



# Healthcare Landscape and Benefits of Aggressive Nutrition Intervention in Hospital Systems in the Philippines

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It is well known that healthcare is costly. There is a need to apply the general economic concept of supply and demand in this arena. The more ill a person is, the greater the expenses incurred. The larger the population of a country is, the greater the risks for decline in health and, therefore, the greater the need for appropriate and adequate healthcare services.

## Healthcare and Economic Landscape of the Philippines

The Philippines is an archipelago in Southeast Asia. Apart from the challenges imposed by its geographical features, healthcare accessibility for those in remote regions and islands is further impeded by language barriers. Currently, there are approximately 104 million Filipinos, making the Philippines the 12th most populous country in the world.<sup>1</sup> It has a growth rate of 2% a year.<sup>2</sup> It has been shown that the country is very young, with the majority of its people falling below the age of 20 years.<sup>3</sup> Based on the recent National Nutrition Survey of the Food and Nutrition Research Institute and Department of Science and Technology, malnutrition and growth stunting are seen in almost 30% of young children and 17% of adolescents, as well as in 12% of elderly and 27% of pregnant women.<sup>4</sup>

Many Filipinos may not be receiving sufficient healthcare due to several factors:

- Approximately 27% of Filipinos live below the poverty line.<sup>1</sup> Sixty percent of hospitals are privately run and, therefore, patients pay out of pocket.<sup>5</sup>
- Despite the rise in number of people, both private and government hospital facilities of different levels have not increased commensurately.<sup>5</sup>
- Sixty-three percent of hospitals do not meet the minimum requirement of 1:1000 ratio of beds to provincial population.<sup>6</sup>
- Government expenditure on healthcare has not increased in the last 13 years.<sup>5</sup>
- Except for nurses (1 nurse:226 persons), the ratio of healthcare providers to patients is very low (doctors, 1:803, and dentists, 1:1840).<sup>7</sup>

Similar to other countries, the Philippines has financial coverage for healthcare. The Philippine Health Insurance Corporation, or PhilHealth, was created in 1995

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with the goal of providing social health insurance to all Filipinos within 15 years. Several private health management organizations operate in the country as well. Nevertheless, a recent national survey noted that 53% of Filipinos do not have any form of insurance, 72% pay out of pocket when consulting a physician, 16% opt for free service from a charity institution, and 5% are helped financially by family and friends.<sup>8</sup>

None of the insurance programs, however, covers expenses for nutrition management. This lack of coverage could be serious because malnutrition is highly prevalent among hospitalized patients in the Philippines, as shown in Table 1.

**Table 1. Rate of Malnutrition Among Hospitalized Patients in Five Medical Centers in the Philippines**

Institution	Malnutrition Rate
Philippine General Hospital (Manila)	42%
Amang Rodriguez Medical Center (Marikina)	54%
St Luke's Medical Center (Quezon City)	37%–48%
Mary Mediatrix Medical Center (Lipa City)	38%–55%
The Medical City (Pasig City)	50%

**Source:** Unpublished data provided by Llido LO, Convention of the Philippine Society for Parenteral and Enteral Nutrition, 2004, and The Medical City, 2008.

Counseling sessions, specialized nutrition support, and other supplements are not included in the reimbursement schemes, for the most part. This situation has limited referrals to and consults from nutrition experts. Nutrition care, therefore, is not routinely part of overall patient medical and surgical management.

### Role of Private Sector: PhilSPEN

Because of the impediments to healthcare access, low funding capacity, and lack of government initiative to make hospital nutrition a priority, the Philippines has to rely on its private sector to take the reins. The Philippine Society for Parenteral and Enteral Nutrition (PhilSPEN) is a nonprofit health organization with a 30-person core working group. Despite its relatively small membership, PhilSPEN has succeeded in improving nutrition care practice in hospitals throughout the country.



Since its first convention in 2004, the society has increased its membership from 130 to over 500. The annual scientific meetings have been successful in elevating the value and role of hospital nutrition management to that equaling the other medical and surgical disciplines. The majority of its members are in the field of nutrition and dietetics but in recent years, interest among physicians, nurses, pharmacists, and academicians has been growing.

## **Nutrition Support Teams Setup**

PhilSPEN initially attempted to achieve its goals by promoting the establishment of nutrition support teams (NSTs) in various key hospitals throughout the Philippines. In 2008, several members of the PhilSPEN core group initiated an NST development caravan that visited 83 of the existing 1700 hospitals. That year, six NSTs were registered and recognized by the society. By 2012, the number had increased to 24.<sup>9</sup>

## **PhilSPEN Dedication to Education Program**

PhilSPEN has recognized the need for continuing education to be able to sustain the NST development program and maintain interest in clinical nutrition. The society has developed the Dedication to Education Program (DEP), which is subdivided into the Basic Nutrition Support (BNS) courses, Advanced Nutrition Support (ANS) courses, and Together Everybody Achieves More (T.E.A.M.) program. The BNS courses are for individual members of the NST to prepare them for team setup. The ANS courses emphasize specific nutrition processes such as specialized nutrition and immunonutrition and provide other updates. The T.E.A.M. program is meant to prepare hospitals to develop their NSTs.

## **Education Beyond PhilSPEN**

Because of enhanced interest in clinical nutrition, a number of healthcare professional groups and schools have decided to include clinical nutrition in their training programs. The first and only nutrition support fellowship in existence in the Philippines is the St. Luke's Medical Center program. A 2-year clinical program for doctors, the program has produced graduates who will eventually head the NSTs that will be set up in the future. Recognizing that the fellowship program will have limitations and may not be able to meet demands within the next few years, St. Luke's Medical Center has teamed up with Philippine Women's University, which has an accredited nutrition and dietetics college course, to establish a master's program in clinical nutrition. Graduates of this course also will be qualified to assist in NST formation and education. The Philippine Society of General Surgeons has mandated its 67 surgical training programs to include surgical nutrition in their

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curricula. The Ateneo School of Medicine and Public Health has decided to expose its medical students early on to nutrition by adding lectures on the topic.

PhilSPEN also has been able to convince the government to include specialized nutrition therapy in the Philippine National Drug Formulary. In the future, this action may enable patients to be reimbursed for the use of specialized nutrition formulas and for services of clinical nutrition practitioners.

### Implementing The Medical City Nutrition Team

One of the more successful PhilSPEN NST initiatives is operating at The Medical City (TMC), a privately run tertiary care hospital in Metro Manila. Inasmuch as experts are shying away from the term “nutrition support,” TMC has opted to call its team “Nutrition Management Services” (NMS). It is a multidisciplinary team with 12 dietitians, a nurse-pharmacist, a clerk, and 13 nutrition consultants from various fields of expertise (clinical nutrition, surgery, gastroenterology, endocrinology, oncology, critical care medicine, and pediatrics). It also has a pediatric nutrition team comprising experts in pediatric gastroenterology, critical care, endocrinology, and general pediatrics.

Because TMC recognizes the importance of nutrition and the role nutrition plays in the treatment of all patients, it has mandated NMS to complete nutrition assessments for all newly admitted patients, including those admitted for executive checkups. Furthermore, the NMS team provides every patient with a specific diet prescription. Table 2 summarizes the issues and benefits that stem from this program.



**Table 2. Challenges and Benefits of Nutrition Assessment of All Hospitalized Patients**

Challenges	Benefits
Need more dietitians	Increased income for hospital
Increased cost due to increase in personnel	Increased prestige for hospital
More paperwork	Better communication and coordination of dietitians with doctor, nurse, and other staff
More contact with patients	Better appreciation of the value of dietitians and nutrition
Increased cost to the patient	More satisfied patients

All intensive care unit (ICU) patients are managed fully by the NMS, while patients on the floors are managed on formal referral to the team. Table 3 describes the challenges and benefits of nutrition monitoring of ICU patients.

**Table 3. Challenges and Benefits of Nutrition Monitoring of All ICU Patients**

Challenges	Benefits
Greater staff workload	Better identification of nutrition care errors
More paperwork	More immediate identification of inappropriate nutrition
Time consuming	Decreased incidence of errors in nutrition practice (reported, no statistical data)
Perceived increased cost for patient	Improved nutritional intake
	Improved patient outcomes (reported, no statistical data)

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TMC has expanded the role of NMS to include outpatient services at the Wellness Center, including pediatric, adolescent, and geriatric wellness; weight management; and the feeding clinic of the Center for Developmental Pediatrics. Nutrition consultants have been tapped to conduct regular ICU nutrition conferences, residents' nutrition-basics lectures, and 1-month rotation of endocrinology fellows in nutrition, and to provide various other lectures to allied professionals and lay individuals. NMS also is requested to provide services in the cancer center and wound-care and home-care programs.

To meet the demands of the hospitals, the NMS has had to increase staff knowledge and skills and to keep abreast with updates in clinical nutrition. Nutrition consultants preside over regular meetings and conferences to discuss difficult patients and administrative problems, and to conduct regular training for the team. The key to the success of NMS lies in the fact that its members—doctors, nurses, pharmacists, and dietitians—understand and appreciate each other's roles.

### International ICU Nutrition Survey

To assess the hospital nutrition practices of TMC, the NMS and the ICU section joined the International ICU Nutrition Survey in 2011. The lone registrant from the Philippines, NMS wanted to benchmark itself against other more established ICU nutrition teams all over the world. Results showed that NMS has been following the standard nutrition protocols of other parenteral/enteral societies by making enteral nutrition the preferred form of feeding for patients in the ICU. NMS ranked 23rd out of 183 participating ICUs in terms of adequacy of calorie delivery and 7th in adequacy of protein delivery.

### Summary

Despite the Philippines' struggle to meet the general healthcare demands of its growing population, medical institutions still should attempt to improve hospital nutrition care status and, consequently, improve patient outcomes. At this point, government is limited in its capacity to address the nutrition needs of hospitalized patients. Thus, the country must rely on its private sector in this endeavor. PhilSPEN, a private nonprofit medical organization, has developed ways and means to help achieve the ultimate goal of establishing as many nutrition teams in as many hospitals as possible nationwide. The successful and fully operational TMC team in Metro Manila can be a model to others.



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