

# **RISKS ASSOCIATED WITH THE TRANSFER OF CRITICALLY ILL CHILDREN**

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“THERE WILL ALWAYS BE INHERENT RISKS ASSOCIATED WITH UNDERTAKING CRITICAL CARE PATIENT TRANSPORTS, BE THEY INTERNAL OR EXTERNAL”

(Murphy 2004)



CRITICALLY ILL CHILDREN ARE CHILDREN WHO  
HAVE AN UNSTABLE PHYSIOLOGIC STATUS  
THAT REQUIRES SPECIALISED CARE TO  
PREVENT SECONDARY INSULTS OR DEATH

**(Chiocca 2000)**

**RISK OF MORTALITY AND MORBIDITY CAN BE GREATLY REDUCED AND OUTCOMES IMPROVED WITH:**

- Careful **Planning**
- Appropriately Qualified **Personnel**
- Selection & Availability Of Appropriate **Equipment**

## THE PRIORITY

To **IDENTIFY** & **MINIMISE** Any  
Potential Risk Associated with  
Transport



## WHAT CAN GO WRONG?

### Unknown Risks

- Weather
- Breakdown/crash
- Personnel sickness

## WHAT CAN GO WRONG?

### Known Risks

- Patient Deterioration
- Et Tube /IV fall out
- Equipment Failure
- Power Failure

“THE DECISION TO TRANSFER CRITICALLY ILL PATIENTS EITHER WITHIN A HOSPITAL OR TO ANOTHER FACILITY IS BASED ON AN ASSESSMENT OF THE POTENTIAL BENEFITS OF TRANSPORT WEIGHED AGAINST POTENTIAL RISK”

(WARREN ET AL 2004)

## **RISK ASSESSMENT**

**BE PREPARED FOR EVERY**

**EVENTUALITY**



## **RISK ASSESSMENT**

### **CLINICAL ACUITY OF CHILD**

- Response to Resuscitation
- Degree of Stabilisation



## **RISK ASSESSMENT**

### **TRANSPORT TEAM**

- Need to be able to anticipate needs and intervene before/as complications occur



## **RISK ASSESSMENT**

### **DOCUMENTATION**

“Clear documentation is a vital tool in the assessment of quality care during transfer”

(Cosgrave et al 2001)



## **RISK ASSESSMENT**

### **COMMUNICATION**

- Inter-Hospital
- Ambulance Service
- Family



## REDUCING THE RISKS

- Resuscitate & Stabilise

Meticulous stabilisation prior to transport is the key to avoiding complications during transfer (Wallace & Ridley 1999)

- No Rush

- Good preparation



## REDUCING THE RISKS

- Plan Transfer
- Communicate
- Mode of Transport
- Mode should take into account the urgency, mobilisation time, weather, traffic conditions.





## REDUCING THE RISKS

- Personnel Traveling
- Who Goes / Competency Level
- Appropriate knowledge base



## REDUCING THE RISKS

- Equipment
- Specific Transport trolley
- Audible and visible alarms
- Battery life
- Transport team get equipment ready



## TRANSPORT TROLLEY



## INFANT BABYPOD TRANSPORTER



## REDUCING THE RISKS

- Documentation
- Consent
- Nurse/Doctor letter
- Evidence of investigations
- Specific documentation for recording during transfer



# Children's University Hospital

TEMPLE STREET



## TRANSFER FORM

Emergency Department - The Children's University Hospital Temple Street Ph: 8784259 (Direct)

### Critical Care Patient Transfer form

Attach Addressograph here

Name of Parent/Guardian: \_\_\_\_\_

Parent/guardian informed of transfer: Yes  No

Parent/guardian accompanying patient: Yes  No

#### History of illness/injury

Allergies: Yes  No  Details: \_\_\_\_\_

Medications (regular) Yes  No  Details: \_\_\_\_\_

Previous medical/surgical history: Yes  No  Details: \_\_\_\_\_

Last Time Ate: Time: \_\_\_\_\_ Details: \_\_\_\_\_  
 Drank: Time: \_\_\_\_\_ Details: \_\_\_\_\_

Vaccinations: Up to date: Yes  No  Details: \_\_\_\_\_

#### Patient Assessment & Management

##### Airway:

Intubated: Yes  No  Oral  / Nasal  ETT Size: \_\_\_\_\_ Length: \_\_\_\_\_  
 Taped @: \_\_\_\_\_

Breathing: Self-ventilating: Yes  No  Non-rebreather mask: Yes  No  O<sub>2</sub>: \_\_\_\_\_ litres/min

Ventilation Mode: \_\_\_\_\_ VT(ml): \_\_\_\_\_ Freq(l/min): \_\_\_\_\_ Pmax (mbar): \_\_\_\_\_ Oxygen(%) \_\_\_\_\_

Cervical: Hard Neck Collar in situ: Yes  No  Time Placed on Spinal Board: \_\_\_\_\_

Circulation: Pulse Range: \_\_\_\_\_ Capillary Refill Range: \_\_\_\_\_ B.P. Range: \_\_\_\_\_

I.V. Fluids Infusing: Yes  No  Fluid Type 1: \_\_\_\_\_ Rate: \_\_\_\_\_ ml/HR  
 Fluid Type 2: \_\_\_\_\_ Rate: \_\_\_\_\_ ml/HR

I.V. line 1 Yes  No

I.V. line 2 Yes  No

I.V. line 3 Yes  No

Arterial Line: Yes  No  Central Line: Yes  No

Intraosseous Line: Yes  No  Size: \_\_\_\_\_ Location: \_\_\_\_\_

Disability: GCS on arrival: \_\_\_\_\_ GCS on departure: \_\_\_\_\_

#### Drugs:

#### Drugs Administered in Emergency Department

Time	Generic Drug Name	Dosage	Route

Blood Group Known: Yes  No  Blood Group: \_\_\_\_\_

Blood accompanying patient: Yes  No  No. of Units Travelling: \_\_\_\_\_

Tubes/Drains in situ: e.g. urinary catheters, chest drains, naso/oro gastric tubes

Type: \_\_\_\_\_ Site: \_\_\_\_\_ Size: \_\_\_\_\_

Type: \_\_\_\_\_ Site: \_\_\_\_\_ Size: \_\_\_\_\_

#### Investigations Performed:

X-rays: Lateral cervical spine  A-P Chest  A-P Pelvis  Other: \_\_\_\_\_

Bloods: FBC: Yes  NO  U&E: Yes  NO  Glucose: Yes  NO  Coag: Yes  NO

Venous Gas: Yes  NO  Group & Crossmatch: Yes  NO  Cultures: Yes  NO

PCR: Yes  NO  Others: \_\_\_\_\_

L.P. performed: Yes  NO  Other investigations: \_\_\_\_\_

Documentation: Neuro Obs: Yes  NO  Observation Sheet: Yes  NO

Fluid balance: Yes  NO  Copies of X-rays: Yes  NO  Drug Sheets: Yes  NO

Nursing Notes: Yes  NO  Doctors referral letter: Yes  NO

"Nurse to nurse" contact in receiving hospital: Yes  NO  Name: \_\_\_\_\_

#### Equipment:

Transport Bag Checked: Yes  NO  Transport Trolley Checked: Yes  NO

Blood Transport Box Required: Yes  NO

#### Other Relevant Information:

Signed: \_\_\_\_\_

## REDUCING THE RISKS

- Consent
- Verbal Consent is Acceptable
- Written Consent is recommended



## REDUCING THE RISKS

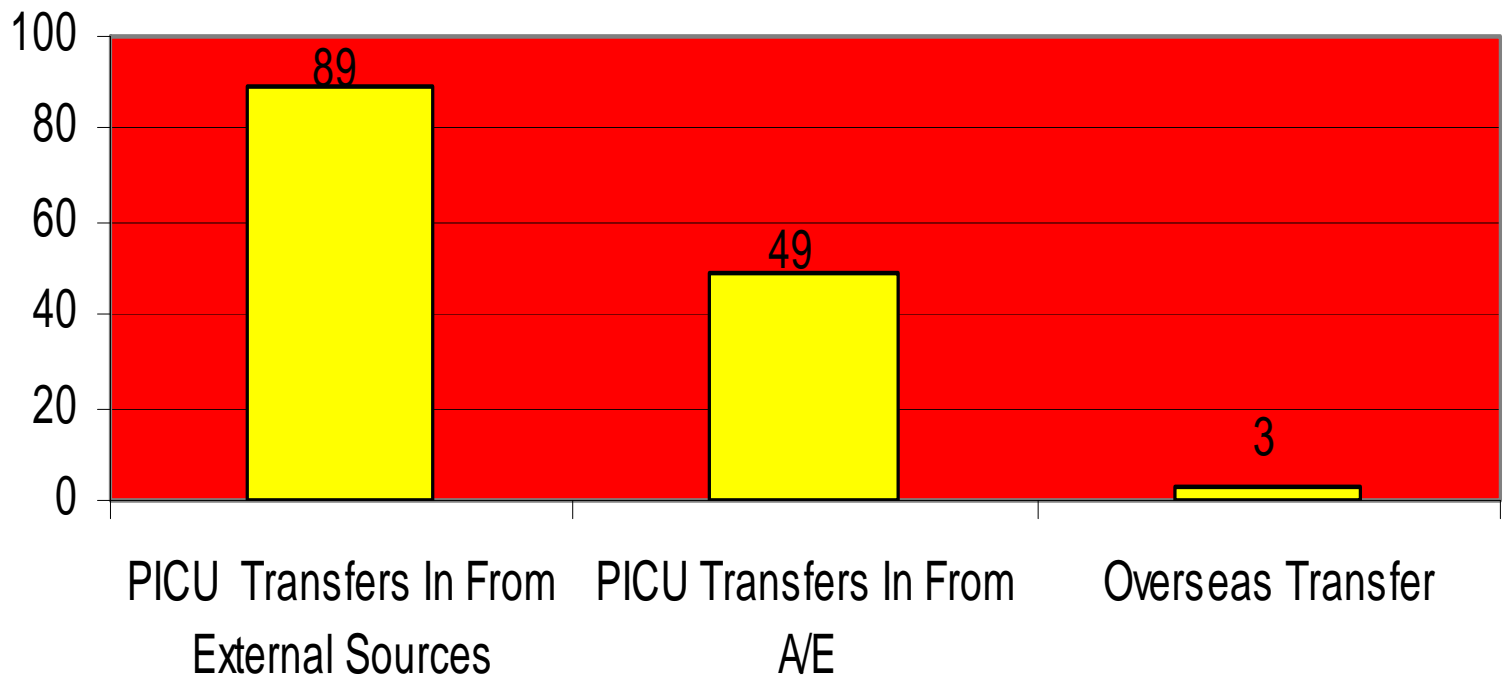
- **MONITORING DURING TRANSPORT**
  - ✓ Cardiac monitoring
  - ✓ Oxygen Saturation/CO<sub>2</sub> Monitoring
  - ✓ Temperature
  - ✓ Intra-arterial monitoring
  - ✓ Infusions e.g. Inotropes



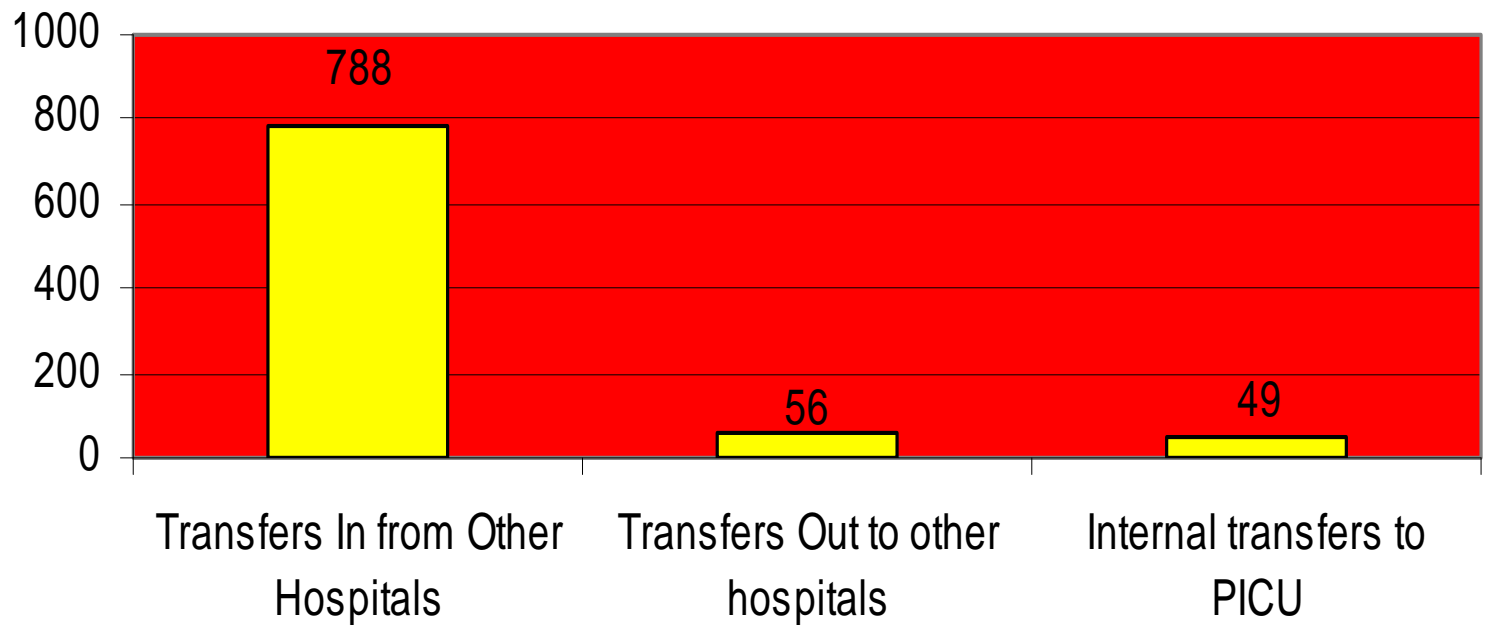
## CUH PERSPECTIVE

- P.I.C.U. Bed Capacity **9**
- Neo Natal H.D.U. Bed Capacity **7**
- A+E Attendances in 2006 **48,760**

## PICU Transfers



## AE Dept. Transfers



## SETTING UP OF TRANSPORT COMMITTEE

- Why
- Members
- Equipment
- Documentation
- Guidelines



## RECOMMENDATIONS

- Local level
- Set up transport committee
- National level
- Retrieval Service for Paediatrics similar to National Neo-Natal Service.



**“CHILDREN ACCOUNT FOR 25-30% OF ALL  
EMERGENCY DEPARTMENT ATTENDANCES”  
AND THEREFORE IT IS IMPERATIVE THAT  
THEY RECEIVE THE STANDARDS  
OF CARE THEY DESERVE.**

(Bentley 1995, Watson 2000, Oakley et al 2004, DOHC 2004)



Future National plans to centralise Healthcare into centres of excellence will increase the transfer requirements in all age groups.

**Children are not small adults their needs are unique and are different to adults.**

Thank you for your  
Attention

Questions ?