UNDERSTANDING HEALTH-SEEKING BEHAVIOR FOR INPATIENT CARE IN ANTIQUE AND GUIMARAS

Presented at 6th Global Symposium on Health Systems Research
November 8-12, 2020

Authors: Nuevo C, Co P, Alviorn H, Samson C
Contact details: inuevo@thinkwell.global

Introduction

Health care delivery and expenditures in the Philippines are heavily oriented towards inpatient care in the past years. In 2018:

- 43.9% of CHE spent on inpatient care

The Philippine Health Insurance Corporation (PhilHealth) runs the state social health insurance and pays providers for services rendered for PhilHealth members. Data shows that payments for 2018 are also more towards inpatient care.

- 87.0% of PhilHealth benefit payouts for inpatient care

Packages and payment systems for primary and inpatient care is separate, as PhilHealth can only pay local government units managing public facilities because of local autonomy. In effect, incentives also are fragmented

A highly decentralized healthcare system has caused great fragmentation in the financing and delivery of health services.

- Provinces manage and finance public inpatient facilities
- Municipalities / cities manage and finance public primary facilities

This separation in management and governance of healthcare delivery created a disconnect in the continuum of care. Similarly, patients end up accessing care wherever they prefer, which are mostly inpatient facilities.

The Universal Health Care (UHC) Act introduces a major reform in the health system: establishment of healthcare provider networks (HCPNs) within provincially-integrated local health systems.

Antique and Guimaras in Western Visayas has committed to local health system integration and HCPN institutionalization as UHC Integration Sites.
General Objective:
This study aimed to describe inpatient care health seeking behavior patterns of the population in Guimaras and Antique for healthcare services.

Specific Objectives:
- To describe inpatient care health seeking behavior patterns of the population of Guimaras and Antique
- To explore which factors affect utilization of inpatient healthcare services
- To assess the potential role of healthcare provider networks in improving access to and delivery of health services

Secondary quantitative data: 2018 PhilHealth paid inpatients claims in Guimaras and Antique, where each observation of claim is one inpatient visit; outpatient and maternal care payments were excluded due to lack of sufficient data.

Variables: Patient age and sex (socio-demographic factor), membership category (socio-economic factor), case rates in ICD-10 CM or relative value scale (individual factor).

Analysis: Descriptive statistics and visualizations per facility level attribute and ownership (using Google BigQuery and MS Excel).

Primary data: Online questionnaires disseminated to technical and managerial provincial-level oversight and health facility representatives.

Variables: Socio-demographic and economic, individual, institutional, health beliefs factors.

Analysis: Thematic analysis and triangulation with quantitative results.

Quantitative

Qualitative

Figure 3. HSB Conceptual Framework

Health-seeking behavior (HSB) or mobility patterns in seeking health services influenced by factors such as socio-demographic and economic, individual, institutional, and health beliefs.
Results

Table 1. Total Number of Claims Paid for 2018 in Antique and Guimaras

<table>
<thead>
<tr>
<th>CLAIMS</th>
<th>ANTIQUE</th>
<th>GUIMARAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infirmary</td>
<td>9,948 (23%)</td>
<td>932 (11%)</td>
</tr>
<tr>
<td>Level 1</td>
<td>6,800 (16%)</td>
<td>7,380 (89%)</td>
</tr>
<tr>
<td>Level 2</td>
<td>25,756 (61%)</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>42,504</td>
<td>8,312</td>
</tr>
</tbody>
</table>

*Figures for socio-demographic and economic factors selected Antique due to observed homogeneity (all public) and limited (only 2) facilities in Guimaras.

- Most inpatient claims are from public facilities (86%) across all levels.
- Most inpatient claims from the highest level facility in each province:
  - 48% for Antique (public level 2) and 89% for Guimaras (public level 1)
  - Private level 2 most frequented by Lifetime Members (49%) in Antique
- 60% to 70% of cases for both provinces were respiratory, genitourinary, and infectious.
- Around 70% to 80% of procedures conducted are ordinary. Complex and intensive procedures are all conducted in at least level 1 hospitals.

Figure 4. Facility access disaggregation gender, age, and membership

Common diseases

Respiratory
Antique - 27%
Guimaras - 30%

Genitourinary
Antique - 20%
Guimaras - 29%

Infectious
Antique - 14%
Guimaras - 10%
Discussion

Table 2. Occupancy rates of facilities in Guimaras and Antique based on 2018 paid PhilHealth claims

<table>
<thead>
<tr>
<th>Province</th>
<th>Level</th>
<th>Ownership</th>
<th>Occupancy Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guimaras</td>
<td>INFIRMARY/DISPENSARY</td>
<td>Public</td>
<td>68%</td>
</tr>
<tr>
<td>Guimaras</td>
<td>INFIRMARY/DISPENSARY</td>
<td>Public</td>
<td>57%</td>
</tr>
<tr>
<td>Antique</td>
<td>INFIRMARY/DISPENSARY</td>
<td>Public</td>
<td>147%</td>
</tr>
<tr>
<td>Antique</td>
<td>INFIRMARY/DISPENSARY</td>
<td>Public</td>
<td>156%</td>
</tr>
<tr>
<td>Antique</td>
<td>INFIRMARY/DISPENSARY</td>
<td>Public</td>
<td>145%</td>
</tr>
<tr>
<td>Antique</td>
<td>INFIRMARY/DISPENSARY</td>
<td>Public</td>
<td>92%</td>
</tr>
<tr>
<td>Antique</td>
<td>INFIRMARY/DISPENSARY</td>
<td>Public</td>
<td>78%</td>
</tr>
<tr>
<td>Antique</td>
<td>LEVEL 1 HOSPITAL</td>
<td>Public</td>
<td>154%</td>
</tr>
<tr>
<td>Antique</td>
<td>LEVEL 1 HOSPITAL</td>
<td>Public</td>
<td>121%</td>
</tr>
<tr>
<td>Antique</td>
<td>LEVEL 1 HOSPITAL</td>
<td>Private</td>
<td>84%</td>
</tr>
<tr>
<td>Antique</td>
<td>LEVEL 2 HOSPITAL</td>
<td>Public</td>
<td>280%</td>
</tr>
<tr>
<td>Antique</td>
<td>LEVEL 2 HOSPITAL</td>
<td>Private</td>
<td>52%</td>
</tr>
<tr>
<td>Guimaras</td>
<td>INFIRMARY/DISPENSARY</td>
<td>Public</td>
<td>88%</td>
</tr>
<tr>
<td>Guimaras</td>
<td>LEVEL 1 HOSPITAL</td>
<td>Public</td>
<td>318%</td>
</tr>
</tbody>
</table>

Table 3. Occupancy rates grouped per facility level in Antique based on 2018 paid claims

<table>
<thead>
<tr>
<th>ANTIQUE FACILITIES</th>
<th>ALOS</th>
<th>Occupancy Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFIRMARY/DISPENSARY</td>
<td>2.21</td>
<td>80%</td>
</tr>
<tr>
<td>LEVEL 1 HOSPITAL</td>
<td>3.94</td>
<td>176%</td>
</tr>
<tr>
<td>LEVEL 2 HOSPITAL</td>
<td>4.33</td>
<td>169%</td>
</tr>
</tbody>
</table>

Majority of cases can be prevented by good primary care services. However, primary care facilities seen still as insufficient, of low quality, and inconsistent. Thus, most care accessed in inpatient facilities.

High occupancy rates and congestion in public facilities lead to bed shortages, and patients placed in re-purposed spaces. This may affect actual and perceived quality of services.

Indigents and Sponsored
Poor and vulnerable, without financial capacity; premium payment subsidized

Senior Citizens
Premium payment subsidized

Entitled to additional financial assistance in public facilities
- PhilHealth No Balance Billing – zero co-payment for basic accommodation
- DOH Medical Assistance for Indigents Program
- Social welfare Assistance to Individuals in Crisis Situation

Figure 5. Patient facility access pathways based on PhilHealth claims 2018

Availability of public facilities

Formal economy
Formally employed, with financial capacity, and directly pays premiums

Public Level 2

Private Level 2

Preference for private facility service quality
Willingness and capacity to pay extra charges on top of PhilHealth coverage

Cross Border Mobilities
- 5-10% of patients visiting facilities in Iloilo City are from Guimaras or Antique (qualitative data)
- Lack of services → key services not available in Guimaras and/or Antique (ex. newborn screening)
- Privacy → pregnant teenagers seek services outside Guimaras
- Quality → Perceived better quality of services in private facilities in Iloilo City

Preference for private facility service quality

Indigents and Sponsored
Majority of cases can be prevented by good primary care services. However, primary care facilities seen still as insufficient, of low quality, and inconsistent. Thus, most care accessed in inpatient facilities.

High occupancy rates and congestion in public facilities lead to bed shortages, and patients placed in re-purposed spaces. This may affect actual and perceived quality of services.

Public Level 2

Private Level 2

Preference for private facility service quality
Willingness and capacity to pay extra charges on top of PhilHealth coverage

Cross Border Mobilities
- 5-10% of patients visiting facilities in Iloilo City are from Guimaras or Antique (qualitative data)
- Lack of services → key services not available in Guimaras and/or Antique (ex. newborn screening)
- Privacy → pregnant teenagers seek services outside Guimaras
- Quality → Perceived better quality of services in private facilities in Iloilo City

Preference for private facility service quality

Indigents and Sponsored
Majority of cases can be prevented by good primary care services. However, primary care facilities seen still as insufficient, of low quality, and inconsistent. Thus, most care accessed in inpatient facilities.

High occupancy rates and congestion in public facilities lead to bed shortages, and patients placed in re-purposed spaces. This may affect actual and perceived quality of services.
Results show patterns in health-seeking behavior in Antique and Guimaras tend towards higher level and publicly-owned facilities. Financing assistance and perceptions on quality affect this behavior. Poorer households take advantage of additional financial assistance in public facilities, while those with capacity to pay access private hospitals. Given that most cases are from poorer socioeconomic households, public facilities become congested.

Figure 6. Envisioned patient pathway enlisted in an HCPN

**Pathway of patient enlisted in an HCPN**

Network-based care through healthcare provider networks (in yellow box of the diagram) with specific catchment populations, strong gatekeeping, and quality primary, health care can help decongest inpatient facilities by capturing simpler cases, preventing cases of hospitalization, and overall rationalize and re-distribute cases better across providers.

PhilHealth reforms towards negotiated and performance-based prospective payments can help equalize performance and quality across public and private facilities, and control co-payments as part of contractual obligations. This can also help diminish the influence of out-of-pocket in seeking care and provide opportunities to empower lower income individuals to seek care even in private facilities.

Supply-investments to increase service capacity of Antique and Guimaras need to be increased not just in terms of inpatient bed capacity, but even in terms of primary, outpatient, and specialist care.

Innovative contracting and resource-sharing arrangements across provinces have the potential to ensure that the healthcare needs of its mobile population is accounted for and its health system design is people-centered. Existing region-level governance mechanisms can be leveraged.