



# ACC Middle East Conference 2018

In partnership with:



جمعية القلب السعودية  
Saudi Heart Association

## Stent For Life, Egypt A Success Story

**Hany Ragy MD, FSCAI**

NHI, Cairo, Egypt

@hragy





مشروع دعامة الحياة  
Stent For Life initiative - Egypt

Under the auspices of



EURO  
PCR

تحت رعاية



## Stent For Life Initiative in Egypt

**Professor Mohamed Sobhy, MD, FACC, FESC**

Professor of Cardiology Department, Alexandria

University - Egypt

Past President of the Egyptian Society of Cardiology

Governor of ACC Chapter in Egypt

CardioAlex Chairman

Chairman of ICC Hospital, Alexandria

SFL Egypt Champion



# Egyptian Journey in pPCI

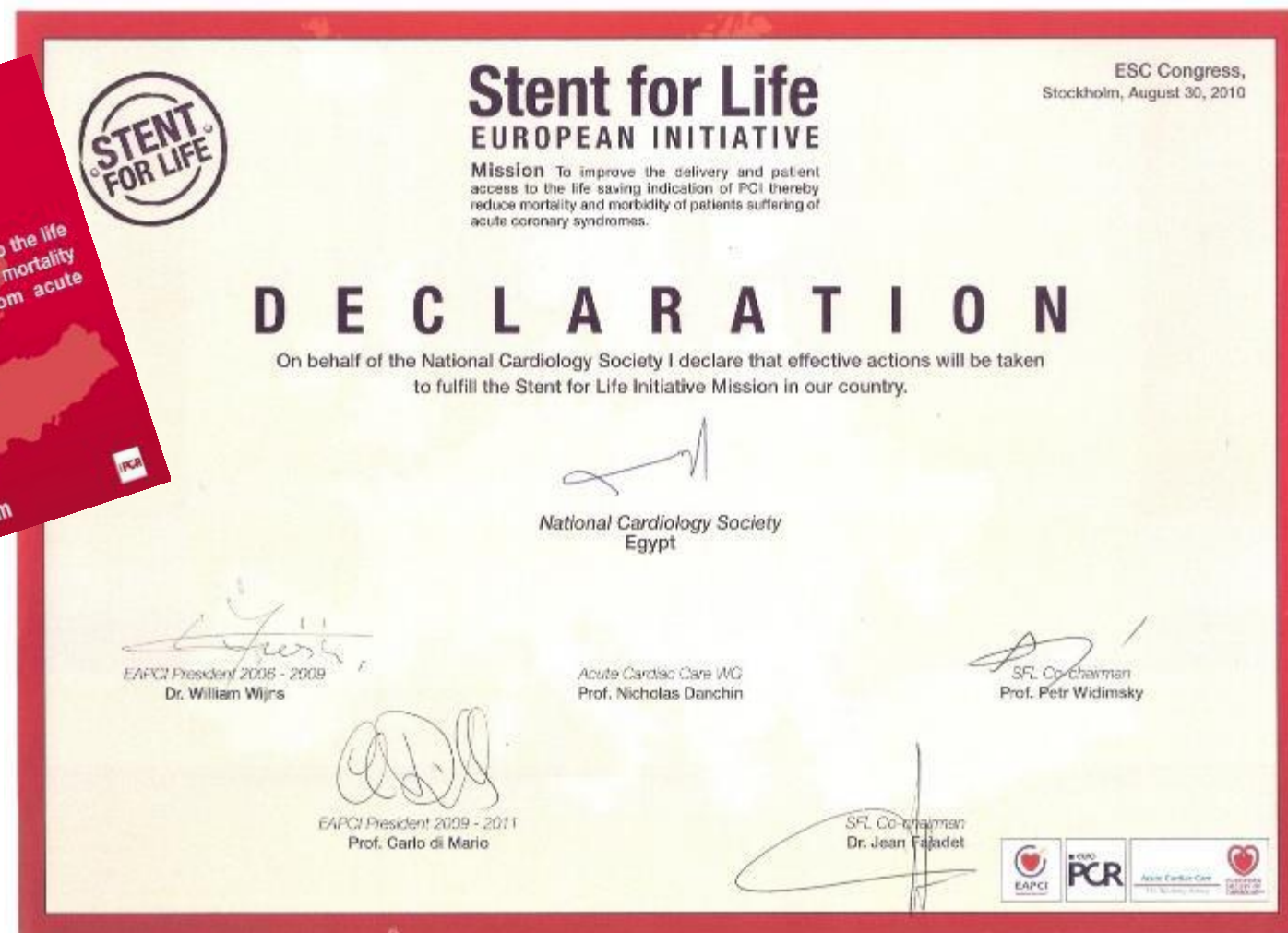
- 2006 : Workshops, Discussions, cases.

- 2007 : We started to share in international track..



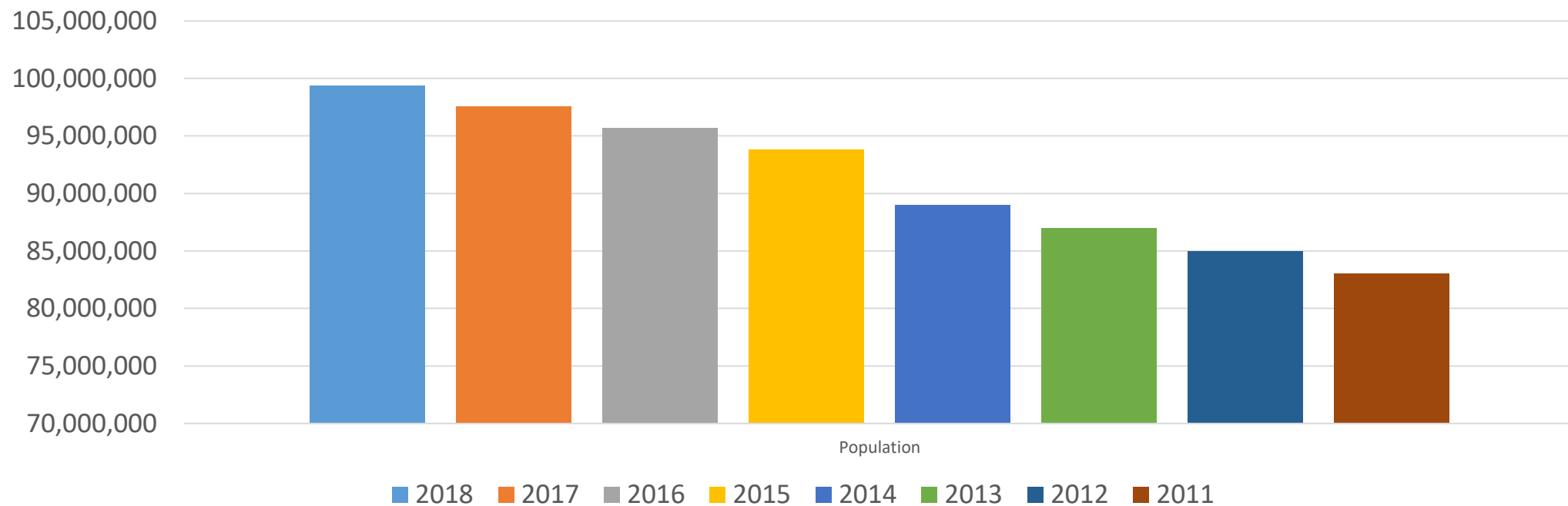
# Egyptian Journey in pPCI - continued

End of 2010 : We finally found our way



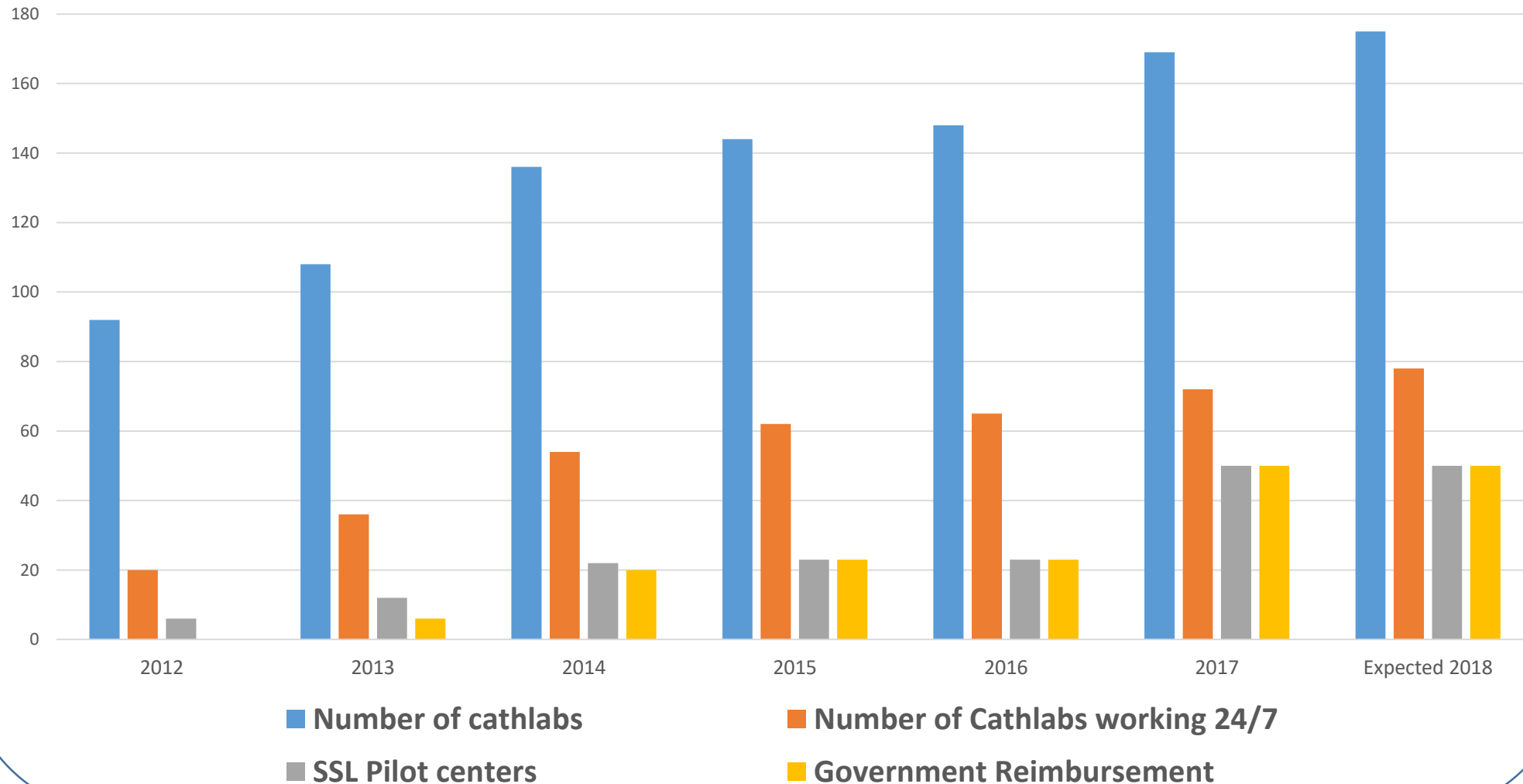
# Egyptian Situation

Egyptian Population



# Egyptian Situation

200

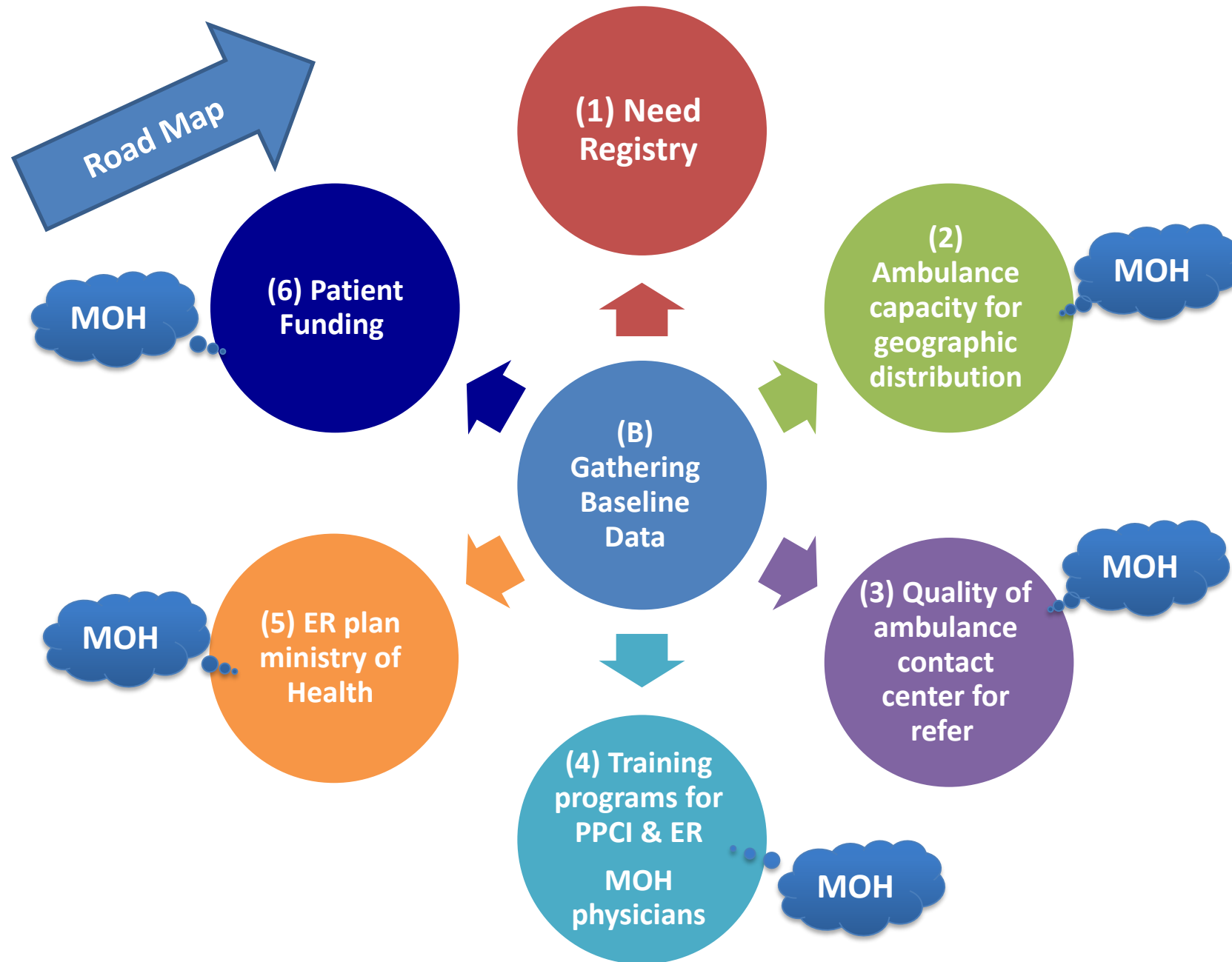




# The start ..

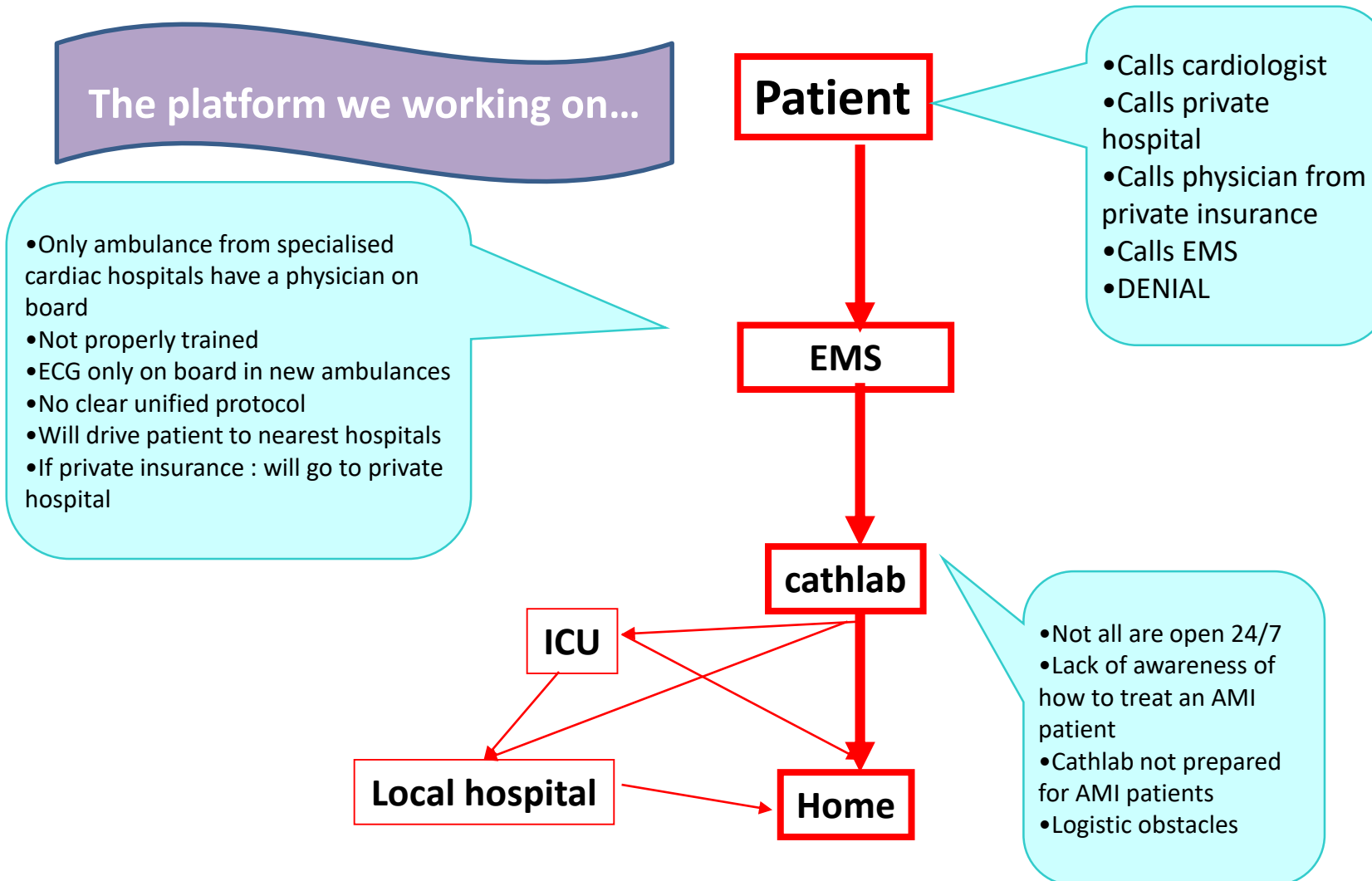
- November 2010
- Brain storming Camp
- 80 eminent Intervention Cardiologists , MOH representatives , NGOs , Health Insurance , EMS and ..The minister of Health .







# Current situation : patient pathway



Stent For Life Egypt - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://stentforlifeegypt.com/en/home.php

Stent For Life Egypt

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# STENT FOR LIFE

INITIATIVE IN EGYPT

EAPCI euro PCR

[www.stentforlifeegypt.com](http://www.stentforlifeegypt.com)

**Dear professor**

If you want to apply as a pilot center in Stent For Life project Egypt kindly check the criteria for primary PCI centers and fill the application form and submit it online it will be sent directly to the project management (ICOM) then you will be contacted by the auditing committee for an inspection visit, you will be informed with the date and time of visit.

**Members Login**

User Name

Password

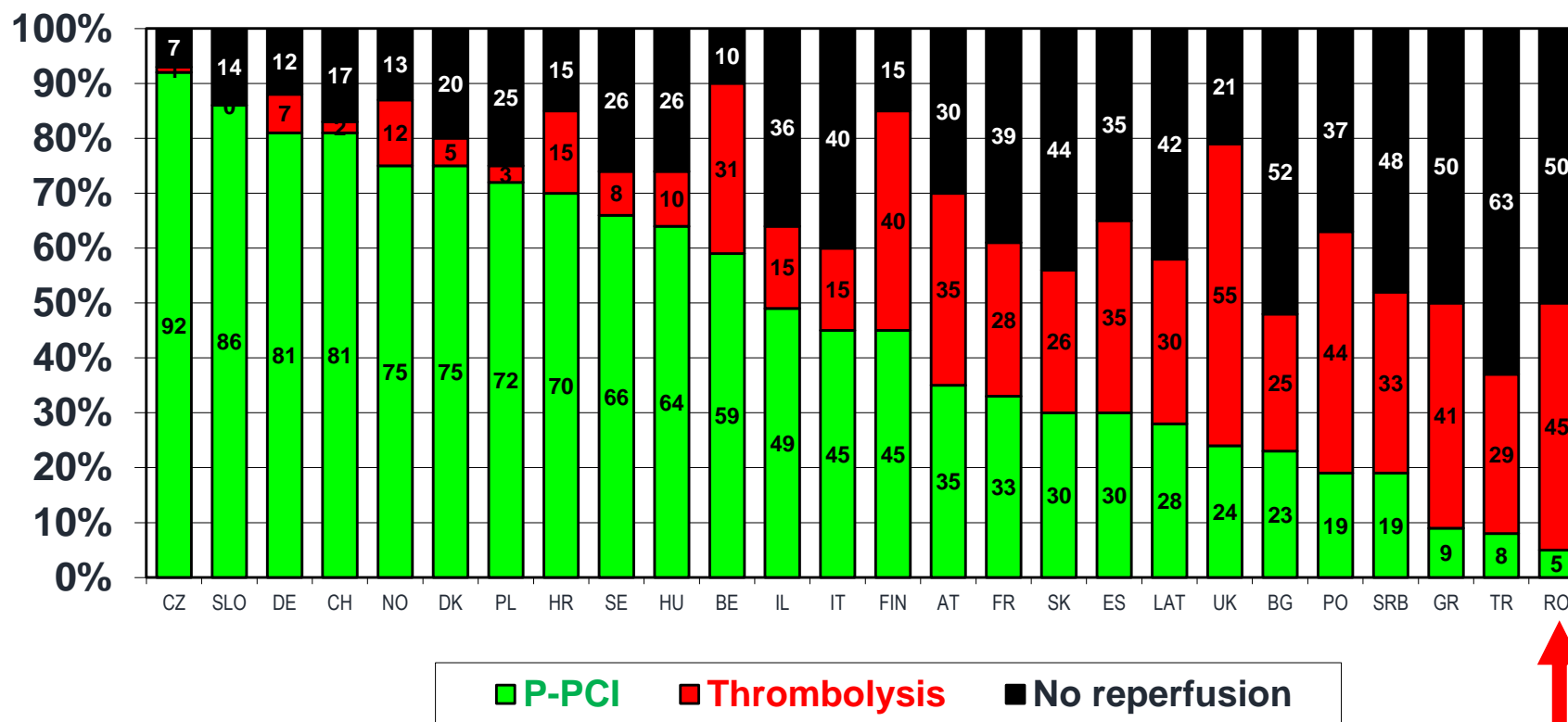
Events Calendar

Application

Criteria

Egypt situation 2011

# Reperfusion Therapies



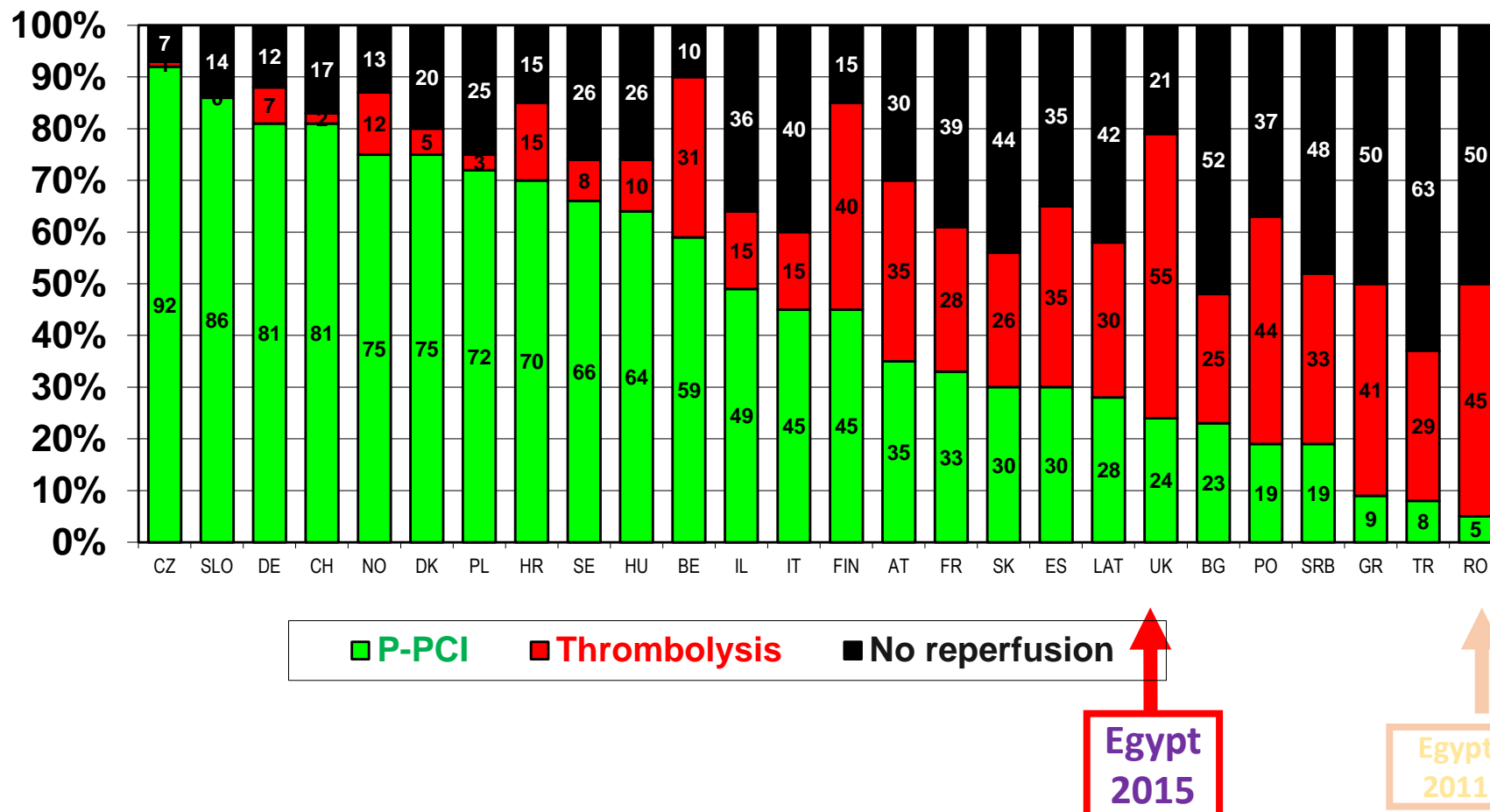
P.Widimsky et al. November 19, 2009. Reperfusion therapy for ST elevation acute myocardial infarction in Europe: description of the current situation in 30 countries. Eur. Heart.J.doi:10.1093/eurheartj/ehp492



Egypt  
2011

Proposed Egypt situation **2015**

# Reperfusion Therapies



P.Widimsky et al. November 19, 2009. Reperfusion therapy for ST elevation acute myocardial infarction in Europe: description of the current situation in 30 countries. Eur. Heart.J.doi:10.1093/eurheartj/ehp492



# EuroIntervention Supplement

Official Journal of EuroPCR and the European Association  
of Percutaneous Cardiovascular Interventions (EAPCI)



## Stent for Life Initiative

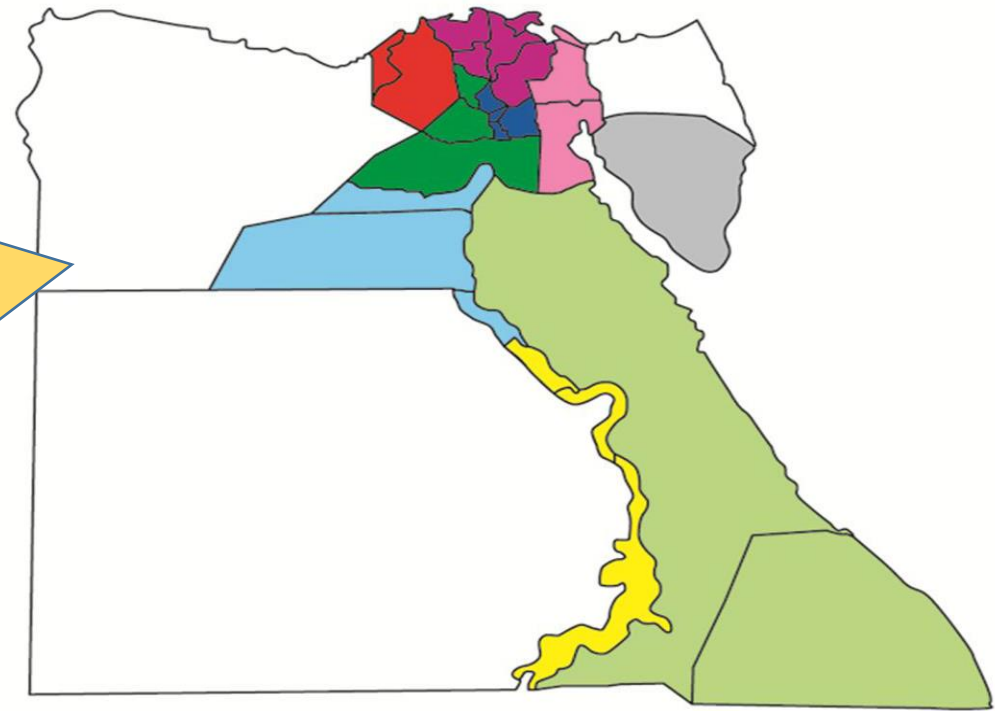
### Stent for Life Initiative placed at the forefront in Egypt 2011

Mohamed Sobhy<sup>1</sup>, MD; Mohamed Sadaka<sup>1</sup>, MD; Nireen Okasha<sup>2</sup>, MD; El Sayed Farag<sup>3</sup>, MD; Ayman Saleh<sup>1</sup>, MD; Hussein Ismail<sup>4</sup>, MD; Mohamed El Seteiha<sup>5</sup>, MD; Hany Ragy<sup>6</sup>, MD; Mohamed Abdel Hameed<sup>1</sup>, MD; Radwa Mehanna<sup>1</sup>, MD

*1. Faculty of Medicine, Alexandria University, Alexandria, Egypt; 2. Faculty of Medicine, Ain Shams University, Cairo, Egypt; 3. Faculty of Medicine, Zagazig University, Zagazig, Egypt; 4. Faculty of Medicine, Suez Canal University, Port Said, Egypt; 5. Faculty of Medicine, Tanta University, Tanta, Egypt; 6. National Heart Institute, Cairo, Egypt*



**Mapping  
Situation  
(December 2013)**



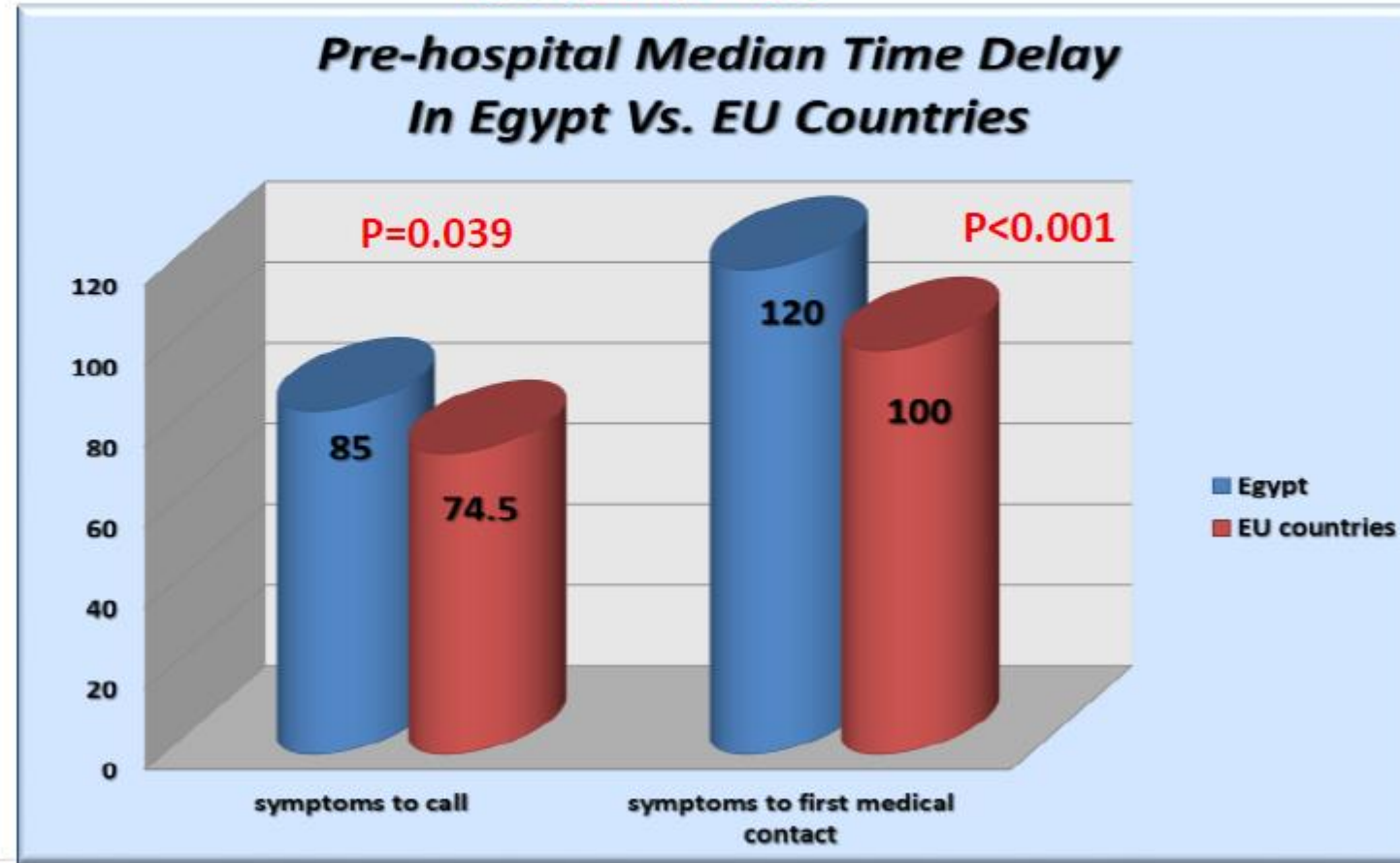
Area		Population	Cath. Labs	24/7	SFL Pilot	Population/Cath lab working 24/7	Population/SFL Pilot
Alexandria		6%	10	5	3	972000/cath lab	1.620000/center
Cairo		12%	34	12	7	833000/cath lab	1.430000/center
Giza		10%	34	9	6	888000/cath lab	1.330000/center
Delta		21%	12	4	4	4.250000/cath lab.	4.250000/ center
Canal		7%	3	1	1	5.700000/cath lab.	5.700000/ center
Red Sea		4%	1	0	0	0	0
Upper Egypt 1		13%	4	1	1	10.500000/cath lab.	10.500000/ center
Upper Egypt 2		20%	7	2	2	8.100000/cath lab.	8.100000/ center
South Sinai		4%	1	0	0	0	0
West Desert & Upper Sinai		3%	0	0	0	0	0

# Mapping situation 2018

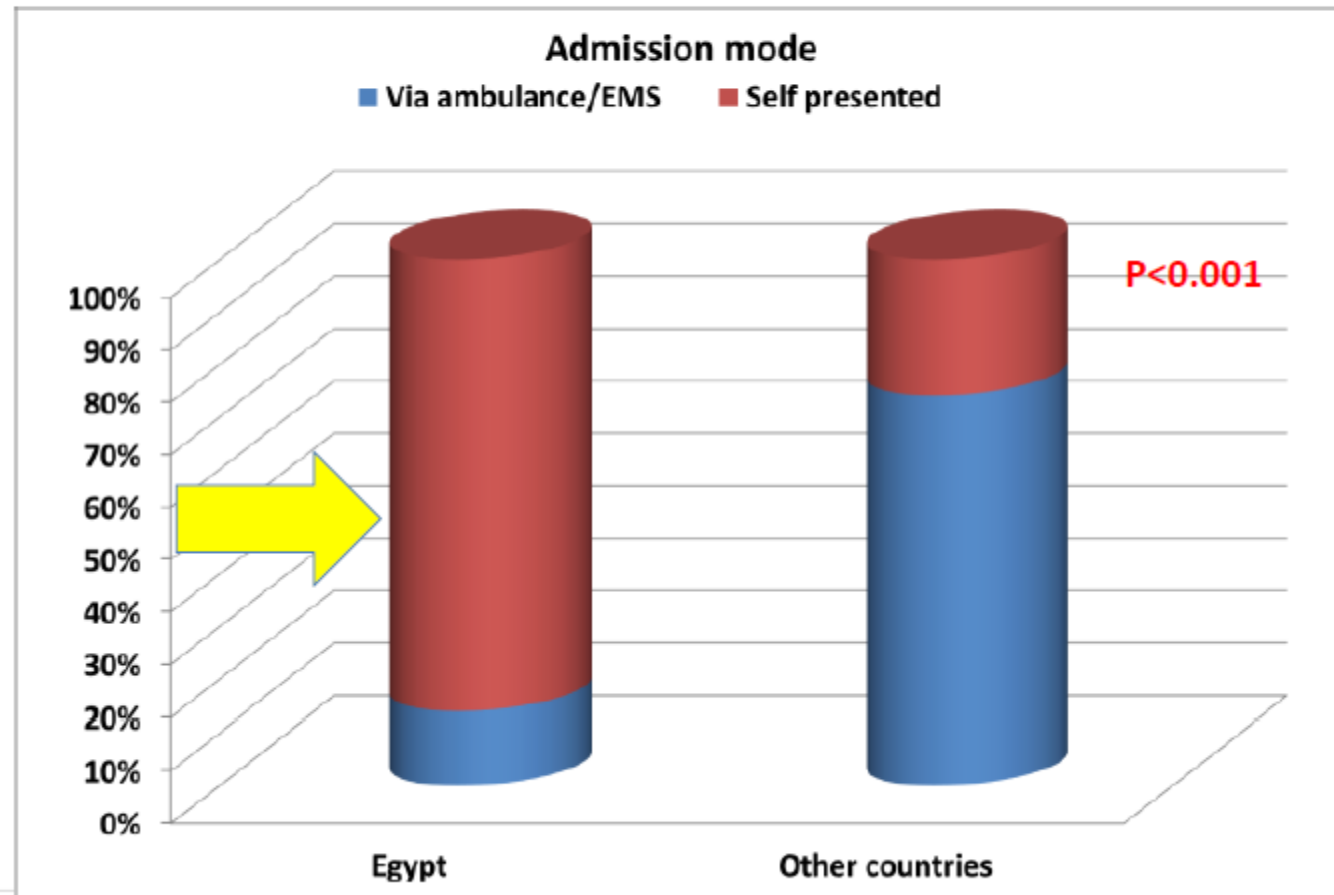


N.B: the upcoming slides are from dr. Moheb Wadie (Mansoura University) ppt in ESC 2018

# Admission process - Egypt versus Other Countries



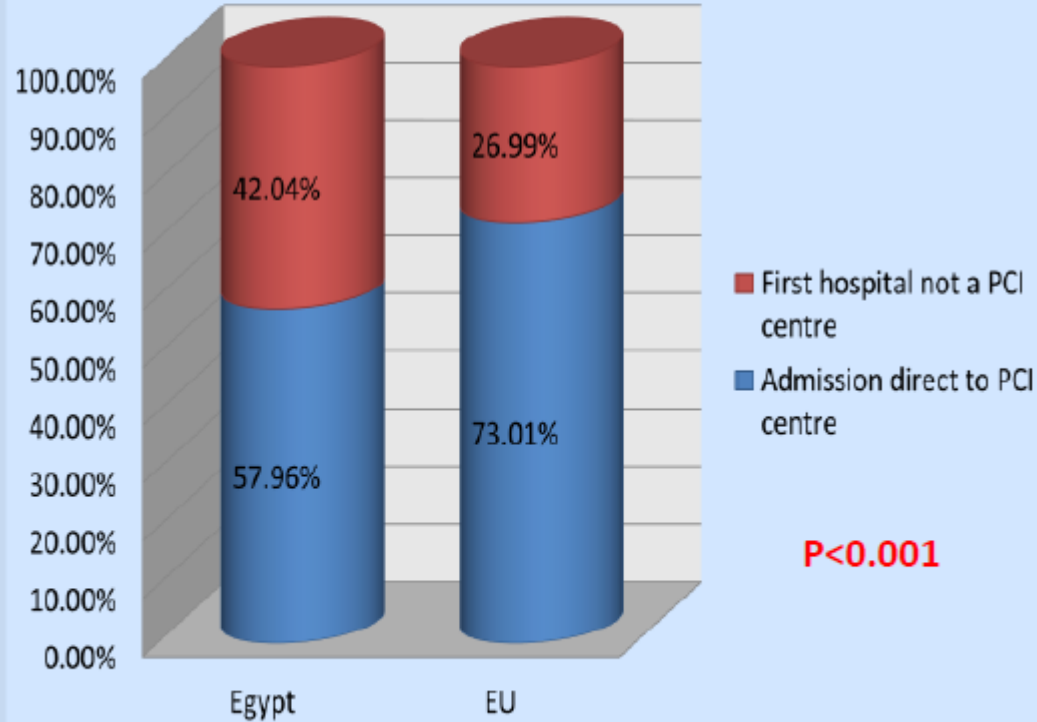
# Admission process - Egypt versus Other Countries



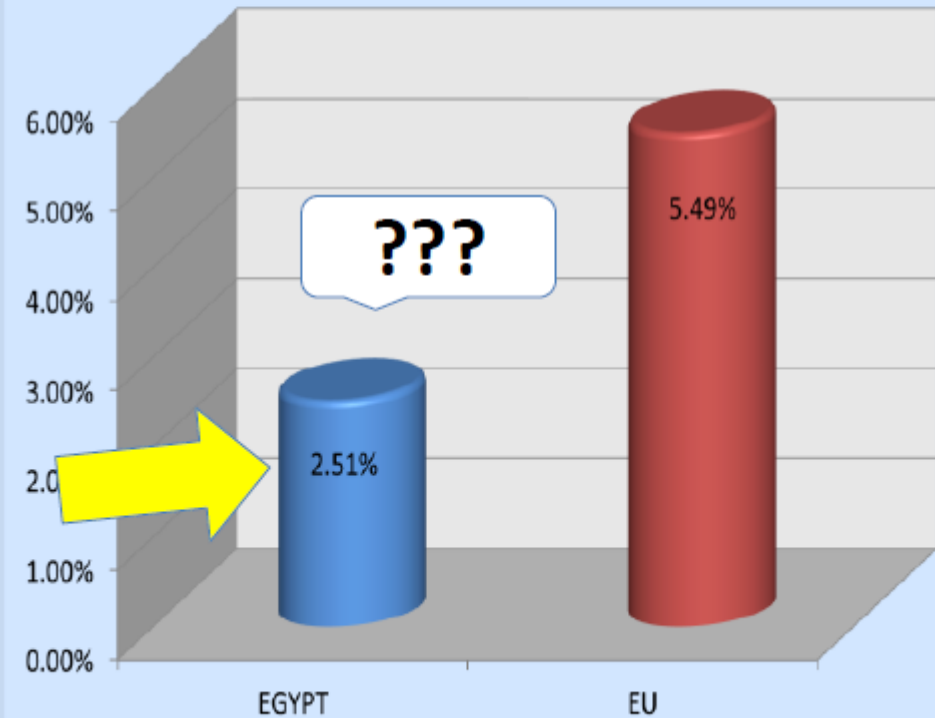


# Admission process - Egypt versus Other Countries

Admission site: PCI vs. Non PCI hospital

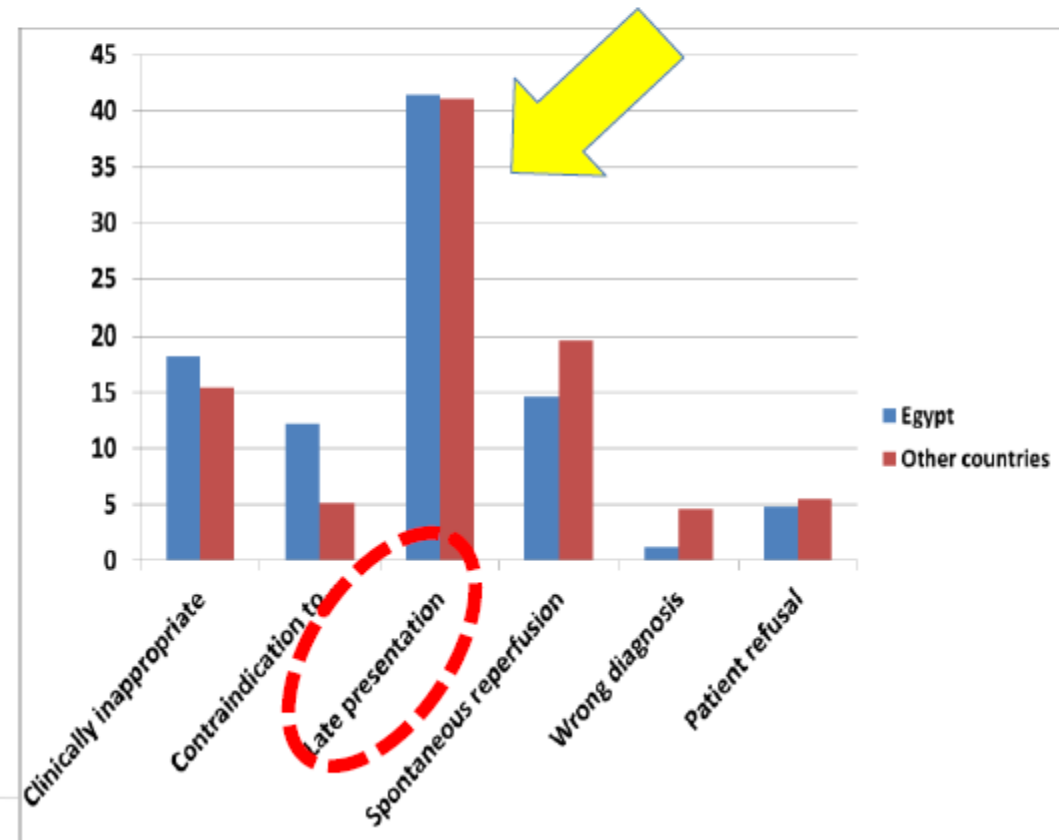
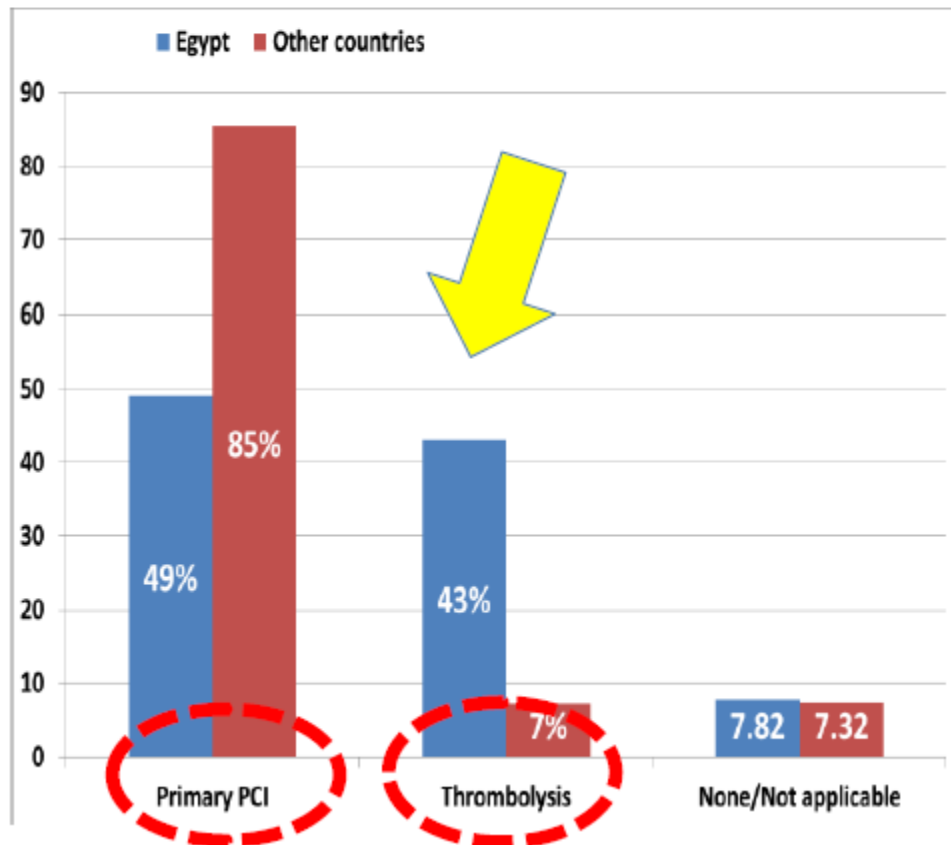


Out of hospital cardiac arrest



# Treatments

- Given Treatment





## How-to-Guide

Stent for Life Initiative

### SFL Egypt: How to work innovatively with government

**M. Sobhy<sup>1,2</sup>, A. El Shal<sup>3</sup>**

<sup>1</sup> Stent for Life Egypt, Country Champion

<sup>2</sup> Stent for Life Egypt, Project Manager, ICOM

<sup>3</sup> Alexandria University

SFL Egypt has found innovative ways of working with the government during a turbulent period.

Egypt became a member of SFL at the end of 2010 and held a brainstorming session with 80 eminent intervention cardiologists, Ministry of Health (MOH) representatives including the minister of health, non-governmental organisations (NGOs), health insurance providers and the emergency medical service (EMS). A road map was created which specified five elements as being the responsibility of the MOH. These were: ambulance capacity to cover the geographic area; ability of ambulance staff to triage patients correctly; training programmes in primary PCI for emergency room staff and MOH physicians; protocol for emergency rooms; and patient funding. Three months later a two year revolution began. There were dramatic changes in ministers, delays in decision making and economic instability. The EMS became preoccupied with staging revolutionary activities. Government support and involvement is essential to the success of Egypt's SFL road map. Meetings were held with successive health ministers to convince them that a national STEMI programme was needed. A protocol of cooperation and support between SFL and the MOH was agreed that included three goals: educating MOH physicians and referral doctors, providing patient funding through government health insurance, and improving the quality and coverage of the EMS.



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CardioPulse

## Cardiology in Egypt is improving through increased links with Europe and the USA

The president of the Egyptian Society of Cardiology discusses his vision for bringing the speciality onto the 'world stage' with Jen Taylor



M. Sobhy

The Egyptian Society of Cardiology was founded by 50 doctors in 1954. Today, membership stands at 1954 and it has a 15-strong board.

The society is a member of the European Society of Cardiology (ESC) and has four votes for the ESC president.

Professor Mohamed Sobhy, MD, FACC, FESC, Professor of Cardiology in the Faculty of Medicine at Alexandria University and Chairman of the International Cardiac Center, is the society's President from 2010 to 2012.

He has a number of awards, which include introducing the society's

It is one of the two big cardiology meetings held annually in Egypt. The second, CardioEgypt, is in February and this year the 5-day event had 48 guest speakers from the USA, Canada, Europe, and Arab countries and more than 360 Egyptian speakers and chairpersons.

The Egyptian Society of Cardiology hosts 13 working groups that have been active for a number of years: Interventional Cardiology; Electrophysiology & Pacing; Echocardiography; Preventive Cardiology; Heart Failure; Nuclear Cardiology; Continuous Medical Education; Thrombosis and Haemostasis; The Egyptian Working Group of Pediatric Cardiologists; Cardiovascular Drug Therapy; Lipidology; Vascular Biology and Research; Cardiovascular Diseases in Women; and Peripheral Vascular Disease.

The working groups collaborate with international societies, and their main objective is to hold specialist conferences.

Creating a core syllabus for young cardiologists is another major project. Sobhy, who is Egypt's national coordinator for ESC guidelines, has received approval from Professor Alec Vahanian, MD, chairman of the ESC's Committee for Practice Guidelines from 2006 to 2010 and Professor Roberto Ferrari, MD, president of the ESC from 2008 to 2010, to adapt ESC guidelines to Egyptian cardiologists.

"We don't have Egyptian guidelines", says Sobhy. "It's very difficult because we don't have trials." The society and its Cardiovascular Drug Therapy working group agreed that they needed to adapt the guidelines that would most closely fit the Egyptian situation and that these would be the ESC guidelines.

### Acute Coronary Syndrome Registry

Hany I. Ragy<sup>1</sup>, Ghada A. Kazamel<sup>1</sup>, Mohamed Sleem<sup>1</sup>, Khaled El Tohamy<sup>1</sup>, Mohamed Helmy<sup>1</sup>, Basem Zarif<sup>1</sup>,  
Medhat M. Elsayed<sup>1</sup>, Hisham Sleem<sup>1</sup>, Ahmed Magdy<sup>1</sup>, Magid Alabbadi<sup>1</sup>, Farid M. El Gendy<sup>1</sup>, Tarek Abd El  
Ghafar<sup>1</sup>, Abdelkader A. Elbakery<sup>1</sup>, Waleed Abass<sup>2</sup>

<sup>1</sup>Cardiology Department, National Heart Institute, Egypt

<sup>2</sup>Cardio Surgery Department, National Heart Institute, Egypt



# Method:

## Patients:

Enrolled 886 ACS patients on 1/6/2011 and closed for statistical analysis on 30/12/2012.

All patients signed the hospital standard consent form which allows data collection for study and statistical purposes.

# In hospital management

**Table 3 Treatment and Mortality**

	All (886)	STEMI (482)	Other ACS (404)	Rescue revascularization
Thrombolysis	269/886 *	268	1	
PCI	265/886 (29.9%)	180 PPCI (37%)	46 (11%)	39 rescue
No revascularization	N/A	38 (7.8%) **	88%***	
Death	19/886 (2.1%)	14/482 (3.1%)	5/404 (1.2%)	

\* Mostly in 483 STEMI cases. \*\* 22 inconclusive ECG and 16 late presenters

\*\*\* No revascularization during index hospitalization

- **Thrombolytic therapy** was used in 264 out of 482 STEMI patients (54.7%)
- Streptokinase in 260 patients t-PA was used in 4 patients; 1 out of 404 NSTEMI received Streptokinase.

# Discussion: High Use of Thrombolysis

- PPCI was used in 37% of STEMI patients while thrombolytic, namely streptokinase were used in 55.6%.
- In spite of **24/7 Cath labs** and full involvement in **stent for life program**, less than 40% of STEMI patients coming to NHI undergo PPCI.
- **IV thrombolysis remains the strategy used in the majority of STEMI patients; this needs to be addressed.**

# Identified Unmet needs

## Patients

1. Teach patients about heart attacks and importance of time.
2. Encourage them to call the emergency if symptoms were felt
3. Special patient awareness campaigns around the pilot centers to monitor the effect of the campaigns.

## EMS

1. EMS team awareness for the diagnosis of MI.
2. To implement all needs for MOH and project coordination.
3. Transporting the data from the car to the hospital.

## Hospitals

1. Physician education.
2. MOH support.
3. Cath lab equipments and needs including physicians and nurses and techs.

## Registry

1. Mortality rate in the registry.
2. Need to increase centers in registry phases.



## إنقاذ مرضى جلطات القلب أول ٩٠ دقيقة

ومدير مشروع دعامة الحياة، أن اختيار المراكز الطبية التي يمكنها الاشتراك في المشروع يتم بناء على معايير عالمية يجب توافرها للخدمة والأطباء والفنيين، ويقوم بتقييم ذلك لجنة دعامة للحياة في المشروع، بحيث يقوم المركز بإجراء ٤٠٠ عملية توسيع وتركيب دعامة عادية في العام، وأن يكون الطبيب الواحد قام بإجراء ٧٥ حالة قسطرة في العام، وأن يتوفر في المركز عدد من الكفاءات الطبية المتخصصة.

تم اختيار ٢٢ مركزا في ١٢ محافظة تابعين لوزارة الصحة والجامعة للمشاركة في مشروع دعامة الحياة التي تمثل «المبادرة الوطنية لإنقاذ مرضى الشرايين التاجية والقلب» من الجلطات في أول ٩٠ دقيقة، عن طريق ضمان وصولهم إلى المستشفيات وإجراء قسطرة قلبية لتركيب دعامة أو اذابة جلطة مجانا صرح بذلك الدكتور عادل عدوي وزير الصحة. ومن جانبه أوضح الدكتور محمد صبحي استاذ امراض القلب جامعة الاسكندرية



# Conclusion

- SFL now SSL Egypt was a successful first step in the right direction.
- In 2018 the Egyptian MOH formed a National Heart Attack committee mainly formed from the Original SFL members aiming at National level management of Acute Coronary Syndromes.



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# Thank You



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