

## An Analysis of Affordability in Healthcare in Island Dependents of Multi-Island Micro-States in the Caribbean – Case Study of Carriacou and Petite Martinique

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### Introduction

A major limitation in designing effective and efficient healthcare systems for Multi-island Micro-States (MIMS) is the paucity of information and research on the unique characteristics which define their socioeconomic space and environment. This often results in inefficiency-induced-inequities in healthcare access since local conditions are ignored. The primary objective of this paper is to evaluate the affordability dimension of access to healthcare within the spatial dynamics of Carriacou and Petit Martinique, island dependents of Grenada.

### Methods

Household surveys (n=80 for Petite Martinique, n=116 for Carriacou) and facility-based interviews (n=1 for Petite Martinique, n=5 for Carriacou) used to create health utilization profiles and evaluate affordability of each island dependent (Fig. 1). Affordability was disaggregated and mapped into direct medical and non-medical cost and indirect cost, which were used to identify the main cost drivers in each island dependent. A comparative analysis of catastrophic health expenditures between the island dependents was done using the budget share and capacity to pay approaches.



Fig. 1: Methodological Model for Profiling Demand and Supply of Healthcare and Identifying Access Gaps in MIMS

### Results

- Different cost drivers in each island,
- Direct Non-Medical and Indirect Cost of Care significantly affecting total cost of care.
- High levels of health-related expenditure in both islands; culture of health avoidance, self-medication.
- Using direct medical cost only to represent out-of-pocket expenditure may underestimate household cost of care.

Table 1. Total Cost of Care Carriacou and Petite Martinique (XCD)

	Type of Cost	Carriacou	Petite Martinique
Direct Cost (including meds) <sup>1</sup>	Direct Medical	\$ 3,035,819.30	\$ 148,523.05
	Direct Non-medical	\$ 619,564.60	\$ 50,668.97
Transportation	Direct Non-medical	\$ 1,781,905.00	\$ 239,810.60
Health-related	Direct Non-medical	\$ -	\$ 4,014.60
Other costs	Direct Non-medical	\$ -	\$ 4,014.60
Opportunity cost <sup>2</sup>	Indirect Cost	\$ 603,423.78	\$ 61,822.66
	Total cost	\$ 6,040,892.68	\$ 407,638.58



Figure 2: Comparison of all Costs for Carriacou and Petite Martinique

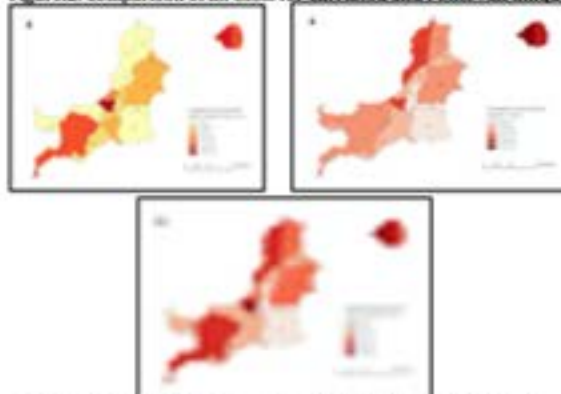


Figure 3: Spatial Distribution of (A) Direct Medical Cost of Care, (B) Indirect and Direct Non-Medical Cost of Care

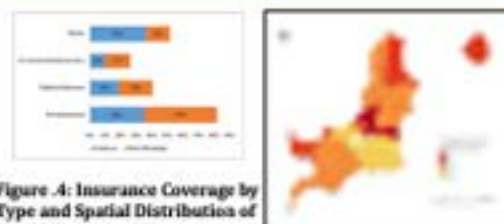
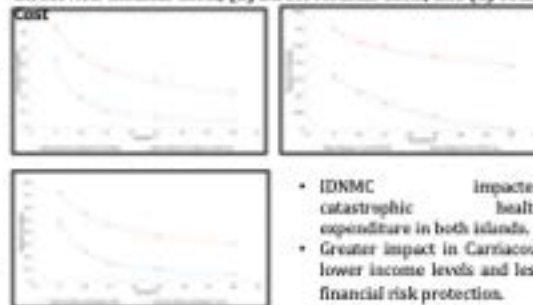


Figure 4: Insurance Coverage by Type and Spatial Distribution of Health Insurance Coverage

- Low financial risk protection in both islands; 23% (Coo), 19% PM
- Asymmetrical information
- Financial protection not synonymous with low OOP; other costs attached.

Figure 5: Proportion of Households Facing Catastrophic Health Expenditure Capacity to Pay Approach (%) (A) Indirect and Direct Non-medical Costs, (B) Direct Medical Costs, and (C) Total COST



- IDNMC impacted catastrophic health expenditure in both islands.
- Greater impact in Carriacou; lower income levels and less financial risk protection.

### Conclusions

- Failure to consider the multi-island dynamic may result in policy interventions and economic evaluations focused on containing cost in some areas and not others.
- Health financing review is recommended, using the System of Health Account (SHA) methodology to map health financing resources by all actors in the economy and by beneficiary characteristics suited to the dynamic of MIMS.