

# Pediatric Global Sepsis Initiative

Fedora M

KDAR LF a MU Brno



World Federation of Pediatric Intensive  
& Critical Care Societies

## WORLD FEDERATION OF PEDIATRIC INTENSIVE & CRITICAL CARE SOCIETIES



*Creating a global environment  
where all children have access  
to a high standard of care.*



World Federation of Pediatric Intensive  
& Critical Care Societies

## WHAT WE DO

We promote a high standard of pediatric critical care worldwide through educational, scientific and charitable endeavors.



## HOW YOU CAN HELP

Support the work we do by donating or joining the World Federation of Pediatric Intensive & Critical Care Societies at:

[www.wfpiccs.org](http://www.wfpiccs.org)



World Federation of Pediatric Intensive  
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## ASSOCIATIONS

The WFPICCS collaborates with 25 different associations in Europe, Africa, North America, South America, Oceania & Asia.



Groups include national associations as well as allied health specific groups - all working together to ensure a higher standard of care for children everywhere.

Names and contacts can be found on our website at:

[www.wfpiccs.org](http://www.wfpiccs.org)



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## HOW WE DO IT

**Through collaborations with professionals worldwide, activities include:**

### Education

Bringing best practices to life through journal publications, conferences, fellowship programs, web access, and educational courses.

### Research

Advancing a high standard of pediatric and critical care through international collaboration, publications, facilitation, presentations, support and alignment of research initiatives.

### Clinical

Encouraging the development of new clinical treatments and appropriate application of new and existing critical care technologies and treatments to infants, children, and adolescents with life threatening illness.

## CURRENT WORK

### Initiatives

#### Sepsis

An ongoing worldwide, collaborative campaign to decrease the burden and ravages of sepsis on children.

#### WHO Handbook

Promotion of the WHO Handbook and educational courses.

### Journal

A bi-monthly publication featuring information on continuing medical education, original research, and critical care focused communications.

### Fellowships in Pediatric Critical Care

Providing opportunities for postgraduate clinical, research and training world wide.

### WFPICCS Website

Provides updates on research, regional meetings, conferences and educational links.

## EVENTS

🌐 World Congress (*held every 4 years*)

🌐 Annual Regional Meetings (*held several times annually*)

🌐 Topic Specific Conferences (*see website for times and locations*).

***Events are multidisciplinary and aim to transfer current knowledge and information on best practices in the care of critically ill children.***

[www.wfpiccs.org](http://www.wfpiccs.org)



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*Pediatric Sepsis Initiative*



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[SEPSIS INITIATIVE](#)

## Welcome to the WFPICCS website

The World Federation of Pediatric Intensive and Critical Care Societies (WFPICCS) was established in 1997. It arose from the vision of several world leaders in the field of Pediatric Critical Care who saw the opportunity to combine international expertise, experience and influence to improve the outcomes of children suffering from life threatening illness and injury.

WFPICCS is committed to a global environment in which all children have access to intensive and critical care of the highest standard. With this in mind, WFPICCS has defined its mission as exclusively

## Latest News

6<sup>th</sup> WORLD CONGRESS  
ON PEDIATRIC  
CRITICAL CARE  
SYDNEY, AUSTRALIA  
[www.pcc2011.com](http://www.pcc2011.com)



REACT



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HOME

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SEPSIS INITIATIVE

#### Sepsis Bundle Registry

Enter your bundle details in the Sepsis Bundles Registry and help us eradicate sepsis.  
» ENTER

#### Sepsis Guidelines

Find out how you can diagnose and manage sepsis and septic shock using our guidelines and videos.

» ENTER

## International Pediatric Sepsis Initiative

A worldwide campaign to decrease the burden and ravages of sepsis in children.

### Chair(s):

Niranjan Kissoon, MD  
Acute and Critical Care Medicine  
British Columbia's Children's Hospital  
Department of Pediatrics, University of British Columbia  
Email: [nkissoon@cw.bc.ca](mailto:nkissoon@cw.bc.ca)

Joseph Carcillo, MD  
University of Pittsburgh Physicians  
Department of Critical Care Medicine  
Children's Hospital of Pittsburgh  
Email: [carcilloja@anes.upmc.edu](mailto:carcilloja@anes.upmc.edu)

### Sepsis Initiative Committee members (at large):

|                           |                |  |
|---------------------------|----------------|--|
| Andrew Argent             | South Africa   | <a href="mailto:aargent@ich.uct.ac.za">aargent@ich.uct.ac.za</a>   |
| Peter Boone               | United Kingdom | <a href="mailto:peterdboone@yahoo.com">peterdboone@yahoo.com</a>   |
| Santiago Campos           | Ecuador        | <a href="mailto:scampos@life.com.ec">scampos@life.com.ec</a>       |
| Pedro Celiny Ramos Garcia | Brazil         | <a href="mailto:celiny@puccs.br">celiny@puccs.br</a>               |
| Trevor Duke               | Australia      | <a href="mailto:trevor.duke@rch.org.au">trevor.duke@rch.org.au</a> |



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## Pediatric Sepsis Initiative



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### Sepsis Guidelines

» You are here

### Sepsis Bundle Registry

» ENTER

- » Clinical Guidelines
- » Educational Resources
- » Videos

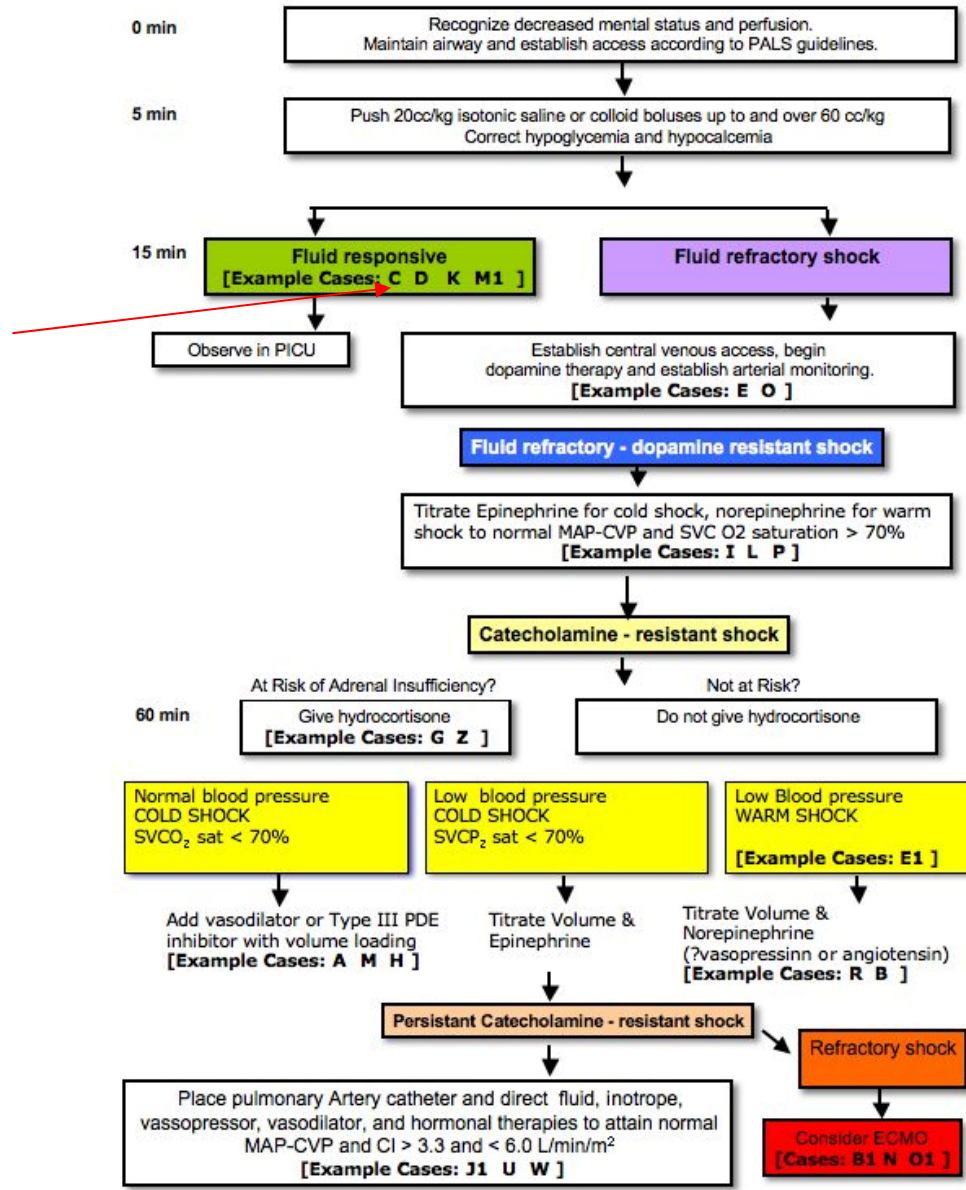
### Clinical Guidelines

[Clinical practice parameters for hemodynamic support of pediatric and neonatal patients in septic shock](#) (PDF)

[Surviving Sepsis Campaign guidelines for management of severe sepsis and septic shock](#) (PDF)

[Guidelines Part 1: Management of hemodynamic support](#) (html)

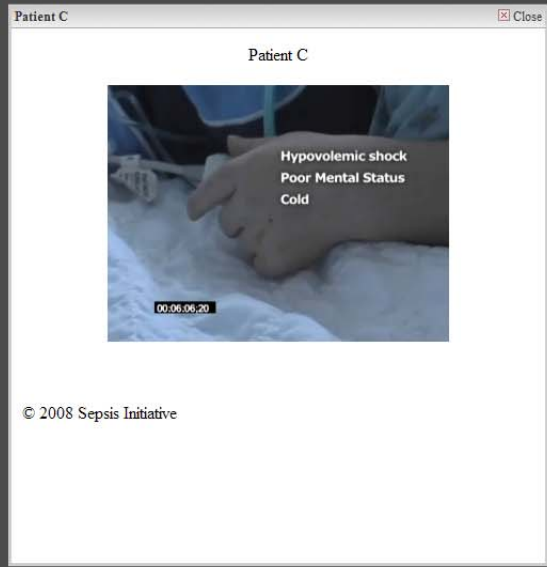
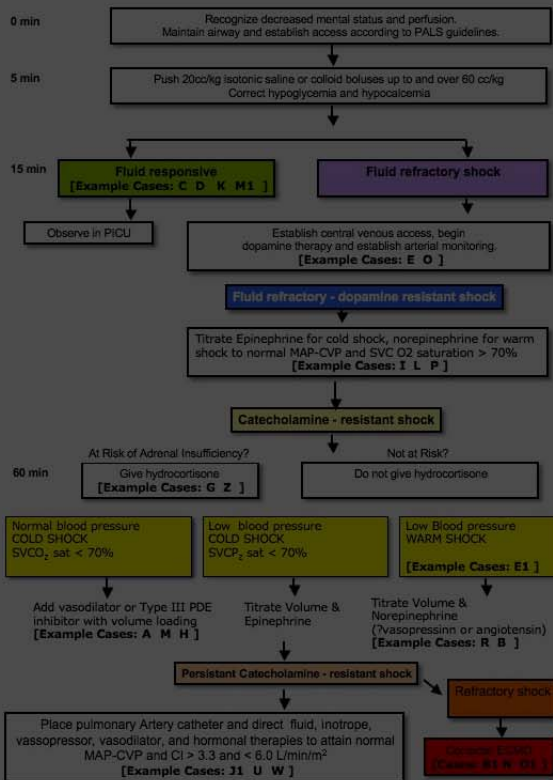
[Management of Septic Shocks](#) (html)



Guidelines Part 1

Recommendation for stepwise management of hemodynamic support with goals of normal perfusion and perfusion pressure (MAP-CVP) in infants and children with septic shock. Proceed to next step if shock persists.

Click on case letter to view patient video.



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**Clinical Guidelines**

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**Pediatric Sepsis Initiative**

LOGGED IN AS: Michal Fedora

[Children Hospital Brno \[, Czech Republic\]](#)

[BUNDLES SELECTION](#)

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### Sepsis Forum

Join the discussion and ask questions at the WFPICCS Forum.

» [ENTER](#)

### Sepsis Guidelines

Find out how you can diagnose and manage sepsis and septic shock using our guidelines and videos.

» [ENTER](#)

### Sepsis Bundle Registry

Enter your bundle details in the Sepsis Bundles Registry and help us eradicate sepsis.

» You are here

## Select Appropriate Bundle

- Your Facility: **Children Hospital Brno [, Czech Republic]**
- [Change Your Facility](#)
- [GROUP A](#): Non-Industrialized setting with child mortality rate > 30/1,000
- [GROUP B](#): Non-industrialized setting with child mortality rate < 30/1,000
- [GROUP C](#): Industrialized developing nation
- [GROUP D](#): Industrialized developed nation

**View your existing submissions.**

To view submissions you have already made please [CLICK HERE](#).

**ADMINISTRATIVE BUNDLE:**

|   | YES                              | NO                    |
|---|----------------------------------|-----------------------|
| WHO+IMCI guidelines available   | <input checked="" type="radio"/> | <input type="radio"/> |
| <b>Region has:</b>  |                                  |                       |
| - potable water   | <input checked="" type="radio"/> | <input type="radio"/> |
| - rural/urban health care workers                                     | <input checked="" type="radio"/> | <input type="radio"/> |
| - immunization program  | <input checked="" type="radio"/> | <input type="radio"/> |
| - Vitamin A supplementation   | <input checked="" type="radio"/> | <input type="radio"/> |
| - Zinc supplementation  | <input checked="" type="radio"/> | <input type="radio"/> |
| <b>Provide hospital emergency room/clinic stocked with:</b>           |                                  |                       |
| - IV fluids – D10, NS, LR, albumin (malaria belt)                     | <input checked="" type="radio"/> | <input type="radio"/> |
| - IV catheters  | <input checked="" type="radio"/> | <input type="radio"/> |
| - IV antibiotics/anti-malarials                                       | <input checked="" type="radio"/> | <input type="radio"/> |
| Oxygen with high flow capabilities (pneumonia)                        | <input checked="" type="radio"/> | <input type="radio"/> |
| ED/ICU available for patients   | <input checked="" type="radio"/> | <input type="radio"/> |
| High flow O2 available to all patients                                | <input checked="" type="radio"/> | <input type="radio"/> |
| Ventilator available for all patients                                 | <input checked="" type="radio"/> | <input type="radio"/> |
| Peripheral and Central IV catheters available to all patients         | <input checked="" type="radio"/> | <input type="radio"/> |
| Inotropes available for all patients                                  | <input checked="" type="radio"/> | <input type="radio"/> |
| Intravascular pressure monitoring available for all patients          | <input checked="" type="radio"/> | <input type="radio"/> |
| SVC or IVC/RA oxygen saturation monitoring available for all patients | <input checked="" type="radio"/> | <input type="radio"/> |
| Dialysis available for patients                                       | <input checked="" type="radio"/> | <input type="radio"/> |
| Infusion pumps available  | <input checked="" type="radio"/> | <input type="radio"/> |
| Cardiac Output monitoring available for all patients                  | <input checked="" type="radio"/> | <input type="radio"/> |
| CRRT available for all patients                                       | <input checked="" type="radio"/> | <input type="radio"/> |
| Plasma exchange available for all patients                            | <input checked="" type="radio"/> | <input type="radio"/> |
| ECMO available for all patients                                       | <input checked="" type="radio"/> | <input type="radio"/> |
| HFOV available for all patients                                       | <input checked="" type="radio"/> | <input type="radio"/> |
| iNO available for all patients for PPHN                               | <input checked="" type="radio"/> | <input type="radio"/> |
|   | YES                              | NO                    |

SUBMIT FORM

# World Federation of Pediatric Intensive Care and Critical Care Societies: Global Sepsis Initiative\*

Niranjan Kissoon, MD; Joseph A. Carcillo, MD; Victor Espinosa, MSc; Andrew Argent, MD, PhD; Denis Devictor, MD, PhD; Maureen Madden, RN, MSN; Sunit Singhi, MD; Edwin van der Voort, MD; Jos Latour, RN, PhD; and the Global Sepsis Initiative Vanguard Center Contributors

# World Federation of Pediatric Intensive Care and Critical Care Society

Niranjana K  
Denis Dev  
Jos Latou

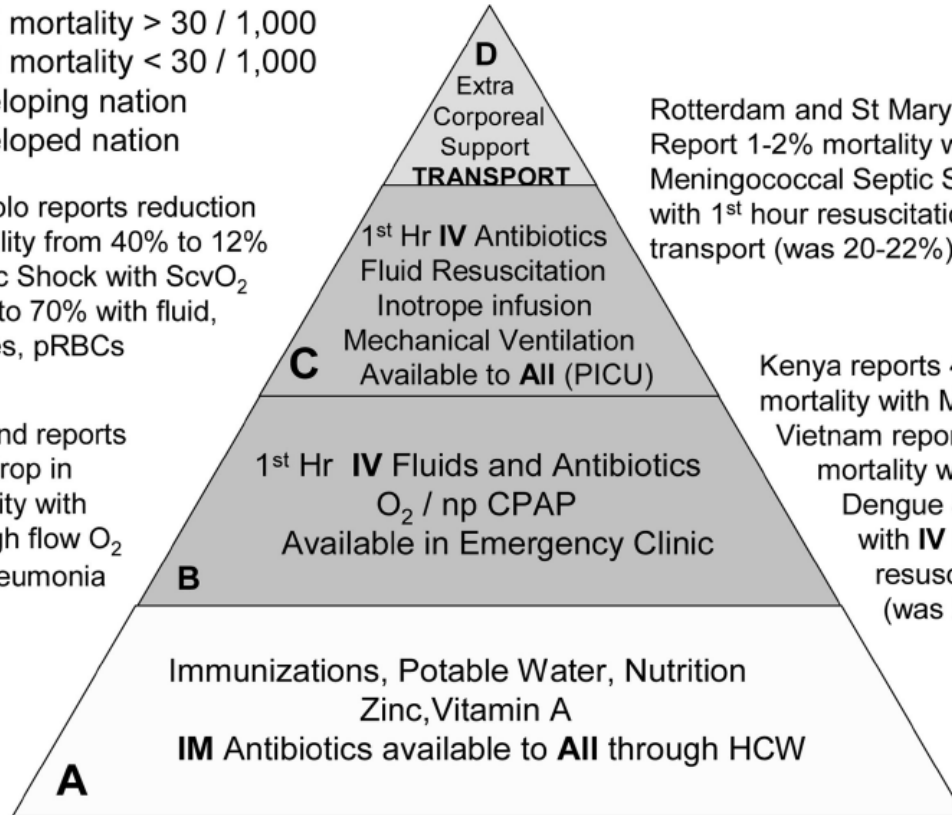
## GLOBAL NEWBORN AND CHILD SEPSIS INITIATIVE

### Bundles A-D

- A** Child mortality > 30 / 1,000
- B** Child mortality < 30 / 1,000
- C** Developing nation
- D** Developed nation

Sao Paulo reports reduction in mortality from 40% to 12% In Septic Shock with ScvO<sub>2</sub> Guided to 70% with fluid, Inotropes, pRBCs

Thailand reports 60% drop in mortality with NP high flow O<sub>2</sub> for Pneumonia



Rotterdam and St Mary's Report 1-2% mortality with Meningococcal Septic Shock with 1<sup>st</sup> hour resuscitation and transport (was 20-22%)

Kenya reports 4% mortality with Malaria, Vietnam reports 0-1% mortality with Dengue Shock with IV fluid resuscitation (was 24-60%)

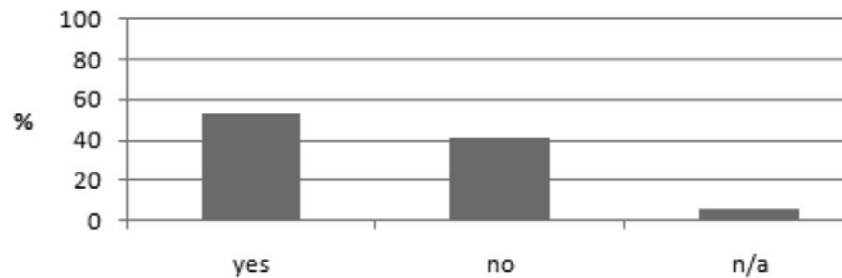
Gandchiroli, India reduced neonatal mortality from 16% to 2% with HCW + IM Abx

## Bundle A

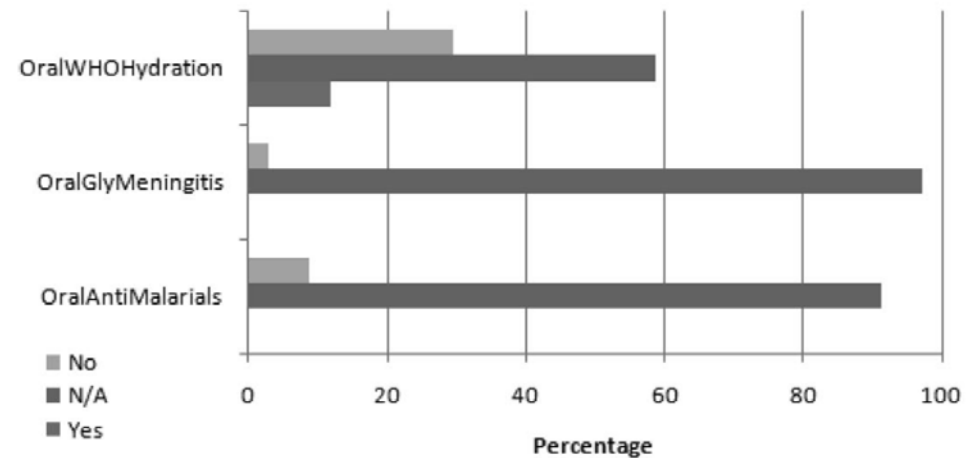
## Number of Cases

34

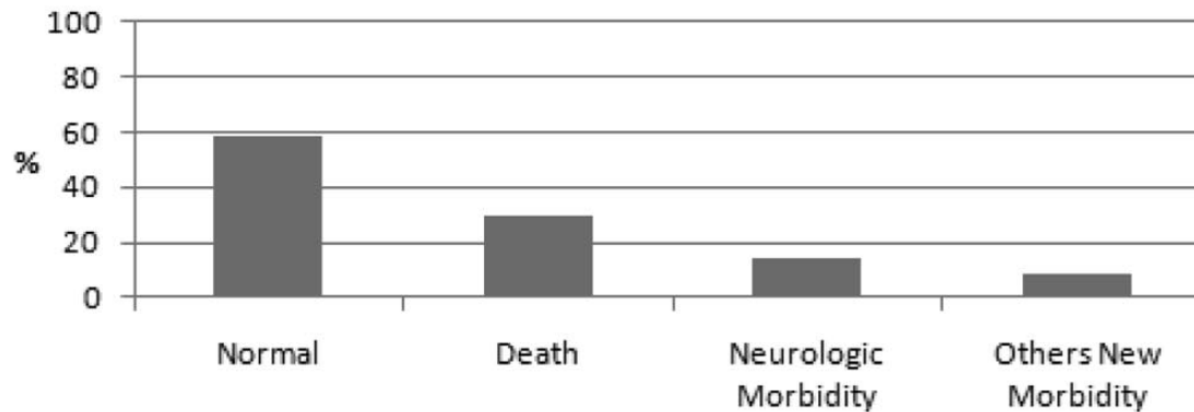
### Appropriate timing of antibiotics



### Treatment Method Usage

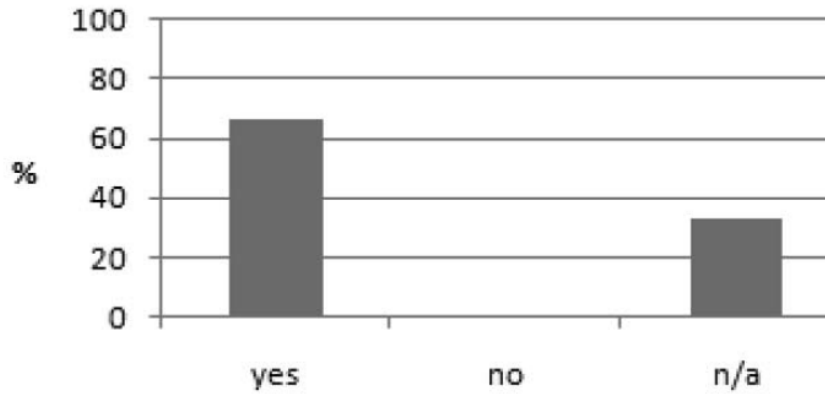


### Patient Outcomes

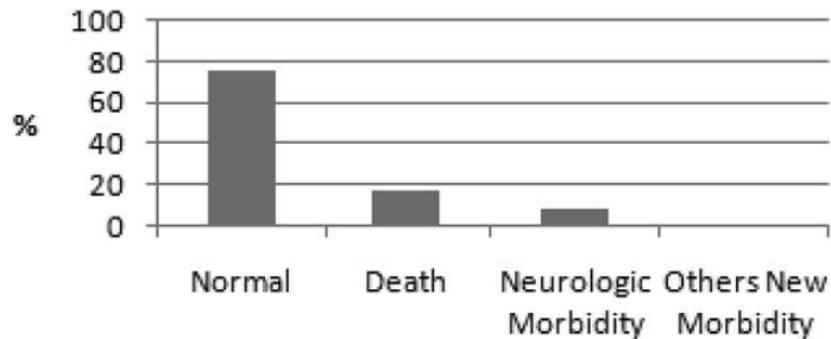


**Bundle B**      **Number of Cases**  
**12**

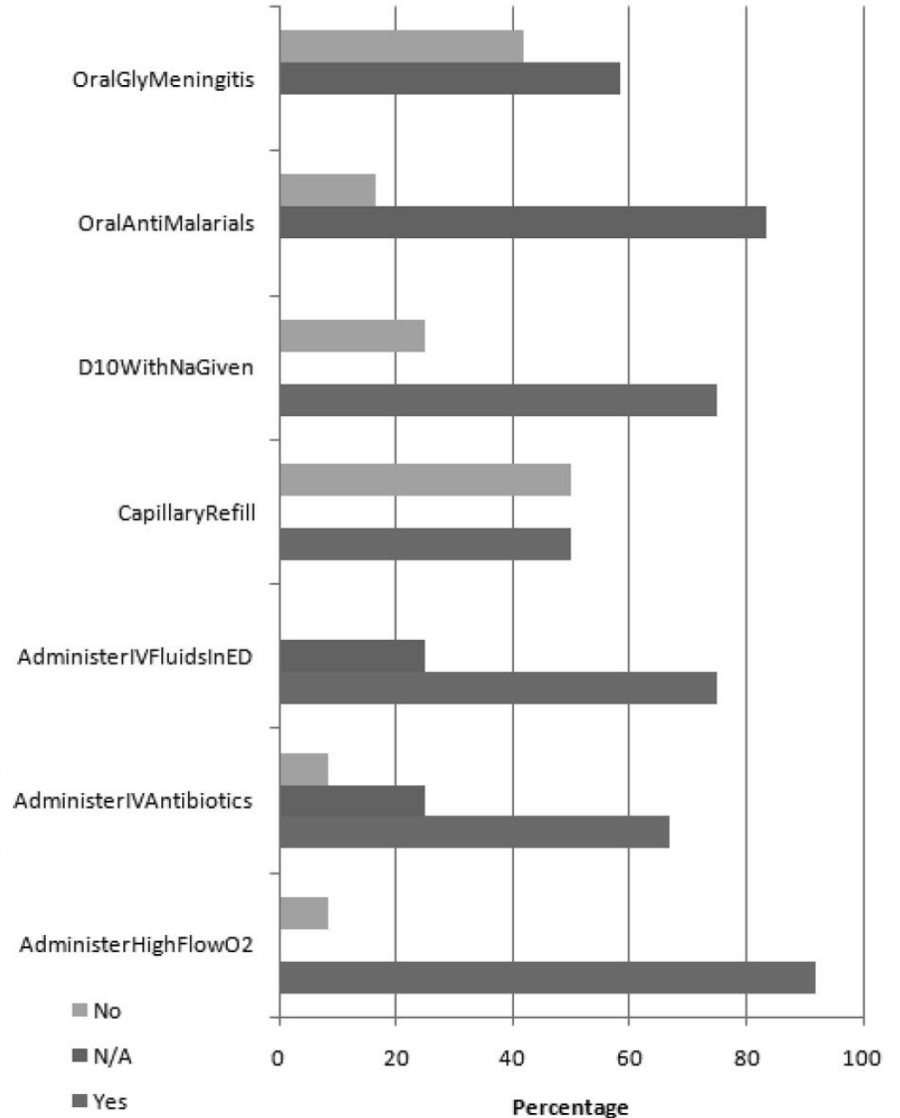
**Appropriate timing of antibiotics**



**Patient Outcome**



**Treatment Method Usage**

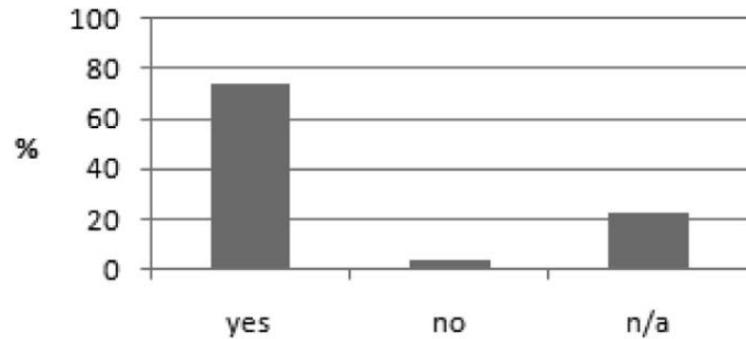


## Bundle C

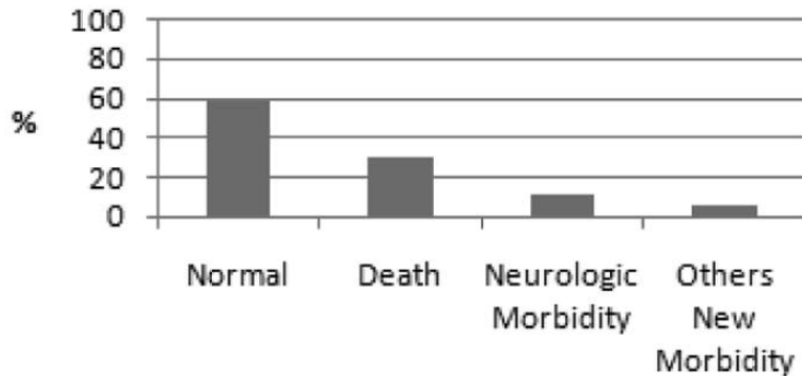
## Number of Cases

84

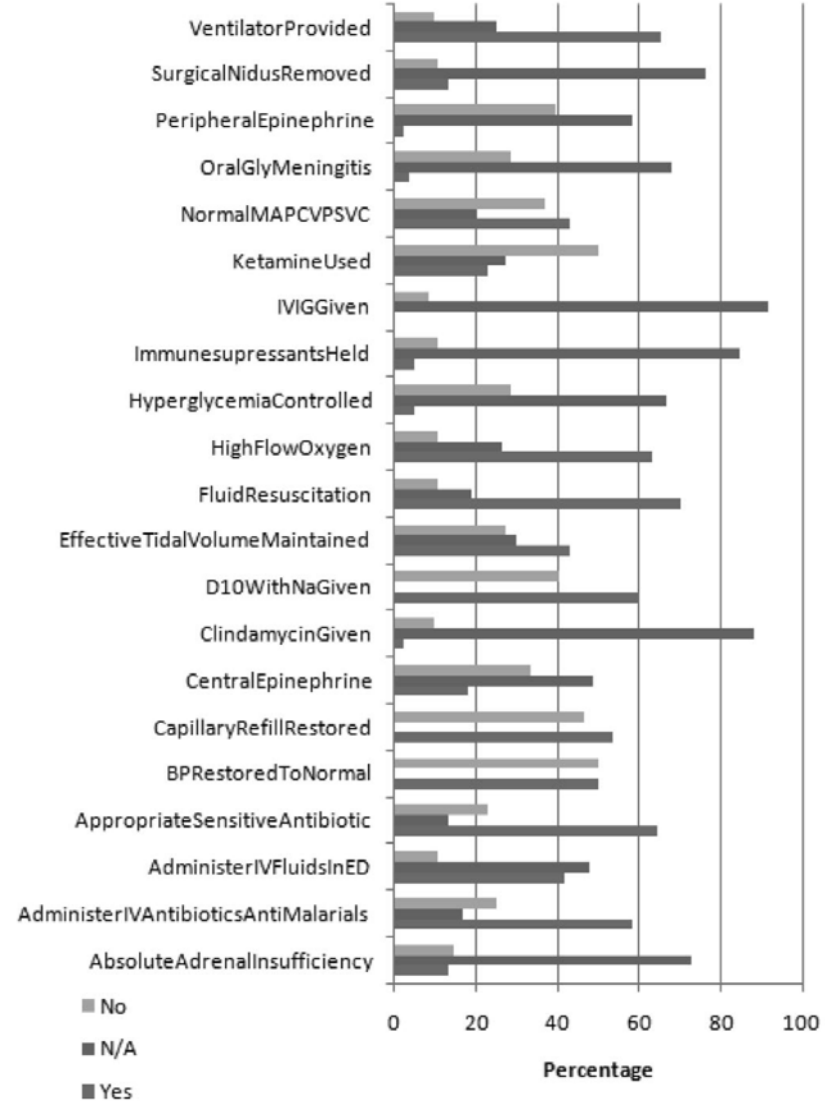
### Appropriate timing of antibiotics



### Patient Outcomes



## Treatment Methods Usage

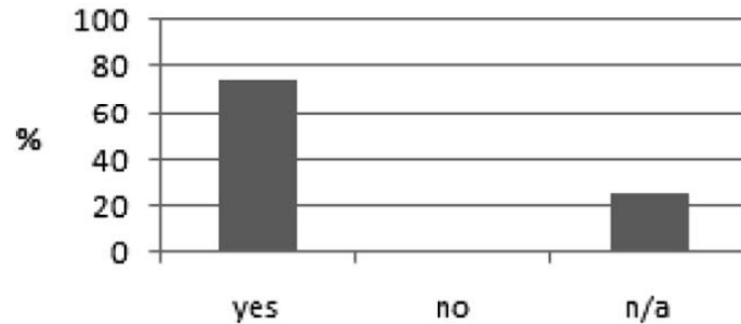


## Bundle D

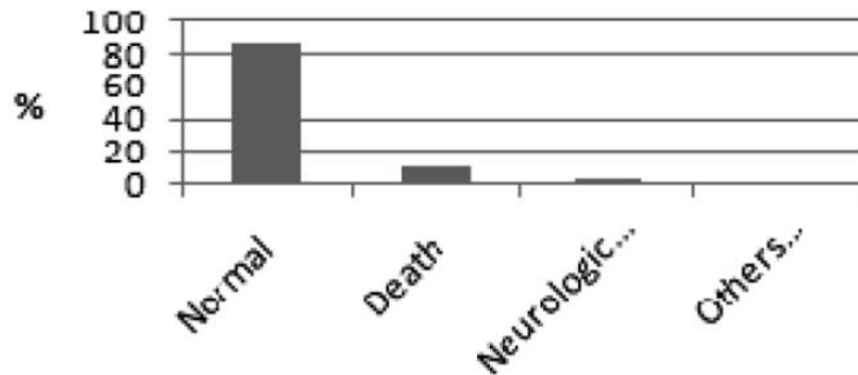
## Number of Cases

231

### Appropriate timing of antibiotics



### Patient Outcomes



## Treatment Method Usage

