

## Who are you to ask?

- Donald Locasto, MD
  - Assistant Professor
  - Director, Division of EMS
- Medical Director, Cincinnati Fire Department



DEPARTMENT OF EMERGENCY MEDICINE





# Can (should) EMS agencies ask if a hospital is capable of treating certain patients?

You bet !!!



## What do you think the hospital's reaction will be?

Who the hell is EMS to ask us what we can and cannot do?





## Why?



- We are patient advocates
- Get the <u>right</u> patient to the <u>right</u> facility
- Empowers EMS to drive the care provided in the hospital.



## So let's do an ED Capabilities survey!!



Is this going to be an easy task?

NFW!!!

Is it worth the time and effort?

Absolutely !!!



### Hamilton County, Ohio



- 42 Fire/EMS departments
  - 42 Fire Chiefs
  - 42 EMS Officers
  - 42 Medical Directors
- 26 Hospitals
  - 26 CEOs
  - 26 ED Medical Directors
  - Three hospital systems
- Several competing Physician groups
  - Cardiology, Emergency Medicine





### Who can ask?



- Difficult for a single EMS/Fire department.
- Regional EMS coalitions
- Regional Fire Chiefs associations
- Regional medical director
- Physician Advisory Board



## Ohio EMS Region 1 Physician Advisory Board

- State of Ohio has 10 EMS Regions
- Each has a Regional Physician Advisory Board
- The survey was issued under the auspices of this Advisory Board.
  - Entity of the State EMS office
- Consultation with the State EMS Medical Director





## What hospital person should be asked these questions?

Hospital Administrator?

ED Charge Nurse?

• ED Docs?

ED Medical Dir



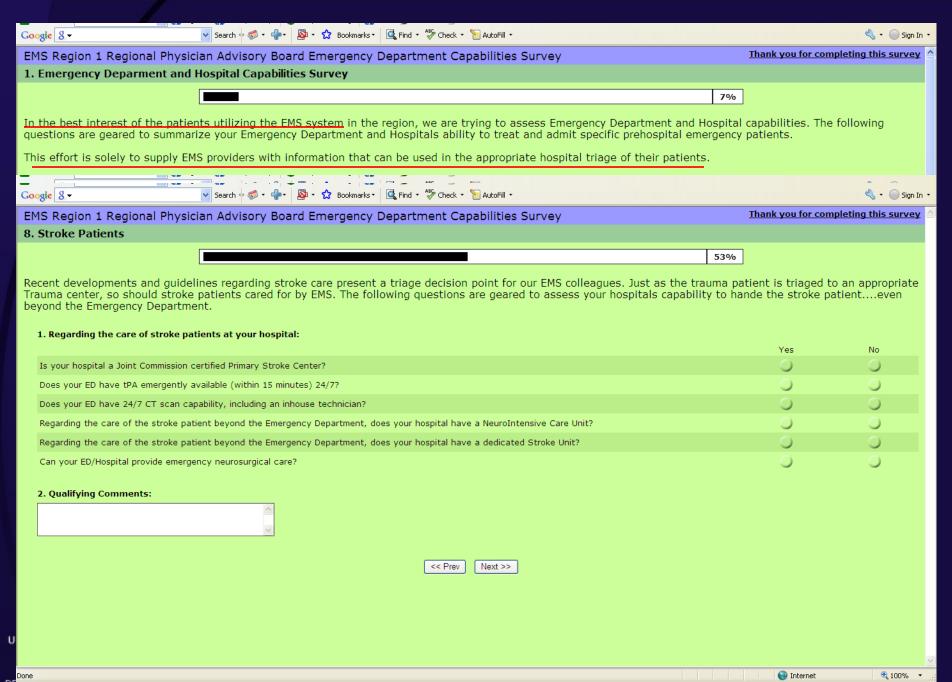


### How do you get this task done?

Make it as easy as possible.

- Internet based survey mechanism
  - Well crafted and tested
  - To the point



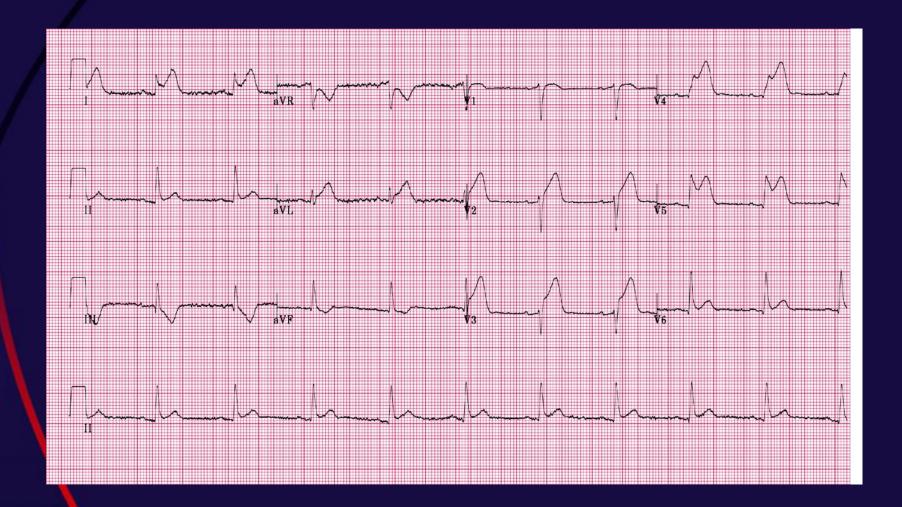


## What to ask? Size does matter!

- How much depth?
  - Emergency Department vs. In-house services

- How much breadth?
  - Low hanging fruit vs. expanded topics







#### AHA/ASA Guideline

#### Guidelines for the Early Management of Adults With Ischemic Stroke

A Guideline From the American Heart Association/ American Stroke Association Stroke Council, Clinical Cardiology Council, Cardiovascular Radiology and Intervention Council, and the Atherosclerotic Peripheral Vascular Disease and Quality of Care Outcomes in Research Interdisciplinary Working Groups

The American Academy of Neurology affirms the value of this guideline as an educational tool for neurologists.

7. Patients should be transported rapidly for evaluation and treatment to the closest institution that provides emergency stroke care as described in the statement (Class I, Level of Evidence B). In some instances, this may involve air evacuation. EMS personnel should notify the receiving ED so that the appropriate resources may be mobilized.

(Stroke. 2007;38:1655-1711.)



## Circulation



JOURNAL OF THE AMERICAN HEART ASSOCIATION

Learn and Lives

#### Part 4: Advanced Life Support

Circulation 2005;112;III-25-III-54

DOI: 10.1161/CIRCULATIONAHA.105.166474

Circulation is published by the American Heart Association. 7272 Greenville Avenue, Dallas, TX

#### Treatment Recommendation

Unconscious adult patients with spontaneous circulation after out-of-hospital cardiac arrest should be cooled to 32°C to 34°C for 12 to 24 hours when the initial rhythm was VF. Cooling to 32°C to 34°C for 12 to 24 hours may be considered for unconscious adult patients with spontaneous circulation after out-of-hospital cardiac arrest from any other rhythm or cardiac arrest in hospital.





### **Expanded Topics**

- Pediatric issues
- Burns
- OB/Gyn issues
- Specific Trauma Care
  - Hand Injury
  - Eye Injury

- Decontamination
- Hyperbaric Emergencies
- Poisoning/Toxicologic
   Emergencies
- Psychiatric Emergency Care



## It's Pucker time!!!







## What is the most Important Question?







### Cincinnati Response

#### Responded (18)

- Adams County Medical Center
- Children's Hospital Medical Center
- Children's Liberty Township
- Bethesda North Hospital
- Good Samaritan Hospital
- Mercy Hospital Anderson
- Mercy Hospital Fairfield
- University Hospital
- Veteran's Medical Center
- Bethesda Arrow Springs
- Mercy Western Hills
- Mercy Harrison
- Jewish Hospital
- Brown County General Hospital
- Mercy Mt Airy
- Mercy Clermont
- Dearborn County Hospital
- Christ Hospital

#### No Response (8)

- Middletown Regional/Atrium
- St Elizabeth MC North
- St Elizabeth MC South
- St. Luke's Hospital East
- St. Luke's Hospital West
- McCullough-Hyde Hospital
- Ft. Hamilton Hospital
- Deaconess Hospital

70%





### **Problem: Non responders**





"The capabilities of hospitals that have not completed this survey are unknown."



### Problems/Issues

- Can we validate accuracy?
- Maintenance and upkeep ever changing medical community.
- Rural vs urban

How much is too much information?



Line	EMS Region 1  Emergency Department and Hospital Capabilities (06/2008)  This is a guide for all EMS providers to assist in the appropriate triage of their patients based on primary medical or surgical issue. Each facility Emergency Department Medical Director completed this survey.  Specific questions regarding any of these reported capabilities should be directed to that specific Emergency Department.  The capabilities contained in this report were voluntarily reported by each ED. Verification of this information has not been performed.  Always follow protocols for critically ill patients.	Adams County Medial Center	Children's Hospital Medical Center	Children's – Liberty Township	Bethesda North Hospital	Good Samaritan Hospital	Mercy Hospital Anderson	Mercy Hospital Fairfield	University Hospital	Veteran's Medical Center	Bethesda Arrow Springs	Mercy Western Hills	Mercy - Harrison	Jewish Hospital	Brown County General Hospital	Mercy Mt Airy	Mercy Clermont	Dearborn County Hospital	Christ Hospital
_ ' _	Pediatric patients:		CMC	CLT	BN	GS	MA	MIF	UH		BA	MW	МН	JH	BC	MM	MC	DC	CH
a	Is your ED prepared to stabilize a pediatric cardiopulmonary arrest?	Υ	Y	Y	Υ	Υ	Υ	Y	Υ	N	Υ	Υ	Υ	Υ	Y	Y	Υ	Υ	Y
b	Can you admit a resuscitated pediatric patient to your hospital?	N	Υ	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
С	Is your ED prepared to stabilize a pediatric diabetic emergency?	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
d	Can you admit a pediatric patient with a diabetic emergency to your hospital?	N	Υ	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Υ	N
e	Is your ED prepared to handle pediatric febrile illnesses?	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Y	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Y
1	Can you admit a pediatric patient with a febrile illness to your hospital?	N	Υ	Υ	N	N	N	N	N	N	N	N	N	N	N	N	N	Υ	N
g	Is your ED prepared to stabilize pediatric patients with isolated minor orthopedic injuries?	Υ	Y	Υ	Υ	Υ	Υ	Υ	Υ	N	Υ	Υ	Υ	Υ	Υ	Y	Υ	Υ	Υ
h	Can you provide follow up outpatient care for pediatric patients with minor orthopedic injuries?	N	Υ	Υ	Υ	N	Υ	Υ	N	N	N	N	N	Υ	N	N	Υ	Υ	N
- 1	Is your ED prepared to stabilize a pediatric patient with minor trauma? (lacerations, single system trauma)	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
	Can you provide follow up outpatient care for a pediatric patient with minor trauma?	N	Υ	Υ	Υ	N	Υ	Υ	N	N	N	N	N	Υ	Υ	Υ	Υ	Υ	N
k	Is your ED prepared to stabilize a pediatric patient with major trauma? (2 or more systems,, etc)	Υ	Υ	Υ	Υ	N	Υ	Υ	Υ	N	Υ	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ
1	Do you typically transfer all pediatric major trauma patients to another hospital?	Υ	N	Υ	Υ	Υ	Υ	Υ	Υ	N	Υ	Υ	Υ	N	Υ	Υ	Υ	Υ	Y
m	Can you admit pediatric patients to a general inpatient setting?	N	Υ	Υ	N	N	N	N	N	N	N	N	N	N	N	N	N	Υ	N
n	Can you admit pediatric patients to an ICU setting?	N	Υ	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
2	Burns	AC	CMC	CLT	BN	GS	MA	MF	UH	VA	BA	MW	МН	JH	ВС	MM	MC	DC	СН
а	Is your ED prepared to treat minor burns?	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Y
b	Can you provide follow up outpatient care for the patient with minor burns?	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	Υ	Υ	Υ	N
С	Is your ED prepared to stabilize a patient with burns and inhalation injury?	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
d	Can you admit patients with burns and inhalation injuries to your hospital?	Υ	Υ	N	N	N	N	N	Υ	N	N	N	N	Υ	N	N	N	N	N
e	Is your ED prepared to stabilize patients with a major burn?	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	Υ	Υ	Υ	Υ	N	Υ	Υ	Υ	Υ
1	Can you admit patients with major burns to your hospital?	N	Υ	N	N	N	N	N	Υ	N	N	N	N	N	N	N	N	N	N
g	Can you admit patients with a diagnosis of smoke inhalation to your hospital?	Υ	Υ	N	Υ	Υ	Υ	Υ	Υ	Υ	N	Υ	N	Υ	N	Υ	Υ	Υ	N
3	Cardiac Arrest and STEMI patients	AC	CMC	CLT	BN	GS	MA	MF	UH	VA	BA	MW	МН	JH	BC	MM	MC	DC	CH
а	Does your hospital have a cardiac catheterization laboratory that is capable of treating patients on the 24 hours/day, 7 days/week basis?	N	Y	N	Υ	Υ	Υ	Υ	Υ	N	N	N	N	Υ	N	N	N	N	Υ
b	Does your Emergency Department initiate patient cooling post resuscitation from cardiac arrest?	N	N	N	N	Υ	Υ	N	Υ	N	N	N	N	Υ	N	N	N	N	Υ
С	Does your Intensive Care Unit continue the post resuscitation cooling process?	N	Υ	N	N	Υ	Υ	N	Υ	N	N	N	N	Υ	N	N	N	N	Υ
d	Can your hospital receive a 12-lead EKG transmitted by EMS?	N	N	N	Υ	Υ	Υ	N	Υ	N	N	N	N	Υ	N	Υ	N	N	Υ
4	Stroke Care	AC	CMC	CLT	BN	GS	MA	MF	UH	VA	BA	MW	MH	JH	BC	MM	MC	DC	CH
a	Is your hospital a Joint Commission certified Primary Stroke Center?	N	N	N	N	Υ	N	N	Υ	N	N	N	N	N	N	Υ	N	N	N
b	Does your ED have tPA emergently available (within 15 minutes) 24/7?	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	Υ	N	Υ	Υ	Υ	Υ	Υ	Υ
С	Does your ED have 24/7 CT scan capability, with an inhouse technician?	Υ	Υ	N	Υ	Υ	Υ	N	Υ	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
d	Regarding the care of the stroke patient beyond the ED, does your hospital have a Neuro ICU?	N	N	N	N	Υ	N	N	Υ	N	N	N	N	N	N	N	N	N	Υ
e	Regarding the care of the stroke patient beyond the ED, does your hospital have a dedicated Stroke Unit?	N	N	N	N	Υ	N	N	Υ	N	N	N	N	N	N	N	N	N	N
f	Can your ED/Hospital provide emergency neurosurgical care?	N	Υ	N	Υ	Υ	N	N	Υ	N	N	N	N	N	N	N	N	N	Υ
5	Obstetrical Emergencies	AC	CMC	CLT	BN	GS	MA	MF	UH	VA	BAS	MW	MH	JH	BC	MM	MC	DC	СН
	Is your ED prepared to handle imminent obstetrical emergencies (deliveries)?	Υ	Y	Υ	Υ	Υ	Υ	Υ	Υ	N	Υ	Υ	Υ	N	N	Y	Υ	Υ	Y
	Should EMS bring the following patients to your ED?																		
b	The pregnant patient with a minor injury/illness?	Υ	N	N	Υ	Υ	Y	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Y	Υ	Υ	Y
c	The pregnant patient with a pregnancy related issue/problem?	Ÿ	N	N	Ÿ	Ÿ	Ý	Ÿ	Ÿ	N	N	N	Ň	N	Ÿ	Ý	N	Ÿ	Ÿ
d	The pregnant patient involved in a motor vehicle accident?	Ÿ	N	N	Ÿ	Ý	Ý	Ý	Ÿ	N	Y	N	Ÿ	N	Ý	Ý	N	Ÿ	N
e	The pregnant patient with an imminent delivery and breech presentation?	N	N	N	Ÿ	Ÿ	Ÿ	Ÿ	Ÿ	N	N	N	N	N	Ÿ	N	N	Ÿ	Y
1	The preterm infant delivered in the field?	N	Ÿ	Y	Ÿ	Ÿ	N	N	Ÿ	N	N	Y	N	N	N	N	N	Ÿ	Ÿ
<u> </u>																			



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6 Trauma Patients  AC CMC CLT BN GS MA MF UH VA BA MW MH JH BC MM MC DC CLT BN GS MA MF UH VA BA MW MH JH BC MM MC
a Is your hospital an American College of Surgeons verified trauma center? – L=Level  N L1 N L3 N N N L1 N N N N N N N N N N N N N N N
Regarding the adult trauma patient:    b   Is your ED prepared to treat minor adult trauma? (single body system and stable physiologic parameters)   Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
b Is your ED prepared to treat minor adult trauma? (single body system and stable physiologic parameters)  Can you provide follow up outpatient care for the minor trauma patient?  Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
Can you provide follow up outpatient care for the minor trauma patient?  Can you provide follow up outpatient care for the minor trauma patient?  YNNNYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYY
d Is your ED prepared to stabilize major adult trauma? (2 or more systems and/or unstable vital signs, etc) e Do you typically transfer major trauma patients to another hospital?  The can your ED/hospital provide appropriate treatment of significant (non-minor) ocular trauma?  Note that the control of the control of trauma patients to another hospital?  Your substitution of the control of trauma patients to another hospital?  Your substitution of trauma patients to another hospital provide appropriate treatment of significant (non-minor) ocular trauma?  Note that the provide appropriate treatment of significant (non-minor) ocular trauma?  Note that the provide appropriate treatment of significant (non-minor) ocular trauma?  Note that the provide appropriate treatment of significant (non-minor) ocular trauma?  Note that the provide appropriate treatment of significant (non-minor) ocular trauma?  Note that the provide appropriate treatment of significant (non-minor) ocular trauma?  Note that the provide appropriate treatment of significant (non-minor) ocular trauma?  Note that the provide appropriate treatment of significant (non-minor) ocular trauma?  Note that the provide appropriate treatment of significant (non-minor) ocular trauma?  Note that the provide appropriate treatment of significant (non-minor) ocular trauma?  Note that the provide appropriate treatment of significant (non-minor) ocular trauma?  Note that the provide appropriate treatment of significant (non-minor) ocular trauma?  Note that the provide appropriate treatment of significant (non-minor) ocular trauma?  Note that the provide appropriate treatment of significant (non-minor) ocular trauma?  Note that the provide appropriate treatment of significant (
e Do you typically transfer major trauma patients to another hospital?  The can your ED/hospital provide appropriate treatment of significant (non-minor) ocular trauma?  Solution of the control of the control ocular trauma?  Solution ocular trauma patients to another hospital?  Yhave yha
r Can your ED/hospital provide appropriate treatment of significant (non-minor) ocular trauma?  g Can your ED/hospital provide appropriate treatment for a significant hand injury?  h Does your hospital have neurosurgical services available?  N N N N Y Y N N N N N N N N N N N N N
g Can your ED/hospital provide appropriate treatment for a significant hand injury?  N N N N Y Y N N N N N N Y N N N N N N
n Does your hospital have neurosurgical services available?  Regarding the treatment of significant ocular trauma:    Can your ED/hospital provide appropriate treatment of significant (non-minor) ocular trauma?    N N N N N Y Y N N N N N N N N N N N N
Regarding the treatment of significant ocular trauma:    Can your ED/hospital provide appropriate treatment of significant (non-minor) ocular trauma?   N Y Y Y Y N N N N N N N Y Y Y Y Y N N N N N N N Y Y N N Y N N N N N N Y Y N
Can your ED/hospital provide appropriate treatment of significant (non-minor) ocular trauma?   N Y Y Y Y N N Y N N N N N N Y Y Y Y Y
Can your hospital provide follow up outpatient care for this type of patient?   N Y Y Y Y Y Y Y Y Y N N N N Y Y N N N Y Y N N N N Y Y N N N N N Y N
Hand Injury  AC CMC CLT BN GS MA MF UH VA BA MW MH JH BC MM MC DC CLT BN GS MA MF UH WA BA MW MH JH BC MM MC DC CLT BN GS MA MF UH WA BA MW MH JH BC MM MC DC CLT BN GS MA MF UH WA BA MW MH JH BN GS MA MF UH WA BA MW MH JH BN GS MA MF UH WA BA MW MH JH BN GS MA MF UH WA BA MW MH JH BN GS MA MF UH WA BA MW MH JH BN GS MA MF UH WA BA MW MH JH BN GS MA MF UH WA BA MW MH JH BN GS MA MF UH WA BA MW MH JH BN GS MA MF UH WA BA MW MH JH BN GS MA MF UH WA BA MW MH JH BN GS MA MF UH WA BA
K Can your ED/hospital provide appropriate surgical treatment for a significant hand injury?  N Y N Y N Y N N N N N N Y N Y N Y N Y
Can your hospital provide follow up outpatient care for this type of patient?
Regarding a padent with significant traumatic nead injunes (gcs < 15)?
Can your ED provide appropriate treatment for noticints with airmificant traumatic head injuries (CCS)
Can your ED provide appropriate treatment for patients with significant traumatic head injuries (GCS < Y Y Y Y Y N Y N N Y N N Y N Y Y Y Y Y
To Can your hospital provide follow up outpatient care for this type of patient?
Regarding the patient with a traumatic spinal cord injury?  Solvent ED/hospital prepared to treat traumatic spinal cord injuries?  Y Y Y Y Y N Y N N N N N Y N Y N Y N Y
7 Mass Decontamination: Is your ED capable of decontaminating patients in the following situation
a More than 100 patients?
b Medium event - 5-100 patients?  Y Y N Y Y Y Y N N N N N Y Y Y Y Y Y Y
c Isolated small event - 1-5 patients?
d Will your ED rely on the local fire department to provide decontamination?
8 Hyperbaric Emergency Care AC CMC CLT BN GS MA MF UH VA BA MW MH JH BC MM MC DC CI
a Can your ED/Hospital provide emergent Hyperbaric Oxygen therapy?
9 Toxicologic Emergencies
a Can your ED stabilize/treat patients that are intoxicated/poisoned?
Description of the control of the co
can your ED stabilize/treat patients suffering from a toxic ingestion resulting from a suicide attempt?
Can you admit the toxic ingestion patient resulting from a suicide attempt to your hospital?
10 Psychiatric Emergency Care AC CMC CLT BN GS MA MF UH VA BA MW MH JH BC MM MC DC CI
a Is your department capable of handling the abusive/belligerent psychiatric patient?
Does your hospital have an inpatient psychiatric ward?
What inpatient psychiatric services are provided by your hospital?
AS AS AS AS AS AT AS AT
Key: P=Pediatrics, AS= Adolescent, AT=Adult, G=Geriatric



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_ 1	Pediatric patients:	AC	CMC	CLT	BN	GS	MA	MF	UH	VA	BA	MW	МН	JH	BC	MM	MC	DC	CH
а	Is your ED prepared to stabilize a pediatric cardiopulmonary arrest?	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
b	Can you admit a resuscitated pediatric patient to your hospital?	N	Υ	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N





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### Key:

Collect the data

 Have your medical director guide the usage of the data.



## Questions

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## Thank you



