Global Resuscitation Alliance

Update on the Implementation of the 10 steps in Global Resuscitation Alliance to Improve OHCA survival in Southern Philippines Medical Center, Davao City, Philippines

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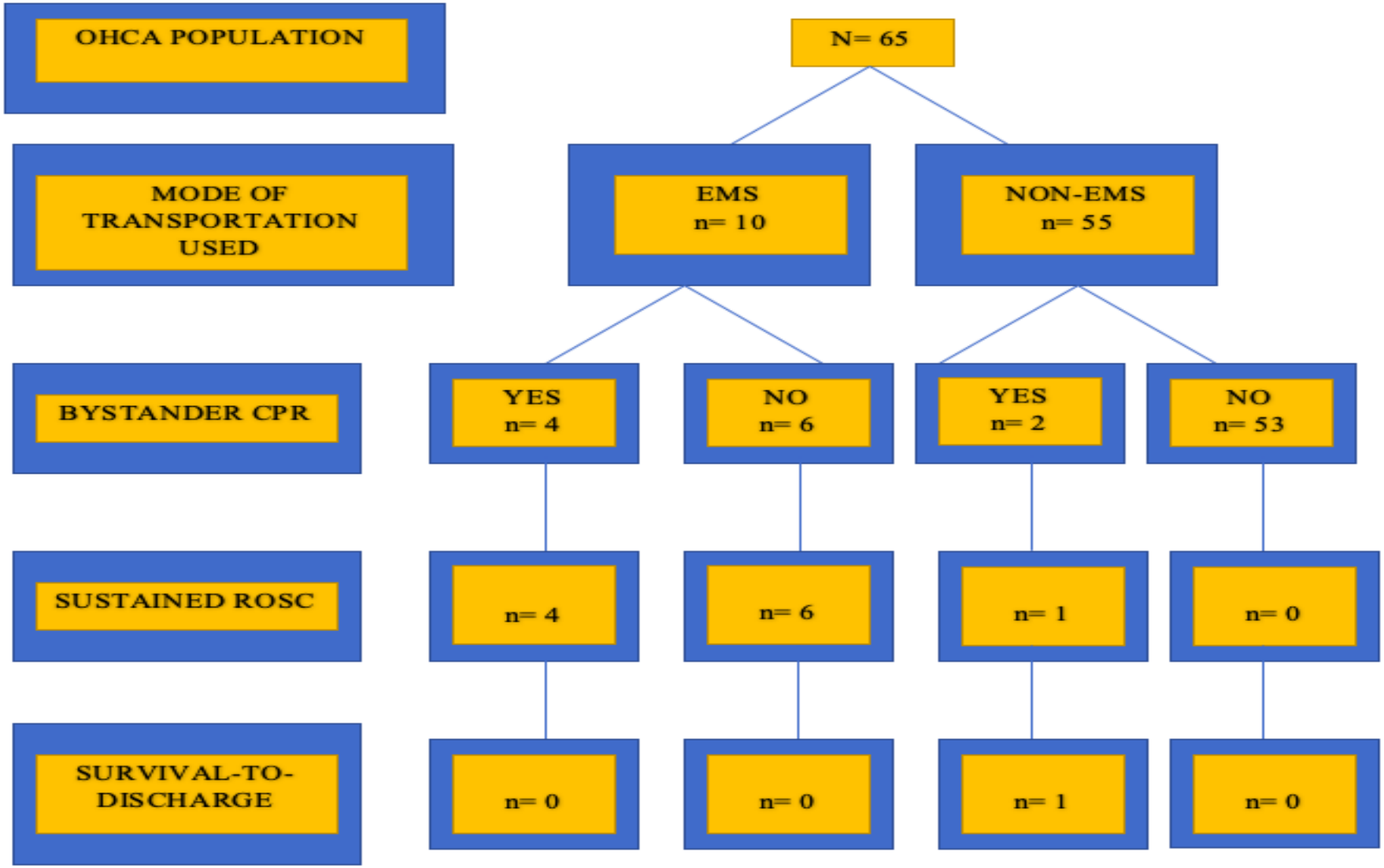
BASELINE STATISTICS

- No accurate OHCA mortality data in SPMC
- In 2016, we started our registry to establish baseline incidence of OHCA.
- This is important as this will generate pre-hospital protocol and will guide health policy makers in implementing appropriate preventive strategies, improving emergency preparedness and instituting financing policies for the improvement of OHCA survival.

At a Glance: 2016-2017 Data



2016-2017 DISPATCH INFORMATION ACTIVITY	
ACTIVITY	MINUTES
Call-to-arrival at scene	
Mean	0:13:30
Median	0:13:50
Call-to-arrival at hospital	
Mean	0:27:40
Median	0:29:00

Improving SURVIVAL from OHCA: Our Experience in the Philippines

Implementation of GRA's 10-programs/actions consensus recommendations to improve OHCA survival

THE **CHALLENGE** from the start...

- **Survival from sudden cardiac arrest (SCA) is low.**
- **Most of the constituents in the community do not know how to do compression-only CPR**
- **Unavailability of AED's in public areas**
- **No available smart technology where bystander volunteers can be notified to respond to a nearby arrest to provide early CPR**

THE PROGRAM...

Ten Steps to Improve Cardiac Arrest Survival

1. Establish a cardiac arrest registry
2. Begin Telephone-CPR with ongoing training and QI
3. Begin high-performance EMS CPR with ongoing training and QI
4. Begin rapid dispatch
5. Measure professional resuscitation using the defibrillator recording (and voice if possible)
6. Begin an AED program for first responders, including police officers, guards, and other security personnel.
7. Use smart technologies to extend CPR and public access defibrillation programs to notify volunteer bystanders who can respond to nearby arrest to provide early CPR and defibrillation
8. Make CPR and AED training mandatory in schools and the community
9. Work toward accountability – submit annual reports to the community
10. Work toward a culture of excellence

WHERE ARE WE NOW?

Ten Steps to Improve Cardiac Arrest Survival

1. Establish a cardiac arrest registry
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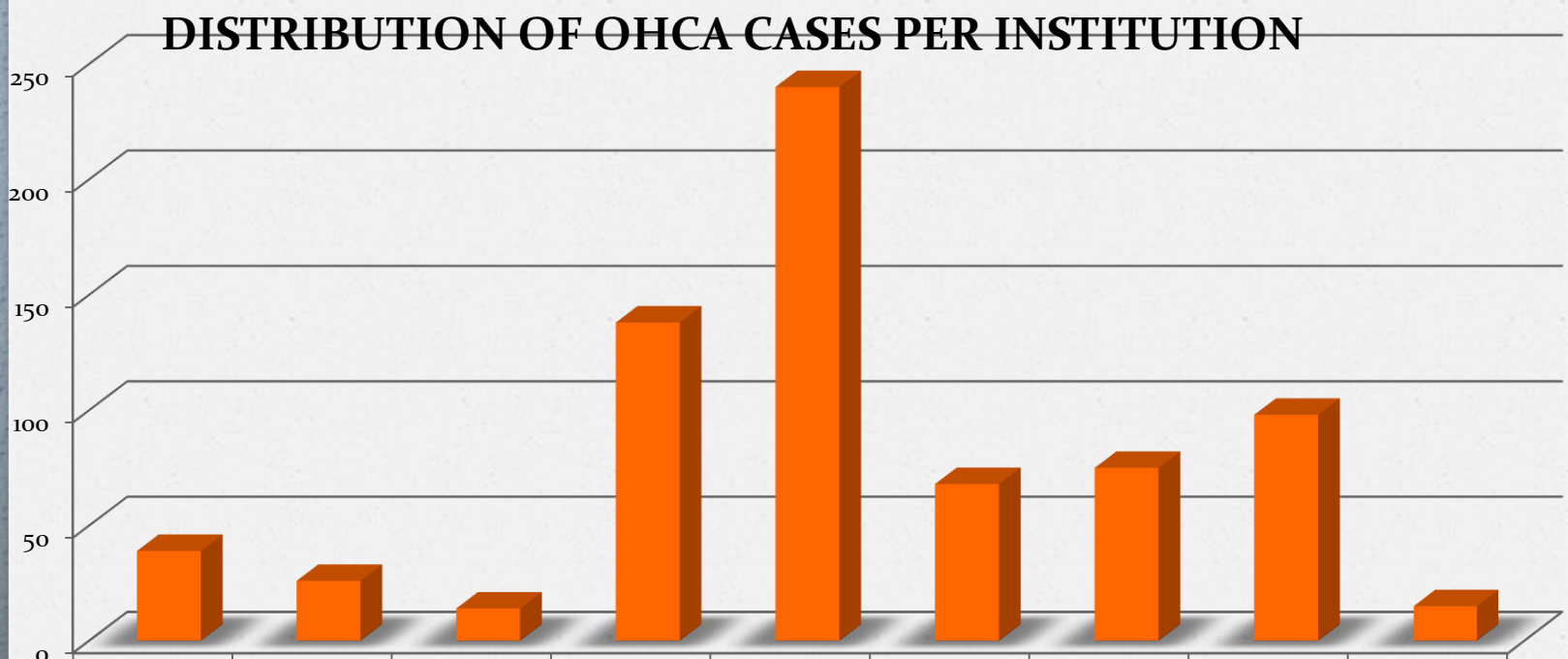
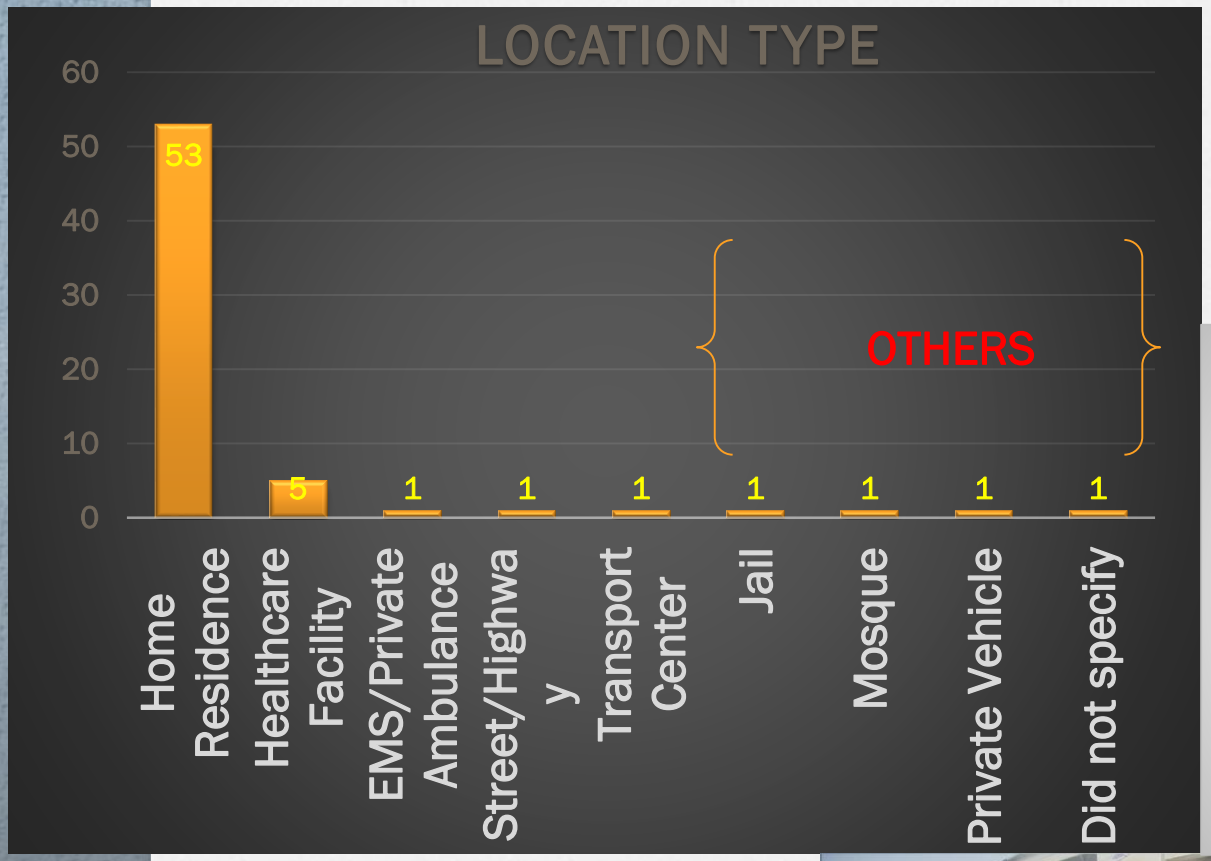
STEP 1: ESTABLISH A CARDIAC ARREST REGISTRY

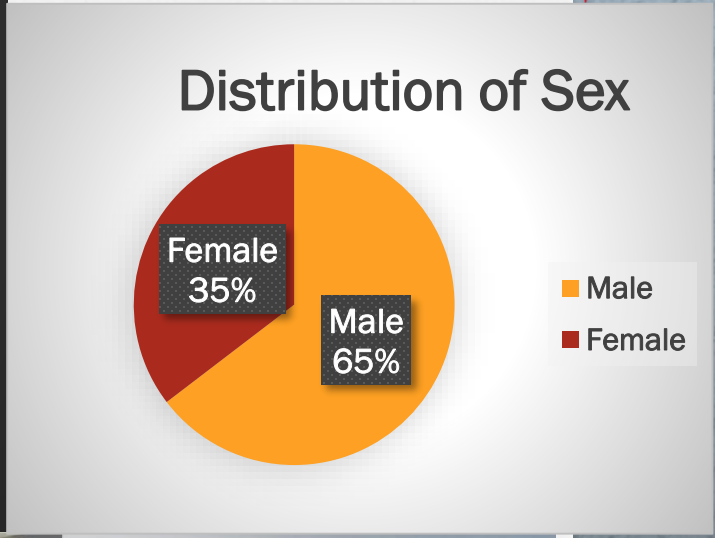


	SLMC	CSMC	MDH	PGH	EAMC	PCGH	MMC	VSMMC	OSMAK
Series1	39	26	14	138	240	68	75	98	15

SPMC RESULTS

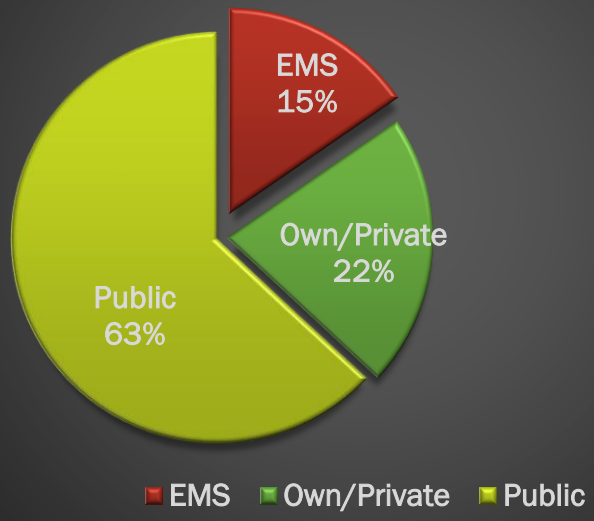


PATIENT INFORMATION	DESCRIPTIVE STATISTICS
Age (Mean±SD)	49.12 +/-20.57

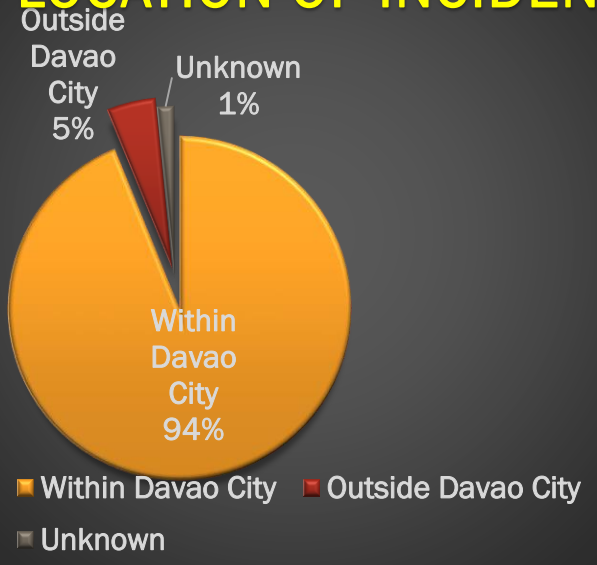


CLINICAL PARAMETERS RESULTS

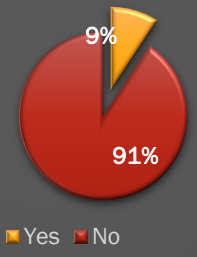
MODE OF TRANSPORTATION



LOCATION OF INCIDENT



Bystander Performing CPR

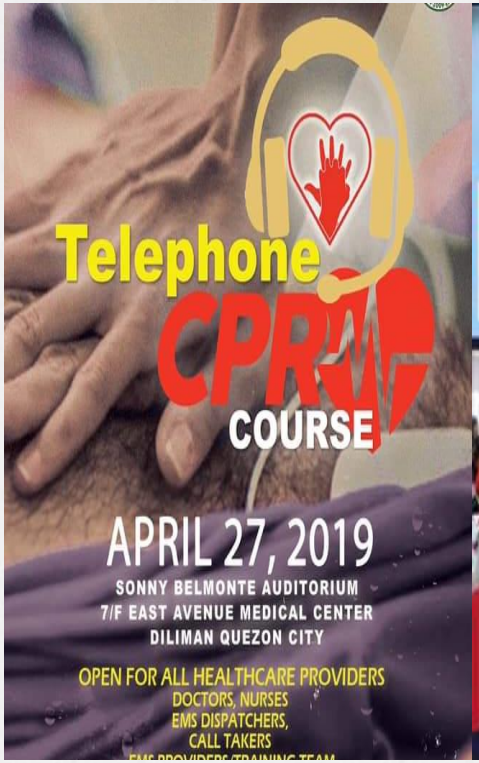


CONCLUSION

- Return of spontaneous circulation or resuscitation success rate for this study is 17 % where majority of patients were admitted.
- The survival to hospital discharge or survival to 30 days post cardiac arrest is 1.5 %.
- Modifiable factors include bystander CPR and access to EMS services

STEP 2: BEGIN TELEPHONE CPR TRAINING

- OHCA Dispatcher's Course - July 28, 2017; 50 participants
- OHCA Dispatcher's Course during EMS Asia – June 17, 2018 with 60 participants



DA-CPR (Telephone CPR)

DAVAO EMS MODEL

Medical Direction

NATIONAL-DOH

Disaster management

LOCAL-DILG

COMMUNICATION

TRAINING

MEDICAL DIRECTION

FACILITY-EMS COMPONENTS

TELEMEDICINE

ULTRASOUND LIFE SUPPORT

STEP 3: HIGH PERFORMANCE EMS CPR WITH TRAINING AND QI

STEP 4: RAPID DISPATCH

DISPATCH INFORMATION ACTIVITY		
TIME-CRITICAL EMS ACTIVITIES	2016-2017 Data	2018-2019 Data
Call-to-arrival at scene	0:13:30 (Mean in minutes)	0:15:22 (Mean in minutes)
Call-to-arrival at hospital	0:27:40 (Mean in minutes)	0:26:05 (Mean in minutes)

PHILIPPINES
CENTRAL 911

STEP 8: HIGH PERFORMANCE CPR TRANING

- COLLOBORATION WITH COMMUNITIES SERVED BY 911
- PARTNERSHIP WITH LOCAL RADIO NETWORK
- COLLABORATION WITH PUBLIC SCHOOLS FOR TEACHING CPR TO SENIOR HIGH SCHOOL STUDENTS

STEP 8: HIGH PERFORMANCE CPR TRANING

S. No. 3204
H. No. 6204

Republic of the Philippines
Congress of the Philippines
Metro Manila

Sixteenth Congress

Third Regular Session

Begun and held in Metro Manila, on Monday, the twenty-seventh day of July, two thousand fifteen.

[REPUBLIC ACT NO. 10871]

AN ACT REQUIRING BASIC EDUCATION STUDENTS TO UNDERGO AGE-APPROPRIATE BASIC LIFE SUPPORT TRAINING

CPR CAMPAIGNS IN SCHOOLS

STEP 10: WORK TOWARDS A CULTURE OF EXCELENCE

2018 PAROS Data

Median age	52.5
Gender (Male)	70.8 %
Past Medical History (Heart Disease)	64.3 %
Location: Home Residence	70.8 %
Arrest witnessed by: Unwitnessed	58.3 %
First Arrest Rhythm: Unknown Unshockable	50 %

2018 PAROS Data

Bystander CPR	29.2 %
Etiology of Arrest: Presumed Cardiac	87 %
EMS ROSC	8.3 %
ED ROSC	29.2 %
Survived to admission	16.7 %
Survived to discharge	4.2 %

Outcome since the Implementation of the Program

OTHER PARAMETER	2016-2017 Data	2018-2019 Data
Mode of Transportation	EMS- 15 % Non-EMS- 85 %	All EMS No data for Non-EMS
Bystander CPR Rate	9 %	20 %
Sustained ROSC Rate	17 %	25 %
Survival-to-hospital discharge rate	1.54 %	5 %

IT TAKES A SYSTEM TO SAVE A LIFE