, pediatrics, obstetrics/gynecology, family medicine, anesthesia, and surgery.

Dr. Val Echavez

An alumnus of GMSG Medical School who completed his urology training at a top training hospital in Manila, Echavez was one of GMSG's new urologists. Prior to joining the GMSG staff, he held clinics in most hospitals in Davao City and Davao Province. While Echavez was the head of GMSG's medical staff, at other institutions, he also held administrative positions, prompting him to take an MBA course at a prominent school in Davao.

As he continued his MBA studies, he became Onate's favorite pick for most administrative tasks, and was ultimately tapped by the medical director to lead a team that would provide him with recommendations to give to the board for how rooms should be allocated in the new hospital building.

To accommodate more patients, GMSG became a 115-bed capacity hospital. Seventy-eight beds were to be distributed among four major specializations: 20 for surgery, 16 for obstetrics/gynecology, 21 for pediatrics, and 21 for medicine. The remaining 37 beds were to be shared by other specializations. (Please see **Appendix B** for the census of admission per month for the 2012-2013 period and **Appendix C** for the census of admission per specialization in 2013.)

Still, 115 beds were not sufficient for the growing demand for hospital services in Davao. According to the admissions office, as many as 74 potential admissions per day were declined due to the unavailability of beds. The increasing rate of transfer admissions was as an indication of increasing opportunity costs given the hospital's limited facilities.

Expansion

Both the hospital and medical school were expanding. A significant number of first-year medical students were to arrive from India. In 2014, there were about 600 medical students enrolled in the school, and another 500 applicants were expected to enroll in 2015. Also, GMSG Hospital was aiming to become an accredited training hospital in all its areas of specialization. In 2014, only pediatrics and internal medicine were accredited. The size of the school expanded to accommodate the increase in enrollment.

The hospital also expanded to accommodate clerkships and internships. The board's plan was to build a medical arts facility for the doctors' clinics and another building to increase bed capacity to 190. The second building would be situated in the vacant lot, adjacent to the hospital. This would be a modern facility that would house a laboratory, emergency room complex, and rehab facility. The buildings were slated to open in 2016.

New Direction

As he made his presentation to the board, Onate would consider the present allocation of rooms, the vision of the hospital, and its profitability over the long term. The hospital was turning away admissions. As he looked at how the rooms were organized, he was unsure if the current set-up would allow the hospital to maximize profits. He also realized that he was in the position for five years. He asked himself how far his leadership was from the vision.

Facing the Pressure

With little time left, Echavez called an emergency meeting of his team, which included the hospital administrator, chief of clinics, and head of finance. He also invited Onate, who attended the meeting to challenge the team to put into practice the following strategies:

- Ensure that at least 40% of new beds be prepared for MIS.
- Ensure that only the allocation of beds for major specializations increases. Shared specializations should remain as is.
- Ensure that each major specialization has at least a 25% increase in its current bed allocation.

The chief of clinics argued that the increase in MIS rooms was too high, but Echavez replied that is was the only way to align the allocation of beds with the hospital's turnaround plan. Onate then reassured the chief that he had another game plan as long as the team could prove that his strategies would have the optimal impact on the hospital's bottom line.

Onate asked the head of finance for data on the indicative profit per patient per admission. He replied "Well, based on past data, the indicative profit per department was PHP 9,500 for surgery, PHP 10,000 for obstetrics/gynecology, PHP 5,000 for pediatrics, and PHP 5,500 for medicine. These included room accommodation, medicine and supplies, laboratory and diagnostics, and corresponding procedures."

After the meeting, Echavez was exhausted. Onate had given him directions, but added to his confusion. Taking a deep breath, Echavez recounted the lessons from his operations management class, and started to solve the puzzle. The proper allocation of rooms would not be easy, but he had to find the right mix in the next two days.

Appendix A

Davao Top 10 Diseases for 2011 and Five-Year Average Leading Up to 2011

CAUSES	2011	AVE (2006-2010)	% INC/DEC
Acute Respiratory Infection	7,541	4,264	76.9%
Acute Upper Respiratory Infection	6,429	5,910	8.8%
Pneumonia	6,335	6,286	0.8%
Diarrhea and Gastroenteritis	4,862	3,577	35.9%
Dengue	2,561	3,994	-35.9%
Essential Hypertension	2,163	2,041	6.0%
Urinary Tract Infection	1,932	1,603	20.5%
Tonsillitis and Pharyngitis	1,631	226	621.7%
Respiratory Tuberculosis	1,577	1,755	-10.1%
Diseases Of The Heart	1,219	1,430	-14.8%

Source: Davao City Health Office

Appendix B

Census of Admission by Month 2012 -2013

	2012	2013
January	809	806
February	744	688
March	853	709
April	732	768
May	841	757
June	812	749
July	814	768
August	760	839
September	824	759
October	867	711
November	752	714
December	777	737

Source: Created by the author of the case.

Appendix C

2013 Census of Admission per Specialization

Month	Internal Medicine	Pediatrics	OB/GYN	Surgery	Other	Total
January	314	217	87	159	42	819
February	267	174	68	156	31	696
March	273	176	80	168	15	712
April	287	179	98	184	27	775
May	272	179	89	188	32	760
June	288	220	85	129	37	759
July	263	251	77	149	37	777
August	323	285	78	140	19	845
September	301	238	77	127	20	763
October	287	214	75	135	14	725
November	312	176	72	133	21	714
December	315	196	58	161	7	737

Note: The discrepancy in the total number of admissions is due to admissions from minor sections such as dentistry, family medicine, and industrial medicine.
Source: Created by the author of the case.

Endnotes

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