

INDUSTRY CAREER GUIDE: Health and Wellness¹

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EXECUTIVE SUMMARY

The Health and Wellness Services industry belongs to the services sector. The National Statistical Coordination Board (2007) defines it as institutions that cater to the “activities of persons traveling to and staying in places outside their usual environment for not more than one consecutive year for health and wellness purposes not related to the exercise of an activity remunerated from within the place visited”. Establishments belonging to the industry, therefore, are engaged in: 1) hospital care and treatment – refer to services offered by public and private hospitals, sanitarium and other similar services; 2) specialty clinics – pertain to general public and private medical services such as dental and laboratory services, and other human health services; 3) wellness and spa centers – consisting of enterprises that provide physical and well-being services including but are not limited to slendering and body-building services, massage, reflexology, facials, nail care, waxing, and body treatments, etc.; and 4) retirement and rehabilitative care – comprised of residential institutions, that care for the aged and orphans, and the rehabilitation of people addicted to drugs or alcohol.

Attempts at tracking the sector’s performance show that the medical and health sub-sector gross value added has grown from an annual average of PHP7.92 billion in 1991-1995 to PHP17.31 billion in 2006-2009 with an annual average rate of increase of 4.39%, 5.79%, and 6.78% from 1991-1995, 1996-2000, and 2001-2005, respectively. Compared to the Philippines’ GDP and GNP average annual rates of growth for the same time period of GDP: 2.88% for 1991-1995, 3.96% for 1996-2000, and 4.49% for 2001-

2005 and GNP: 3.45% for 1991-1995, 4.74% for 1996-2000, and 4.94% for 2001-2005 – the medical and health sub-sector has consistently expanded faster than the national economy.

Accordingly, the share of the sub-sector to the Philippine national income has steadily gone up from 1.06% of GDP in 1991-1995 to 1.27% of GDP in 2001-2005. GNP shares followed the same trend with a 1.04% in 1991-1995 to 1.17% in 2001-2005. The slight decline in shares in GDP – average of 1.26% - and GNP – average of 1.13% - in 2006-2009 is attributed to the sub-sector's slower rates of growth from 2006 to 2009 (except for GDP growth in 2009) – owing to global financial, which reduced travels for medical purposes to the Philippines.

In terms of employment, the 2010 Philippine Statistical Yearbook reported the sector's share to total Philippine employment to be as low as 1.13% in 2006 - 376 thousand workers out of the 33.2 million of total Philippine employment - and as high as 1.18% in 2008 at 406 thousand workers of the 34.5 million of total Philippine employment.

Occupations in the hospital care and treatment and specialty clinics generally fall into two major categories: clinical and non-clinical. Clinical hospital jobs include physicians (i.e., ER doctors, surgeons, and hospitalists), dentists, nurses, medical technologists/medical and clinical laboratory technicians, physical therapists, pharmacists, dieticians, medical assistants, midwives, and hospital orderly/nurse's aide. In contrast, non-clinical hospital positions consist of case managers/social workers, accountants, human resources and recruiting, executives, information technologists, and administrative assistants. The wellness and spa centers, on the other hand, typically employ spa managers,

spa support staff, estheticians, massage therapists, and spa hair stylists. Occupations in the retirement and rehabilitative care include the nursing home administrator, nurses, and nursing aides/assistants – also known as home caregivers.

Two of the most important sources of growth in demand for healthcare and wellness services in the country are: 1) the relatively rapid expansion in population; and 2) longevity. Estimates predict that the number of the residents in the country would go up to 103 million and 111.8 million in 2015 and 2020, respectively. Coupled with a steady increase in life expectancy - the United Nations (2008) predicted average life expectancy to increase from 71.7 years in 2010 to 74 years in 2020 - these translate to a lucrative market for all the sub-sectors in the health and wellness services industry.

The quality and quantity of healthcare services and the availability of retirement and rehabilitative care services, for instance, are among the primary concerns of individuals aged sixty (60) and over – also known as senior citizens or the elderly. Owing to the high birth rates during the postwar period, 1945-1950, the elderly is the fastest growing segment of the Philippine population with an annual growth rate of 4.9 percent from 1995 to 2000 (DSWD, n.d.), which is almost twice the rate of the overall Philippine population rate of increase of 2.7 percent annually during the same time period (NSO, 2010). The trend is expected to continue resulting to a steady increase in the share of senior citizens to the total Philippine population of 7.8 percent, 9.6 percent, and 11.7 percent in 2015, 2020, and 2025, respectively (UN, 2008).

Exploiting the potential of the medical tourism industry in the global arena, which benefits the hospital care and treatment,

specialty clinics, and wellness and spa centers sub-sectors, begins with attracting a larger share of foreign visitors. An analysis of the latest available data from the Department of Tourism reveals that visitor arrivals in the Philippines have been growing at an annual average rate of 6.4%, from 2006's 2.8 million to 3.5 million in 2010.

The Philippines can also position itself to be one of the preferred destinations for retirees, especially in Asia. At present there are roughly 24,000 registered retirees residing at key locations in the National Capital Region, Baguio, Cebu, and Davao. Every retiree corresponds to around 1.5 jobs locally (Isip, 2011)

Among the reasons for this strong preference for the Philippines is the fact that the Philippines is the largest English-speaking country. Also, according to the Philippine Retirement Incorporated (PRI), a private-sector counterpart of the Philippine Retirement Authority (PRA), the Philippines is one of the best places in which to retire because of its healthcare facilities, which are equipped with modern facilities, closely monitored by the Department of Health (DOH), nationally-certified and accredited by the DOH, a few are also certified under the International Organization for Standardization (ISO) and three – Chong Hua Hospital (Cebu City), The Medical City (Pasig City, and St. Luke's Medical Center (Quezon City) - are accredited under the Joint Commission International (JCI).

Furthermore, the “unique Filipino brand of caring and compassion” is what gives the Philippines the greatest edge in providing medical and healthcare services to the retiring sector. (<http://retirephil.com/medfacilities.html>)

Lastly, the Philippines has always enjoyed “a higher percentage of medical professionals [– nurses in particular – as compared] to other developing countries” (Vequist & Valdez, 2008). In fact, in 2000 the ratio of nurses per one-thousand population was estimated 4.4 while in 2003 the ratio of doctors per thousand population stood at 1.2 (Vequist & Valdez, 2008). Moreover, the future supply of medical professionals in the country is reasonably assured by the more than 313 health recognized educational institutions in the country today.

Understandably, a factor that can significantly affect the future growth of the industry is the considerable outflow of Filipino health and wellness workers and professionals. Data shows that over the last three years, 2007 to 2009, deployment of this particular sector’s potential employees shrank by an average of 1.4% per year.

Further examination of the data on labor deployment, however, reveals that key professionals in the hospital care and treatment and specialty clinic sub-sectors – such as doctors medical and nurses professionals – have been leaving the Philippines at a rate that is notably higher than the overall industry average – 16% and 19%, respectively. Whereas, caregivers and caretakers, who are essential workers in the retirement and rehabilitative are segment, are emigrating at a negative rate over the three-year period, average of -19% per year from 2007 to 2009.

Nevertheless, in terms of magnitudes, caregivers and caretakers, nurses professions, and hairdressers, barbers, beauticians and related workers top the list of health and wellness

workers and professionals deployment during the three-year period at average of 11,245, 11,229, and 1,476, respectively.

Furthermore, while the Philippine Overseas Employment Agency data does not reflect the number of wellness and spa center workers deployed annually, the literature claims that given the rapid growth of destination and medical spas, in particular, “estheticians and other spa workers interested in international travel will find the opportunities endless as spas around the world, on cruise ships” (<http://www.hcareers.com/us/resourcecenter/tabid/306/articleid/269/default.aspx>).

Introduction

I. Nature of the Industry

A. Agriculture/Industry/Service

The Health and Wellness Services industry belongs to the services sector. The National Statistical Coordination Board (2007) defines it as institutions that cater to the “activities of persons traveling to and staying in places outside their usual environment for not more than one consecutive year for health and wellness purposes not related to the exercise of an activity remunerated from within the place visited”. Establishments belonging to the industry, therefore, are engaged in:

- 1) hospital care and treatment – refer to services offered by public and private hospitals, sanatoria and other similar services such as medical care, surgical care, women’s health, dental care, and optometric;
- 2) specialty clinics – pertain to general public and private medical services such as dental and laboratory services, and other human health services (i.e., public and private ambulance services, private child care clinics, services provided by midwives, physiotherapists, etc.);
- 3) wellness and spa centers – consisting of enterprises that provide physical and well-being services including but are not limited to sauna and steam bath services, slendering and body-building services, nutrition

counseling, massage, reflexology, facials, nail care, waxing, and body treatments, etc.; and

- 4) retirement and rehabilitative care – comprised of residential institutions, that care for the aged and orphans, and the rehabilitation of people addicted to drugs or alcohol.

Although recognized by the Philippine government as a significant contributor to the country's quest for rapid economic growth and development – particularly through medical tourism, Virola and Polistico (2007) maintain that information on the health and tourism sector are “‘hidden’ somewhere under Personal Services or Medical Services of the [Philippine System of National Accounts] PSNA” and the Philippine Tourism Satellite Account (PTSA). Consequently, data constraints deprive stakeholders of “an explicit characterization of health and wellness tourism as a component of the Philippine economy” (Virola & Polistico, 2007).

B. . Economic Profile

b.1 Contribution to GDP, GNP and Employment

Attempts at tracking the sector's performance can be made by monitoring the gross value added of the medical and health sub-sector as well as employment in the health and social services sub-sector as reported by the National Coordination and Statistical Board. Table 1 shows that the medical and health sub-sector gross value added has grown from an annual average of PHP7.92 billion in 1991-1995 to PHP17.31 billion in 2006-2009 with an annual average rate of increase of 4.39%, 5.79%, and 6.78% from

1991-1995, 1996-2000, and 2001-2005, respectively. The Philippine GDP and GNP average annual rates of growth for the same time period were below these rates of expansion – GDP: 2.88% for 1991-1995, 3.96 for 1996-2000, and 4.49% for 2001-2001 and GNP: 3.45% for 1991-1995, 4.74% for 1996-2000, and 4.94% for 2001-2005 (refer to Table 1).

Table 1: Health and Wellness Industry Contribution to the Philippine Economy

Indicator	1991-1995	1996-2000	2001-2005	2006	2007	2008	2009	2006-2009
<i>National Income</i>								
Medical & Health GVA (in constant 1985 PHP billions)	7.92	10.10	13.9	16.40	17.30	17.51	18.00	17.31
GDP (in constant 1985 PHP billions)	747.64	904.28	1,094.99	1,276.87	1,368.41	1,417.09	1,432.12	1,373.68
GNP (in constant 1985 PHP billions)	762.75	951.31	1,182.15	1,392.01	1,502.81	1,591.11	1,654.94	1,535.22
Medical & Health GVA Growth (%)	4.39	5.79	6.78	3.52	5.59	1.15	2.79	3.26
GDP Growth (%)	2.88	3.96	4.49	5.40	7.19	3.54	1.06	4.30
GNP Growth (%)	3.45	4.74	4.94	5.45	7.96	5.88	4.01	5.83
Share to GDP (%)	1.06	1.11	1.27	1.28	1.27	1.24	1.26	1.26
Share to GNP (%)	1.04	1.06	1.17	1.18	1.15	1.10	1.09	1.13
<i>Employment</i>								
Health & Social								

Work (in thousands)	-	-	356	376	396	406	412	397.5
Philippines (in Thousands)	24,461	28,074	31,301	33,188	33,672	34,533	35,478	34,218
Total Employment Growth (%)	2.84	1.63	3.47	0.10	1.46	2.56	2.74	1.93
Health & Social Work Employment Growth (%)	-	-	1.71	3.87	5.32	2.53	1.48	3.30
Share to Total Employment (%)			1.14	1.13	1.18	1.18	1.16	1.16

Source: 2010 Philippine Statistical Yearbook, NSCB

Note: 1991-1995, 1996-2000, 2001-2005 values are averages for the indicated years.

1991-1995 and 1996-2000 employment figures are not reflected owing to a change in the industry definition. The 1991-2000 definition classifies health and wellness under “Community Service and Personal Services”, which is a larger and more varied sector relative to the current (2001 to the present) definition of “Health and Social Work”.

Accordingly, the share of the sub-sector to the Philippine national income has steadily gone up from 1.06% of GDP in 1991-1995 to 1.27% of GDP in 2001-2005. GNP shares followed the same trend with a 1.04% in 1991-1995 to 1.17% in 2001-2005 (refer to Table 1). The slight decline in shares in GDP and GNP in 2006-2009 is

attributed to the sub-sector's slower rates of growth from 2006 to 2009 (except for GDP growth in 2009) – owing to global financial, which reduced travels for medical purposes to the Philippines.

Estimates provided by the NSO's Annual Survey of Philippine Business and Industry in 2003 and 2005 show that the hospital treatment and care and specialty clinics sub-sectors contributed the most to the health and wellness services industry's gross value added in 2003 and 2005. The report claims that these sub-sectors' value added grew from 2003's PHP19.4 billion to PHP25.5 billion in 2005 – average of 15.7% increase per year. Value added for the hairdressing and other beauty treatment sub-sector, which offers wellness and spa center services, on the other hand, was recorded at PHP3.1 billion in 2003 and PHP3.5 billion in 2005 for an annual average growth rate of 6.5% for the two years.

In terms of employment, the 2010 Philippine Statistical Yearbook reported the sector's share to total Philippine employment to be as low as 1.13% in 2006 - 376 thousand workers out of the 33.2 million of total Philippine employment - and as high as 1.18% in 2007 – 396 thousand workers out of the 33.7 million total Philippine employment and 2008 at 406 thousand workers of the 34.5 million of total Philippine employment, respectively (refer to Table 1). The NSO reported that the 2010 health and social work employment rose to four hundred sixty-five thousand, 12.9% higher than the 2009 level of four hundred twelve thousand. Since the increase in overall Philippine employment was less than 3% during the same period - from 35.48 thousand in 2009 to 36.49

thousand in 2010, the share of the sector to total Philippine employment grew from 1.16% in 2009 to 1.27% in 2010.

Employment levels are directly proportional to output. They go up when the sector's gross value added increases and fall when GVA declines. Notice that the GVA growth rates of Medical and Health and Health and Social Work employment both peaked at more than 5% in 2007 and that the expansions and reductions in gross value added are almost always accompanied by corresponding increases and decreases in employment in the sector (refer to Table 1).

b.2 Regional Distribution/Concentration of Sub-Sectors

Hospital Care and Treatment and Specialty Clinics

In 1999, NCR had the highest concentration of registered establishments and workers in the hospital activities and the dental and medical practices sub-sector, 31% and 47%, respectively, of the total registered establishments and hospital activities and dental and medical practices in the Philippines. Region IV is second, with 6,363 employees – 12% - working at 101 establishments – 18% - across the region. In 2006, the share of NCR in the number of registered establishments swelled to 51% and the Cordillera Autonomous Region (CAR) overtook Region IV with a 14% share - 170 establishments – of the number of registered establishments versus Region IV's 9% share - 114 establishments (refer to Table 2).

Registered hospital activities and the dental and medical practices establishments are concentrated in NCR owing to the high demand for the sector's services in urban areas. The consumer base is larger relative to the other regions in the country. NCR is the preferred residence of an estimated 13% of the Philippine's 89 million population in 2007. In addition, NCR's population is growing faster than the country's population – 2.11% versus the Philippine's 2.04% in 2000 to 2007. Lastly, serving as the center of commerce in the Philippines, NCR also hosts supporting infrastructure that are critical to the growth and development of the sector. Relative to other regions in the country, the National Capital Region offers better quality roads, ports, public transportation, utilities, communication facilities, educational institutions, and the like. The availability of these supporting industries, complementary services, and the abundant supply of healthcare professionals in the region, can reduce the cost of operation (Ebert & McMillen, 1999) of firms belonging to the health and wellness industry and entice them to position themselves in NCR.

Table 2: Total No. of Establishments and Employment by Region and Sub-Sector (1999)

REGION	NO. OF EST. (1999)	HOSPITAL ACTIVITIES & MEDICAL & DENTAL PRACTICES (1999)	NO. OF EST. (2006)
NATIONAL CAPITAL REGION (NCR)	173	25,676	625
CORDILLERA ADMINISTRATIVE REGION (CAR)	6	253	170
REGION I – ILOCOS	22	1,198	8

REGION II - CAGAYAN VALLEY	14	596	16
REGION III - CENTRAL LUZON	47	2,997	68
REGION IV - SOUTHERN TAGALOG	101	6,363	114
REGION V - BICOL	23	942	23
REGION VI - WESTERN VISAYAS	22	3,949	22
REGION VII - CENTRAL VISAYAS	28	4,273	35
REGION VIII - EASTERN VISAYAS	7	522	11
REGION IX - WESTERN MINDANAO	19	981	20
REGION X - NORTHERN MINDANAO	23	1,519	32
REGION XI - SOUTHERN MINDANAO	41	3,407	32
REGION XII - CENTRAL MINDANAO	23	1,208	29
AUTONOMOUS REGION IN MUSLIM MINDANAO (ARMM)	-	-	4
CARAGA	6	383	8

Source: Census of Philippine Business and Industries (CPBI)

Wellness and Spa Centers

In 2005, hairdressing and other beauty treatment establishments with twenty or more average total employment were located in the National Capital Region (NCR), Ilocos Region (Region I), Central Luzon (Region III), CALABARZON (Region IV), Western Visayas (Region VI), Central Visayas (Region VII), Zamboanga Peninsula (Region IX), and Davao Region (Region XI) (refer to Table 3). Majority of these new large hairdressing and other beauty treatment firms chose to locate in the National Capital Region where their numbers rose from 59 in 2003 to 165 in 2005 – an

increase of 179.7% or 89.8% per year. Indeed, the share of NCR hairdressing and other beauty treatment and other service activities n.e.c. businesses with twenty or more average total employees to the 2005 total gross additions to fixed capital, total revenue, and value added of the entire sub-sector were 51.4%, 26.1%, and 23.1%, respectively (refer to Table 3).

Table 3: Establishments with Twenty or More Average Total Employees in the Hairdressing and Other Beauty Treatment and Other Service Activities N.E.C. Sub-sectors Statistics by Region, 2003 and 2005

	Total Number of Establishments		Gross Additions to Fixed Capital (PHP thousands)		Total Revenue (PHP thousands)		Value Added (PHP thousands)	
	2003	2005	2003	2005	2003	2005	2003	2005
NCR	59	165	38,808	110,315	498,866	1,663,747	228,759	749,380
Region I	-	7	-	316	-	14,319	-	15,090
Region III	-	5	-	81	-	34,261	-	19,516
Region IV*	5	23	7,303	1,197	208,901	133,442	72,089	62,705
Region VI**	3	5	1,086	450	40,952	17,027	21,030	7,566
Region VII	8	25	640	20,929	33,000	210,674	18,706	115,326
Region IX***	-	4	-	-	-	32,786	-	22,368
Region XI	-	6	-	-	-	36,334	-	15,191
Total	75	240	47,837	133,288	781,719	2,142,590	340,584	1,007,142
Philippines	23,316	26,007	84,552	259,421	6,500,970	8,205,020	3,571,165	4,369,077

Source: 2003 and 2005 Annual Survey of Philippine Business and Industry, NSO

*Includes hairdressing and other beauty treatment and washing and (dry-) cleaning of clothes and textiles for 2003

**Includes hairdressing and other beauty treatment and funeral and related service for 2003

***Includes hairdressing and other beauty treatment; motion picture, radio, television and other entertainment activities; and sporting and other recreational activities for 2005

Retirement and Rehabilitative Care

The NSO's 2003 and 2005 Annual Survey of Philippine Business and Industry "includes activities that are directed to provide social assistance to children, **the aged** and special categories of persons with some limits on ability for self-care, but where medical treatment education or training are not important elements" (ASPBI, 2003) under social work activities, which, for the purposes of this section represents the retirement and rehabilitative care sub-sector.

In 2003 nine establishments with average total employment of 20 and over were – out of 116 of the total number of firms in the entire sub-sector - located in the National Capital Region. Retirement and rehabilitative care firms in NCR increased its numbers by 77.8% in 2005 – from 9 in 2003 to 16 in 2005 - while the total number of firms in the sub-sector rose to 203 or by 75% during the same period.

b.3 Industry Organizations relative to the sub-sectors

Industry Professional Organizations

Health and wellness services industry workers, depending on their professions can be members of a number of professional organizations including, but not limited to:

- 1) Philippine Medical Association (PMA),
- 2) Philippine Nurses Association (PNA);
- 3) Philippine Dental Association (PDA);
- 4) Nutritionist-Dieticians' Association of the Philippines;
- 5) Philippine Physical Therapy Association;
- 6) Philippine Association of Medical Technologists, Inc. (PAMET);
- 7) Philippine International Cosmetologists Association (PICA); and
- 8) Spa Association of the Philippines, Inc./Philippines Wellness and Spa Association (PHILWELL).

Certainly, various specialties within the profession have given rise to additional professional organizations – the overarching objective of each one being strengthening the competencies of individuals belonging to the profession by creating opportunities for professional growth and development.

Moreover, non-government organizations (NGOs) centered on the specific concerns of the health and wellness services industry work towards the promotion of the welfare of its stakeholders by providing access to medical services, in particular, and offering technical assistance for the improvement of services, etc. Examples of NGOs directly involved in the health and wellness services industry are: 1) health – PGH Medical Foundation, PHAP Cares Foundation, Inc., Lingap Para sa Kalusugan ng Sambayanan, etc.; and 2) older persons – Federation of Senior

Citizens Association of the Philippines (FSCAP), Coalition of Services of the Elderly, etc.

C. Industry Sub-sectors

c.1 Enumerates the Type of Establishment for Each Sub-sector

Hospital Care and Treatment and Specialty Clinics

Although almost two-thirds of licensed hospitals in 2005 – 591 hospitals out of 950 total number of hospitals – were owned by private entities, the share of government to the total number of hospital beds was slightly higher than that of the private sector’s – 36,396 beds in government hospitals versus 36,380 in the private sector. In contrast, the private sector dominated the other health facilities sub-sector in 2005 (includes privately-owned infirmaries, birthing homes, acute chronic psychiatric care facilities, and custodial psychiatric care facilities) in both the number of establishments - 539 private facilities compared to 343 government-owned establishments - and number of beds - 6,834 number of beds in the private sector relative to the government’s 6,163. In fact, 100% of the acute chronic psychiatric care facilities and custodial psychiatric care facilities – four institutions -during the period were owned by the private sector.

Government-owned hospitals and other health facilities are categorized as DOH-retained or locally-owned while private sector hospitals and other health facilities fall under the three main business organization classifications, namely: single proprietorship, partnership, and corporation. Some are owned and

managed by religious organizations, civic organizations, and cooperatives. Most are for-profit organizations.

Wellness and Spa Centers

The NSO's Annual Survey of Philippine Business and Industry classified the hairdressing and other beauty treatment segment of the health and wellness industry – presumably encompassing the services offered by the wellness and spa centers – under Other Community and Personal Service Activities. Table 4 reveals that the number of establishments in the sub-sector mushroomed from 23,316 in 2003 to 26,007 in 2005, thereby registering an average annual rate of increase of 5.8% per year for two years.

Table 4: Hairdressing & Other Beauty Treatment and Other Service Activities N.E.C. Sub-sectors Statistics, 2003 and 2005

	Total Number of Establishments		Gross Additions to Fixed Capital (PHP millions)		Total Revenue (PHP millions)		Value Added (PHP millions)		Total Employment	
	2003	2005	2003	2005			2003	2005	2003	2005
Total Hairdressing and Other Beauty Treatment and Other Service Activities N.E.C.	23,316	26,007	85	259	6,501	8,205	3,571	4,369	61,247	70,304
Less than 20 Employees*	23,241	25,767	37	126	5,719	6,062	3,230	3,362	58,600	64,122
20 or More Employees	75	240	48	133	782	2,143	341	1,007	2,647	6,182

Source: 2003 and 2005 Annual Survey of Philippine Business and Industry, NSO

*Derived values – NSO reported statistics are only for the Hairdressing and Other Beauty Treatment sub-sector and establishments with 20 or more employees.

Small firms – defined as businesses with less than twenty (20) employees – dominated the industry in 2003 and 2005. Based on the data Table 4, small firms accounted for 99.7% and 99.1%, respectively, of the sub-sector's total number of establishments; 43.5% and 48.7%, respectively, of total gross additions to fixed capital; 88% and 73.8%, respectively, of total revenue; and 90.5% and 77%, respectively of total value added. Considerable growth in the number of hairdressing and other beauty treatment and other service activities not elsewhere classified n.e.c. establishments with 20 or more average total employment in 2005 – almost two and a half times as many as that of 2003 – resulted in the more than 100% increase in the number of workers in enterprises with more than 20, from 2,647 in 2003 to 6,182 in 2005, as well as an increase in the share of large businesses in the sub-sector's total revenue and value added during the year.

The Special Release of the 2009 Annual Survey of Philippine Business and Industry did not include a regional distribution of the total number of establishments, gross additions to fixed capital, total revenue nor value added for the sub-sector. The database, however, showed that during the year the other service activities sub-sector – to which the Hairdressing and Other Beauty Treatment and Other Service Activities N.E.C. belong - accounted for the most number of establishments (61.8% or 3,770 of the total 6,100 the Other Community, Social and Personal Service

Activities firms surveyed), ranked third in total revenue earned (7.93% or PHP9,921.6 million out of the total PHP125,176.6 million revenue of the industry) but less than 1% of the sector's value added (PHP133 million relative to the industry's PHP73,050 million). Comparing these statistics to the 2003 and 2005 values, nonetheless, will be misleading for the database did not breakdown the other service activities into its various components (i.e., hairdressing and other beauty treatment, funeral and related service, washing and dry cleaning of textiles and fur products).

Retirement and Rehabilitative Care

According to the NSO Annual Survey of Philippine Business and Industry, an estimated 92.2% of the establishments in the retirement and rehabilitative care sub-sector were businesses with average total employment of less than 20 or small enterprises in 2003. The 75% increase in the total number of firms in the sub-sector in 2005 – from 2003's 116 to 2005's 203 – resulted in slight decline in the share of small firms to 92.1%.

c.2. Key Players in the Health and Wellness Services Industry

Numerous companies under the Health and Wellness Services industry have been featured in the top 7000 corporations in the Philippines. This survey, released by the Philippine Business Profiles and Perspectives, Inc., ranks companies per year based on their annual Gross Revenues.

Hospitals and Specialty clinics were classified under the Health and Social Work division of the top 7000 corporations. According to the latest data, the Gross Revenue (GR) and the Net Income After Tax (NIAT) of this division has been growing steadily from 2006 to 2008. In 2006, for the Health and Social Work Sector, total Gross Revenues was equal to PHP13,962,818,000 and total Net Income after Tax was equal to PHP467,074,000. In 2007, Gross Revenues increased by about 12.59% to PHP15,721,255,000. However, this translated poorly to Net Income after Tax, which decreased by about 81.91% to PHP256,747,000. For 2008, health-related companies experienced a sudden boost. Its Gross Revenues went up to PHP25,205,318,000. This is a 60.33% increase from the previous year's gross revenues. On the other hand, Net Income after Tax seemed to bounce back, surpassing both values of the previous two years, as it went by 138.33% to P611,902,000.

The list of the highest-ranked health-related companies for the past three years included:

- 1) in 2006 - Professional Services Incorporated, Medicaid Philippines, Incorporated, and Maxicare Healthcare Corporation;
- 2) in 2007 - Professional Services Incorporated, Medicaid Philippines, Incorporated, and Maxicare Healthcare Corporation; and
- 3) in 2008 - Professional Services Incorporated, Medical Doctors Incorporated, and Medicaid Philippines, Incorporated.

Among the top three companies in the top 7000 corporations list include healthcare providers (also known as Health Maintenance Organizations or HMOs). Businesses such as Maxicare Health Corporation and Medicaard Philippines also run their own hospitals and specialty clinics aside from providing health insurance to its customers.

The list of the top 7000 companies also contain wellness-related corporations. Under the division of *Other Community, Social, and Personal Service Activities* is the subclass *Hairdressing and Other Beauty Treatment* (Beauty Parlor activities).

In 2006, companies under this division and subclass earned a total Gross Revenue of PHP260,177,000 and a total Net Income after Tax of PHP5,451,000. Both went up in 2007, with total Gross Revenues increasing to PHP546,701,000 or by 110.12% from 2006, and Net Income after Tax to PHP9,025,000 or by 65.57% from 2006.

Both income items further increased in 2008, although not as much as the observed increase from 2006 to 2007. Total Gross Revenues was up from 2007 by 12.37% or to PHP614,357,000. On the other hand, Net Income after Tax went up by 10% to PHP9,927,000.

The list of the highest-ranked wellness-related companies for the past three years. include:

- 1) in 2006 - Hair Group Salons Incorporated and Beauty Profile Corporation;
- 2) in 2007 - Going Straight Salon, Incorporated, Hair Group Salons, Incorporated, and Bioaccents, Incorporated; and

- 3) in 2008 - Going Straight Salon, Incorporated, Hair Group Salons, Incorporated, and Index Hair and body Salon Corporation.

c.3 Recent Developments for the past 3 to 5 years

The growth of the medical tourism sector, which is currently a multi-billion dollar industry, is attributed to a number of factors, namely:

- 1) the significant price differences of medical services between developed and developing countries;
- 2) “favorable foreign currency exchange rates [in developing economies]” (Garcia & Besinga, 2006);
- 3) “rapidly improving technology and medical practice standards” in developing nations (Garcia & Besinga, 2006);
- 4) the long waiting period for medical care in first world economies; and
- 5) rising incomes worldwide costs (Castillo & Conchada, 2011; Garcia & Besinga, 2006; Kalshetti & Pillai, 2008; Smith, 2008).

The continued expansion of the industry, which is expected in the short- and medium term, would be fueled by the following major factors:

- 1) improving life expectancy worldwide;
- 2) extension of healthcare insurance coverage to include medical services obtained in “selected healthcare

institutions around the world” (Kalshetti & Pillai, 2008), which will, in turn, allow an increase in the number of foreign patients who can “use their insurance plans to finance procedures performed abroad” (Castillo & Conchada, 2011);

- 3) the persistent and widening gap in healthcare costs between developed and developing countries – comparing Philippine and US medical procedures, for example, the cost of hip/knee replacement, bypass, transplant in the former are 17% to 58.2% of the United States (Castillo & Conchada, 2011); and
- 4) relative ease and declining cost of travel.

Industry experts are optimistic about the prospects of the wellness and spa centers sub-sector, particularly given the increasing perception that spa services “offer real therapeutic benefits beyond pampering” (Global Spa Summit, 2010). Accordingly, in addition to the market initially established among the wealthier households in the economy through pampering and beauty services, an emphasis on the contribution of wellness and spa center services to an improved quality of life – particularly when tied-in with medical services (i.e., massage for cardiac patients, wellness and spa packages for patients recuperating from medical procedures, or wellness and spa services as alternatives to medicine/medical treatments) and tourism (i.e., spa tour packages) - would expand the sub-sector’s client base not only in the domestic economy but also within the world’s rapidly developing countries.

II. General Employment

A. Macro Levels

Hospital Care and Treatment and Specialty Clinics

Table 5 presents data on the total paid and unpaid employees. Paid employees are categorized into two: managers and executives and other paid employees. Managers and executives are individuals who hold high management positions in the health and wellness business establishments. Other paid individuals include staff and other employees who are essential in the daily operations of the business. While 98.5% of health and wellness workers are paid, the balance is comprised of unpaid workers who are mostly health-related professionals seeking experience, particularly nurses who would like to work abroad.

According to an interview conducted with a registered nurse, Ms. Clare Bianca L. Villegas, hospitals usually accept new graduates as volunteers. Very few of these hospitals actually pay these volunteers, while others give a minimal allowance. At the end of their contracts, hospitals assess whether they will be accepted for employment as staff nurses. However, other hospitals have stopped accepting new graduates because of a recent controversy where volunteer nurses are asked to pay a fee for duty.

Table 5: Health and Wellness Industry Paid and Unpaid
Employees

					Total
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Region	Managers and Executives	Other Paid Employees	Total Paid Workers	Unpaid Workers	Paid and Unpaid Workers
Philippines	3,007	51,788	54,795	825	55,620
National Capital Region	1,567	23,908	25,475	201	25,676
Cordillera Administrative Region (CAR)	24	225	249	4	253
Region I	62	1,122	1,184	14	1,198
Region II	22	523	545	51	596
Region III	131	2,808	2,939	58	2,997
Region IV	368	5,867	6,235	128	6,363
Region V – Bicol	66	858	924	18	942
Region VI	119	3,806	3,925	24	3,949
Region VII	97	4,132	4,229	44	4,273
Region VIII	43	472	515	7	522
Region IX	45	907	952	29	981
Region X	52	1,414	1,466	53	1,519
Region XI	164	3,215	3,379	28	3,407
Region XII	57	1,103	1,160	48	1,208
ARMM	-	-	-	-	-
CARAGA	39	342	381	2	383

Source: Census of Philippine Business and Industries

Specifically in the public sector, Table 6 shows the number of doctors, dentists, nurses, and midwives employed in government-operated health facilities from 2004 to 2008. Note that, on average, 64.5% of public sector health workers are midwives. Doctors and nurses, on the other hand, account for an average of 11.2% and 17%, respectively, of all government employed health workers during the five-year period.

Table 6: Philippine Government Health Manpower, 2004-2007/2008

Profession	2004	2005	2006	2007	2008	Ave. Growth	Share to Total Gov.
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						(%)	Health Manpower (%)
Doctors	2,969	2,967	2,955	3,047	2,838	-1.46	11.17
Dentists	1,929	1,946	1,930	1,894	1,891	-0.53	7.32
Nurses	4,435	4,519	4,374	4,577	4,576	-0.61	16.99
Midwives	16,967	17,300	16,857	16,821	17,437	0.30	64.52
Total	26,300	26,732	26,116	26,339	26,742	-0.13	100.00

Source: Department of Health

Employment of health professionals in government-operated health facilities ebbed and flowed from 2004 to 2008. Starting with 26, 300 doctors, dentists, nurses and midwives in 2004, the government health manpower rose to 26,742 four years later. The 2008 employment expansion nonetheless was not enough to compensate for the declines in government health manpower in 2006 and 2007 (refer to Table 6). Bulk of the increase in 2008 was accounted for by the rise in the number of midwives employed by the public sector – from 16, 821 in 2007 to 17,437 in 2008 or a 3.7% growth. In contrast, the number of nurses employed by government-run facilities shrank, on average, by 0.6% per year from 2004 to 2008. The largest decline was recorded in 2004, when nurses serving in public health facilities dropped by 6.3% - from 2003's 4, 735 to 4,435 in 2004.

The rise and fall in the number of health workers in the public sector is closely tied with the Philippine government's spending on health during the period. Table 13 shows that government expenditure on health, in general went up in 2009 and 2010 – government expenditure on health per capita climbed from US\$40/capita in 2008 to US\$47/capita in 2009 and US\$50/capita in 2010. Moreover, government expenditure on health as a percentage of total government expenditure remained at 7% from 2006 to 2009 and grew to 8% in 2010. Additional government

spending on health, therefore, resulted in, among other things, the expansion of government health manpower as well.

Wellness and Spa Centers

In terms of employment, according to the NSO's Annual Survey of Philippine Business and Industry, an estimated 95.7% and 91.2% of the workers in hairdressing and other beauty treatment and other service activities n.e.c. sub-sectors in 2003 and 2005, respectively, were employed in establishments that had less than 20 average total employees. Businesses in the sub-sector that employed 20 or more average total employees during the same two years accounted for less than 10% of the hairdressing and other beauty treatment and other service activities n.e.c. sub-sectors, 2,647 of the total 61,247 workers in 2003 and 6,182 of the total 70,304 workers in 2005 (refer to Table 7).

Table 7: Hairdressing and Other Beauty Treatment and Other Service Activities N.E.C. Sub-sectors Employment Statistics, 2003 and 2005

	Total Employment		Paid		Unpaid	
	2003	2005	2003	2005	2003	2005
Total Hairdressing and Other Beauty Treatment and Other Service Activities N.E.C.	61,247	70,304	36,682	41,893	24,566	28,413
Less than 20	58,600	64,122	34,040	35,743	24,561	28,327

Employees*						
20 or More Employees	2,647	6,182	2,642	6,096	5	86

Source: 2003 and 2005 Annual Survey of Philippine Business and Industry, NSO

*Derived values – NSO reported statistics are only for the Hairdressing and Other Beauty Treatment sub-sector and establishments with 20 or more employees.

The report also revealed that a larger proportion of workers in establishments with less than 20 average total employees were unpaid relative to businesses with 20 or more average total employment in 2003 and 2005 – 41.9% and 44.2% for the former, respectively, versus 0.2% and 1.4%, respectively, for the latter. Note that the share of the unpaid workers to total employment grew for both the small - the number of unpaid workers climbed from 2003's 24,566 to 2005's 28,413 - and large establishments the number of unpaid workers swelled from 2003's 5 individuals to 2005's 86 - as total employment increased (refer to Table 7). The rates of growth of unpaid workers were also higher than that of total employment – 15.3% rise in unpaid workers in small firms relative to a 9.4% increase in total employment from 2003 to 2005 and an increase of 16 times more unpaid workers in larger establishments compared to a 150.6% rise in total employment from 2003 to 2005.

In the Philippines, unpaid workers normally refer to family workers who “work[s] without pay in a farm or business operated by a member of his/her family” (Sibal, 2007). Relative to the formal

sector, majority of them are employed by micro- and small-scale enterprises in the informal sector. Accordingly, the increase in the total number of establishments with less than 20 employees in the sub-sector of 10.87% from 2003 to 2005 was accompanied by a 15.3% growth in family members and other volunteers employed by small firms in the sub-sector. While the occasional family worker may also “volunteer” in large firms in the sub-sector, unpaid workers in these companies may also include apprentices or individuals engaged in on-the-job training programs. Unpaid workers do not usually account for significant percentages of formal sector and large enterprises labor force owing to government regulations pertaining to labor practices.

In addition, according to the Special Release 2009 Annual Survey of Philippine Business and Industry, during the year, the other service activities sub-sector – to which the Hairdressing and Other Beauty Treatment and Other Service Activities N.E.C. belong - ranked second in terms of the most number of employees (35.9% or 31,395 workers out of the total 87,438 employees in the sector) in the Other Community, Social and Personal Service Activities industry. The sub-sector’s average number of workers per establishment in 2009 was more than 40% below the industry average – eight employees versus fourteen for the industry. It also ranked last relative to the other sub-sector’s average number of employees per establishment – 35 average workers per establishment, for instance, in the sewage and refuse disposal, sanitation and similar activities sub-sector and 25 average workers per establishment for the sporting and other recreational sub-sector. Lastly, average annual compensation per worker was also the lowest in the industry at PHP90,044 – a mere 36.9% of

the industry average annual compensation per worker of PHP243,763. The nature of the services as well as the skills required to provide them may explain earnings per worker in the other service activities sub-sector. The news agencies activities, motion picture, radio, television and other entertainment activities and sporting and other recreational activities sub-sectors, for example, require specialized skills developed and honed by years of experience and schooling; thus resulting in an average annual compensation per worker of PHP2.2 million, PHP361 thousand and PHP322 thousand, respectively, during the same time period.

Table 8: 2005 Regional Hairdressing and Other Beauty Treatment and Other Service Activities N.E.C. Sub-sectors Employment Statistics by Gender for Establishments with 20 or More Average Total Employees

Region	Total		Paid		Unpaid	
	Male	Female	Male	Female	Male	Female
NCR	1,374	2,957	1,355	2,922	19	35
Region I	108	83	106	81	2	2
Region III	15	85	15	85	-	-
Region IV	228	330	226	324	4	6
Region VI	47	55	47	55	-	-
Region VII	178	429	170	419	7	10

Region IX*	71	80	71	79	-	1
Region XI	27	114	27	114	-	-
Total	1,998	4,133	2,017	4,079	32	54

Source: 2003 and 2005 Annual Survey of Philippine Business and Industry, NSO

Note: May not yield the same totals as reported by NSO for the entire sub-sector owing to the inclusion of other services in Region IX.

*Includes hairdressing and other beauty treatment; motion picture, radio, television and other entertainment activities; and sporting and other recreational activities

The regional distribution of employment in establishments with 20 or more average total employees in 2005 shows that 68.8% and 71.6% of all male and female workers, respectively, were employed in the National Capital Region – the preferred location for 78.7% of the larger firms that provided hairdressing and other beauty treatment services in 2005. NCR also accounted for the largest share of unpaid male and female employees in the sub-sector during the year, 59.4% - 19 out of the total 32 unpaid male employees and 64.8% - 35 of the total 54 unpaid female employees, respectively (refer to Table 8). Consistent with the statistics for the entire sub-sector – sum of small and large establishments, a greater share of the male employees (relative to total male workers) was reported as unpaid relative to their female counterparts.

Retirement and Rehabilitative Care

According to the NSO Annual Survey of Philippine Business and Industry, 58% of workers employed in the retirement and rehabilitative care sub-sector in 2003, 810 out of 1,397, worked in establishments with average total employment of 20 or more - large firms. These businesses were located in the National Capital Region. Employment in the sub-sector rose by 108.5% from 2003's 1,397 to 2005's 2,912. Large firms in the NCR continued to dominate employment in the sub-sector in 2005 with a share of 48.4%, 1,409 out of 2,912.

B. In-demand and hard-to-fill Occupations in the sub-sectors

In the domestic market, occupations in the health and wellness services industry that are in short supply include doctors and dentists. Majority of Filipino health workers choose to work abroad where the pay is significantly higher. Health professionals who remain the Philippines are concentrated in urban areas resulting in shortages of health providers in the rural areas, particularly doctors and dentists.

III. Industry Occupations

a. Working Conditions

a.1 Nature of Employment

Workers in the health and wellness services industry work on full-time or part-time basis depending on the needs of the establishment that employ them. Full-time employment, specifically for establishments that require shifting arrangements like hospitals and nursing homes, range from 40 to 48 hours a week; thus, affecting mostly doctors, nurses, medical technologists, and caregivers. Part-time employment requires less than 40 hours of service rendered per week.

Employees of all sub-sectors in the health and wellness services industry also have opportunities to work for themselves. Doctors and dentists, for instance, can establish their own practices or partner with like-minded professionals to put-up specialty clinics. Similarly, spa and wellness sub-sector workers, particularly estheticians, can run their own salons and spas while massage therapists can work on their own – without a staff – and serve clients in their own homes. Accordingly, the work hours for these professionals are highly flexible and may extend to the weekends.

a.2 Working Hours

The Labor Code of the Philippines (PD442), Article 83, decree that “Health personnel in cities and municipalities with a population of at least one million (1,000,000) or in hospitals and clinics with a bed capacity of at least one hundred (100) shall hold regular office hours for eight (8) hours a day, for five (5) days a week, exclusive of time for meals, except where the exigencies of the service require that such personnel work for six (6) days or forty-eight (48) hours, in which case, they shall be entitled to an additional compensation of at least thirty percent (30%) of their regular wage

for work on the sixth day” (<http://www.chanrobles.com/legal4labor3.htm>). The Labor Code of the Philippines considers the following as health personnel: resident physicians, nurses, nutritionists, dietitians, pharmacists, social workers, laboratory technicians, paramedical technicians, psychologists, midwives, attendants and all other hospital or clinic personnel – and are, therefore, subject to the above mandate.

Table 9: Average Weekly Hours Worked, 2006-2010

Category	2006	2007	2008	2009	2010	Five-Year Average (in hours)
Health and Social Work	41.5	42.1	42.8	42.2	43.0	42.32
All Industries	41.1	41.4	41.8	41.2	41.7	41.44
Private Sector	44.3	44.4	44.8	44.2	44.5	44.44
Government	39.0	39.5	39.4	38.9	39.2	39.20
Self-Employed	40.1	40.6	41.2	40.5	40.0	40.48

Source: National Statistics Office

Accordingly, data from the National Statistic Office² (refer to Table 9) report that, on the average, health and social work employees rendered 42.32 hours of work per week from 2006 to 2010. Note that the number of hours worked in the health and social work sector has been steadily increasing – except in 2007 - over the

² Averages for the year were computed based on the average weekly hours worked of employed persons, in each of the four survey rounds of the Labor Force Survey.

past five years. Similarly, compared to workers in all industries, the self-employed, and government-owned/controlled corporations during the same period, employees in the health and social work industry, on the average, rendered 2.08%, 4.35%, and 7.37%, respectively, more hours per week. Relative to the private sector, however, laborers in the health and social sector, on the average, worked 5.01% hours less.

In general, there is a great degree of flexibility in working hours within the health and wellness industry. Doctors, nurses, dentists, pharmacists, and medical technologists in the hospital care and treatment sub-sector can choose to work for hospitals on a full-time or part-time/consultancy basis. They can also choose to set-up their own practice and, thus, determine their own hours.

Similarly, a large percentage of spa employees – estheticians, massage therapists, etc. – are given opportunities to work daytime hours owing to the dominance of day spas – 80% - in the sub-sector. In addition, licensed estheticians and massage therapists can choose to work as independent contractors in day, destination, and medical spas, which allow them to set their own fees and hours (<http://www.hcareers.com/us/resourcecenter/tabid/306/articleid/269/default.aspx>). They may also choose to put up their own business or work free lance. Spa services – particularly massages, manicures and pedicures – can be and are often - offered at the client's home. Well-trained esthetician and massage therapist, therefore, do not have to be employed in spas. With an established and loyal clientele, they can be entrepreneurs and run

their own facilities or offer their services in the homes of their clients.

Lastly, since patients in retirement and rehabilitative care establishments require round-the-clock assistance, most nursing aides/caregivers render more than the 40-hour a week that is standard across industries. Working in shifts or live-in employees, which allow nursing homes to address the needs of their clients, are also common work arrangements in the sub-sector (www.careermagnifier.com/job-description.php?jobID=39).

Caregivers, on the other hand, have options to work in nursing home facilities on a full-time or part-time basis or they can work for specific clients who are not living in retirement facilities. Depending on the client's needs, shifting and live-in arrangements are within industry norms. Similar to workers in the wellness and spa centers, therefore, caregivers can choose to work for an established institution or strike out on their own – find their own clients and negotiate the terms of their employment.

a.3 Working Environment

Hospital Care and Treatment and Specialty Clinics

Most healthcare professionals in the hospital care and treatment and specialty clinics sub-sectors work in clean, well-lighted and comfortable hospitals, healthcare organizations, and clinics. Among the major factors affecting the work environment in the hospital care and treatment and specialty clinics sub-sectors are the long and irregular work hours, workload, the relatively high stress levels due to the shortage of personnel (i.e., nurses), and

the travel involved, especially doctors and nurses, who, depending on the needs of the patients, shuttle between hospitals and clinics. Multi-tasking is also a facet of the work involved as healthcare professionals attend to several patients at a time while maintaining an accurate and concise record of the diagnosis and treatment required. Lastly, most health care professionals in the hospital care and treatment and specialty clinics sub-sectors are normally on their feet for most of their working hours.

Wellness and Spa Centers

Most spas are day spas. Thus, wellness and spa center workers normally keep daytime hours. Massage therapists, in particular, work in dim-lighted rooms with soothing music as a staple to help their clients relax. Massages adhere to strict time limits as well as methods and therapists must be mindful of both, especially if they are working for established wellness and spa centers.

Hairstylists, manicurists, pedicurists and estheticians employed salons and barbershops – some of which are located in malls, a few in stand alone offices - normally work in clean and well-lighted environments. Full-time employees keep regular hours – about 40 hours a week – spread throughout the day and early evenings and even the weekends when these establishments cater to the most number of clients.

Self-employed massage therapists, hairstylists, manicurists, pedicurists and estheticians keep flexible hours. Most would make themselves available on evenings and weekends to make client calls (a.k.a. home service, in the Philippines).

Retirement and Rehabilitative Care

Nursing aides and caregivers mainly work in nursing homes but they can also be employed in hospitals, specialty clinics, and in the homes of particular clients who require assistance. Some are employed in hospitals, clinics and homes of specific clients. The work environment is normally clean and comfortable. The job, however, requires caregivers to cope with the stress stemming from looking after individuals who are sick or assisting individuals perform the most basic tasks (i.e., eating, bathing, etc.) (Kopiec, 2000). In addition, the work is physically exhausting as caregivers are normally on their feet for majority of their working hours and are called upon to lift and move patients.

a.4 Occupational Hazards

Hospital Care and Treatment and Specialty Clinics

Several sources of occupational hazards are identified in the hospital care and treatment and specialty clinics sub-sectors, namely: biological, chemical, ergonomic and safety, and psycho-social. Contact with infected patients exposes hospital and specialty clinics workers to biological hazards such as bacteria, viruses, fungi or parasites, etc. Hepatitis B (HBV) and Human Immunodeficiency Virus (HIV) are particular concerns for direct contact with infected individuals' blood and body fluids, especially - "when the skin is broken by a contaminated object such as a needle or a scalpel" - raises the likelihood that workers will

develop the diseases (http://www.mflohc.mb.ca/fact_sheets_folder/hospital%20work%20C%20occupational%20hazards.html). Chemical hazards include dusts, vapors or gases, liquids, medications, and other materials used for therapeutic purposes that are inhaled, absorbed through the skin, or accidents with contaminated needles or scalpels. Common safety issues in hospital care and treatment and specialty clinics sub-sectors – also referred to as ergonomic and safety hazards – are slippery floors, cluttered hallways or blocked exits, explosive gases used in laboratories and operating rooms, various power tools and maintenance equipment, sharp utensils and instruments, and materials handling” (http://www.mflohc.mb.ca/fact_sheets_folder/hospital%20work%20C%20occupational%20hazards.html). In addition, exposure to radiation (i.e., x-ray, angiography, and lasers), excessive noise, and heat – mostly from kitchens, laundries, and boiler rooms – and cold can lead to a myriad of health problems ranging from skin burns and hearing loss to adverse reproductive outcomes and genetic damage. Lastly, excessive job demands, inadequate resources, combative and terminally-ill patients, shiftwork, and fatigue are but a few of the factors that raise the stress levels – thereby risking the psychological and social well-being of healthcare professionals and practitioners – in the industry (http://www.mflohc.mb.ca/fact_sheets_folder/hospital%20work%20C%20occupational%20hazards.html).

Wellness and Spa Centers

Workplace safety in the wellness and spa centers sub-sector is adversely affected by three main factors, namely: toxic exposure to massage products, indoor air quality, and spa worker burnout. Recent studies and dialogues with wellness and spa centers professionals and practitioners revealed that repeated use of massage creams and lotions, which may contain toxins, can have adverse health implications on the sub-sector's workers³. A similar concern is attributed to the presence and concentration of indoor air pollutants – owing to the use of chemicals and cleaners – in wellness and spa centers. Finally, the odds of suffering from burnout are higher among wellness and spa employees than among independent wellness and spa professionals and practitioners, primarily because the former have to adhere to more demanding and heavier workloads and rigid schedules (Kreydin, 2009).

Retirement and Rehabilitative Care

All the hazards to which doctors and nurses in the hospital care and treatment and specialty clinics are exposed apply to nursing home nurses and caregivers. Owing to the continuous direct contact with patients, nurses and caregivers in the retirement and rehabilitative care sub-sector is at risk for contracting communicable diseases. They are also exposed to potentially harmful chemicals such as cleaning/disinfecting/sterilizing agents, anesthetic gases, and radiation. Injuries caused by sharp objects,

³ An example documented by the Swedish research entitled, “Acute Effects of Occupational Endotoxin Exposure at a Spa” are the health concerns of two spa employees – fever, diarrhea, shivering, palpitation and arthralgia – that were traced to the frequent use of a seaweed product

hot surfaces, faulty equipment, etc. have also been reported. The most common hazard, however, is the effect of the nursing home nurses' responsibilities on their health, which includes suffering from back pains, leg problems, and extreme fatigue (International Hazard Datasheets on Occupation).

In addition, nursing aides/caregivers, in particular, have physically and mentally demanding responsibilities, which results to very high turnover and vacancy rates. Nursing aides/caregivers are prone to injuries arising from lifting/transferring resident as well as the need to quickly and efficiently perform tasks in order to cope with the increasing number of retirement and rehabilitative care residents. Similar to nurses in nursing homes, they are also exposed to communicable diseases and harmful chemicals. Moreover, nursing aides/caregivers have to care for sometimes sick, disoriented, irritable, and/or uncooperative patients – which take a toll on their emotional and psychological well-being.

Specific Occupations per Sub-sector (includes: . Basic Educational/Training/Skill Requirements on the Identified Occupations, Professional Licensure Requirements, job description, earnings, technology used and entrepreneurial mindset. Most of the information is presented in tables presented per occupation.

Hospital Care and Treatment and Specialty Clinics

Occupations in the hospital care and treatment and specialty clinics generally fall into two major categories: clinical and non-clinical. Clinical hospital jobs include physicians (i.e., ER doctors,

surgeons, and hospitalists), dentists, nurses (i.e., CRNA, RN, LPN/LVN, and CNS), medical technologists/medical and clinical laboratory technicians (i.e., radiology tech, ultrasound tech, and surgical tech), therapists (i.e., physical), pharmacists, dieticians, medical assistants/medical secretary/doctor's assistant, midwives, and hospital orderly/nurse's aide. In contrast, non-clinical hospital positions consist of case managers/social workers, accountants, human resources and recruiting, executives (i.e., CEOs, CFOs, and CIOs), information technologists, and administrative assistants

(<http://healthcareers.about.com/od/wheretowork/p/HospitalProfile.htm>).

The specifics of the clinical positions in hospital care and treatment and specialty clinics (i.e., educational requirement, professional licensure requirement, job descriptions, average earnings, etc.) are as follows:

1. Hospital doctors have a variety of specialties such as anaesthetics, emergency medicine, general medicine, general surgery, obstetrics and gynaecology, paediatrics, psychiatry and trauma, orthopaedics, ophthalmology, etc.. In general, they are tasked with the responsibility of applying medical knowledge and skills to diagnose, prevent and manage diseases. They work for hospitals, specialty clinics, health care organizations, research laboratories or establish their own practice.

Basic Educational/Training/	✓ bachelor's degree in science or arts with credits in certain required subjects such as math, physics, chemistry, and biology
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Skill Requirements	✓ at least four years of medical school
Professional Licensure Requirements	✓ Pass the Board Examination
Job Description	<p>Specific work activities include:</p> <ul style="list-style-type: none"> ✓ “monitoring and providing general care to patients on hospital wards and in outpatient clinics; ✓ admitting patients requiring special care, investigations and treatment; ✓ examining and talking to patients to diagnose their medical conditions; ✓ carrying out specific procedures (i.e., performing operations and specialist investigations); ✓ making notes, both as a legal record of treatment and for the benefit of other health care professionals; ✓ working with other doctors as part of a team, either in the same department, or within other specialties; ✓ liaising with other medical and non-medical staff in the hospital to ensure quality treatment; ✓ promoting health education; ✓ undertaking managerial responsibilities such as planning the workload and staff of

	<p>the department, especially at more senior levels; [and]</p> <p>✓ teaching (junior doctors and medical students), as well as auditing and research”</p> <p>(www.prospects.ac.uk/hospital_doctor_job_description.htm)</p>
Earnings	<p>✓ Doctors who worked in the Philippines in August 2010 earned average annual salaries of PHP273,888.</p>
Technology	<p>✓ diagnostic devices (i.e., portable ultrasound unit recommended for general practitioners) tele-home care systems, etc.</p>
Entrepreneurial Mindset	<p>✓ Establish their own practice or partner with other enterprising physicians to operate their own clinics and, thus, generate employment, determine their own hours, and choose their market.</p>

2. Dentists, in general, “diagnose and treat diseases, injuries, and malformations of teeth and gums and related oral structures. [They] may [also] treat diseases of nerve, pulp, and other dental tissues affecting vitality of teeth” (<http://job-descriptions.careerplanner.com/Dentists,-General.cfm>). They are employed by hospitals, health care organizations, or establish a practice on their own or with partners.

Basic Educational/Training/	<p>✓ any bachelor’s degree of science on any course</p>
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Skill Requirements	<ul style="list-style-type: none"> ✓ two years of pre-dental courses ✓ four years of dental proper
Professional Licensure Requirements	<ul style="list-style-type: none"> ✓ pass the Dental Licensure examinations
Job Description	<ul style="list-style-type: none"> ✓ “use masks, gloves and safety glasses to protect themselves and their patients from infectious diseases; ✓ administer anesthetics to limit the amount of pain experienced by patients during procedures; ✓ examine teeth, gums, and related tissues, using dental instruments, x-rays, and other diagnostic equipment, to evaluate dental health, diagnose diseases and abnormalities, and plan appropriate treatments; ✓ formulate plan of treatment for patient’s teeth and mouth tissue; ✓ use air turbine and hand instruments, dental appliances and surgical implements; ✓ advise and instruct patients regarding preventive dental care, the causes and treatment of dental problems, and oral health care services; ✓ design, make, and fit prosthodontic appliances such as space

	<p>maintainers, bridges, and dentures, or write fabrication instructions or prescriptions for denturists and dental technicians;</p> <ul style="list-style-type: none">✓ diagnose and treat diseases, injuries, and malformations of teeth, gums and related oral structures, and provide preventive and corrective services;✓ fill pulp chamber and canal with endodontic materials;✓ write prescriptions for antibiotics and other medications;✓ analyze and evaluate dental needs to determine changes and trends in patterns of dental disease;✓ treat exposure of pulp by pulp capping, removal of pulp from pulp chamber, or root canal, using dental instruments;✓ eliminate irritating margins of fillings and correct occlusions, using dental instruments;✓ perform oral and periodontal surgery on the jaw or mouth;✓ remove diseased tissue using surgical instruments;✓ apply fluoride and sealants to teeth;✓ manage business, employing and supervising staff and handling
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	<p>paperwork and insurance claims;</p> <ul style="list-style-type: none"> ✓ bleach, clean or polish teeth to restore natural color; ✓ plan, organize, and maintain dental health programs; [and] ✓ produce and evaluate dental health educational materials” (http://job-descriptions.careerplanner.com/Dentists,-General.cfm)
Earnings	<ul style="list-style-type: none"> ✓ Dentists who worked in the Philippines in August 2010 earned average annual salaries of PHP280,524.
Technology	<ul style="list-style-type: none"> ✓ use a variety of equipment x-ray machines, drills, probes, and lasers, digital scanners and other computer-based technologies
Entrepreneurial Mindset	<ul style="list-style-type: none"> ✓ Establish own practice – with a small staff- or partner with other dentists to operate their own offices and, thus, generate employment, determine their own hours, and choose their market

3. Nurses, in general, “work to promote good health and prevent illness” (<http://careers.stateuniversity.com/pages/496/Registered-Nurse.html>). They may choose sub-specialties that require continuing education like critical care, trauma nursing, oncology, pain management, etc. They may also pursue advanced nursing degrees (i.e., Masters in Nursing) (<http://www.onlinenursingdegrees.org/types/>). They work for

hospitals, health care organizations, specialty clinics, nursing homes, or private medical practices.

<p>Basic Educational/Training / Skill Requirements</p>	<p>✓ Bachelor's of Science in Nursing</p>
<p>Professional Licensure Requirements</p>	<p>✓ pass a written examination given by the Board of Nursing</p>
<p>Job Description</p>	<ul style="list-style-type: none"> ✓ "maintain accurate, detailed reports and records; ✓ monitor, record and report symptoms and changes in patients' conditions; ✓ record patients' medical information and vital signs; ✓ modify patient treatment plans as indicated by patients' responses and conditions; ✓ consult and coordinate with health care team members to assess, plan, implement and evaluate patient care; ✓ order, interpret, and evaluate diagnostic tests to identify and assess patient's condition; ✓ monitor all aspects of patient care, including diet and physical activity; ✓ direct and supervise less skilled nursing/health care personnel, or

	<p>supervise a particular unit on one shift;</p> <ul style="list-style-type: none">✓ prepare patients for and assist with examinations and treatments;✓ observe nurses and visit patients to ensure that proper nursing care is provided;✓ assess the needs of individuals, families and/or communities, including assessment of individuals' home and/or work environments to identify potential health or safety problems;✓ instruct individuals, families and other groups on topics such as health education, disease prevention and childbirth, and development health improvement programs;✓ prepare rooms, sterile instruments, equipment and supplies, and ensure that stock of supplies is maintained;✓ inform physician or patient's condition during anesthesia;✓ deliver infants and provide prenatal and postpartum care and treatment under obstetrician's supervision;✓ administer local, inhalation, intravenous, and other anesthetics;✓ provide health care, first aid, immunizations and assistance in
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	<p>convalescence and rehabilitation in locations such as schools, hospitals, and industry;</p> <ul style="list-style-type: none">✓ perform physical examinations, make tentative diagnoses, and treat patients en route to hospitals or disaster site triage centers;✓ conduct specified laboratory tests;✓ hand items to surgeons during operations;✓ prescribe or recommend drugs, medical devices or other forms of treatment, such physical therapy, inhalation therapy, or related therapeutic procedures;✓ direct and coordinate infection control programs, advising and consulting with specified personnel about necessary precautions;✓ perform administrative and managerial functions, such as taking responsibility for a unit's staff, budget, planning, and long-range goals;✓ provide or arrange for training/instruction of auxiliary personnel or students;✓ refer students or patients to specialized health resources or
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	<p>community agencies furnishing assistance;</p> <ul style="list-style-type: none"> ✓ consult with institutions or associations regarding issues and concerns relevant to the practice and profession of nursing; ✓ work with individuals, groups, and families to plan and implement programs designed to improve the overall health of communities; [and] ✓ engage in research activities related to nursing” (http://job-descriptions.careerplanner.com/Registered-Nurses-1.cfm)
Earnings	<ul style="list-style-type: none"> ✓ In 2012, nurses with five or more experience can earn an average annual salary of PHP180,000. (http://myjobstreet.jobstreet.com/career-enhancer/basic-salary-report.php?param=Nurse 170 sg). ✓ Nurses with one to four years experience in 2012 can earn an average annual salary of PHP120,000 (http://myjobstreet.jobstreet.com/career-enhancer/basic-salary-report.php?param=Nurse 170 sg). ✓ Fresh graduates and nurses with less than one year experience in 2012 can

	<p>earn an average annual salary of PHP96,000</p> <p>(http://myjobstreet.jobstreet.com/career-enhancer/basic-salary-report.php?param=Nurse 170 sg).</p>
Technology	<ul style="list-style-type: none"> ✓ range from simple devices like catheters and syringes to complicated gadgets and equipment such as medical and surgical instruments (i.e., otoscopes), electrocardiographs, bar code medication administration systems and electronic health records
Entrepreneurial Mindset	<ul style="list-style-type: none"> ✓ terms of employment are determined by establishments needs ✓ contractual and freelance jobs allow more flexibility in days and hours rendered at work

4. Medical technologists/medical and clinical laboratory technicians “perform routine medical laboratory tests for the diagnosis, treatment, and prevention of disease” (<http://job-descriptions.careerplanner.com/Medical-and-Clinical-Laboratory-Technicians.cfm>). They mostly work in hospitals. A number are also employed in public health laboratories, reference laboratories, biomedical companies, universities, industrial medical laboratories, forensic medicine, and pharmaceutical companies.

Basic	
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Educational/Training/Skill Requirements	✓ Bachelor's of Science in Medical Technology
Professional Licensure Requirements	✓ pass the Medical Technologists Licensure Examination
Job Description	<ul style="list-style-type: none"> ✓ “conduct chemical analysis of body fluids, such as blood and urine, using microscope or automatic analyzer to detect abnormalities or diseases, and enter findings into computer; ✓ set up, adjust, maintain and clean medical laboratory equipment; ✓ analyze the results of tests and experiments to ensure conformity to specifications, using special mechanical and electrical devices; ✓ analyze and record test data to issue reports that use charts, graphs and narratives; ✓ perform medical research to further control and cure disease; ✓ conduct blood tests for transfusion purposes and perform blood counts; ✓ obtain specimens, cultivating, isolating and identifying microorganisms for analysis;

	<ul style="list-style-type: none"> ✓ examine cells stained with dye to locate abnormalities; ✓ collect blood or tissue samples from patients, observing principles of asepsis to obtain blood sample; ✓ consult with a pathologist to determine a final diagnosis when abnormal cells are found; ✓ inoculate fertilized eggs, broths, or other bacteriological media with organisms; ✓ cut, stain and mount tissue samples for examination by pathologists; ✓ prepare standard volumetric solutions and reagents to be combined with samples, following standardized formulas or experimental procedures; ✓ prepare vaccines and serums by standard laboratory methods, testing for virus inactivity and sterility; [and] ✓ test raw materials, processes and finished products to determine quality and quantity of materials or characteristics of a substance” (http://job-descriptions.careerplanner.com/Medical-and-Clinical-Laboratory-Technicians.cfm)
Earnings	<ul style="list-style-type: none"> ✓ In 2012, medical technologists with five or more years of experience can earn an average annual salary of PHP192,000

	<p>(http://myjobstreet.jobstreet.com.ph/career-enhancer/basic-salary-report.php?param=Medical%20Technologist 170 ph).</p> <p>✓ Medical technologist with one to four years of experience in 2012 can earn an average annual salary of PHP144,000 (http://myjobstreet.jobstreet.com.ph/career-enhancer/basic-salary-report.php?param=Medical%20Technologist 170 ph).</p>
Technology	<p>✓ Operate complex electronic equipment, computers and precision instruments requiring extensive training and expertise</p>
Entrepreneurial Mindset	<p>✓ Establish and operate own clinical laboratories</p> <p>✓ Sell and distribute chemical reagents and glasswares</p>

5. Physical therapists “assess, organize, and participate in rehabilitative programs that improve mobility, relieve pain, increase strength, and decrease or prevent deformity of patients suffering from disease or injury” (<http://job-descriptions.careerplanner.com/Physical-Therapists.cfm>). They are mostly employed hospitals or have their own private offices.

Basic Educational/Training/	<p>✓ Bachelor of Science in Physical Therapy</p>
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Skill Requirements	
Professional Licensure Requirements	<ul style="list-style-type: none"> ✓ pass the Physical and Occupational Board Examination
Job Description	<ul style="list-style-type: none"> ✓ “provide educational information about physical therapy and physical therapists, injury prevention, ergonomics and ways to promote health; ✓ refer clients to community resources and services; ✓ plan, prepare and carry out individually designed programs of physical treatment to maintain, improve or restore physical functioning, alleviate pain and prevent physical dysfunction in patients; ✓ perform and document an initial exam, evaluating the data to identify problems and determine a diagnosis prior to intervention; ✓ evaluate effects of treatment at various stages and adjust treatments to achieve maximum benefit; ✓ administer manual exercises, massage and/or traction to help relieve pain, increase the patient’s strength, and decrease or prevent deformity and crippling; ✓ instruct patient and family in treatment

	<p>procedures to be continued at home;</p> <ul style="list-style-type: none">✓ confer with the patient, medical practitioners and appropriate others to plan, implement and assess the intervention program;✓ review physician's referral and patient's medical records to help determine diagnosis and physical therapy treatment required;✓ record prognosis, treatment, response, and progress in patient's chart or enter information into computer;✓ obtain patients' informed consent to proposed interventions;✓ discharge patient from physical therapy when goals or projected outcomes have been obtained and provide for appropriate follow-up care or referrals;✓ test and measure patient's strength, motor development and function, sensory perception, functional capacity, and respiratory and circulatory efficiency and record data;✓ identify and document goals, anticipated progress and plans for reevaluation;✓ provide information to the patient about the proposed intervention, its material risks and expected benefits and any
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	<p>reasonable alternatives;</p> <ul style="list-style-type: none">✓ inform the patient when diagnosis reveals findings outside their scope and refer to an appropriate practitioner;✓ direct and supervise supportive personnel, assessing their competence, delegating specific tasks to them and establishing channels of communication;✓ administer treatment involving application of physical agents, using equipment, moist packs, ultraviolet and infrared lamps, and ultrasound machines;✓ teach physical therapy students as well as those in other health professions;✓ evaluate, fit, and adjust prosthetic or orthotic devices and recommend modifications to orthotist;✓ conduct and support research and apply research findings to practice;✓ participate in community and community agency activities and help formulate public policy;✓ construct, maintain and repair medical supportive devices; [and]✓ direct group rehabilitation activities” <p>(http://job-descriptions.careerplanner.com/Physical-Therapists.cfm)</p>
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Earnings	<p>In 2012, physical therapists with one to four years of experience can earn an average annual salary of PHP120,000 (http://myjobstreet.jobstreet.com.ph/career-enhancer/basic-salary-report.php?param=Physical+Therapist 000 p h ph).</p>
Entrepreneurial Mindset	<ul style="list-style-type: none"> ✓ setup their own clinics and work for themselves ✓ administrative activities pertaining to running the office such as employing staff and working within strict budgets are added to the tasks above

6. Pharmacists “are health professionals, who in addition to dispensing prescription medication to patients, also provide information about the drugs their doctors have ordered for them. They explain doctors’ instructions to patients so that these individuals can use these medications safely and effectively” (<http://careerplanning.about.com/od/occupations/p/pharmacist.htm>). They are usually employed by for retail pharmacies, hospitals, long-term care facilities, laboratories and pharmaceutical companies.

Basic Educational/Training/Skill Requirements	<ul style="list-style-type: none"> ✓ Bachelor of Science in Pharmacy
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Professional Licensure Requirements	✓ pass the Pharmacist Licensure Examination
Job Description	<ul style="list-style-type: none"> ✓ “advise physicians and other health practitioners on the selection, dosages, interactions, and side effects of medications; ✓ monitor the health and progress of patients in response to therapy; ✓ advise patients and answer questions about prescription drugs, including questions about possible side effects and interactions among different drugs; ✓ provide information and make recommendations about over-the-counter drugs; ✓ give advice about diet, exercise or stress management; ✓ help patients manage conditions such as diabetes, asthma, smoking cessation, or high blood pressure; ✓ advise patients about durable medical equipment and home healthcare supplies; ✓ complete third-party insurance forms and other paperwork; [and] ✓ [] supervise personnel as well as [] other general managerial duties, [specially for pharmacists who own or manage their own drugstores]”

	http://careerplanning.about.com/od/occupations/p/pharmacist.htm).
Earnings	✓ graduates with no or less than a year's experience can earn an average annual salary of PHP120,000 in 2011 (http://myjobstreet.jobstreet.com/career-enhancer/basic-salary-report.php?param=pharmacist ph ph)
Entrepreneurial Mindset	

7. Nutritionists/Dieticians and nutritionists, in general, “plan and conduct food service or nutritional programs to assist in the promotion of health and control of disease. [They] may supervise activities of a department providing quality food services, counsel individuals, or conduct nutritional research” (<http://job-descriptions.careerplanner.com/Dietitians-and-Nutritionists.cfm>). They can work for hospitals, government/public health institutions, health and wellness clinics (private sector), research, and academe.

Basic Educational/Training / Skill Requirements	✓ Bachelor of Science in Nutrition and Dietetics
Professional Licensure Requirements	✓ pass the Licensure Examination for Nutritionist-Dieticians
Job Description	✓ “assess nutritional needs, diet

	<p>restrictions and current health plans to develop and implement dietary-care plans and provide nutritional counseling;</p> <ul style="list-style-type: none">✓ consult with physicians and health care personnel to determine nutritional needs and diet restrictions of patient or client;✓ advise patients and their families on nutritional principles, dietary plans and diet modifications, and food selection and preparation;✓ counsel individuals and groups on basic rules of good nutrition, healthy eating habits, and nutrition monitoring to improve their quality life;✓ monitor food service operations to ensure conformance to nutritional, safety, sanitation and quality standards;✓ coordinate recipe development and standardization and develop new menus for independent food service operations;✓ develop policies for food service or nutritional programs to assist in health promotion and disease control;✓ inspect meals served for conformance
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	<p>to prescribed diets and standards of palatability and appearance;</p> <ul style="list-style-type: none">✓ prepare and administer budgets for food, equipment, and supplies;✓ purchase food in accordance with health and safety codes;✓ select, train and supervise workers who plan, prepare and serve meals;✓ manage quantity food service departments or clinical community nutrition services;✓ coordinate diet counseling services;✓ advise food service managers and organizations on sanitation, safety procedures, menu development, budgeting, and planning to assist with the establishment, operation, and evaluation of food service facilities and nutrition programs;✓ organize, develop, analyze, test, and prepare special meals such as low-fat, low-cholesterol and chemical-free meals;✓ plan, conduct, and evaluate dietary, nutritional, and epidemiological research;✓ plan and conduct training programs in dietetics, nutrition, and institutional
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	<p>management and administration for medical students, health-care personnel and the general public;</p> <ul style="list-style-type: none"> ✓ make recommendations regarding public policy, such as nutrition labeling, food fortification, and nutrition standards for school programs; ✓ write research reports and other publications to document and communicate research findings; ✓ plan and prepare grant proposals to request program funding; ✓ test new food products and equipment; [and] ✓ confer with design, building, and equipment personnel to plan for construction and remodeling for food service units” (http://job-descriptions.careerplanner.com/Dietitians-and-Nutritionists.cfm)
Earnings	<ul style="list-style-type: none"> ✓ In 2012, nutritionists/dieticians with one to four years of experience can earn an average annual salary of PHP180,000 (http://myjobstreet.jobstreet.com.my/career-enhancer/basic-salary-report.php).
Entrepreneurial Mindset	<ul style="list-style-type: none"> ✓ Nutritionists/dieticians have the option of establishing and running their own

	pharmacies with the help of a small staff
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8. Medical assistants/Medical secretary/Doctor’s assistant, in general, “perform administrative and certain clinical duties under the direction of physician” (<http://job-descriptions.careerplanner.com/Medical-Assistants.cfm>).

Basic Educational/Training/Skill Requirements	<ul style="list-style-type: none"> ✓ at least a high school diploma ✓ certificates of completion from vocational/technical schools – most of them on-line – that focus on the use of equipment like an ECG machine and tasks needed to assist physicians in performing laboratory tests, assessing vital signs, administering medication, etc. http://www.askedu.net/course/c_200236_Medical_Assistant.htm ✓ Bachelor’s degree is an advantage, especially medical related courses
Professional Licensure Requirements	<ul style="list-style-type: none"> ✓ None
Job Description	<ul style="list-style-type: none"> ✓ “interview patients to obtain medical information and measure their vital signs, weight, and height; ✓ show patients to examination rooms and prepare them for the physician; ✓ record patients’ medical history, vital

	<p>statistics and information such as test results in medical records;</p> <ul style="list-style-type: none">✓ prepare and administer medication as directed by a physician;✓ collect blood, tissue or other laboratory specimens, and prepare them for testing;✓ explain treatment procedures, medications, diets and physicians' instructions to patients;✓ help physicians examine and treat patients, handing them instruments and materials or performing such tasks as giving injections and removing sutures;✓ authorize drug refills and provide prescription information to pharmacies;✓ prepare treatment rooms for patient examinations, keeping the rooms neat and clean;✓ clean and sterilize instruments and dispose of contaminated supplies;✓ schedule appointments for patients;✓ change dressings on wounds;✓ greet and log in patients arriving at office or clinics;✓ contact medical facilities or departments to schedule patients for tests and/or admission;✓ inventory and order medical, lab, and office supplies and equipment;✓ perform routine laboratory tests and sample
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	<p>analyses; [and]</p> <p>✓ set up medical laboratory equipment” (http://job-descriptions.careerplanner.com/Medical-Assistants.cfm).</p>
Earnings	<p>✓ average annual salary of PHP108,000 in 2011 (http://myjobstreet.jobstreet.com/career-enhancer/basic-salary-report.php?param=Medical+%2C+Secretary 000 ph ph)</p>
Technology	<p>✓ computer use in maintaining patients’ electronic records</p>

9. Midwives provide advice, care and support for women, their partners and families before, during and after childbirth. They help women make their own decisions about the care and services they access. The care for newborn children, providing health education and preparing support for the first 28 days, after which care transfers to a health visitor. Midwives are personally responsible for the health of both mother and child and only refer to obstetricians if there are medical complications” (http://www.prospects.ac.uk/midwife_job_description.htm). They are usually employed by public and private health care institutions.

Basic Educational/Training/	<p>✓ Diploma in Midwifery</p>
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Skill Requirements	
Professional Licensure Requirements	<ul style="list-style-type: none"> ✓ pass Board Midwife Licensure Examination
Job Description	<ul style="list-style-type: none"> ✓ “diagnosing, monitoring and examining women during pregnancy; ✓ developing, assessing and evaluating individual programmes of care; ✓ providing full antenatal care, including screening tests in the hospital, community and the home; ✓ identifying high risk pregnancies and making referrals to doctors and other medical specialists; ✓ arranging and providing parenting and health education for the woman, her partner and family members; ✓ encouraging participation of family members in the birth to support the mother and enhance both mother/baby bonding and family relationships; ✓ providing counseling and advice before and after screening; ✓ offering support and advice following events such as miscarriage, termination, stillbirth, neonatal death; ✓ supervising and assisting mothers in

	<p>labour, monitoring the condition of the fetus and using knowledge of drugs and pain management;</p> <ul style="list-style-type: none"> ✓ giving support and advice on the daily care of the baby, including breast feeding, bathing and making up feeds; ✓ providing advice and guidance on a safe and timely transfer home; ✓ liaising with agencies and other health and social care professionals to ensure continuity of care; ✓ engaging in professional development to meet PREP (post-registration education and practice) requirements; [and] participating in the training and supervision of junior colleagues” (http://www.prospects.ac.uk/midwife_job_description.htm).
Earnings	<ul style="list-style-type: none"> ✓ In 2012, midwives with five or more years of experience can earn an average annual salary of PHP 156,000 (http://myjobstreet.jobstreet.com.ph/career-enhancer/basic-salary-report.php?param=Caregiver%7C000%7Cph%7C%7Cph).
Entrepreneurial Mindset	<ul style="list-style-type: none"> ✓ In small communities, in particular, midwives are not necessarily employed by hospitals and/or health care institutions.

	They are self-employed and are called upon by their clients when the need arises.
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Wellness and Spa Centers

The wellness and spa centers, on the other hand, typically employ spa managers, spa support staff, estheticians, massage therapists, and spa hair stylists. A general description of the tasks assigned to each position is found below:

1. Spa managers are tasked with the responsibility of handling the day-to-day operation of the business. They are employed by wellness and spa centers, hotels, health clubs, or other related establishments.

Basic Educational/Training / Skill Requirements	<ul style="list-style-type: none"> ✓ Bachelor's degree ✓ May be an esthetician
Professional Licensure Requirements	<ul style="list-style-type: none"> ✓ none
Job Description	<ul style="list-style-type: none"> ✓ business-related responsibilities such as deciding the treatments the establishment will offer their clients, marketing the spa services offered by the institutions, managing the business' finances, keeping the records of the business, maintaining

	<p>stock inventories, and overseeing payroll;</p> <ul style="list-style-type: none"> ✓ employee-related responsibilities like hiring, training and supervising staff by, for example, “creat[ing] weekly work schedules, train[ing] new employees and arrang[ing] staff workshops on new techniques and procedures” (http://education_portal.com/spa_manager-html); ✓ a spa manager may also be an esthetician and work “directly with customers by providing select spa services” (http://education_portal.com/spa_manager-html)
Earnings	<ul style="list-style-type: none"> ✓ managers and assistant managers, in general, earn an average annual salary of PHP300,000 in 2011 (http://myjobstreet.jobstreet.com/career-enhancer/basic-salary-report.php)
Technology	<ul style="list-style-type: none"> ✓ computer use in maintaining clients’ electronic records
Entrepreneurial Mindset	<ul style="list-style-type: none"> ✓ Spa managers can oversee the operations of their own establishments with the help of their staff. If they are estheticians themselves, then they

	have the opportunity to cultivate their own client bases while employed in spas or health clubs before striking out on their own.
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2. Estheticians are licensed to offer skin – both facial and body - and body care services – including “manicures and pedicures, body massages and other full body treatments, waxing (hair removal), blemish control, and makeup application” (www.ehow.com/about_5336140_aesthetician_job_description.html). They usually work for hotels, spas, beauty salons and health clubs.

Basic Educational/Training/Skill Requirements	<ul style="list-style-type: none"> ✓ high school diploma ✓ vocational diploma or short course certificate from TESDA-accredited institutions
Professional Licensure Requirements	<ul style="list-style-type: none"> ✓ massage therapist must obtain a certificate issued by the Department of Health by order of Presidential Decree 856 ✓ DOH license within the next three years (2011-2014) via Administrative Order 2010-0034
Job Description	<p>As manicurists and pedicurists:</p> <ul style="list-style-type: none"> ✓ “apply undercoat and clear or colored polish unto nails with brush; ✓ attach paper forms to tips of customers’

	<p>fingers to support and shape artificial nails;</p> <ul style="list-style-type: none">✓ brush powder and solvent onto nails and paper forms to maintain nail appearance and to extend nails, then remove forms and shape and smooth nail edges using rotary abrasive wheel;✓ clean and sanitize tools and work environment;✓ clean customers' nails in soapy water, using swabs, files, and orange sticks;✓ polish nails, using powdered polish buffer;✓ remove previously applied nail polish, using liquid remover and swabs;✓ roughen surfaces of fingernails, using abrasive wheel;✓ shape and smooth ends of nails, using scissors, files, and emery boards;✓ soften nail cuticles with water and oil, push back cuticles, using cuticle knife, and trim cuticles, using scissors or nippers;✓ treat nails to repair or improve strength and resilience by wrapping, or provide treatment to nail biters;✓ whiten underside of nails with white paste or pencil;✓ advise clients on nail care and use of products and colors;
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	<ul style="list-style-type: none"> ✓ assess the condition of clients' hands, remove dead skin from the hands and massage them; ✓ decorate clients' nails by piercing them or attaching ornaments or designs; ✓ maintain supply inventories and records of client services; ✓ promote and sell nail care products; [and] ✓ schedule client appointments and accept payments" (http://job-descriptions.careerplanner.com/Manicurists-and-Pedicurists.cfm). <p>As massage therapists:</p> <ul style="list-style-type: none"> ✓ "inquiring into the medical histories of clients to determine whether massages would be beneficial; ✓ providing advice on postural improvement, stretching, relaxation and rehabilitative exercise when necessary; ✓ advising clients to seek other types of therapists when needed; ✓ promoting the services offered by the institution; ✓ responding to guest queries pertaining to specific wellness concerns; ✓ relaying customer concerns to management;
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	<ul style="list-style-type: none"> ✓ assisting in the care and maintenance of equipment used; ✓ restocking products when necessary; ✓ attending staff meetings; and ✓ participating in training sponsored by the institution” (http://job-descriptions.careerplanner.com/Manicurists-and-Pedicurists.cfm)
Earnings	<ul style="list-style-type: none"> ✓ average annual salary for a massage therapist is PHP120,000 in 2011 (http://myjobstreet.jobstreet.com/career-enhancer/basic-salary-report.php?param=Massage+%2C+Therapist 000 ph ph)
Technology	<ul style="list-style-type: none"> ✓ manicure scissors and tweezers, nail clipper, facial massager, facial steamer, wax heater, eyebrow trimmers, eyelash curlers, etc.
Entrepreneurial Mindset	<ul style="list-style-type: none"> ✓ self-employment may be in the form of establishing own salon/spa and employ a small staff, acquire franchise, or work alone and call on particular clients at home

4. Spa hairstylists and cosmetologists, in general, “provide beauty services, such as shampooing, cutting, coloring, and styling hair, and massaging and treating scalp. [They] may also apply makeup, dress wigs, perform hair removal, and provide nail and skin care services”

(<http://quai/runinc.com/HairstylistJobDescription.htm>). They are employed by hotels, spas, beauty salons and health clubs.

<p>Basic Educational/Training/Skill Requirements</p>	<ul style="list-style-type: none"> ✓ high school diploma ✓ vocational diploma or short course certificate
<p>Professional Licensure Requirements</p>	<ul style="list-style-type: none"> ✓ none
<p>Job Description</p>	<ul style="list-style-type: none"> ✓ “analyz[ing] patrons’ hair and other physical features to determine and recommend beauty treatment or suggest hair styles; ✓ demonstrate[ing] and sell[ing] hair care products and cosmetics; ✓ shampoo[ing], rins[ing], condition[ing] and dry[ing] hair and scalp or hairpieces with water, liquid soap, or other solutions; ✓ schedule[ing] client appointments; ✓ cut[ting], trim[ming] and shap[ing] hair or hair pieces, based on customers’ instructions, hair type and facial features, using clippers, scissors, trimmers and razors; ✓ apply[ing] water, setting, straightening or waving solutions to hair and us[ing] curlers, rollers, hot combs and curling

	<p>irons to press and curl hair;</p> <ul style="list-style-type: none"> ✓ keep[ing] work stations clean and sanitize[ing] tools such as scissors and combs; ✓ comb[ing], brush[ing], and spray[ing] hair or wigs to set style; ✓ develop[ing] new styles and techniques; ✓ bleach[ing], dye[ing], or tint[ing] using applicator or brush; ✓ operat[ing] cash registers to receive payments from patrons; ✓ update[ing] and maintain[ing] customer information records, such as beauty services provided; ✓ administer[ing] therapeutic medication and advis[ing] patron to seek medical treatment for chronic or contagious scalp conditions; [and] ✓ massage[ing] and treat[ing] scalp for hygienic and remedial purposes, using hands, fingers, or vibrating equipment” (http://quai/runinc.com/HairstylistJobDescription.htm)
Earnings	<ul style="list-style-type: none"> ✓ the latest available data on compensation in the sub-sector, 2009 ASPBI, report that the average annual salary in the other service activities, which includes hair stulists was PHP90,044

Technology	✓ blowers, curling and straightening iron, roller brushes, scissors
Entrepreneurial Mindset	✓ establish own salon with a small staff to assist or acquire franchise

Retirement and Rehabilitative Care

Occupations in the retirement and rehabilitative care include the nursing home administrator, nurses, and nursing aides/assistants – also known as home health aids/caregivers.

1. Nursing home administrators direct operations and manage personnel at nursing home facilities. In general, their tasks include, but are not limited to, personnel management, food service, marketing, building maintenance operations, and monitoring and overseeing the facility’s finances. “They meet with family members who want to have their family members cared for in the facility. (<http://www.jobisjob.co.uk/healthcare/nursing-home-manager/job-description>).

Basic Educational/Training/Skill Requirements	✓ bachelor’s degree in health care administration or a related field
Professional Licensure Requirements	✓ none
Job Description	✓ “conducting daily handover meetings; ✓ managing work teams and nurses;

	<ul style="list-style-type: none"> ✓ enforcing health and safety regulations; ✓ hiring staff; ✓ assessing patient care systems; ✓ ordering supplies and equipment for the home; ✓ orienting staff; [and] ✓ meeting with patient families and friends” <p>(http://www.jobisjob.co.uk/healthcare/nursing-home-manager/job-description).</p>
Earnings	<ul style="list-style-type: none"> ✓ managers and assistant managers, in general, earn an average annual salary of PHP300,000 in 2011 <p>(http://myjobstreet.jobstreet.com/career-enhancer/basic-salary-report.php)</p>
Technology	<ul style="list-style-type: none"> ✓ computer use in maintaining clients’ electronic records
Entrepreneurial Mindset	<ul style="list-style-type: none"> ✓ with sufficient capital and an established pool of clients, nursing home administrators can run their own retirement and rehabilitative care establishments

2. Nurses who work in retirement and rehabilitative care establishments are responsible for the professional care of patients in a retirement and rehabilitative facility are referred to as a nursing home nurse. Ideally, they are gerontological nurses who “specialize in initiating treatment plans for patients with chronic illnesses and provide support for the patient and their families”

([http://jobs.lovetoknow.com/Job Description for Nursing Home Nurses](http://jobs.lovetoknow.com/Job_Description_for_Nursing_Home_Nurses)). They are also responsible for care issues of patients like “fractures (i.e., hips, elbows and other bones), Alzheimer’s disease, vision problems, general mobility problems, hearing problems, stroke,” etc. ([http://jobs.lovetoknow.com/Job Description for Nursing Home Nurses](http://jobs.lovetoknow.com/Job_Description_for_Nursing_Home_Nurses)).

The educational requirements for a nursing home nurse are similar to that of nurses working for the hospital care and treatment and specialty clinics sub-sectors: 1) must be a holder of a Bachelor’s Degree in Nursing; and 2) must pass a written examination given by the Board of Nursing.

3. Orderlies/nurse’s aides/Caregivers are employed in hospitals, specialty clinics, nursing homes, and particular client’s requiring assistance at home.

<p>Basic Educational/Training/Skill Requirements</p>	<ul style="list-style-type: none"> ✓ normally required to have a high school diploma or its equivalent ✓ vocational schools offer courses for nursing aides/caregivers tackling body mechanics, nutrition, anatomy and physiology, infection control, and communication skills www.careermagnifier.com/job-description.php?jobID=39 ✓ pass National Competency Exam given by TESDA to secure a certificate that is required by countries like Canada and Japan
<p>Job</p>	<ul style="list-style-type: none"> ✓ serving meals, helping patients to eat, dress,

Description	<p>and bathe, administer oral medication, emptying bed pans, changing soiled linens, etc.;</p> <ul style="list-style-type: none"> ✓ assisting patients in exercises and “helping them maintain memory by using specialized drills and memory books” (http://www.ehow.com/facts_5091120_job-description-caregiver.html); ✓ ensuring patients’ receive proper nutrition by “preparing their meals, performing grocery shopping and checking food for expiration dates in the home pantry and refrigerator” (http://www.ehow.com/facts_5091120_job-description-caregiver.html) –for nursing home caregivers; ✓ performing housekeeping tasks such as laundry, running errands, cleaning etc. – for nursing home caregivers ; ✓ providing transportation and assistance when clients leave the home to go to the doctor, attend religious activities, etc. – for nursing home caregivers; ✓ “providing companionship and conversation [which may include engaging] in activities with them such as board games, card games or film and television watching” (http://www.ehow.com/facts_5091120_job-description-caregiver.html); [and]
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	<p>✓ “report[ing] any sign of physical or cognitive difficulties to the agency they work for or directly to the family of their clients” (http://www.ehow.com/facts_5091120_job-description-caregiver.html)</p>
Earnings	<p>✓ In 2011, caregivers who has acquired the necessary training and has less than one year experience can earn an average annual salary of PHP96,000 (http://myjobstreet.jobstreet.com/career-enhancer/basic-salary-report.php?param=Caregiver 000 ph ph)</p> <p>✓ In 2011, caregivers with one to four years of experience can earn an average annual salary of PHP120,000 (http://myjobstreet.jobstreet.com/career-enhancer/basic-salary-report.php?param=Caregiver 000 ph ph)</p>
Technology	<p>✓ “assistive technology” such as mechanical hoists to lift and turn someone in bed, pill organizers, sensors, smart phones, etc. (http://www.caregiver.org/caregiver/jsp/content_node.jsp?nodeid=1412)</p>

Personal Qualities

Hospital Care and Treatment and Specialty Clinics

Ideal workers in the hospital care and treatment and specialty clinics, particularly in the clinical field, have the following characteristics: desire to serve patients, are self-motivated, “able to survive the pressures and long hours of medical education and practice” (<http://www.bls.gov/oco/ocos067.htm>), follow instructions accurately and efficiently, ability to make decisions in emergencies, and the “[willingness] to study throughout their career to keep up with medical advances” (<http://www.bls.gov/oco/ocos067.htm>).

Moreover, both clinical and non-clinical workers must have excellent oral and written communication skills; maintain concise and accurate confidential patient records; and be able to prioritize the needs of the patients and keep their confidence.

Wellness and Spa Centers

Preferably, spa employees – especially spa therapists - should possess a vast array of skills such as: high degree of physical stamina to cope with the nature of the work; excellent communication skills; and the ability to relate and work well with people from every age group, social background, ethnic origin, occupation and gender (www.articlesbase.com/careers-articles/professional-careers-in-the-growing-spa-industry-96705.html).

Retirement and Rehabilitative Care

Individuals who are eyeing nursing aides/caregivers positions should be understanding, patient, and emotionally stable. The

ability to work with a team and the willingness to perform repetitive tasks are also important in becoming excellent nursing aides/caregivers.

Bridging Program/High School Preparation

Hospital Care and Treatment and Specialty Clinics

In general, high school students interested in any profession within the hospital care and treatment and specialty clinics – specifically medical doctors, dentists, nurses, medical technologists, physical therapists, nutritionists/dieticians, midwives – must have strong backgrounds in mathematics (especially algebra, geometry and trigonometry), biology, chemistry, physics and communications.

Wellness and Spa Centers

Potential estheticians – body and skin care specialists, including massage therapists, and hair stylists can prepare for their future careers in high school by acquiring solid foundations in biology, chemistry and communication subjects. Cosmetology training programs vary in duration – four months to two years. Accordingly, it may even be possible, depending on the secondary education curriculum, for short courses to be offered in high school.

b. Earnings

b.1 Average earnings per industry

In 2006, the average daily pay in the health and social work sector was reported at PHP392.30 per day, which rose to PHP464.53 per day in 2010 at average annual increase of 4.3% per year (refer to Table 10). It has been consistently higher than the average daily pay of workers in all industries (33% more), agriculture (67% above) and manufacturing (32% greater) sectors. The average rate of increase per year of the average daily pay in the health and social work sector is also the highest among the four sectors at 4.3% versus 4% in all industries, 3.3% in agriculture, and 4.1% in manufacturing. Rising wages in any sector is usually an indicator of higher demand relative to supply, improvement in the quality of workers, or simply an adjustment to the cost of living.

Table 10: Average Daily Pay (in Philippine Pesos), 2006-2010

Major Industry Group/Sector	2006	2007	2008	2009	2010
All Industries	261.90	266.65	278.93	290.73	306.53
Agriculture, Hunting and Forestry, & Fishing	132.25	132.65	136.73	142.87	150.66
Manufacturing	264.99	277.19	289.56	299.93	310.57
Health and Social Work	392.30	400.23	417.32	434.36	464.53

Source: NSO

b.2 Average earnings per occupation

The latest data available on average monthly wages for selected workers in the health and wellness industry revealed that majority of the professionals in the sector benefited from double-digit rates of increases in earnings in 2008 and 2010. Dentists, in particular, enjoyed the highest growth in income with an average of 98.3% per year for the two-year period. Accounting and bookkeeping clerks, medical equipment operators, medical technologists, and medical doctors also received very high average annual rates of increases – 24.2%, 22.2%, 20.5%, and 13.4 %, respectively, from 2008 to 2010 (refer to Table 11).

Table 11: Health and Wellness Industry Average Monthly Wage Rates of

-Time Rate Workers on Full-time Basis, 2008 and 2010

Occupation	July 2008 (in PHP/month)	Aug. 2010 (in PHP/month)	Ave. (in PHP/month)	Growth Rate (in%)
Medical Doctors	20,135	22,824	21,479.50	13.35
Dentists	11,789	23,377	17,583.00	98.30
Nutritionists- Dieticians	9,829	10,641	10,235.00	8.36
Medical Technologists	10,459	12,606	11,532.50	20.53
Physiotherapists	11,816	12,578	12,197.00	6.45
Professional Nurses	9,867	10,905	10,386.00	10.52
Professional Midwives	8,714	9,474	9,094.00	8.72
Medical Equipment	9,510	11,625	10,567.50	22.24

Operators				
Accounting and				
Bookkeeping	9,218	11,446	10,332.00	24.17
Clerks				
Unskilled				
Workers Except				
Janitors,	9,167	8,627	8,897.00	-5.89
Messengers &				
Freight Handlers				

Source: Bureau of Labor and Employment Statistics, 2008 and 2010 Occupational Wages Survey

Nonetheless, income levels across the health and wellness professionals remained relatively low. Doctors working in the Philippines, for instance, earned an average wage of PHP20,135 per month in July 2008 – at 12 months per year, this is PHP241,620. According to the US Bureau of Labor Statistics, the lowest paid physicians in the United States – those who worked for state government - received an annual mean wage of US\$138,710 or PHP6,013,078.50⁴ in May 2010 (<http://www.bls.gov/oes/current/oes291062.htm>). In 2004, doctors in Singapore received a net income of US\$3,523 per month or US\$42,276 per year – PHP1,832,664.60⁵ (<http://www.worldsalaries.org/generalphysician.shtml>). Likewise, nurses with five or more years of experience who worked in the Philippines in 2012 received annual compensations of PHP180,000 (<http://myjobstreet.jobstreet.com/career-enhancer/basic-salary-report.php?param=Nurse||170||sg>), which is

⁴ Computed at PHP43.35 = \$1.

⁵ Computed at PHP43.35 = \$1.

significantly lower than their counterparts in the US – annual mean wage of at least US\$59,990 or PHP2,600,566.50 in May 2010 (<http://www.bls.gov/oes/current/oes291111.htm>) - and Singapore – annual net average income of US\$14,844 or PHP643,487.40 in 2004.

The significant discrepancy between local and international compensation attracts thousands of college students to the field of medicine, nursing in particular. Indeed, the National President of the Philippine Nurses Association, Inc., Teresita Barcelo, PhD, RN, asserts that “many high school graduates choose Bachelor of Science in Nursing (BSN) only because of the prospect of going abroad” (Barcelo, 2011), resulting in an abundant supply of nurses.

The recent global financial crisis has slowed down the foreign demand for Philippine nurses leading to the significant underemployment and unemployment of nurses – more than 200,000 according to Dr Barcelo. Thus, Dr. Barcelo recommends that the supply of nurses be reduced “by monitoring and possibly closing colleges [] with graduates [that] have poor performances in the Philippine Nursing Licensure Exam. She claims that “CHED plans to close down schools with an average of 30% and below passing percentage in the board exam for the last three years (2008-2010)” (Barcelo, 2011).

Lastly, Dr. Barcelo believes that “the unemployment of registered nurses is also aggravated because government and private hospitals are not following the standard ratio of nurse to patient[,], which according to the Department of Health Bureau of Hospital Standards[,], should be one nurse to twelve patients. This ratio is

hardly followed. If followed, many nurses need to be hired. In [the] Department of Education, [school's should have] a ratio of one nurse to one elementary school. Currently, it is one school nurse to one district" (Barcelo, 2011).

c. Training and Advancement

c.1 Internal Training Program (in-house, foreign partners)

In the hospital care and treatment and specialty clinics sub-sectors, tertiary level hospitals with credited residency programs in a specified specialty serve as teaching and training institutions as well (Zoref, 2006).

Some employers in the wellness and spa centers and retirement and rehabilitative care sub-sector conduct short training seminars for their new employees. Most, however, trust the training received by applicants from high school and/or vocational institutions (www.careermagnifier.com/job-description.php?jobID=39).

c.2 External Training Program (domestic and foreign)

Professional organizations provide educational opportunities for their members by creating venues for collegial interaction and collaboration. Most of these organizations sponsor various local, and, on occasion, international seminars and conferences throughout the year in an effort to ensure the spread and use of up-to-date medical technology and know-how, improve the quality of services and increase client bases through skills and human

resource development, setting standards, various technical support, and networking.

Likewise, the Technical Education and Skills Development Authority (TESDA), a government agency tasked with raising the quality of technical education and skills development of Filipino workers, offers a number of training programs specifically designed to equip potential workers with the necessary skills and competencies to build a world class health and wellness industry. Listed in Table 12 are the courses offered by TESDA for chosen occupations in the four sub-sectors of the industry.

In addition to TESDA conducted training, private educational institutions offer courses and apprenticeships for wellness and spa center workers (i.e., massage therapists, hairstylists/hairdressers, manicurists/pedicurists, make-up artists, etc.) who wish to improve their skills or learn new treatment techniques (i.e., body sugaring or different skin detoxifying techniques)

<http://www.hcareers.com/us/resourcecenter/tabid/306/articleid/269/default.aspx>.

Owing to the continued increase in the demand for caregivers especially in developed countries, TESDA is offering a well-rounded training program for potential workers in the retirement and rehabilitative care segment.

Table 12: TESDA Courses for Health and Wellness Workers

Hospital Care and Treatment/Specialty Clinics	Wellness and Spa Centers	Retirement and Rehabilitative Care
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Competency-based Curriculum	Competency-based Curriculum	Caregiver
1. Biomedical Equipment Servicing NC II	1. Beauty Care NC II	1. Clean Living Room, Bedrooms, Toilets and Bathrooms
2. Dental Laboratory Technology Services (Fixed Dentures/Restorations)	2. Beauty Care NC III	2. Establish Professionalism in the Workplace
3. Dental Laboratory Technology Services (Removable Dentures/Appliances) NCII	3. Hilot (Wellness Massage) NCII	3. Maintain a Healthy and Safe Environment
4. Dental Laboratory Technology Services NCI		4. Occupational Skills Standard for CAREGIVER
5. Emergency Medical Services NCII		5. Prepare Hot and Cold Meals/Food
6. Health Care Services NCII		6. Provide Care and Services for People with Special Needs
7. Dental Hygiene IV Validated		

8. Dental Technology NC IV		7. Provide Care and Services to Elderly
9. Pharmacy Services NC II		

Source: TESDA

Lastly, as stated by the National President of the Philippine Nurses Association, Teresita Barcelo, PhD, RN, TESDA has approved training institutions to offer a program for Licensed Practical Nurse (LPN). Dr. Barcelo (2011) claims that “there is no position title of Licensed Practical Nurse” in the Philippines. According to her, “there is only one nursing licensure exam, none for practical nurses” so “there [are] no jobs available for LPNs locally” (Barcelo, 2011). The program is, thus, geared for individuals who would eventually work abroad. It must be noted, however, that the USA “will require that [practical nurse] graduates be licensed” (Barcelo, 2011).

d. Career path/Advancement

Opportunities for career advancement for health and wellness services industry workers increase through continuing education and research involvement. Doctors and nurses, for example, can specialize in specific areas of medicine, which can enhance the likelihood of promotion or the offer of administrative and teaching positions or research projects. Similarly, widening the scope of their expertise and keeping current on new techniques are critical

in remaining competitive in the dynamic wellness and spa center sub-sector. Advanced training allows estheticians, for example, to keep up with evolving technologies, products and processes and higher standards of service quality.

IV. Job Outlook and Prospects

Domestic

Two of the most important sources of growth in demand for healthcare and wellness services in the country are: 1) the relatively rapid expansion in population; and 2) longevity. Based on the 2007 Census, the Philippine population stood at 88.6 million (www.nscb.gov.ph). Estimates of the succeeding years predict that the number of the residents in the country would go up to 94 million, 103 million, and 111.8 million in 2010, 2015, and 2020, respectively. Coupled with a steady increase in life expectancy - the United Nations (2008) predicted average life expectancy to increase from 71.7 years in 2010 to 74 years in 2020 - these translate to a lucrative market for all the sub-sectors in the health and wellness services industry.

The quality and quantity of healthcare services and the availability of retirement and rehabilitative care services, for instance, are among the primary concerns of individuals aged sixty (60) and over – also known as senior citizens or the elderly. Owing to the high birth rates during the postwar period, 1945-1950, the elderly is the fastest growing segment of the Philippine population with an annual growth rate of 4.9 percent from 1995 to 2000 (DSWD, n.d.), which is almost twice the rate of the overall Philippine

population rate of increase of 2.7 percent annually during the same time period (NSO, 2010). The trend is expected to continue resulting to a steady increase in the share of senior citizens to the total Philippine population of 7.8 percent, 9.6 percent, and 11.7 percent in 2015, 2020, and 2025, respectively (UN, 2008).

Table 13: Philippine Health Indicators, 2006-2010

Variable	2006	2007	2008	2009	2010
Total Expenditure on Health per Capita PPP (\$)	112	119	123	133	142
General Government Expenditure on Health per Capita PPP (\$)	40	42	40	47	50
General Government Expenditure on Health as % of Total Government Expenditure	7	7	7	7	8
Private Expenditure on Health as % of Total Expenditure on Health	65	65	68	65	65
Out-of-Pocket Expenditure as % of Private Expenditure on Health	81	83	83	84	84

Source: World Health Organization

(<http://www.who.int/nha/country/phl/en/>)

Although Philippine healthcare expenditures as shown in Table 13 have been on an upswing from 2006 to 2010, findings of research claim that they are not nearly sufficient to meet the medical needs

of Filipinos. For example, although the World Health Organization (WHO) estimated that the Philippine government's expenditure on health as a percentage of total expenditure averaged 7.2% from 2006 to 2010 - which translated to an average per capita spending of US43.8 per year during the five-year period, an average of 65.6% of total healthcare expenditure in the Philippines was still privately financed – more than 80% of which was sourced out-of-pocket.

WHO statistics imply that a significant proportion of the domestic health and wellness market in the Philippines remains untapped, particularly among the low-income households. Thus, tackling the daunting task of designing and successfully implementing mechanisms that will allow the poor more access to healthcare should considerably boost industry growth.

In addition, the Department of Health's report on Notifiable Diseases from 2003 to 2007 underscores the importance of guaranteeing access to medical services regardless of economic status. Communicable illnesses such as cholera, tuberculosis, measles, and chicken pox – which trouble young, old, rich, and poor alike – steadily declined – at a rate of 15.26% - from 2,882,250 reported cases in 2003 to 1,219,958 in 2007. The continued success in containing aforementioned diseases is best achieved through the availability of vaccines and antibiotics – requiring private- and public-sector financing - not only to those who can afford them but especially those who do not have the means to privately finance medical care.

Finally, the studies show that the domestic demand for the retirement and rehabilitative care services may not grow as fast as

that of its neighboring countries. Based on the NSO 2000 Census, majority of the Filipino elderly – individuals aged 60 and over – live in households with three to four members, 31.5% while 40% live in households with more five and more members. In fact, senior citizens living alone or with just one companion are minorities at 28%.

Studies, however, determined that the probability of living alone increases as a Filipino senior citizen ages – 22.5% among aged 60-69 versus 35% among aged 70-79 versus 44.9% among aged 80 and over. The percentages are higher among elderly females as males, in general, have shorter life expectancies and among the poor owing to the lack of resources of younger family members to support them (Abejo, 2004).

Foreign

Exploiting the potential of the medical tourism industry, which benefits the hospital care and treatment, specialty clinics, and wellness and spa centers sub-sectors, begins with attracting a larger share of foreign visitors. An analysis of the latest available data from the Department of Tourism reveals that visitor arrivals in the Philippines have been growing at an annual average rate of 6.4%, from 2006's 2.8 million to 3.5 million in 2010; majority of tourists originated from East Asia (44.4%) – particularly Korea with a 21% share, United States (17%), Japan (10.3%), and China (5.4%).

Nonetheless, despite the heralded 3.52 million arrivals in 2010, which surpassed the 3.3 million government-target for the year, the number of tourists who visited the Philippines, it pales in

comparison with the more than 15 million and 5.6 million arrivals in Thailand and India, respectively, during the same year and the 9.7 million arrivals in Singapore in 2009. Addressing concerns with regards to the cost of travel to, from, and within the Philippines – starting with the availability of well-functioning infrastructure - as well as the perceived difficulties in maintaining peace and order are among the recommended measures in promoting the Philippine tourism sector.

In addition, translating visitor arrivals to a market for the health and wellness industry requires that Philippine service providers employ initiatives that will allow them to successfully compete with the leaders in the industry - India, Malaysia, Singapore, and Thailand. To this end, it is critical that local health and wellness institutions:

- 1) define their market niche;
- 2) correctly identify target markets; and
- 3) strengthen the link between the local tourism and the medical sectors.

Enhancing and maintaining the Philippines' advantage in the global medical tourism sector, therefore, would depend on its health and wellness sector's ability to capitalize on its strengths – which includes:

- 1) the provision of medical treatments and procedures at a fraction of the cost of services provided in their developed country counterparts;
- 2) providers “combine western medical knowledge with traditional or alternative remedies that may not be

readily available in First World countries” (Castillo & Conchada, 2011);

- 3) medical services that are asserted to be comparable in quality, if not better, than that of hospitals operating in rich nations owing to the employment of licensed, highly-trained and skilled medical practitioners (i.e., doctors and nurses) and state-of-the art hospital facilities; and
- 4) the “[support] [of] their respective governments through tax and non-tax incentives” (Castillo & Conchada, 2011) - and remedy or compensate for its weaknesses – for example, establishing a mechanism to keep and increase their highly-trained personnel and modern facilities as well as strengthening the “collaboration between the medical and tourism stakeholders to ensure the improvement of business processes and continued product/service innovation” (Castillo & Conchada, 2011).

Certainly, it might benefit the Philippine’s health and wellness sector to re-evaluate its target market. Most medical tourism establishments in the country focus on American clients primarily because of their familiarity with the US market. The more lucrative markets, however, may be Japan and Korea owing to the more than one million Japanese and 1.2 million Koreans residing in the country today. In addition, travel and transactions costs are also potentially lower given the proximity of these countries to the Philippines and the fact that Japan and Korea only has one health insurer for their respective populations, which would reduce the

cost of establishing networks between the Philippines and Japan and the Philippines and Korea.

Finally, foreign demand for the Philippine retirement and rehabilitative care services is said to have the strongest potential in boosting the growth of the industry in the medium- to long-term. About 10% of the world's population is aged sixty or over in the year 2000. The UN (2003) predicted the share to increase to 21% in 2050. A significant number of these senior citizens are residents of more developed countries - where 19% of the population is aged sixty or over in 2000 and forecasted to balloon to 32% in 2050 (UN, 2003). Among the developed nations, Japan ranks first in the list of countries with the largest proportion of the population aged sixty and over, 31% (UN, 2011).

The Philippines can position itself to be one of the preferred destinations for retirees, especially in Asia. At present there are roughly 24,000 registered retirees residing at key locations in the National Capital Region, Baguio, Cebu, and Davao. Every retiree corresponds to around 1.5 jobs locally. This is according to Henry Schumacher, chairman of the Retirement and Healthcare Coalition. Jobs generated include doctors, medical assistants, and nurses who will attend to the needs of these retirees. (Isip, 2011)

Among the reasons for this strong preference for the Philippines is the fact that the Philippines is the largest English-speaking country. Also, according to the Philippine Retirement Incorporated (PRI), a private-sector counterpart of the Philippine Retirement Authority (PRA), the Philippines is one of the best places in which to retire because of its healthcare facilities. Specifically, hospitals in the country are equipped with modern facilities. In Metro Manila,

for example, medical centers are closely monitored by the Department of Health (DOH). Indeed, these centers are not only nationally-certified and accredited by the DOH but a few of them are also certified under the International Organization for Standardization (ISO) and three – Chong Hua Hospital (Cebu City), The Medical City (Pasig City, and St. Luke's Medical Center (Quezon City) - are accredited under the Joint Commission International (JCI). These hospitals are also run by local doctors and nurses who are highly skilled and competent.

Furthermore, the “unique Filipino brand of caring and compassion” is what gives the Philippines the greatest edge in providing medical and healthcare services to the retiring sector. (<http://retirephil.com/medfacilities.html>)

In 2007 there were around three hundred twenty-six (326) million retirees worldwide. It was expected that in 2010, this would have increase to eighth hundred sixty-nine (869) million retirees. According to Col. Doy Francisco, former general manager of the Philippine Retirement Authority (PRA) as much as three (3) million of these retirees can be absorbed in the Philippines, although the government is only targeting one (1) million as of the moment. This makes will provide a promising for the Health and Wellness sector. Among the projects spearheaded by the Arroyo administration to encourage these retirees were retirement villages. Various incentives were given by the National Government to developers who will put up retirement villages. One of the incentives is the project's classification into a special economic zone, with special benefits and five (5) percent tax on gross income.

(<http://www.lakbaypilipinas.com/blog/2007/06/21/the-philippines-targets-close-to-1m-retirees-abroad-to-live-here/>)

Employment Prospects (internal, external)

The Philippines has always enjoyed “a higher percentage of medical professionals [– nurses in particular – as compared] to other developing countries” (Vequist & Valdez, 2008). In fact, in 2000 the ratio of nurses per one-thousand population was estimated 4.4 while in 2003 the ratio of doctors per thousand population stood at 1.2 (Vequist & Valdez, 2008). Moreover, the future supply of medical professionals in the country is reasonably assured by the more than 313 health recognized educational institutions in the country today.

Understandably, a factor that can significantly affect the future growth of the industry is the considerable outflow of Filipino health and wellness workers and professionals. Table 14 shows that over the last three years, 2008 to 2010, deployment of this particular sector’s potential employees shrank by an average of 4.3% per year.

Further examination of the data contained in Table 14, however, reveals that key professionals in the hospital care and treatment and specialty clinic sub-sectors – such as pharmacists, social workers, technicians life scientists/technologists, technicians medical x-ray, nurses professionals and dentists – have been leaving the Philippines at a rate that is notably higher than the overall industry average – 77.9%, 8.3%, 7.6%,6.2%, 3% and 1.8%, respectively. Whereas, caregivers and caretakers, who are

essential workers in the retirement and rehabilitative are segment, are emigrating at a negative rate over the three-year period, average of – 4.1% per year from 2008 to 2010 (refer to Table 14).

Nevertheless, in terms of magnitudes, nurses professions, caregivers and caretakers, and hairdressers, barbers, beauticians and related workers top the list of health and wellness workers and professionals deployment during the three-year period at average of 12,197, 9,543, and 1,282, respectively.

Table 14: Deployment of Philippine Health and Wellness Workers and Professionals, 2008-2010

Skill Classification	2008	2009	2010	3-year Average Growth Rate (in %)
Technicians Medical X-Ray	462	636	475	6.17
Technicians Life Sciences/Technologis ts	370	419	427	7.58
Social Workers	6	6	7	8.33
Physiotherapists & Occupational Therapists	1,171	1,266	896	-10.56
Pharmacists	55	165	92	77.88
Pharmaceutical Assistants	199	209	126	-17.34
Optometrists & Opticians	137	209	94	-1.23
Nursing Personnel	1,123	451	349	-41.23

(n.e.c.)				
Nurses Professional	11,495	13,014	12,082	3.03
Midwives	404	391	266	-17.59
Professional				
Midwifery Personnel	57	56	17	-35.70
(n.e.c.)				
Medical Assistants	46	31	13	-45.34
Doctors Medical	217	224	176	-9.10
Dieticians & Public	293	210	185	-20.12
Health Nutritionists				
Dentists	111	139	109	1.82
Dental Assistants	526	658	384	-8.27
Bacteriologists				
Pharmacologists and	19	10	10	-23.68
Related Scientists				
Hairdressers Barbers				
Beauticians and	1,331	1,547	967	-37.49
Related Workers				
Caregivers and	10,109	9,228	9293	-4.01
Caretakers				
TOTAL	28,131	28,869	25,968	-4.27

*Source: Philippine Overseas Employment Administration
(<http://www.poea.gov.ph/stats/statistics.html>)*

Furthermore, while the Philippine Overseas Employment Agency data does not reflect the number of wellness and spa center workers deployed annually the literature claims that given the rapid growth of destination and medical spas, in particular, “estheticians and other spa workers interested in international travel will find the opportunities endless as spas around the world, on cruise ships”

(<http://www.hcareers.com/us/resourcecenter/tabid/306/articleid/269/default.aspx>).

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