

Testing A Minimum Notification Criteria To Increase Potential Donor Referral In An Emergency Department: An Italian Hospital Experience In ACCORD Joint Action

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## The Joint Action

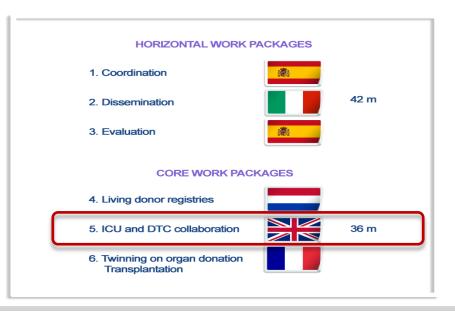


#### EU Organ Directive 2010/53/EU



### ACCORD: Achieving Comprehensive Coordination in ORgan Donation in EU

#### WORKPLAN





### Italian Hospitals and ACCORD



San Camillo – Forlanini Hospital - Rome





### San Camillo Organ Donation Team



San Camillo – Forlanini Hospital - Rome

Members Organ Donation Team:

Clincal Leads : 2 Dedicated Nurse: 1 Collaborating Nurses: 10

	ICU* Beds	Nr of actual DBD Donors (2013)	Nr of Corneal Tissue Donors (2013)	Nr of actual DCD Donors
San Camillo Hospital	34	13	40	



\* Shock & Trauma ICU, Cardiac Surgery ICU and Neuro Surgical ICU

Forstering Intensive Care and Transplant Coordinators Collaboration



### WP5 Methods :

- 1. Study on the Variations in End of Life Care Pathways for patients with devastating brain injury in Europe
- 2. Improvement Methodology Training and implementation: PDSA Cycle

### **Results EOL Study: General Information**

#### **28** Audited Patients

Age		
	Ν	%
18-34	3	10,7
35-49	2	7,1
50-59	1	3,6
60-69	5	17,9
70 +	17	60,7
Total	28	100,0

Main general cause of death % Ν **Cerebral Neoplasm** 1 3,6 Cerebrovascular 60,7 17 **Accidents** 10 35,7 Trauma 100,0 **Total** 28



### Patterns of Care

#### **28 Audited Patients**

Statement best describing the care of the patient during his/her final illness				
	Ν	(%)		
Full active treatment on ICU until diagnosis of BD	16	(57,1%)		
Full active treatment until unexpected cardiac arrest from which the patient could not be resuscitated				
Admitted to ICU to incorporate organ donation into end-of-life care				
Full active treatment on ICU until the decision of withdrawal or limiting life sustaining therapy was made	2	(7,1%)		
Not admitted or admitted to ICU but subsequently discharged	10	( 35,7%)		

### **Results EOL Study: General Information**

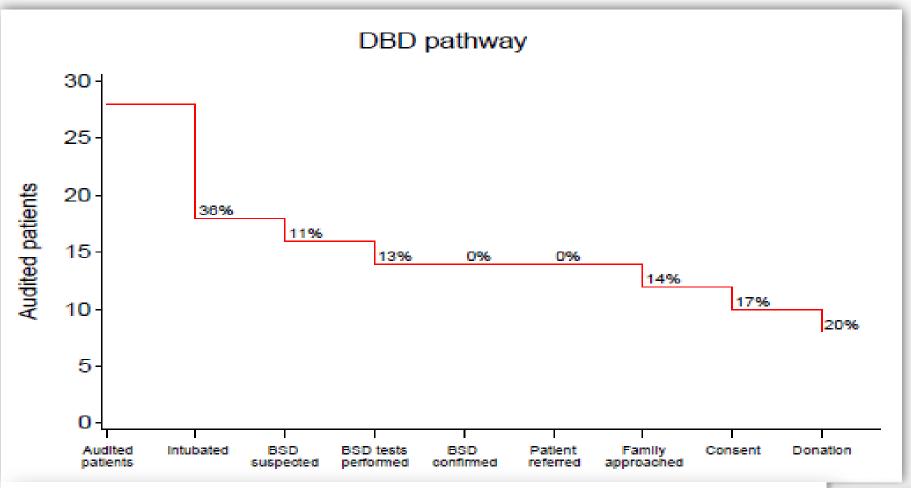
#### **28 Audited Patients**

Unit where death was confirmed		
	Ν	%
Adult Intensive Care	13	46,4
Specialised Neurosurgical Intensive Care	4	14,3
Emergency Department	5	17,9
Medical Ward	4	14,3
Stroke Unit	1	3,6
Other	1	3,6
Total	28	100,0



### Where are Potential Donors lost?

#### **28 Audited Patients**

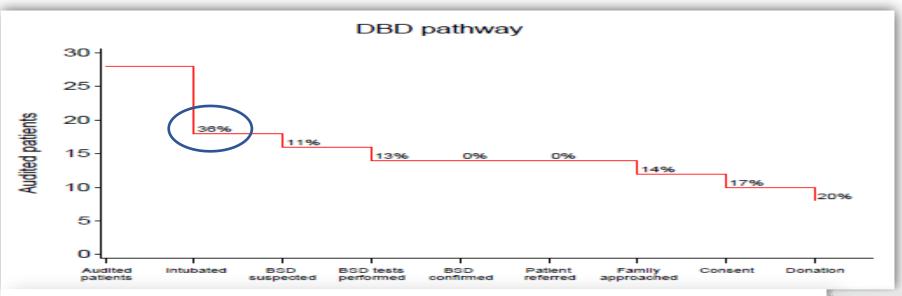


Note: annotated percentages represent the percentage of remaining patients that are lost at each stage, not from all audited patients.

## Intubation & Ventilation

Was the patient intubated and receiving mechanical ventilation via an endotracheal or tracheostomy tube at the time of death or at the time of the decision to withdraw or limit life sustaining treatment

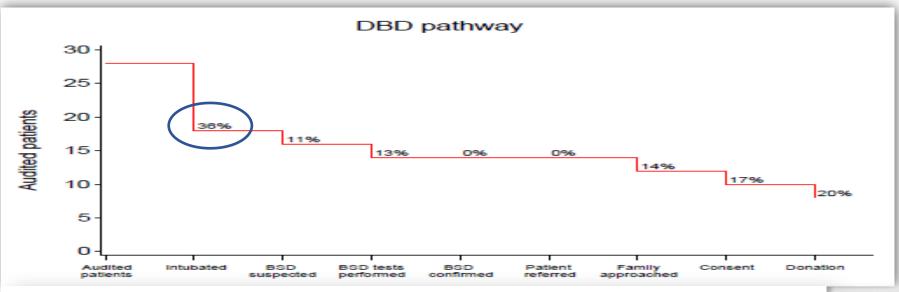
	Ν	(%)
No	10	(35,7%)
Yes	18	(64,3%)
Total	28	(100%)



Note: annotated percentages represent the percentage of remaining patients that are lost at each stage, not from all audited patients.

## Intubation & Ventilation

What was the reason for the patient not being intubated and receiving mechanical ventilation at that moment			
	Ν	(%)	
Not appropriate	4	(40%)	
Not needed	1	(10%)	
Not of overall benefit to the patient due to severity of the acute event	5	(50%)	

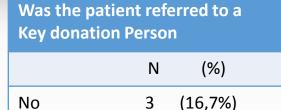


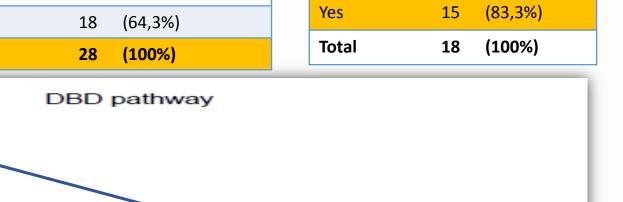
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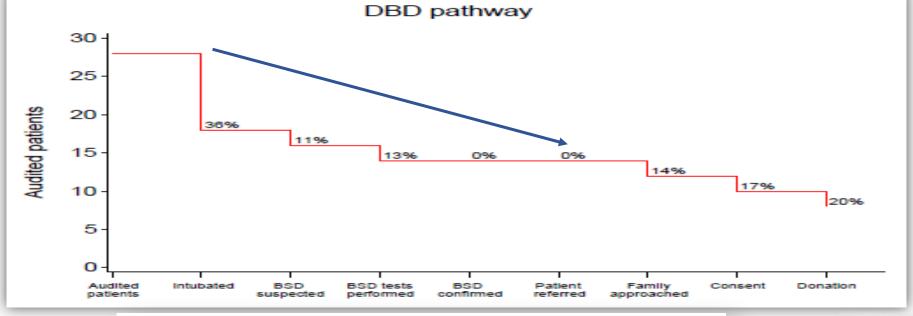
## Identification and Referral

Was the patient intubated and receiving mechanical ventilation via an endotracheal or tracheostomy tube at the time of death or at the time of the decision to withdraw or limit life sustaining treatment

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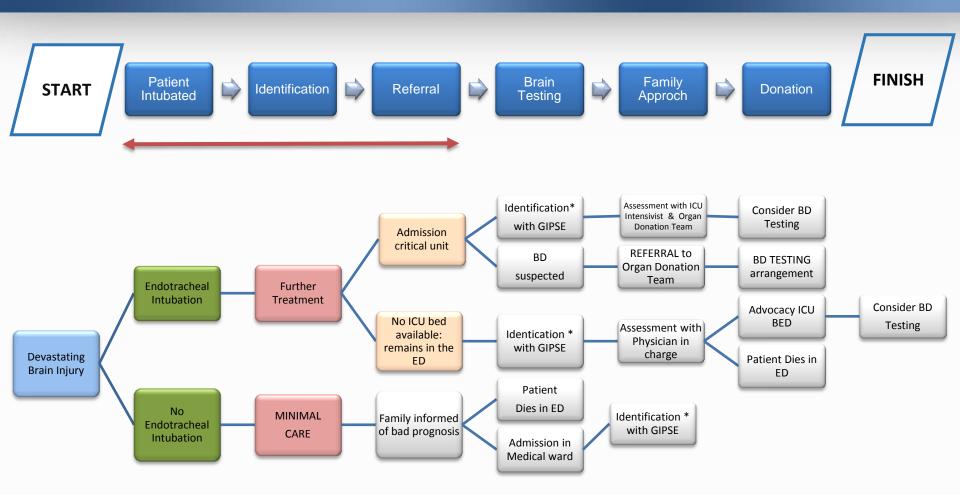






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#### Mapping Current Hospital Donation Process:

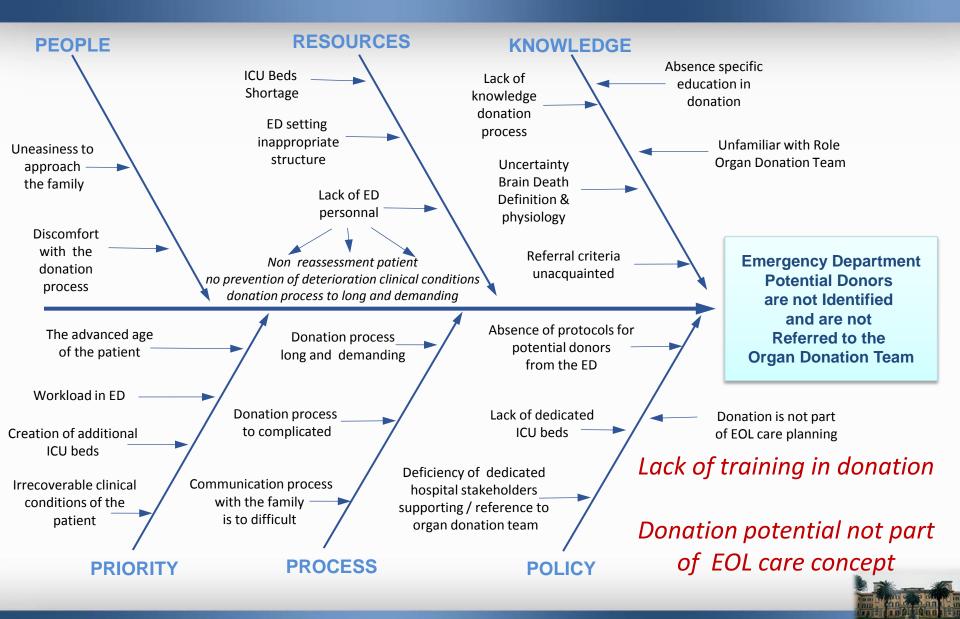


#### Non systematic and timely referral

\*The Potential Donor is identified by Organ Donation Team the day after admission in the hospital with the ED patient database (GIPSE).



### Root Cause Diagram



Barrier in donation to address: The lack of an identification and referral system of the person with devastating brain injury to the donor transplantation coordinator



## Study Aim :

### To test the introduction of a minimum notification criteria (G.I.V.E.) in the Emergency Department (ED)

Hypothesis:

The use of clinical triggers will result in a 100% referral rate from the ED.



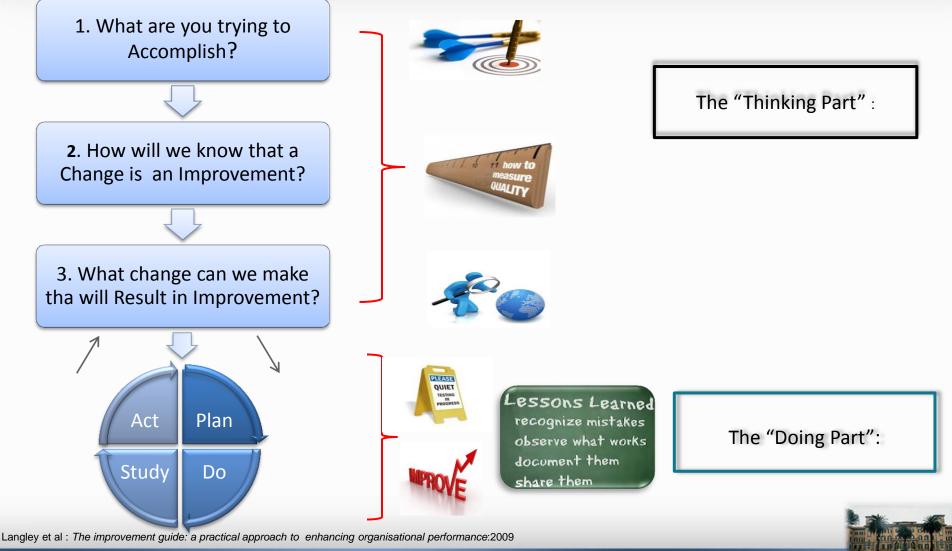
## Methods

# Plan Do Study Act Cycle



## The Model for Improvement

#### A MODEL FOR LEARNING & CHANGE



## Setting

#### San Camillo-Rome :

- Level One Trauma Center
- 870 beds
- ED admissions: 78.701\*



### Emergency Department Partecipants : ED Clinical Staff PDSA Cycle Testing : Feb-April 2014





**Seeking Stakeholders** 



### Minimum Notification Criteria

#### • Benchmarking & References



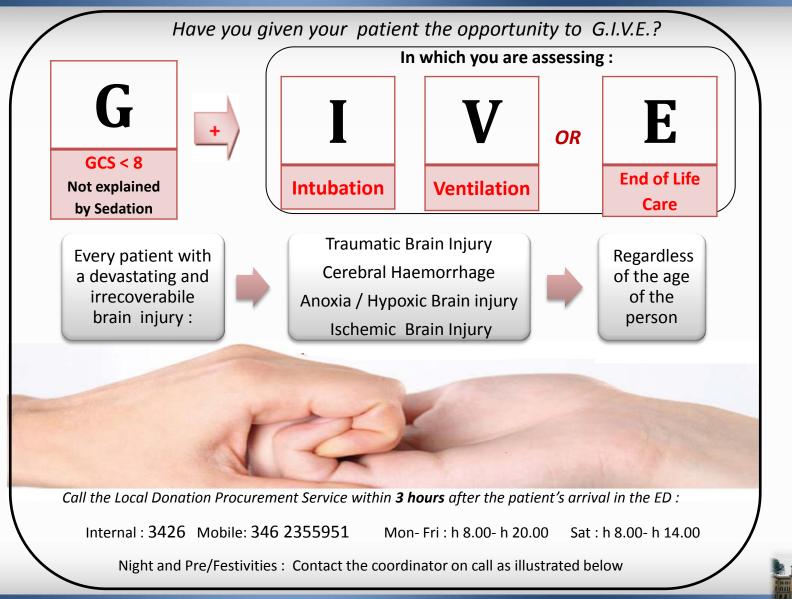
### Minimum Notification Criteria

- Benchmarking & References
- Establish clinical and time triggers:
  - Glasgow Coma Score < 8</p>
  - Intubation & Ventalation / End Of Life
  - Referral < 3 Hours from ED Arrival</li>
- GIVE POSTER

Organ Donation Collaborative Guide : Improvement Through Collaboration (CCDT) , 2007 Good Pratice Guidelines in the process of Organ ONT, Mantesanz et al ,2012 Timely Identification and Referral of Potential Organ Donors, NHS, 2012 NICE clinical guideline 135, 2011 Shafer et al, 2006 Erle 2006 Neate S et al, 2012 THE ANZICS - 2013 Clinical Training Tool - http://educationresource.bhs.org.au/library/file/10/Clinical\_trigger.pdf Deceased Organ and Tissue Donation - http://www0.health.nsw.gov.au/policies/pd/2013/pdf/PD2013\_001.pdf Procedural Identification Criteria for the monitoring of brain injury in the Lazio Region – 2009 Organ Donation Campagne Poster 2013 - http://www.crtlazio.org/

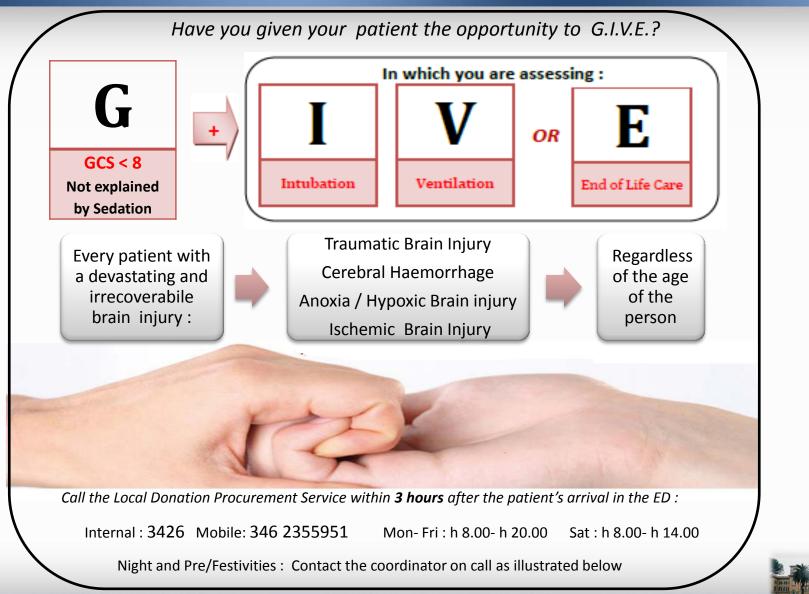


## **GIVE POSTER**



centro regionale trapianti lazio

## **GIVE POSTER**



centro regionale trapianti lazio

ccord

## **Data Collection**

- PDSA measurement sheet\*
- Improvement measures :
  - Referral Rate
  - Clinical Triggers Compliance
  - Timely Referral

#### THE PDSA MEASUREMENT SHEET FOR ACCORD

Project Name: The systematic & timely Identification and Referral of the Potential Donor in the ED

Center: A.O. San Camillo - Forlanini

Numero ID Progressivo : \_\_\_\_\_

Data			
Ora chiamata			
Cognome e Nome			
paziente			
Età			
Diagnosi			
Nome e Ruolo Chiamante			Med Inf
CLINICAL TRIGGERS			
GCS <8	SI	NO	
Intubato e Ventilato	SI	NO	
End of Life Care	SI	NO	
Chiamata entro 3 ore	SI	NO	

NOTE:			

Nome COMPILATORE

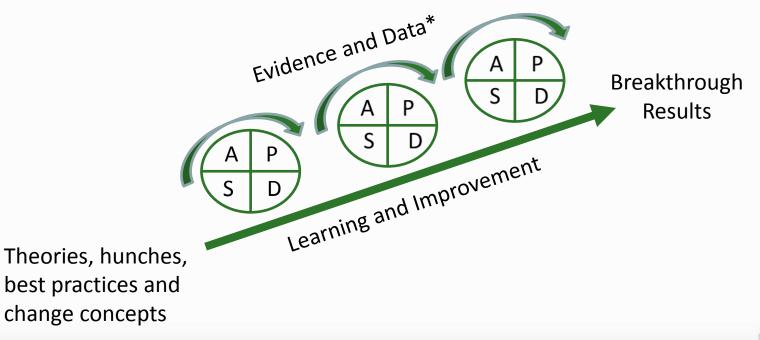
• Biweekly audit PDSA Cycle results

\*Adapted from : Improvement Through Collaboration: A reference guide for teams in organ and tissue donation Canadian Council for Donation and Transplantation , 2007



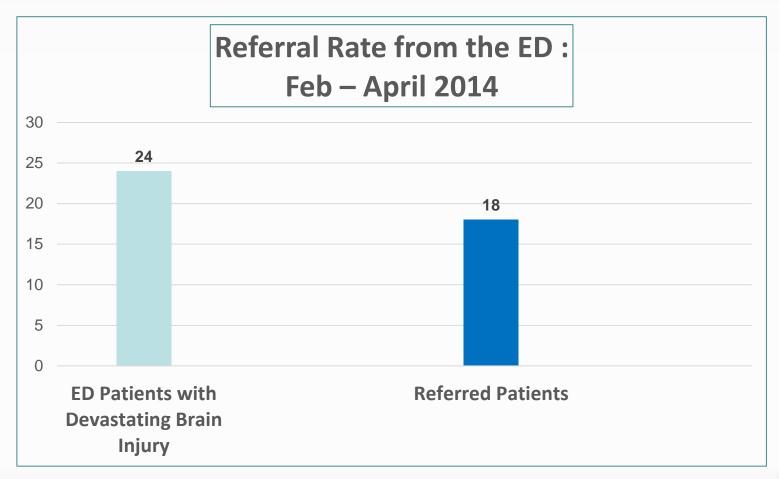
### **PDSA Cycle Testing**

- Consensus meeting with all stakeholders
- Written memo to ED Staff

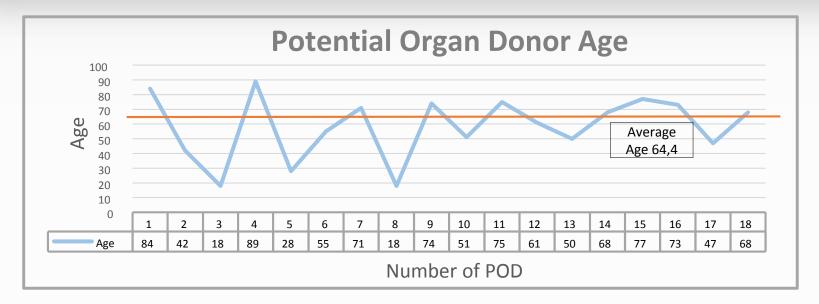


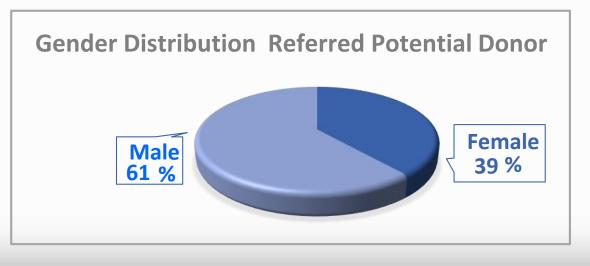
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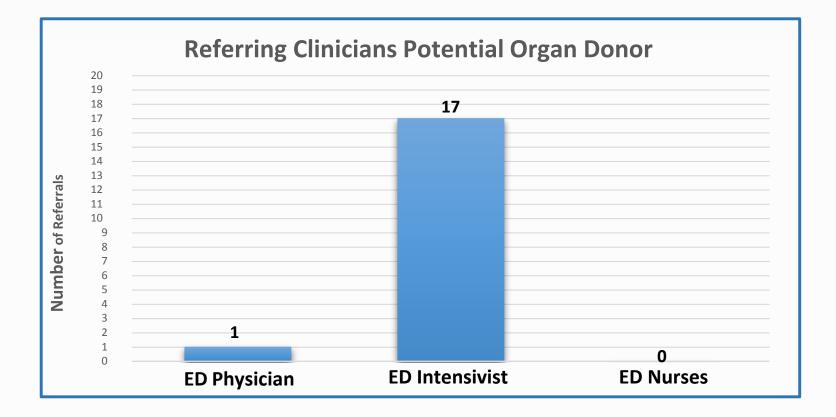






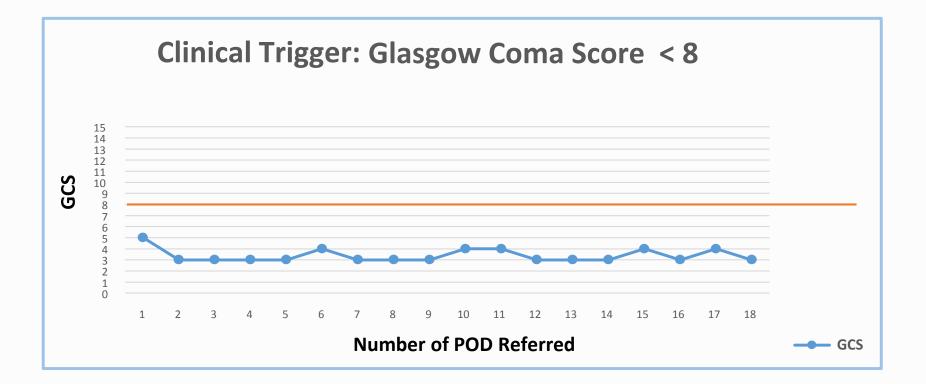








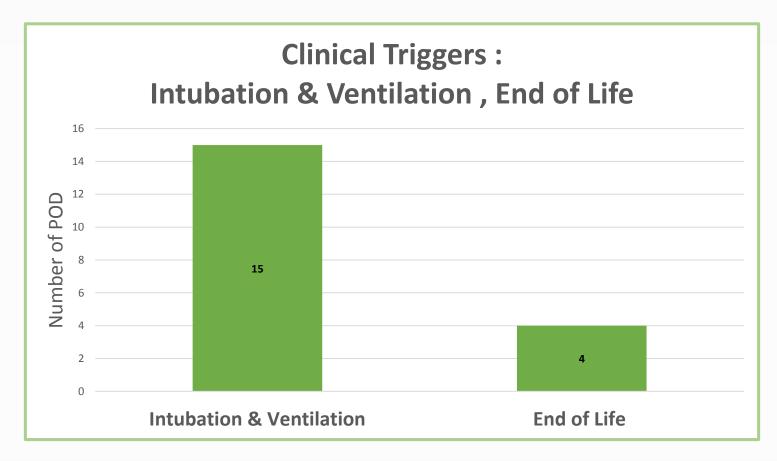
#### **Compliance to Clinical Triggers**





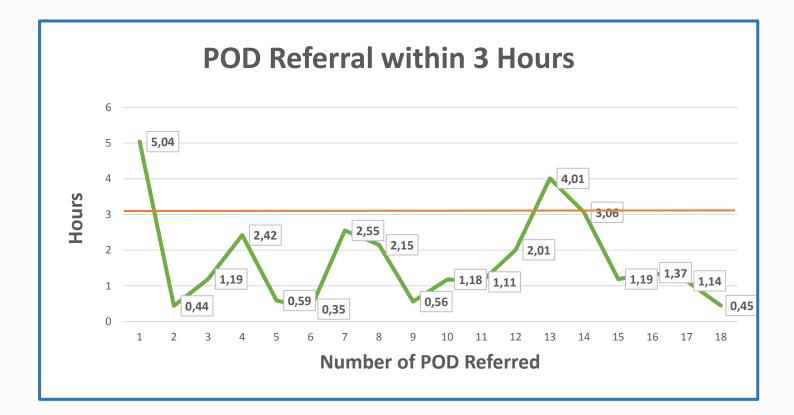


#### **Compliance to Clinical Triggers**





#### **Compliance to Time Trigger**





## Pitfalls



- Lack of motivation ED Nurses and Physicians
- Non attendance Biweekly audit of the results
- Low admission rate severe brain injury patients
- Overcrowding ED



## Conclusions



- GIVE increases communication between Transplant Coordinators and Intensivists
- Education in organ donation for ED Nurses and ED Physicians is mandatory
- Improvement methodology key structure to test changes in donation



## Thank you for this Opportunity







San Camillo – Forlanini Hospital Rome

