

# An Analysis of the Performance and Utilization of DOH Mobile Clinics in Eight Hospitals in the Philippines

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# The State of Health Care in the Philippines

- Financial resources
  - 2009 Family Income and Expenditure Survey (FIES)
    - Average annual family income in the lower third of the population: Php 62,000
      - Php 1,054 (1.7%) spent on health
- Geographic isolation
- Physical resources
- Human resources

# What is a Mobile Clinic?

- Self-contained vehicle employed with a medical team aimed to provide health care services

## Why Mobile Clinics?

- Mobility
- Versatility



# **Table 1. Mobile clinics in the international setting**

<b>Country</b>	<b>Mobile Clinic Services</b>
India	Primary health care services
Dominican Republic	Pediatric primary health care, management of malnutrition
Malawi	HIV and Malaria diagnosis and treatment, public health lectures
Kenya	HIV counseling and testing
Brazil	Skin cancer screening, diagnosis, and treatment

# Mobile Clinic in the Philippines

- Lakbay Buhay Kalusugan (LBK) Health Caravan by the DOH (2011)
- Mobile clinic in Biliran (2011)



Photo courtesy of [www.mulatpinoy.com](http://www.mulatpinoy.com)



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## BACKGROUND OF THE STUDY

- In 2010, **eight mobile clinics** donated by the People's Republic of China as part of the **2007 China-Philippines Agreement on Economic and Technical Cooperation**.



## **Department Order No. 2011-0034: Guidelines on release, utilization and maintenance of the Mobile Clinics**

“ To serve as ancillary services to the operations of the recipient hospitals most especially in priority, underserved, hard to reach and remote areas .“

### **Roles and Responsibilities of Recipient Health Care Facilities**

- Identification of target areas
- Patient database
- Quarterly plan of activities
- Bimonthly activities
- LTO registration
- Regular budget
- Qualified personnel
- Biannual reports

# Objectives of the Study

To describe the performance and utilization of the DOH Mobile Clinics deployed in 8 health care facilities in the Philippines

- ✓ Facilities provided and services offered
- ✓ Problems encountered and insights gained
- ✓ Stakeholder perception and level of satisfaction
- ✓ Determinants of utilization

# Methodology



## Key informant interviews

- Mobile Clinic Coordinators
- Mobile Clinic team



## Field inspection

- Mobile Clinic bus and equipments



## Records review

- Activity reports, patient census, operational and maintenance costs



## Patient feedback

- Interviews during medical missions
- Parent/guardian interviewed for patients less than 18 yo

# METHODOLOGY



**Dr. Paulino J. Garcia Memorial Research and Medical Center (DPJGMRMC)**

**Quezon City General Hospital (QCGH)**

**Rizal Medical Center (RMC)**

**San Lazaro Hospital (SLH)**

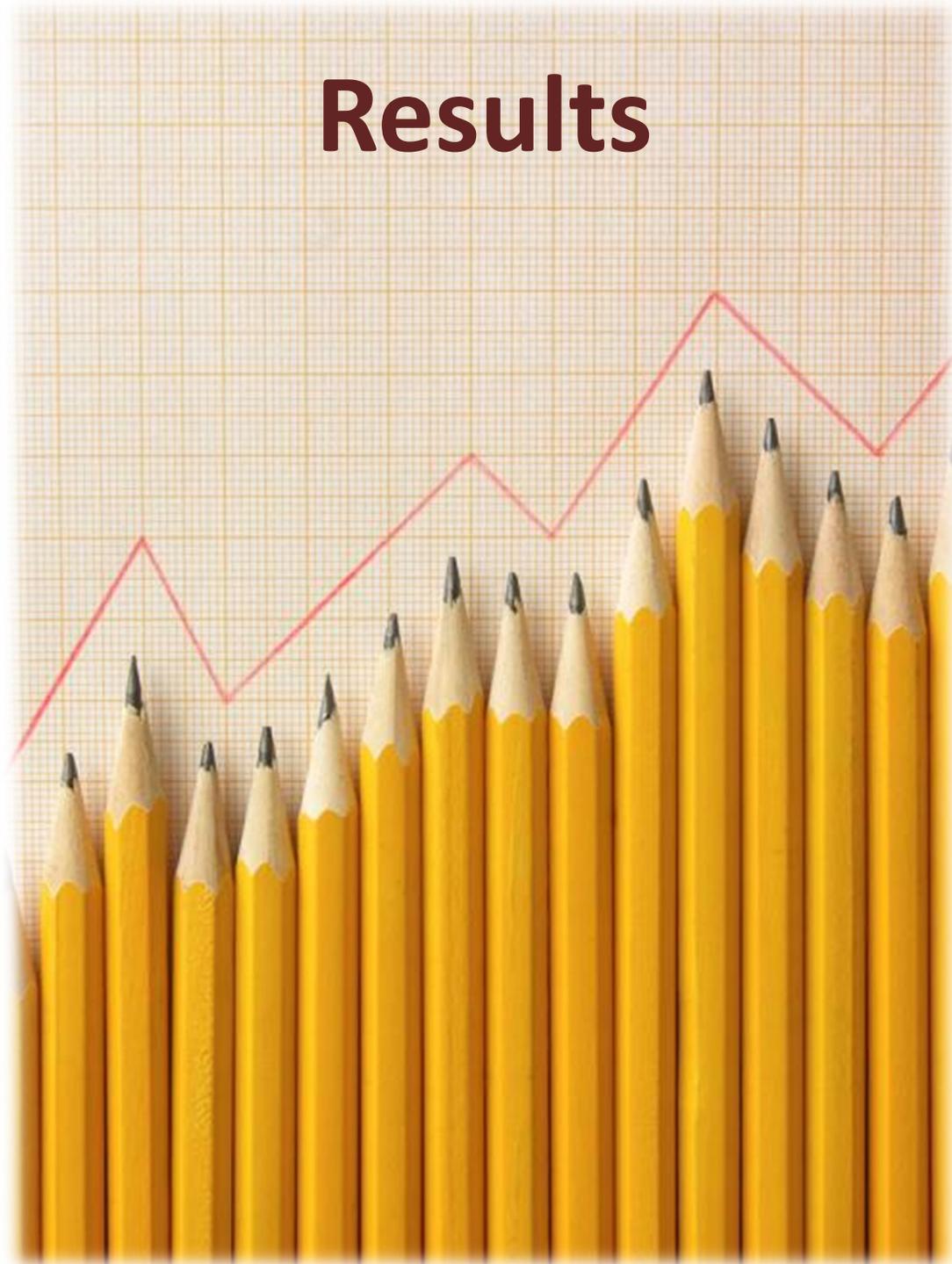
**Manila Health Department (MHD)**

**Ospital ng Palawan (ONP)**

**Southern Philippines Medical Center (SPMC)**

**Zamboanga del Sur Medical Center (ZSMC)**

# Results



# Equipments received

- ☑ Automatic hematology analyzer
- ☑ Automatic blood chemistry analyzer
- ☑ Urine analyzer
- ☑ Ultrasound
- ☑ ECG
- ☑ X-ray
- ☑ Centrifuge
- ☑ Defibrillator
- ☑ Oxygen concentrator
- ☑ OB GYN/dental examining table
- ☑ Film viewer
- ☑ UV lamp
- ☑ Pharma refrigerator
- ☑ Water supply facility
- ☑ Airconditioning units (2)
- ☑ Generators (2)

## Table 2. Services available to patients during operations of the Mobile Clinics

Services available	No. of facilities
Diagnostic examinations	8
Primary health care consultation	7
Drug dispensing	6
Prenatal consultation	4
Dental care	4
Basic life support	4
Advanced life support	3
Well child consultation and Immunization	3
Public Health promotion	3
Dietary Counselling	2
Circumcision	2
Ambulance conduction	1

## RESULTS

## Table 3. Summary of Utilization of the Mobile Clinics from receipt to April 2012

Health Care Facility	Start of deployment	Total no. of deployments	Mobile Clinic Utilization
MHD	January 2012	16	Weekly (2-5 times monthly)
DPJGMRMC	March 2011	19	1-6 times monthly
ONP	June 2011	13	1-3 times monthly
SPMC	June 2011	12	1-3 times monthly
RMC	February 2011	7	Irregularly
QCGH	March 2012	6	Irregularly
SLH	March 2011	4	Irregularly
ZSMC	N/A	0	Not Utilized*

\*Only the X-ray machine was used within the health care facility

# Table 4. Total number of patients served by the Mobile Clinics

Health Care Facility	Total no. of deployments	No. of Patients
SPMC	12	~7,100
DPJGMRMC	19	6,697
MHD	16	4,142
SLH	4	~3,400
ONP	13	2,552
RMC	7	1,015
QCGH	6	558



## Operational and Maintenance Expenses

- Operational expenses:
  - Budget allocation for health per district (MHD)
  - HEMS suballotment for medical outreach programs
  - Medical Education Program from hospital funds
  - Requesting parties
- Maintenance expenses: health care facility funds
- Estimated Php 22,000 per medical mission in Manila Health Department
- No data on maintenance costs

# Table 5. Problems encountered in the implementation of the Mobile Clinic Program

Common problems encountered	Frequency
Equipment damage noted upon receipt of the bus	8
Lack of consumables	7
Inadequate training/expertise in the use of the facilities	6
Equipment malfunction during operations	5
Absence of budget allocation	5
Power incompatibility of equipments	5
Inadequate qualified staff to operate the clinic	4
Problems with area accessibility	4
Lack of LTO registration	2



# Key Areas for Improvement

- Financial resources
  - Budgetary allocation
- Human resources
  - Qualified personnel
  - Regular staff
- Material resources
  - Consumables

**Table 6. Mean grade given by the respondents for the Mobile Clinics**

Health Care Facility	Grading given by the Respondents			
	No. of respondents	Mean (%)	SD	Range (%)
MHD	20	93.4	8.1	75 - 100
QCGH	8	91.3	17.1	50 - 100
DPJGMPMC	20	93.9	11.8	50 - 100
ONP	21	95.8	7.8	75 - 100
SPMC	25	95.8	7.6	75 - 100

## Table 7. Benefits of the Mobile Clinic perceived by the respondents

Perceived benefits	Frequency	%
Availability of free health care services	88	93.6
Increased accessibility of health care services	26	27.6
Ability to address health care concerns	10	10.6
Prompt delivery of health care services	4	4.3
Availability of competent health care provider	3	3.2

## • • **Conclusion and recommendations**

**The mobile clinics augmented the services provided by the recipient health care facilities through:**

- Extending the areas covered through the clinics' mobility
- Making more services available during medical missions

**Although very beneficial, program implementers recognize the need to further optimize these mobile clinics.**

## CONCLUSIONS AND RECOMMENDATIONS

**To improve the mobile clinic programs, development of a **Work and Financial Plan** is recommended. This would:**

- Incorporate the mobile clinic in the planning of programs and budget of the respective health care facilities
- Provide definite guidelines on the use of the mobile clinics
- Ensure regular monitoring and evaluation of the mobile clinics

### **Monitoring of Mobile Clinic Program expenses**

- Accomplishment of financial reports
- Allow for estimation of annual budget and analysis of cost-effectiveness

### **Maximizing the use of the Mobile Clinics for GIDAs**

- Deployment of existing mobile clinics to GIDAs
- protocol for crossing regions

**Assignment of Mobile Clinics acquired in the future to nearby GIDAs**

## CONCLUSIONS AND RECOMMENDATIONS

**In the interim, program implementers are advised to**

- Conduct further research studies to in order to provide firsthand experience on implementation
- Look into international experience on mobile clinics for reference



**THANK  
YOU**

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