



2017

# National Dissemination Forum

**GOOD PRACTICES BOOKLET**

Reducing Maternal and Child Mortality in the Cordillera

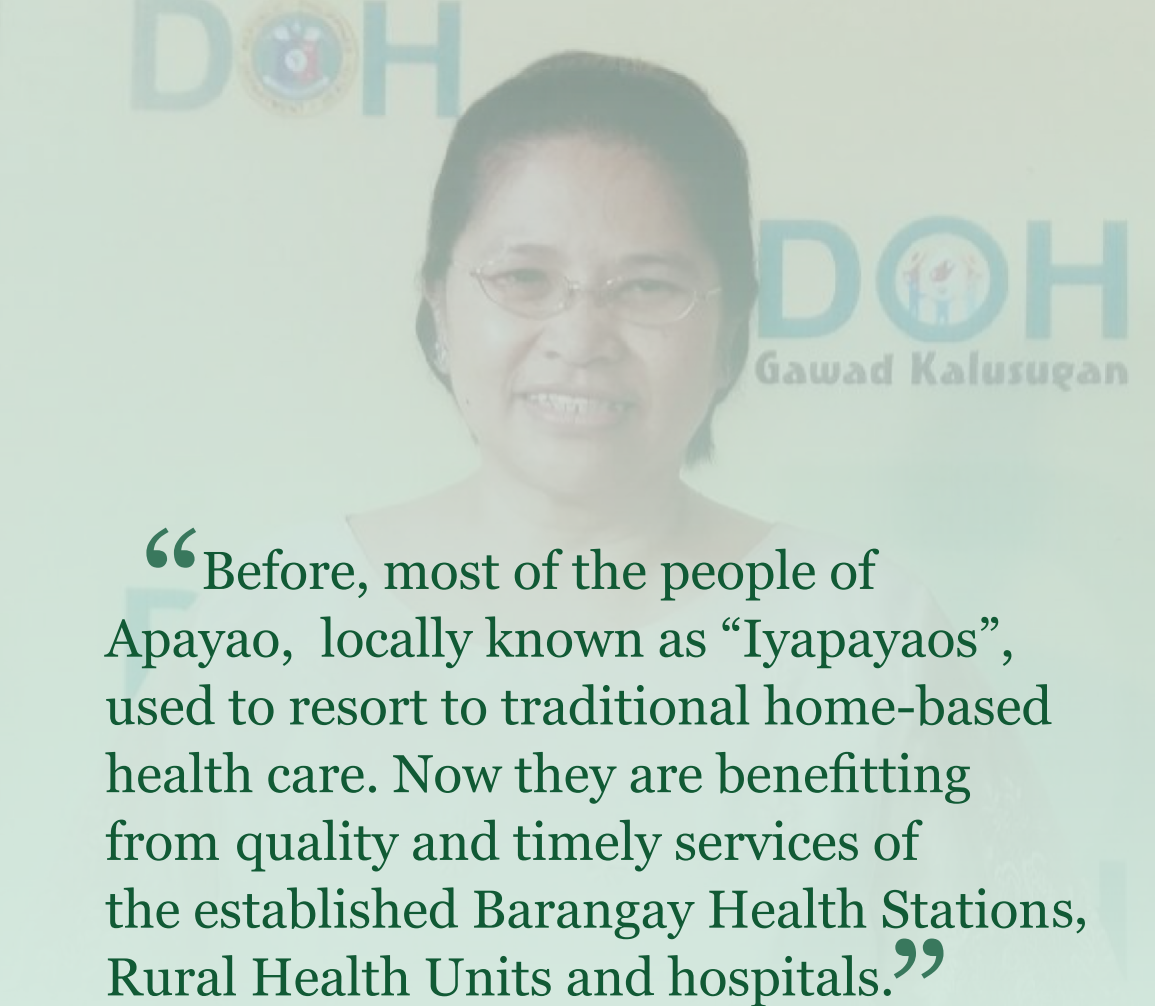


## Strengthening of Service Delivery Network



**2014 Awardee: NEDA's 3rd Biennial Good Practice Awards**  
Project for Cordillera-wide Strengthening of the Local Health System  
for Effective and Efficient Delivery of Maternal and Child Health Services

# Strengthening of Service Delivery Network



“Before, most of the people of Apayao, locally known as “Iyapayaos”, used to resort to traditional home-based health care. Now they are benefitting from quality and timely services of the established Barangay Health Stations, Rural Health Units and hospitals.”

**Dr. Thelma Dangao**  
Former Provincial Health Officer II  
*Apayao Province*



**Amidst dangers and  
difficult terrain,  
service continues  
NO END.**



# TABLE OF CONTENTS

Testimonial

Photos

## I. INTRODUCTION

1. Geographic Situation .....	4
2. Guidelines on Strengthening Delivery Network(SDN) .....	5
3. Project Inputs .....	5

## II. RESULTS

1. Increased Number of BEmONC Facilities .....	7
2. Strengthening SDN by Two-Way Referral.....	12
3. Barangay MNCHN Emergency Plan .....	13
4. Increased Number of Inter-Local Health Zones(ILHZs) .....	14

III. IMPACT .....	17
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IV. RECOMMENDATIONS .....	18
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# ACRONYMS

<b>BDRRM</b>	Barangay Disaster Risk Reduction Management
<b>BEmONC</b>	Basic Emergency Obstetric and Newborn Care
<b>BHS</b>	Barangay Health Station
<b>CAR</b>	Cordillera Administrative Region
<b>CHT</b>	Community Health Team
<b>DILG</b>	Department of Interior and Local Government
<b>DOH</b>	Department of Health
<b>FBD</b>	Facility-based Delivery
<b>GIDA</b>	Geographically Isolated and Disadvantaged Areas
<b>ILHZ</b>	Inter-Local Health Zone
<b>JICA</b>	Japan International Cooperation Agency
<b>LGU</b>	Local Government Unit
<b>MMR</b>	Maternal Mortality Ratio
<b>MNCHN</b>	Maternal, Newborn, and Child Health and Nutrition
<b>RHU</b>	Rural Health Unit
<b>SDN</b>	Service Delivery Network
<b>TCL</b>	Target Client List

# INTRODUCTION

## 1. Geographic Situation

The Cordillera Administrative Region (CAR), located in the north central part of Luzon, Philippines, is a culturally diverse region as a home of numerous indigenous tribes with more than six languages spoken. It is considered as the land-locked region and watershed cradle in the country with large mountain ranges characterized by towering peaks.

Covering a total land area of 19, 294 sq. km, the region consists of six provinces (Abra, Apayao, Benguet, Ifugao, Kalinga and Mountain Province), 76 municipalities, 2 cities (Baguio City as the regional center and Tabuk City of Kalinga) and 1,176 barangays.

In Barangay Alangigan, Conner, Apayao Province, the community used to rely on traditional health care from “*hilots*” or relatives. The closest facility with health professionals such as a doctor, a nurse, or a midwife is more than 8 hours away by walking.

Similar situations are found in most areas of the region, especially in far-flung locales. The dire situation prompted the project to strengthen the service delivery network by localizing the guideline of the Department of Health (DOH) within the context of regional terrain.



## 2. Guidelines on Service Delivery Network (SDN)

In 2008, the Department of Health issued A.O. #0029 to the full hierarchy of DOH as well as Local Government Units (LGUs), other public and private providers of health care, and development partners implementing Maternal, Newborn, and Child Health and Nutrition (MNCHN) strategies. It defines MNCHN Service Delivery Network as this: it is “the network of facilities and providers within the province-wide or city-wide health system offering integrated MNCHN services in a coordinated manner. It also includes the communication and transportation system supporting this network.”

## 3. Project Inputs

- Mapping exercise was conducted to identify strategic location of birthing service providers;
- DOH and LGU provided infrastructure, equipment, and trainings;
- Promotion of Barangay MNCHN Emergency Plan to be incorporated in the Barangay Disaster Risk Reduction Management (BDRRM) Plan.

Other inputs of the project include:

- Development of Basic Emergency Obstetric and Newborn Care (BEmONC) monitoring and supportive supervision tool to conduct trainings;
- Development of localized MNCHN Manual of Operation highlighting the cultural integrity in the delivery of services;
- Training on the localized MNCHN Manual of Operation; Basic Emergency Obstetric and Newborn Care (BEmONC) for doctors, nurses and midwives;
- Provision of medical equipment to all birthing facilities;
- Consultative-workshop on Inter-LGUs Collaboration or Inter-Local Health Zone (ILHZ);
- Provision of technical assistance to development of referral manual.

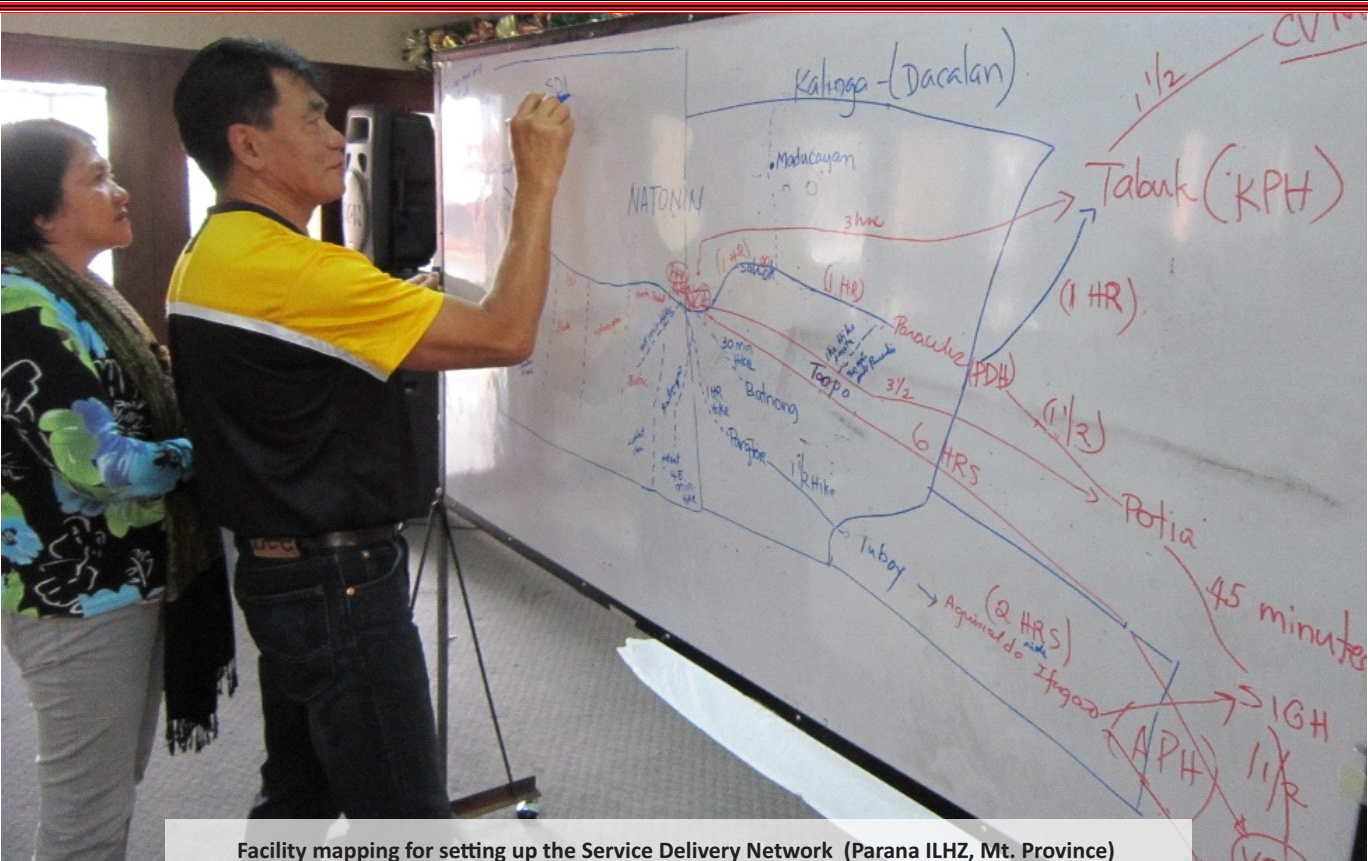


Then

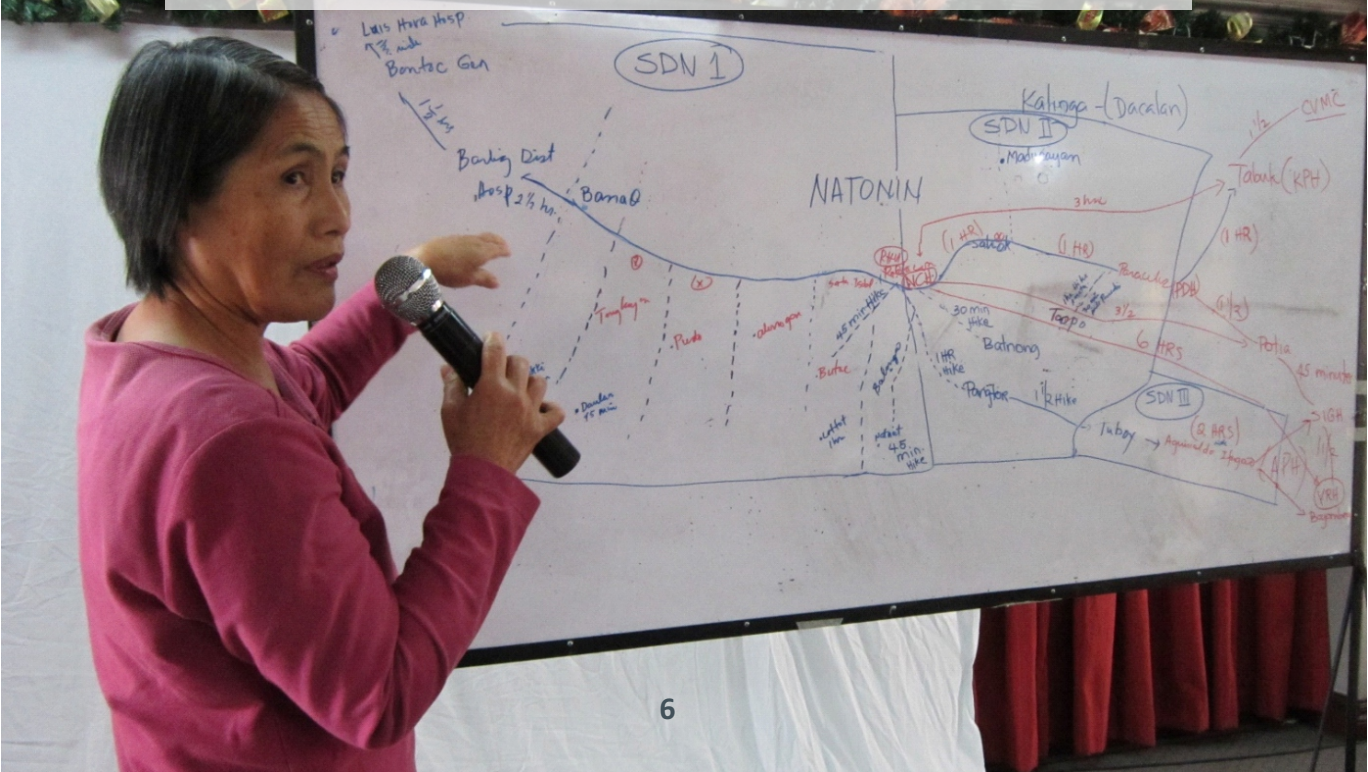


Now

Delivery Table

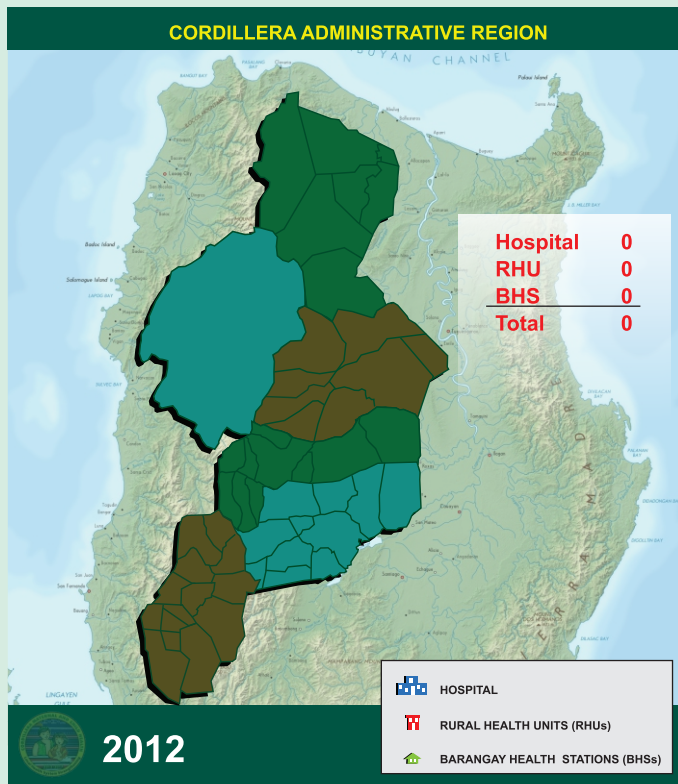


Facility mapping for setting up the Service Delivery Network (Parana ILHZ, Mt. Province)



# RESULTS

## 1. Increased Number of BEmONC Facilities



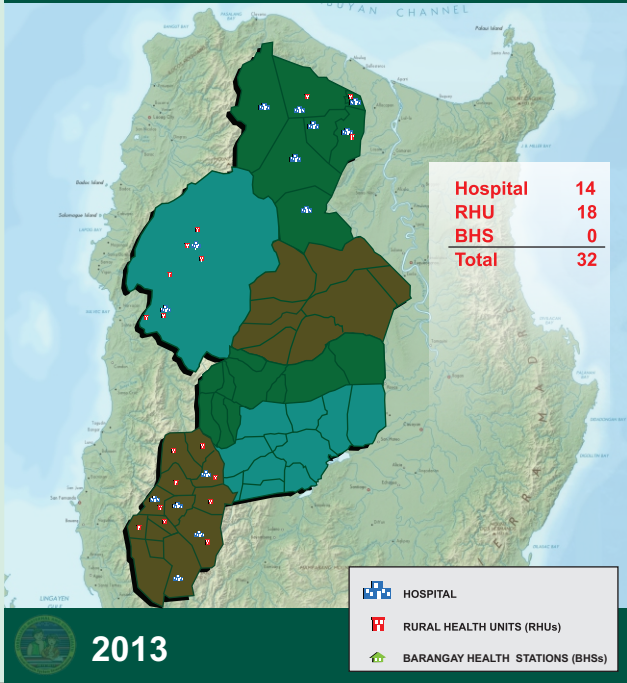
The number of BEmONC facilities has dramatically increased in CAR since 2012.

\*In Abra Province, 6 of 27 municipalities (Dolores, Lagangilang, Penarrubia, Pilar, San Juan and Villaviciosa) were covered by JICA-SSC as Project sites while DOH-CAR handled the remaining 21 municipalities.

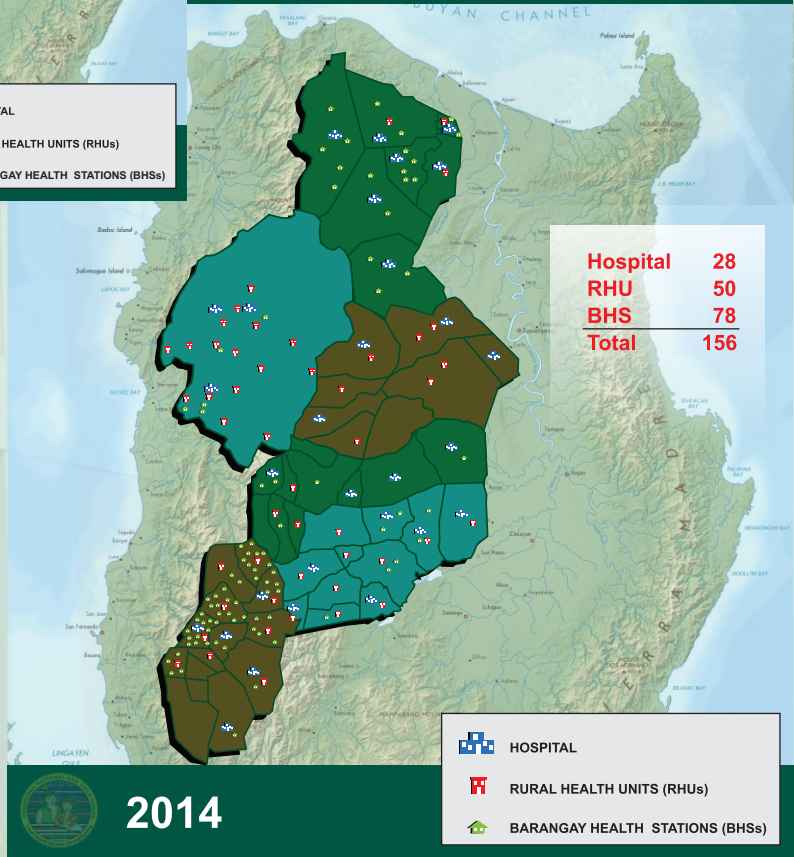




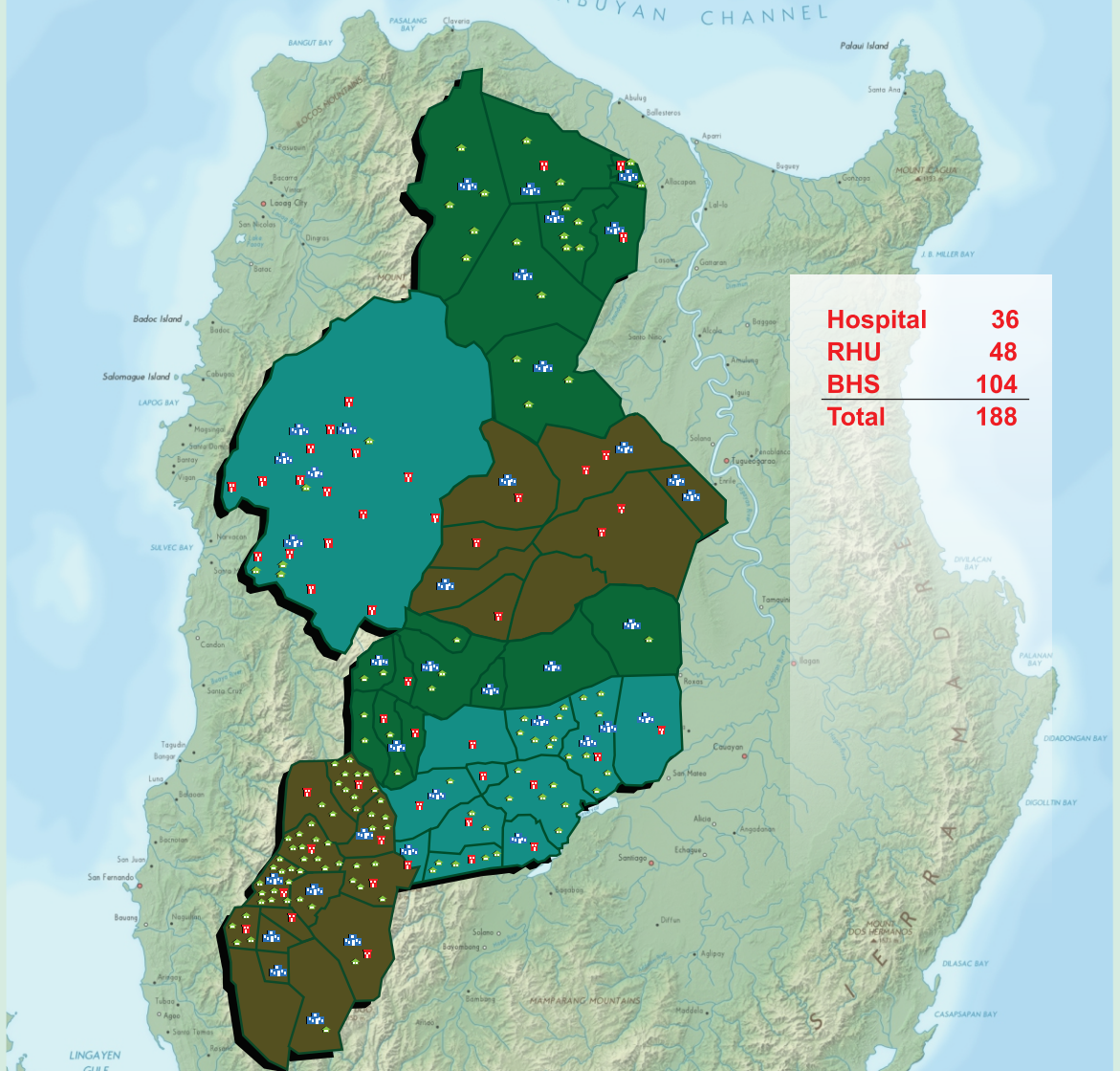
### CORDILLERA ADMINISTRATIVE REGION



### CORDILLERA ADMINISTRATIVE REGION






# CORDILLERA ADMINISTRATIVE REGION



<b>Hospital</b>	<b>36</b>
<b>RHU</b>	<b>48</b>
<b>BHS</b>	<b>104</b>
<b>Total</b>	<b>188</b>



## 2015

-  HOSPITAL
-  RURAL HEALTH UNITS (RHUs)
-  BARANGAY HEALTH STATIONS (BHSs)



Then



Now

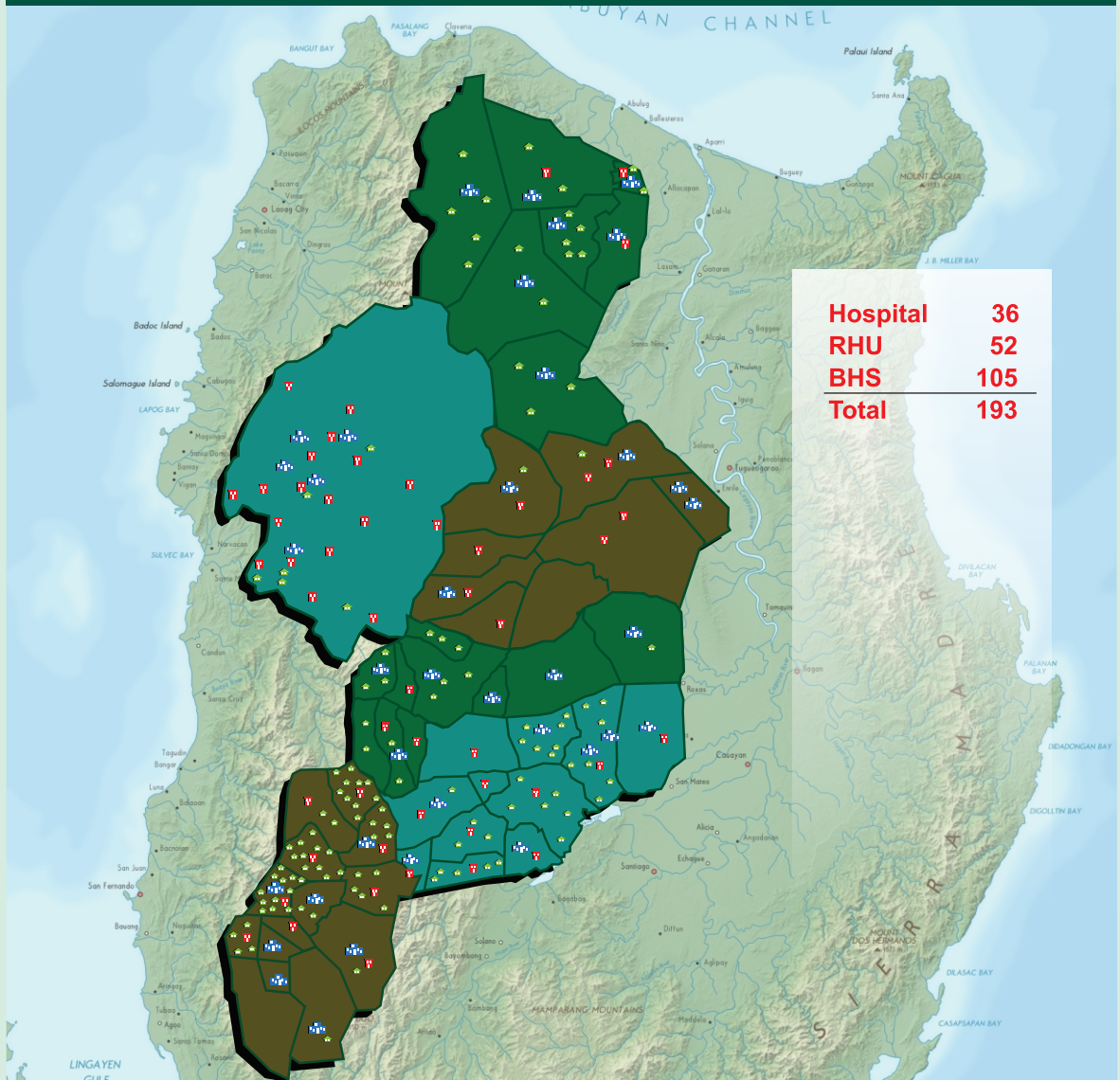
Barangay Health Station, Abra Province

### Number of BEmONC Capable Facilities (2012-2016)

<i>Province</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>
Abra	0	8	24	25	29
Apayao	0	10	29	29	29
Benguet	0	14	65	66	57
Ifugao	0	0	15	37	41
Kalinga	0	0	11	12	13
Mountain	0	0	12	18	23
Baguio City	0	0	0	1	1
<i>Total</i>	<i>0</i>	<i>32</i>	<i>156</i>	<i>188</i>	<i>193</i>

Source: Project Monitoring Data




# CORDILLERA ADMINISTRATIVE REGION



<b>Hospital</b>	<b>36</b>
<b>RHU</b>	<b>52</b>
<b>BHS</b>	<b>105</b>
<b>Total</b>	<b>193</b>



**2016**

-  HOSPITAL
-  RURAL HEALTH UNITS (RHUs)
-  BARANGAY HEALTH STATIONS (BHSs)

## 2. Strengthening SDN by Two-Way Referral

To ensure that all health workers are guided to refer patients to other health facility in a proper and appropriate manner within the service delivery network, a referral manual was developed in March 2013 through the Project in each ILHZ in the provinces of Apayao, Benguet and 6 municipalities in Abra. The manual specifically focuses on maternal and newborn care.

With the manual and regular monitoring, two-way referrals of all referred cases have become possible in the Project sites. Now, patients referred are properly returned to the initiating facility for the necessary follow-up of care.

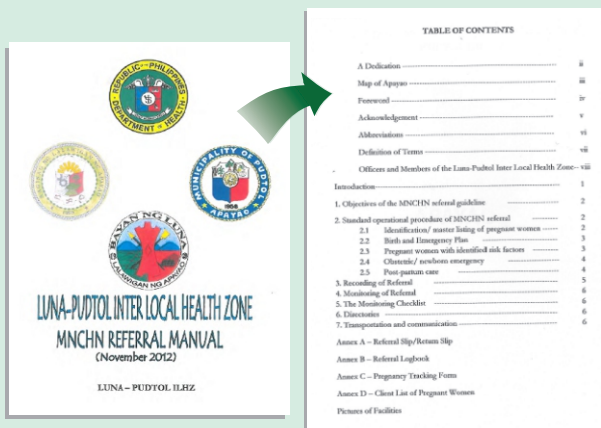
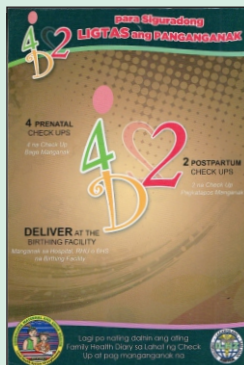


TABLE OF CONTENTS	
A. Dedication	ii
Map of Apayao	iii
Foreword	iv
Acknowledgement	v
Abbreviations	vi
Definition of Terms	vii
Officers and Members of the Luna-Pudtol Inter Local Health Zone	viii
Introduction	1
1. Objectives of the MNCHN referral guideline	2
2. Standard operational procedure of MNCHN referral	2
2.1. Identification/ name listing of pregnant women	2
2.2. Birth and Emergency Plan	3
2.3. Pregnant women with identified risk factors	3
2.4. Client/ service emergency	4
2.5. Post-partum care	4
3. Recording of Referral	5
4. Monitoring of Referral	6
5. The Monitoring Checklist	6
6. Discretion	6
7. Transportation and communication	6
Annex A – Referral Slip/Return Slip	
Annex B – Referral Logsheet	
Annex C – Pregnancy Tracking Form	
Annex D – Client List of Pregnant Women	
Picture of Facilities	

### Summary of MNCHN related referral cases in the Project sites July-December 2016

Province ILHZ	Abra		Apayao			
	Dolasan	VPP	Ymand. (Calanasan)	Flr-StM.	Kabinnu. (Kab-Con)	Luna-Ptl.
(a) number of MNCHN related referral cases	32	45	6	51	180	85
(b) number of cases who actually received care	32	45	6	51	180	85
(b/a) proportion of cases actually received care	100%	100%	100%	100%	100%	100%
(c) number of cases whose results of care were followed up by return slip or by any other means	32	45	6	51	177	85
(c/b) proportion of cases whose results were followed up	100%	100%	100%	100%	98%	100%

Source: Project Monitoring Data



NAME OF MOTHER: _____	
ADDRESS: _____	CONTACT: _____
DATE & PLACE OF CHECK-UP	SIGNATURE OF PH/PROVIDER
1ST TRIMESTER	
2ND TRIMESTER	
3RD TRIMESTER	
4TH TRIMESTER	
DATE & PLACE OF DELIVERY	SIGNATURE OF BIRTH ATTENDANT
DATE & PLACE OF CHECK-UP	SIGNATURE OF PH/PROVIDER
1ST	
2ND	
NAME OF PREGNANCY PARTNER	
1. _____	CONTACT: _____
2. _____	CONTACT: _____
PH/PHONE	

4D2 Card is a referral tool issued to the Community Health Team (CHT) as a pregnancy partner that helps them track pregnant women and accurately fill up the Target Client List (TCL).

4D2 Card, DOLASAN ILHZ, Abra Province

### 3. Barangay MNCHN Emergency Plan

To ensure referral of patients within the service delivery network , a transportation system is considered as indispensable for the timely provision of care. In 2016, all 363 barangays in the Project sites (Benguet Province, Apayao Province, 6 municipalities of Abra Province) have Barangay MNCHN Emergency Plan.

The mobilized transportation includes public jeepneys / tricycles operated by commercial transportation service providers and/or private vehicles owned by (well-off) families as well as organized hammock team operated by youth volunteers.

MINUTES OF THE REGULAR SESSION OF THE SANGGUNIANG BARANGAY OF NAGUILIAN, CALANASAN, APAYAO HELD AT THE BARANGAY HALL ON JUNE 22, 2015, 9:00 IN THE MORNING

PRESENT:

1. Hon. Vedasto Danganan	Punong Barangay
2. Hon. Laxino Aliten	Barangay Kagawad
3. Hon. Sheryl Danganan	Barangay Kagawad
4. Hon. Emma Marrero	Barangay Kagawad
5. Hon. Mailda Ullano	Barangay Kagawad
6. Hon. Romeo Salteb	Barangay Kagawad
7. Hon. Hon. Carlos Ullano	Barangay Kagawad
8. Hon. Joel Smoleng	Barangay Kagawad
9.	

ABSENT: NONE

RESOLUTION NO.     , s. 2015

**A RESOLUTION ADOPTING AN ORDINANCE ESTABLISHING THE BULIG TEAM IN THE BARANGAY, DEFINING ITS DUTIES AND FUNCTIONS THEREOF**

WHEREAS, it is the declared policy of the state to protect and promote the right to health of its citizens and their bodies, and install health centers in all parts of the country, which was duly

**A RESOLUTION ADOPTING AN ORDINANCE ESTABLISHING THE BULIG TEAM BY THE BARANGAY, DEFINING ITS DUTIES AND FUNCTIONS THEREOF**

financially or morally;

WHEREAS, this council commends the initiative of the barangay and partner stakeholders in establishing this kind of voluntary services which provide quick response to address the emergency health situations in the barangay;

WHEREFORE, on motion of the Honorable , be it

**RESOLVED** as it is **HEREBY** resolved to enact the following ORDINANCE to wit:

**ORDINANCE NO.     , s.2015**

**AN ORDINANCE ADOPTING AND ESTABLISHING THE BULIG GROUP IN THE BARANGAY, DEFINING ITS DUTIES AND FUNCTIONS THEREOF**

**Section 1.**Title: this ordinance shall be cited as the **"BULIG GROUP ORDINANCE"** Barangay Naguilian, Calanasan, Apayao

**Section 2. Definition of Terms.**

1. Bulig - the act of carrying a patient through the use of hammock "bayun" for referral in case of emergency to the nearest health facility;

which was duly 2015

ROMEO SALTEB  
Kagawad

SHERYL DANGANAN  
Kagawad

HON. CARLOS ULLANO  
Kagawad

NESTOR ALITEN  
Barangay Secretary

APPROVED:  
VEDASTO DANGANAN  
Punong Barangay

Resolution in Barangay Naguilian, Calanasan, Apayao Province for organizing Bulig (transport group) for emergency

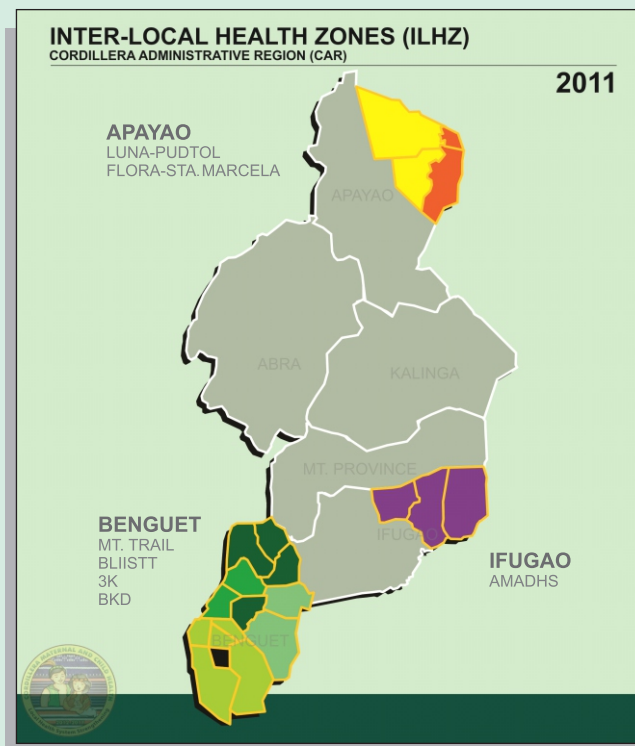
## 4. Increased Number of Inter-Local Health Zones (ILHZs)

The Inter-LGU collaboration, commonly known as *Inter-Local Health Zone (ILHZ)* was taken by the Project as a vital component in the service delivery network. Specifically, it is a system in which individuals, communities and all other health care providers in a well-defined geographical area participate together in providing quality, equitable and accessible health care services.

### Functions of ILHZ are:

- Sharing of resources such as personnel, transportation and medicines and supplies;
- Policy-making to ensure the implementation of holistic health services at the local level;
- Capacity development of health personnel through training and practice, and;
- Development and implementation of comprehensive LGU collaboration including investment to improve the respective health facilities' programs.

In 2011, DOH-CAR reported seven ILHZs in the region: Mt. Trail, BLIISTT, 3K and BKD in Benguet Province, AMADHS of Ifugao Province and Luna-Pudtol and Flora-Sta. Marcela in Apayao Province.



# INTER-LOCAL HEALTH ZONES (ILHZ)

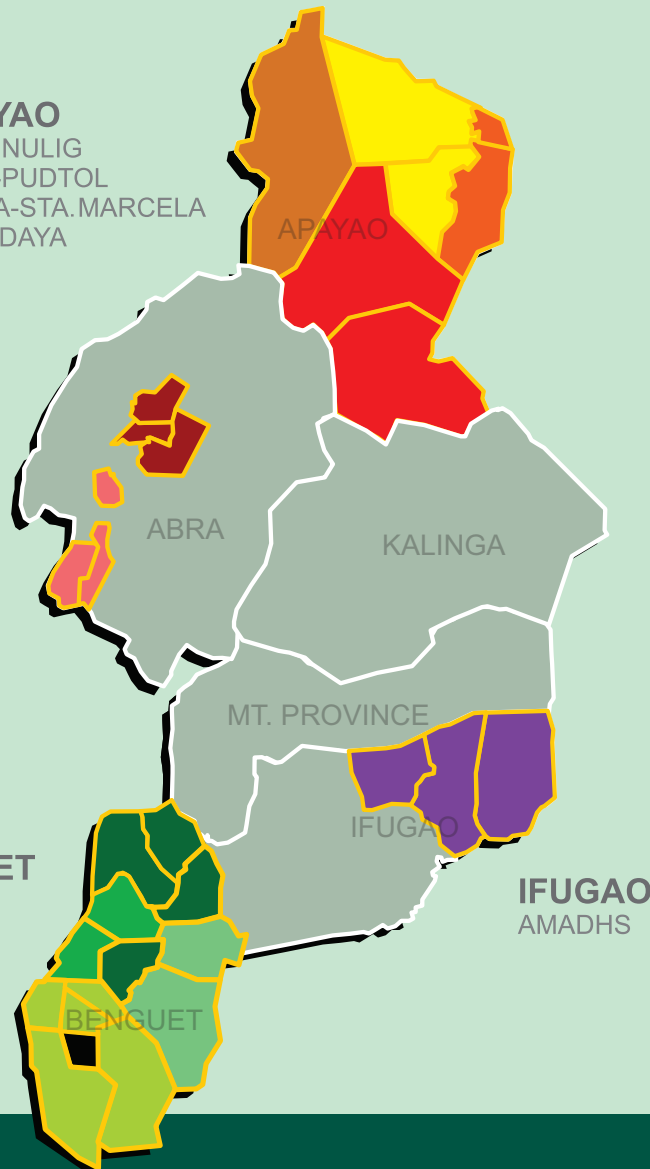
CORDILLERA ADMINISTRATIVE REGION (CAR)

2014

**APAYAO**  
KABINNULIG  
LUNA-PUDTOL  
FLORA-STA. MARCELA  
YMANDAYA

**ABRA**  
DOLASAN  
VPP

**BENGUET**  
MT. TRAIL  
BLIISTT  
3K  
BKD



Three years later in 2014, additional four ILHZs were established and became functional.



## INTER-LOCAL HEALTH ZONES (ILHZ)

CORDILLERA ADMINISTRATIVE REGION (CAR)

2016

**APAYAO**  
KABINNULIG  
LUNA-PUDTOL  
FLORA-STA. MARCELA  
YMANDAYA

**APAYAO**

**KALINGA**  
BINULAWAN  
LIN-AWA  
PUMIYAAN

**ABRA**  
DOLASAN  
VPP

**ABRA**

**KALINGA**

**MT. PROVINCE**  
SABATA  
CHICO-RIVER  
PARANA

**MT. PROVINCE**

**BENGUET**  
MT. TRAIL  
BLIISTT  
3K  
BKD

**BENGUET**

**IFUGAO**

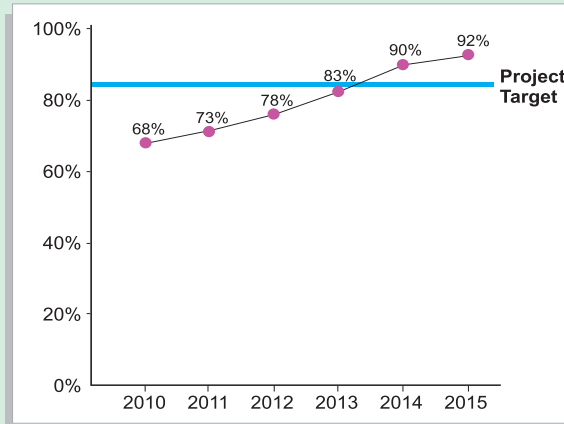
**IFUGAO**  
AMADHS  
TERRACES  
KIASTILA



As of 2016, 19 ILHZs are functional in CAR. Chico-river ILHZ is an inter-provincial collaboration. The municipality of Tinglayan in Kalinga Province teamed up with the municipalities of Bontoc and Sadanga in Mt. Province with Bontoc General Hospital served as their core referral hospital.

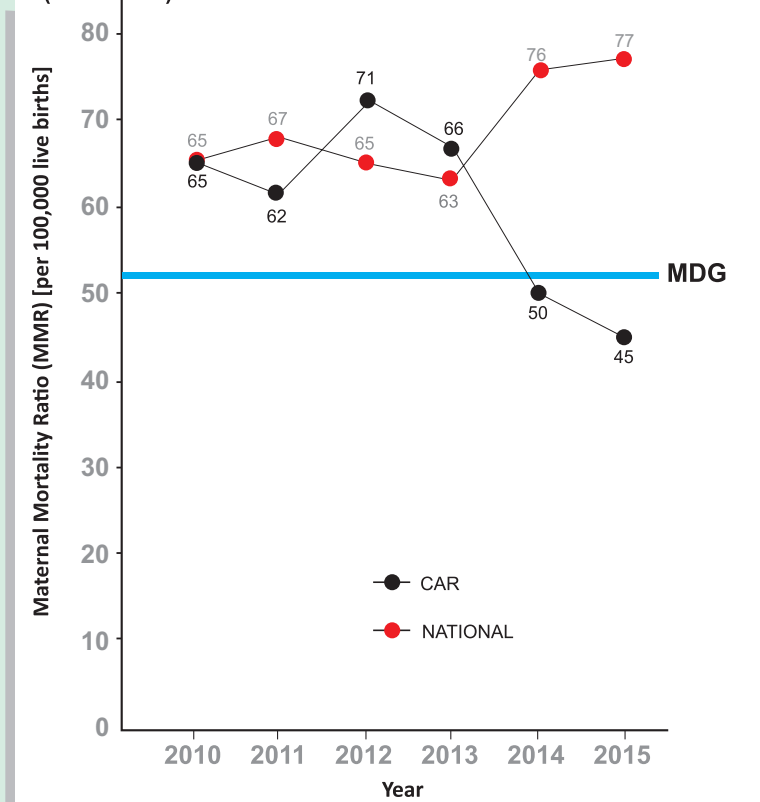
Because of the collaboration among LGUs in the region, birthing facilities were made available in all strategic areas. CAR now has more trained doctors, nurses, and midwives and support from the community.

## 1. Facility-based Delivery (FBD) rate increased from 68% in 2010 to 92% in 2015



Facility-based delivery rate in CAR (2010-2015)

## 2. Maternal Mortality Ratio (MMR) has continued to decline since 2012



Maternal Mortality Ratio in CAR (2010-2015)

# RECOMMENDATIONS

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- ILHZs should be established within the context of SDN.
- Passage of legislation to include MNCHN Emergency Plan in the BDRRM plan should be mandated by Department of Interior and Local Government (DILG) to make transport and communication support system available not only during disaster but on a year round basis.
- The functionality of SDN requires active participation of Community Health Teams/ Barangay Health Workers in referring clients/patients in the community to the nearest health facility.
- When defining and mapping SDN, private hospitals and clinics should be included, as well as households and families to be linked to health facilities nearest them.
- Services available and the directory of contact persons should be regularly updated in the referral manual.



# Kalusugang Pangkalahatan



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