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# GERIATRIC CARE MODEL FOR INDIGENT FILIPINO ELDERLY

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**Abstract**

The world population is in the midst of a longevity revolution, wherein society is currently facing a global trend where the fertility rate is declining while life expectancies are rising. However, this longevity does not mean a better quality of life, instead, it presents other challenges. As people age, they are more likely to have various health problems that cause a strain on insurance and pension systems, as well as other health and social-related support models for the elderly. This strain is even more severe in developing countries like the Philippines due to the country's poor living conditions that hinder securing proper social protection and health care services. Therefore, a dedicated health model is needed to provide better services for the elderly. This study conducted questionnaires and personal interviews with indigent elderlies identified from the Pantawid Pamilyang Pilipino survey done by the local government of Pasay City, Metro Manila, Philippines. Results showed a significant policy implementation gap in what the current laws provide and deliver. The proposed model takes into consideration the internal and external factors affecting elderly health. It recognizes that policies are a set of interrelated decisions in which the identification and allocation of goods, services, and resources should be produced

The Seybold Report
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according to demand and is to be implemented with given regulations. Strategies such as proactive monitoring are to be performed by the community in cooperation with local government services, where the use of specific care protocols for evaluating and managing common geriatric conditions of the elderly are to be implemented.

**Keywords:** Geriatrics, Health care, Elderly, Public Health, Indigent Filipinos

## 1. INTRODUCTION

Aging is a growing public health concern in almost every country worldwide, causing developments in medicine and public health management to be dedicated to ensuring longer life expectancies. However, a long life does not automatically translate to a better quality of life. According to the 2020 census of the population of the Philippines, the elderly make up 15,078,121 of the total Philippine population of 108 million. Of this number, 44.5% are Filipino male elderly, and 55.5% are female elderly (Philippine Statistics Authority, 2022).

However, with a population growth rate of 1.21%, the Philippines is expected to have an increase in the number and proportion of elderly and is likely to become a high-aging society by 2030 (Philippine Statistics Authority, 2015). The latest report as of 2020 confirms that the Philippines now has one of the fastest aging populations, with Filipinos aged 60 and older comprising 8.5%, or 9.2 million of the population.

This number has doubled in comparison to the 2000's data with only 5.9% or 4.5 million of the national population (Commission on Population and Development, 2023). Therefore, there is an objective to redefine these systems to make them address the needs and demands of an aging population (Global Age Watch Index, 2015; World Health Organization, 2011 and; Carlos, 2009). With the dramatic rise in the number of older adults, this increase may put a strain on the Philippine healthcare systems and other services (Badana & Andel, 2017).

Developing countries like the Philippines are not well prepared to meet such challenges because of poor living conditions, which are unfavorable to older adults, especially among the elderly living in poverty. With a poverty incidence of 18.1% (Philippine Statistics Authority, 2022), securing social protection and healthcare services in the country is a hindrance.

More than half of the Filipino elderly living in poverty lack pensions to cover their health care needs, and the projected increase in their population group demands an even bigger need to meet improved health services (International Labour Organization, 2017; & Carandang, et al., 2019).

Several concerns may also arise with the health issues of aging. Adults aged 60 and over are more prone to degenerative and communicable diseases because of aging immune systems. Moreover, they are likely to suffer from visual impairments, mental and neurological disorders, and disabilities (World Health Organization, 2017; Global Age Watch Index, 2015; Carlos, 2009). The term *Geriatric Syndrome* is often used to refer to common health conditions among older adults that do not fit into distinct organ-based disease categories and often have multifactorial causes.

It is a type of syndrome commonly associated with reduced life expectancy (Niederhuber, 2013). However, given the multi-factorial health conditions covered under the term, it is ideal

The Seybold Report
ISSN 1533-9211
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that older adults undergo a comprehensive geriatric assessment (CGA), a multidisciplinary diagnostic process that identifies medical, psychosocial, and functional limitations of older adults in order to develop a coordinated plan to maximize overall health with aging (Wieland and Hirth, 2003).

According to Carlos (2009), poverty is a primary setback for the Filipino elderly to have social and healthcare security in old age. This is further aggravated by the economic challenge of finding sustainable income as productivity and economic opportunities are rendered limited for the aged.

Moreover, the Filipino elderly suffer physical and psychological abuse, financial exploitation, and neglect in homes and institutions, which largely goes under-reported (Global Age Watch Index, 2015; and Carlos, 2009). As the Filipino elderly population is projected to increase, the necessity to improve Filipino elderly health care services, especially for indigent Filipino elderly, is crucial. Therefore, there is a need to identify a dedicated healthcare service that will significantly reduce or eliminate this gap between healthcare demand and supply for the elderly population.

## 2. METHODOLOGY

### Research Design

This study is an exploratory research entailing a collection of data that determines patterns in the current practices to develop a workable model for elderly health care. The respondents of the study are composed of indigent elderlies identified from a survey conducted by the local government of Pasay City, Metro Manila in the Philippines with the beneficiaries of the Pantawid Pamilyang Pilipino Program (4Ps), an institutionalized program that provides support to the poor (Official Gazette of the Republic of the Philippines, n.d.).

### Sampling of Data

Primary data were derived from the indigent elderly respondents that were identified from a list prepared by local health workers for the 4Ps program or the Pantawid Pamilyang Pilipino survey of the Philippine government. The sample size was determined using Slovin's Formula shown below:

$$S = \frac{N}{1 + Ne^2}$$

Where:

N = Population

E = Error to tolerance

S = Sample size

The study made use of personal interviews with key informants and administered a survey questionnaire. The interview guide and survey questionnaires were pre-tested to guarantee its

ISSN 1533-9211

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relevance, reliability, and validity to the objectives of the proposed study. Personal interview respondents were selected based on their knowledge and experiences, they were only done among these selected key informants to get elaboration or clarification on their responses to validate the results of the survey questionnaire.

A five-point rating scale was used to determine perceptions of the experiences and practices of caregivers. The scale values for the response are from 1.0 to 5.0, and for the summary of data, a fixed range scoring shown below was adapted.

| Response | Value | Range |
|---|---|---|
| Strongly Agree (SA) | 5 | 4.21 - 5 |
| Agree (A) | 4 | 3.41 –4.20 |
| Neutral (N) | 3 | 2.61 – 3.40 |
| Disagree (D) | 2 | 1.81 – 2.60 |
| Strongly Disagree (SD) | 1 | 1 – 1.80 |

**Statistical Analysis**

The results of the survey were subjected to descriptive statistics for ease of generating a summary. The percentage, weighted mean and test of difference of means were used in statistically analyzing the data with a calculation of percentages used to profile the respondents, therefore giving their attributes using the formula:

$$P = \frac{f}{n} x\ 100$$

Where:

P = percentage

F = frequency

N = total of respondents

The weighted mean statistics for the group of responses were also used for summarizing the responses of the respondents. The following formula was used:

$$WM = \frac{\sum_{f=1}^{n}(fn * Sn)}{N}$$

Where:

WM = weighted mean

f = number

s = score

n= total sample

Inferential statistics were used for testing the difference of means with the formula:

The Seybold Report
ISSN 1533-9211
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$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\left(\frac{(N_1 - 1)s_1^2 + (N_2 - 1)s_2^2}{N_1 + N_2 - 2}\right)\left(\frac{1}{N_1} + \frac{1}{N_2}\right)}}$$

Where:

t = is the t-value

ẍ = sample mean

N = sample size

s = standard deviation

The t-test is used when looking at a numerical variable and then comparing the averages of two separate populations or groups. The single-tailed test was used with a confidence level of 95% or a significance level of 0.05. Statistical package for the Social Sciences (SPSS) for Windows was used for the statistical computation. The website

http://www.socscistatistics.com/tests was also used for calculation purposes.

**Data Analysis**

For presentation purposes, frequency tables were prepared, and descriptive statistics were computed. This enabled the study to provide the most straightforward approach to working with quantitative data. A survey instrument with a Likert scale has been prepared. As such, the data obtained from the interviews and survey were presented and arranged in the form of a short tabulated summary and detailed analysis.

The data gathered from the respondents show the answer to the specific problem statements of the study and aid in the development of a needs-based geriatric health care model.

## 3. RESULTS AND DISCUSSION

**Results**

A. Demographic Profile of Respondents

**Table 1: Demographic Profile of Respondents**

| Age Range | Number | Percentage |
|---|---|---|
| 60-64 | 33 | 30.56 |
| 65-69 | 31 | 28.70 |
| 70-74 | 25 | 23.15 |
| 75-79 | 12 | 11.11 |
| 80-84 | 5 | 4.63 |
| 85 and Above | 2 | 1.85 |
| **Respondents Distribution by Gender** | | |
| Male | 26 | 24.07 |
| Female | 82 | 75.93 |

The Seybold Report
ISSN 1533-9211
DOI 10.17605/OSF.IO/E736D

| | | |
|---|---|---|
| **Respondents' Distribution by Civil Status** | | |
| Single | 12 | 11.11 |
| Married | 48 | 44.44 |
| Widow/Widower | 40 | 37.04 |
| Separated | 8 | 7.41 |
| **Respondents Distribution by Educational Attainment** | | |
| Elementary | 28 | 25.93 |
| High School | 47 | 43.52 |
| College | 33 | 30.56 |
| **Respondents Distribution by Employment Status** | | |
| Employed | 19 | 17.59 |
| Self-employed | 6 | 5.56 |
| Unemployed | 83 | 76.85 |
| **Respondents Distribution by Living Status** | | |
| Living with Relatives | 99 | 91.67 |
| Living with other than relatives | 5 | 4.63 |
| Living Alone | 4 | 3.70 |
| **Respondents' Distribution by Pension** | | |
| 0 | 61 | 56.48 |
| 1,000 – 5,000 | 43 | 39.81 |
| 6,000 -- 10,000 | 3 | 2.78 |
| 11,000 -- 15,000 | 1 | 0.93 |

As seen in Table 1. the demographic profile of the respondents is consistent with the averaged demographic pattern wherein there is a higher younger population than the older population, as well as a higher female population (75.93%), consistent with the national average in gender distributions since females are found to have longer life expectancies than males (Son, 2009).

It is also observed that more than half of the respondents (56.48%) do not receive any pension from the national Social Security System (SSS) or the Government Service Insurance System (GSIS), and even if they do receive financial assistance, it is generally not enough to sustain their needs.

**Table 1.1: Continuation of the Demographic Profile of Respondents**

| | | |
|---|---|---|
| **Respondents' Distribution by Illness** | | |
| Cardiovascular | 55 | 50.93 |
| Pulmonary | 15 | 13.89 |
| Musculoskeletal | 7 | 6.48 |
| Muscular | 4 | 3.70 |
| Neurological | 2 | 1.85 |
| Malnutrition | 1 | 0.93 |
| Endocrine | 33 | 30.56 |
| None | 38 | 35.19 |
| **Respondents' Distribution by Number of Drugs Regularly Taken** | | |
| 1 – 3 | 60 | 55.56 |
| 4 – 6 | 9 | 8.33 |
| 7 – 9 | 1 | 0.93 |
| >10 | 2 | 1.85 |
| None | 36 | 33.33 |

ISSN 1533-9211

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| | | |
|---|---|---|
| **Respondents' Distribution by Ambulation** | | |
| Full | 80 | 74.07 |
| Partial | 25 | 23.15 |
| None | 3 | 2.78 |
| **Respondents' Distribution by Hospitalization Frequency** | | |
| 1 – 2 | 35 | 32.41 |
| 3 –4 | 2 | 1.85 |
| >5 | 2 | 1.85 |
| 0 | 69 | 63.89 |

Most of the respondents suffer from a series of health problems indicative of Geriatric Syndrome. A majority of respondents (50.93%) suffer from cardiovascular disease, 30.56% suffer from endocrine illness, and 13.89% have pulmonary disease. With the reoccurring health problems that occur with aging, more than half of the respondents (55.56%) regularly take 1 to 3 drugs.

However, despite the results, a majority of respondents (63.89%) have not been hospitalized. This could be because of their economic situation, wherein poor people tend to avoid hospitalization and most likely have not let themselves get checked-up for any medical complications for fear of hospital bills (World Bank Group, 2022).

**A. Health Needs of Elderlies**

The Republic Act No. 9994 is a law enacted to grant senior citizens additional benefits and special privileges. This section determined whether the benefits provided by RA 9994 (Expanded Senior Citizens Act of 2010) is consistent with and addresses the need of elderlies.

Section 2 of the said law provides "the grant of twenty percent (20%) discount and exemption from the value-added tax (VAT), if applicable, on the sale of the following goods and services from all establishments, for the exclusive use and enjoyment or availment of the senior citizen" (Official Gazette of the Republic of the Philippines, 2010).

A Likert scale was used to determine the extent of agreement with the benefits provided by the law and the extent that these benefits are provided. Only those provisions pertaining to health-related privileges and services offered were included in the survey.

The Seybold Report
ISSN 1533-9211
DOI 10.17605/OSF.IO/E736D

**Table 2: Statistical analysis of the responses from the questionnaire**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ***1. Satisfaction with Discounts for Drugs, Immunization, etc*** | | | | | | | | | |
| | **Responses** | | | | | | **Weighted Mean** | **t-value** | ***p-value**** |
| | **1** | **2** | **3** | **4** | **5** | **No Answer** | | | |
| Prescribed | 1 (0.9%) | 0 | 2 (1.9%) | 3 (2.8%) | 102 (94.4%) | 0 | 4.90 | | |
| Provided | 11 (10.2%) | 1 (0.9%) | 11 (10.2%) | 12 (11.1%) | 73 (67.6%) | 0 | 4.25 | 5.37 | <0.001 (S)[†] |
| ***2. Satisfaction with Discounts for Medical Services Fees by the Private Sector*** | | | | | | | | | |
| | **Responses** | | | | | | **Weighted Mean** | **t-value** | ***p-value**** |
| | **1** | **2** | **3** | **4** | **5** | **No Answer** | | | |
| Prescribed | 52 (48.1%) | 2 (1.9%) | 6 (5.6%) | 6 (5.6%) | 41 (38.0%) | 1 (0.9%) | 2.83 | | |
| Provided | 62 (57.4%) | 0 | 9 (8.3%) | 11 (10.2%) | 25 (23.1%) | 1 (0.9%) | 2.41 | 3.02 | 0.003 (S)[†] |
| ***3. Satisfaction with Discounts for Professional Fees for Licensed Professional Health Care Services*** | | | | | | | | | |
| | **Responses** | | | | | | **Weighted Mean** | **t-value** | ***p-value**** |
| | **1** | **2** | **3** | **4** | **5** | **No Answer** | | | |
| Prescribed | 23 (21.3%) | 1 (0.9%) | 4 (3.7%) | 12 (11.1%) | 67 (62.0%) | 1 (0.9%) | 3.93 | | |
| Provided | 44 (40.7%) | 0 | 5 (4.6%) | 15 (13.9%) | 43 (39.8%) | 1 (0.9%) | 3.12 | 5.28 | <0.001 (S)[†] |
| ***4. Satisfaction with the Discounts for Medical and Dental Services and Diagnostic Laboratory in All Private Hospital etc.*** | | | | | | | | | |
| | **Responses** | | | | | | **Weighted Mean** | **t-value** | ***p-value**** |
| | **1** | **2** | **3** | **4** | **5** | | | | |
| Prescribed | 17 (15.7%) | 0 | 3 (2.8%) | 6 (5.6%) | 82 (75.9%) | | 4.26 | | |
| Provided | 37 (34.3%) | 2 (1.9%) | 4 (3.7%) | 9 (8.3%) | 56 (51.9%) | | 3.42 | 5.39 | <0.001 (S)[†] |
| ***5. Satisfaction with Actual Land Transportation Fare*** | | | | | | | | | |
| | **Responses** | | | | | | **Weighted Mean** | **t-value** | ***p-value**** |
| | **1** | **2** | **3** | **4** | **5** | | | | |
| Prescribed | 1 (0.9%) | 2 (1.9%) | 4 (3.7%) | 5 (4.6%) | 96 (88.9%) | | 4.79 | | |
| Provided | 2 (1.9%) | 1 (0.9%) | 6 (5.6%) | 7 (6.5%) | 92 (85.2%) | | 4.72 | 1.04 | 0.30 (NS)[†] |
| ***6. Satisfaction with Free Medical and Dental Services, Diagnostic and LaboratoryFees , XRay and CT Scan in all Government Facilities*** | | | | | | | | | |
| | **Responses** | | | | | | **Weighted Mean** | **t-value** | ***p-value**** |

The Seybold Report
ISSN 1533-9211
DOI 10.17605/OSF.IO/E736D

| | 1 | 2 | 3 | 4 | 5 | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Prescribed | 0 | 0 | 4 (3.7%) | 3 (2.8%) | 101 (93.5%) | | 4.90 | | |
| Provided | 14 (13.0%) | 1 (0.9%) | 8 (7.4%) | 11 (10.2%) | 74 (68.5%) | | 4.20 | 5.07 | <0.001 (S)† |
| ***7. Satisfaction with Free Vaccination Against Influenza Virus and Pneumococcal Disease*** | | | | | | | | | |
| | **Responses** | | | | | | **Weighted Mean** | **t-value** | ***p-value**** |
| | **1** | **2** | **3** | **4** | **5** | | | | |
| Prescribed | 4 (3.7%) | 2 (1.9%) | 3 (2.8%) | 3 (2.8%) | 96 (88.9%) | | 4.71 | | |
| Provided | 20 (18.5%) | 5 (4.6%) | 3 (2.8%) | 8 (7.4%) | 72 (66.7%) | | 3.99 | 5.10 | <0.001 (S)† |
| ***8. Satisfaction with the Scope and Continuation of the Same Benefits and Privileges Given thru GSIS, SSS ….*** | | | | | | | | | |
| | **Responses** | | | | | | **Weighted Mean** | **t-value** | ***p-value**** |
| | **1** | **2** | **3** | **4** | **5** | **No Answer** | | | |
| Prescribed | 3 (2.8%) | 0 | 2 (1.9%) | 0 | 100 (92.6%) | 3 (2.8%) | 4.85 | | |
| Provided | 39 (36.1%) | 11 (10.2%) | 7 (6.5%) | 4 (3.7%) | 44 (40.7%) | 3 (2.8%) | 3.03 | 10.32 | <0.0001 (S)† |
| ***9. Satisfaction with Government Assistance on Health*** | | | | | | | | | |
| | **Responses** | | | | | | **Weighted Mean** | **t-value** | ***p-value**** |
| | **1** | **2** | **3** | **4** | **5** | | | | |
| Prescribed | 1 (0.9%) | 0 | 3 (2.8%) | 1 (0.9%) | 103 (95.4%) | | 4.90 | | |
| Provided | 17 (15.7%) | 1 (0.9%) | 14 (13.0%) | 13 (12.0%) | 63 (58.3%) | | 3.96 | 6.68 | <0.001 (S)† |
| ***10. Satisfaction with Government Assistance on Social Services*** | | | | | | | | | |
| | **Responses** | | | | | | **Weighted Mean** | **t-value** | ***p-value**** |
| | **1** | **2** | **3** | **4** | **5** | | | | |
| Prescribed | 67 (62.0%) | 2 (1.9%) | 5 (4.6%) | 4 (3.7%) | 30 (27.8%) | | 2.33 | | |
| Provided | 75 (69.4%) | 0 | 8 (7.4%) | 12 (11.1%) | 13 (12.0%) | | 1.96 | 2.75 | 0.007 (S)† |
| ***11. Satisfaction with Government Assistance on Housing*** | | | | | | | | | |
| | **Responses** | | | | | | **Weighted Mean** | **t-value** | ***p-value**** |
| | **1** | **2** | **3** | **4** | **5** | | | | |
| Prescribed | 14 (13.0%) | 1 (0.9%) | 4 (3.7%) | 1 (0.9%) | 88 (81.5%) | | 4.37 | | |
| Provided | 74 (68.5%) | 2 (1.9%) | 8 (7.4%) | 8 (7.4%) | 16 (14.8%) | | 1.98 | 13.98 | <0.0001 (S)† |
| ***12. Satisfaction with Government Assistance on Access to Public Transportation*** | | | | | | | | | |
| | **Responses** | | | | | | **Weighted Mean** | **t-value** | ***p-value**** |

The Seybold Report
ISSN 1533-9211
DOI 10.17605/OSF.IO/E736D

| | 1 | 2 | 3 | 4 | 5 | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Prescribed | 4 (3.7%) | 0 | 5 (4.6%) | 4 (3.7%) | 95 (88.0%) | | 4.72 | | |
| Provided | 10 (9.3%) | 9 (8.3%) | 16 (14.8%) | 8 (7.4%) | 65 (60.2%) | | 4.00 | 6.26 | <0.001 (S)† |
| ***13. Satisfaction with Government Assistance on Incentives for Foster Care*** | | | | | | | | | |
| | **Responses** | | | | | | **Weighted Mean** | **t-value** | ***p-value**** |
| | **1** | **2** | **3** | **4** | **5** | **No Answer** | | | |
| Prescribed | 2 (1.9%) | 0 | 2 (1.9%) | 2 (1.9%) | 101 (93.5%) | 1 (0.9%) | 4.87 | | |
| Provided | 32 (29.6%) | 5 (4.6%) | 5 (4.6%) | 9 (8.3%) | 56 (51.9%) | 1 (0.9%) | 3.49 | 8.07 | <0.001 (S)† |
| ***14. Satisfaction with Mandatory Philhealth Coverage Covering All Poor Senior Citizens with a National Health Insurance Program*** | | | | | | | | | |
| | **Responses** | | | | | | **Weighted Mean** | **t-value** | ***p-value**** |
| | **1** | **2** | **3** | **4** | **5** | **No Answer** | | | |
| Prescribed | 1 (0.9%) | 0 | 0 | 3 (2.8%) | 103 (95.4%) | 1 (0.9%) | 4.94 | | |
| Provided | 26 (24.1%) | 1 (0.9%) | 5 (4.6%) | 8 (7.4%) | 66 (61.1%) | 1 (0.9%) | 3.82 | 6.75 | <0.001 (S)† |
| ***15. Satisfaction with Government Assistance on Social Safety Net*** | | | | | | | | | |
| | **Responses** | | | | | | **Weighted Mean** | **t-value** | ***p-value**** |
| | **1** | **2** | **3** | **4** | **5** | **No Answer** | | | |
| Prescribed | 1 (0.9%) | 0 | 3 (2.8%) | 2 (1.9%) | 102 (94.4%) | 0 | 4.89 | | |
| Provided | 46 (42.6%) | 13 (12.0%) | 7 (6.5%) | 11 (10.2%) | 30 (27.8%) | 1 (0.9%) | 2.70 | 12.79 | <0.0001 (S)† |

** p>0.05- Not significant; p ≤0.05-Significant*

*5- Strongly agree, 4-Agree, 3-Neutral, 2-Disagree, 1-Strongly Disagree*

*†Paired t-test*

The Seybold Report
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Table 2 shows a comparative summary of the responses of the elderly on the prescribed and provided privileges on the government's assistance on basic health and social services in the Philippines. Two conceptual categories were used in the questionnaire provided to the respondents. To answer the first part, the health benefits provided by Republic Act 9994 were used as starting point. The respondents were also asked for any additional needs they deemed necessary. The statements deal with the entitlement of a twenty percent (20%) discount and exemption from the value-added tax (VAT), if applicable, on the sale of goods and services from all establishments, for the exclusive use and enjoyment or availment of the senior citizen. The second part deals with the government assistance extended to senior citizens.

**Table 3: Summary of Responses to the Interview Questionnaire**

| Legal Provision | | Weighted Score | Description of Score | p-value |
|---|---|---|---|---|
| Satisfaction with Discounts for Drugs, Immunization, etc | With provision | 4.90 | Agree | <0.001 (S)† |
| | With delivery | 4.25 | Agree | |
| Satisfaction with Discounts for Medical Services Fees by the Private Sector | With provision | 2.83 | Disagree | 0.003 (S)† |
| | With delivery | 2.41 | Disagree | |
| Satisfaction with Discounts for Professional Fees for Licensed Professional Health Care Services | With provision | 3.93 | Neutral | <0.001 (S)† |
| | With delivery | 3.12 | Neutral | |
| Satisfaction with the Discounts for Medical and Dental Services and Diagnostic Laboratory in All Private Hospital etc. | With provision | 4.26 | Agree | <0.001 (S)† |
| | With delivery | 3.42 | Neutral | |
| Satisfaction with Actual Land Transportation Fare | With provision | 4.79 | Agree | 0.30 (NS)† |
| | With delivery | 4.72 | Agree | |
| Satisfaction with Free Medical and Dental Services, Diagnostic and Laboratory Fees, X-Ray and CT Scan in all Government Facilities | With provision | 4.90 | Agree | <0.001 (S)† |
| | With delivery | 4.20 | Agree | |
| Satisfaction with Free Vaccination Against Influenza Virus and Pneumococcal Disease | With provision | 4.71 | Agree | <0.001 (S)† |
| | With delivery | 3.99 | Neutral | |
| Satisfaction with the Scope and Continuation of the Same Benefits and Privileges Given thru GSIS, SSS | With provision | 4.85 | Agree | <0.0001 (S)† |
| | With delivery | 3.03 | Neutral | |
| Satisfaction with Government Assistance on Health | With provision | 4.90 | Agree | <0.001 (S)† |
| | With delivery | 3.96 | Neutral | |
| Satisfaction with Government Assistance on Social Services | With provision | 2.33 | Disagree | 0.007 (S)† |
| | With delivery | 1.96 | Strongly Disagree | |

The Seybold Report
ISSN 1533-9211
DOI 10.17605/OSF.IO/E736D

| | | | | |
|---|---|---|---|---|
| Satisfaction with Government Assistance on Housing | With provision | 4.37 | Agree | <0.0001 (S)† |
| | With delivery | 1.98 | Strongly Disagree | |
| Satisfaction with Government Assistance on Access to Public Transportation | With provision | 4.72 | Agree | <0.001 (S)† |
| | With delivery | 4.00 | Agree | |
| Satisfaction with Government Assistance on Incentives for Foster Care | With provision | 4.87 | Agree | <0.001 (S)† |
| | With delivery | 3.49 | Neutral | |
| Satisfaction with Mandatory Philhealth Coverage Covering All Poor Senior Citizens with a National Health Insurance Program | With provision | 4.94 | Agree | <0.001 (S)† |
| | With delivery | 3.82 | Neutral | |
| Satisfaction with Government Assistance on Social Safety Net | With provision | 4.89 | Agree | <0.0001 (S)† |
| | With delivery | 2.70 | Disagree | |

As seen in Table 2 and 3, based on the responses in the questionnaire, services and privileges such as discounts on land transportation fares like public utility buses (PUB), public utility jeepneys (PUJs), taxis, Asian Utility Vehicles (AUVs), shuttle and train services including Light Rail Transit (LRT), Mass Rail Transit (MRT), and the Philippine National Railways (PNR) are largely practiced in the country. The respondents strongly agrees with the provision of the law, strengthen by the weighted mean score of 4.79 ≈ 5 and are also in strong agreement with the privilege being granted to its constituents, given the mean response of 4.72 ≈ 5. Comparing their responses, no significant difference was noted as shown by the p-value of 0.30 derived from the paired t-test showing a mean difference of only 0.06. This indicates that there is no significant gap in the implementation and provision of actual land transportation fares for the elderly.

The results also showed that the Philippines have numerous laws that are aimed toward health benefits or supportive geriatric care for the elderly. However, despite the availability of these resources or policies, the benefits are not accessible to all and are not properly implemented in the country. The respondents showed an agreement with all the provisions of the Republic Act Number 9994 except the following legal provisions:

1. Satisfaction with Discounts for Medical Services Fees by the Private Sector
2. Satisfaction with Discounts for Professional Fees for Licensed Professional Health Care Services
3. Satisfaction with Government Assistance on Social Services

Respondents have stated their views on the health and social services of the government, and their neutrality or disagreement on the provisions is an indication that there is no urgent need for the respondents to receive the said benefits provided by law and that there is a significant gap in the health care provisions that are provided to the elderly.

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## Discussion

The main question that this study seeks to answer is what kind of geriatric healthcare model can be proposed to address the needs of the elderly. To determine the policy and the implementation were compared to determine gaps between the two and the other needs not addressed by the policy and implementation.

According to the results, several gaps in geriatric care in the Philippines need attention and improvement. In the analysis of data on the perception of select provisions in the Republic Act No. 9994, there is a significant difference between what the law provides and what is delivered. In short, there is a policy-implementation gap. Additionally, there are further needs indicated by the respondents that are to be improved and strengthened. In effect, the benefits provided by law would qualify as mere stop-gap intervention now. There is a need to review the benefits provided by law, especially today, because the cost of living is rising, which includes food and medical expenses.

The study showed that Filipino senior citizens are unsatisfied and largely do not benefit from most health care and social services that are offered. This reason is mainly due to issues like poverty that give them a lack of access to these services (Carlos, 1999). The data also shows that most respondents did not have a proper education, with most being unemployed and unaccommodated in the formal labor sector. This is consistent with the 1996 Philippine Elderly Survey and the 2007 Philippine Study on Aging, where older adult Filipinos generally have low educational attainments (Cruz et al., 2019). This reflects how the country's high poverty index affects people's ability to achieve higher education and employment (World Bank Group, 2022). The lack of financial security and the vicious cycle of poverty causes the marginalized Filipino elderly to continue to work and push their bodies to provide for their family (Carandang, et al., 2019). Aside from that, most members of the older age groups could not save for their pensions and had to consider their families' expenses over their own needs. Therefore, poverty also significantly affects pension coverage, either because most people are uneducated and unaware of it or due to the lack financial security (Carandang et al., 2019; Mandigma, 2016). This is in line with how most of the respondents in this study are not members of any insurance systems.

This study shows the dissatisfaction of the elderly with the provisions of the government regarding their healthcare needs. Due to the lack of strong government support in healthcare systems, members of the National Health Insurance Program (PhilHealth) still pay out-of-pocket because the system only covers 40% of the hospital costs (Ulep, 2022).

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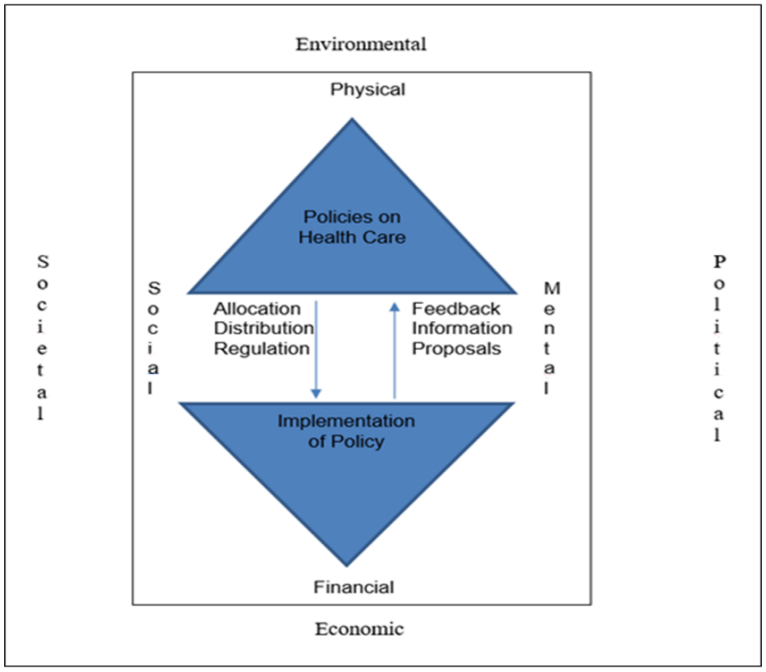


**Figure 1: Model for Geriatric Care**

As displayed in Figure 1, the model exists in a supra environment consisting of the societal, economic, political, physical, and natural environment involved in all human affairs. In the middle of this model are the policies that impinge on the affairs of the elderly and the processes to implement the policies. They are sets of interrelated decisions taken by actors concerning the selection of goals and the means of achieving them within a specified situation where these decisions should, in principle, be within the power of these actors to achieve. For elderly health care, actors include the elderlies themselves, their families, local and national health officers, and health care and social workers, among others. Policies on elderly health care is represented by the upright triangle in the model. The interrelated decisions comprising the policies include the allocation of resources which involves the identification of goods and services that should be produced because there is demand for them. It also involves the distribution of the goods and services to meet demand and finally, polices involve the regulation of behavior including enforcement of rules.

Implementation of elderly health care policies refers to the carrying out of a policy decision, usually expressed as a law, regulation, standard, or guideline. Policy implementation includes all the activities designed to carry out the policies. These activities include the creation of new organizations, departments, agencies bureaus, or the assignments of new responsibilities or authorities to existing organizations or agencies. Implementation translates legislative intent into operating rules and guidelines and coordinates resources and personnel to achieve the intended goals. Health workers like midwives, nurses, and rural health doctors are found here. This is also where strategies and operational activities are implemented and may include an in-

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home assessment by rural health workers and individualized care plan prepared by the local health office; proactive monitoring performed through the efforts of the community; use of specific care protocols for evaluation and management of common geriatric conditions designed in cooperation with local hospital professional staff, the adoption and use electronic medical record to facilitate service delivery; integration with the local government or affiliates; and suitable mental health, home health, and community based and in-patient geriatric services. Implementers and beneficiaries in the implementation generate information that may require policy action, feedback on policy action, and proposals to fill the demand of stakeholders. Implementation is represented by an inverted triangle in the model. It is also important to note the disposition of actors, like the willingness to provide service.

## 4. CONCLUSION

The Philippines is undergoing a demographic transition into an aging population due to the large ratio between the younger generation and the older adults. The elderly have more unique social, physical, and economic challenges than any other population segment. The country is not well-prepared to face this change in population dynamics. This study discovered that there were significant gaps between the policies and implementation of healthcare and social systems. To resolve this issue, the government should strengthen and improve existing policies and services that support the elderly. These services include various health, health-related and social services that will assist these individuals with limited physical or cognitive abilities. A healthcare model that considers every societal, economic, political, physical, and natural factor that affects the elderly should be implemented. In cooperation with the local government units, a program should regularly check on the elderly to address their needs and reduce barriers that hinder the elderly from seeking help at health centers or hospitals. Aside from that, there should also be a unified and computer-based identification system for the elderly to facilitate service delivery properly. This shift in population demographic calls for action to expand financial security, health coverage, and age-friendly neighborhoods that support and acknowledges the needs of the elderly.

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