IPATS
Irish Paediatric Acute Transport Service

IPATS TRANSPORT RECORD

REF

CCRS Critical Care & Retrieval Services

IPATS REFERRAL

Date of Referral to PICU DD MM YYYY Time of Referral HH MM

Family Name First Name(s)

Date of Birth (KPI) DD MM YYYY Check if DOB is Actual Estimated

Weight kgs Sex Male Female Unknown

Referring Hospital Unit Phone

Name of Referring Clinician Referring Specialty Direct Phone Contact

Grade of Referring Clinician Cons Fellow SpR Reg SHO Nurse

Was patient receiving invasive ventilation at time of referral call?

Yes No - Not indicated No - Advised to intubate Unknown

Name Receiving PICU TSCUH OLCHC OTHER SPECIFY Phone Rec. PICU

Consultant Intensivist Consultant Specialist Specialty

Specialist Team Contacted Yes No Unknown Unable to contact

Time HH MM Date DD MM YYYY by referring team PICU Team OTHER SPECIFY

Transport Consultant

Reason for Referral (Please use ISBAR)

Child Protection Issues: Yes No Unknown Infection Control Issues: Yes No Unknown SPECIFY

DECISION OF IPATS TEAM TO TRANSPORT
Time and Date of Decision
HH MM
DD MM YYYY

- Accepted transport + PICU
- Accepted transport to other PICU
- Accepted transport to other destination
- Advice Only Other
- Patient did not require critical care
- Refused, no bed
- Refused, no transport team
- Refused, no bed, no transport team
- Refused, time critical transfer

Mode of Transport Ground-NAS Ground-Other Helicopter Heli+Ground Fixed Wing +Ground

Advice given to referring team by PICU/IPATS team

NEOC NACC contacted at Time HH MM on DD MM YYYY CAD. No (KPI)

NEOC NACC contacted at Time HH MM on DD MM YYYY CAD. No

Ambulance Arrival at Base Hospital(≤30min) (KPI)
Time HH MM on DD MM YYYY

Departure of Team(≤40min) (KPI)
Time HH MM on DD MM YYYY

Team Members (in attendance)
Consultant Registrar Nurse(s) Ambulance Personnel

Other/Clinical Engineer

EQUIPMENT CHECKLIST AND PRE-TRANSPORT BRIEFING

MINIMUM EQUIPMENT LIST (Check pre departure from base hospital and post PICU admission departure checks)

YES ✔ NO ✘ NA O	BASE HOSPITAL	REFERRING HOSPITAL	RECEIVING PICU
Printout patient specific drug & medical gases sheet (IPATS.ie)			
Transport Form & Folder, Acknowledgement Form & Parent Pack			
Main Transport Bag			
Emergency Airway Pack			
Vascular Access Bag			
Drug Bag and Cool Bag			
Hamilton T1 Ventilator (checked and charging)			
Tempus Pro Monitor (charging)			
Arterial/Temp/NIBP/ECG/SpO_2 cables, leads & cuffs			
Tempus ALS Defib & Pads			
Braun Pumps x 8 (6 x syringe drivers, 2 x volumetric)			
Noxbox/ NO2 Monitor/ Nitric Cylinder			
Power leads all connected to central power-bar on trolley			
ACR			
Oxygen Cylinder Check 2 x E cylinder (At least 1 and ¾ full), 1 x CD cylinder			
Spare Batteries Hamilton-Tempus (Air/Frontline Amb)			

AMBULANCE CHECKLIST YES ✔ NO ✘ NA O	BASE HOSPITAL	REFERRING HOSPITAL	RETURN TO BASE HOSPITAL
2x ZX size oxygen cylinders full and trolley O_2 hose clicked into Schrader valves			
Trolley power bar connected to ambulance power inverter outlet and charging			
Respiratory Bag + CMAC			
Ultrasound Bag			
Bags and equipment securely stowed			
Mobile Phones (Ambulance Crew & Team)			
Team briefing and team strapped in prior to departure			

PRE DEPARTURE CHECKLIST PRIOR TO LEAVING REFERRING HOSPITAL

Transport Consultant informed and plan agreed	Yes	No	End tidal CO_2 (KPI)	Yes	No
Imaging Reports, Notes and Drug Kardex	Yes	No	Oxygen available in sufficient quantity	Yes	No
Transport equipment packed (see minimum equipment list above)	Yes	No	Pt Specific Airway bag, drug bag & bagging equipment	Yes	No
CXR Checked	Yes	No	Sufficient and working IV access	Yes	No
E.T. Tube in Good Position and Secured	Yes	No	Sedation, analgesia, muscle relaxant	Yes	No
Blood Gas	Yes	No	Relevant scheduled medications given	Yes	No
Humidivent/Viral Filter	Yes	No	Receiving unit contacted BEFORE UNPLUGGING OXYGEN AND POWER	Yes	No

COMMENTS

INITIAL ASSESSMENT ON ARRIVAL OF IPATS TEAM

Summary of History and Presenting Complaint (Please use ISBAR)

Advice given enroute to referring team by IPATS team

PHYSICAL EXAMINATION BY RETRIEVAL TEAM

Neurology	GI/GU
Respiratory/Cardiology	Other

ON ARRIVAL VITALS (Time taken)

HR	bpm	BP /	mmHg		
ECG Rythm		Cap refill			
RR		Temp	C (core)		
SpO_2			C (skin)		
		$ETCO_2$ mmhg / kPa			

VENTILATION SETTINGS (Time)

Mode		I:E	iTime
Rate		Tidal Volume	
PIP / PEEP			
FiO_2		iNO	ppm
Micro / Imaging done			

Glasgow Coma Scale (4-15 years)

Response	Score
Eye opening	
Spontaneously	4
To verbal stimuli	3
To pain	2
No response to pain	1
Best motor response	
Obeys verbal command	6
Localises to pain	5
Withdraws from pain	4
Abnormal flexion to pain (decorticate)	3
Abnormal extension to pain (decerebrate)	2
No response to pain	1
Best verbal response	
Orientated and converses	5
Disorientated and converses	4
Inappropriate words	3
Incomprehensible sounds	2
No response to pain	1

Children's Glasgow Coma Scale (<4 years)

Response	Score
Eye opening	
Spontaneously	4
To verbal stimuli	3
To pain	2
No response to pain	1
Best motor response	
Spontaneous or obeys verbal command	6
Localises to pain or withdraws to touch	5
Withdraws from pain	4
Abnormal flexion to pain (decorticate)	3
Abnormal extension to pain (decerebrate)	2
No response to pain	1
Best verbal response	
Alert; babbles, coos words to usual ability	5
Less than usual words, spontaneous irritable cry	4
Cries only to pain	3
Moans to pain	2
No response to pain	1

CNS (Time)

GCS /15

Pupil Size (KPI) Rt Lt

Pupil Reaction Rt Lt

BLOOD GAS (Time) (KPI)

(KPI) Blood Gas within 1 hour of IPATS arrival

A / V / C

pH

PCO_2

PO_2

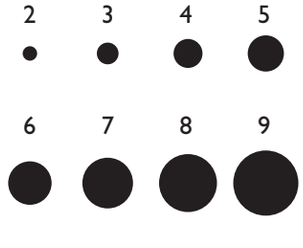
HCO_3^-

B.E.

LACT

GLUCOSE

PUPIL GAUGE mm



PATIENT TRANSPORT OBSERVATIONS

Observations at commencement of preparation for transport and every 15 - 30 minutes during transport

Mandatory Observations:

❶ At referring hospital unit ❷ Patient Transport Trolley ❸ On departure from unit ❹ On switch over to ambulance/aircraft gas & power supply
❺ En route in ambulance/aircraft ❻ On arrival at receiving unit ❼ On transfer to bed/cot/incubator

Stage of transport		1																		
Observations: Time																				
Temp: Core (KPI)																				
Temp: Peripheral																				
Arrival ❻ Core Temp ≥ 36.5°C (KPI)																				
	210																			
	200																			
	190																			
	180																			
Heart Rate (●)	170																			
Blood Pressure	160																			
Systolic ▼	150																			
Mean *	140																			
Diastolic ▲	130																			
NIBP	120																			
IBP	110																			
(Please Tick)	100																			
	90																			
	80																			
	70																			
	60																			
Respiratory Rate (✘)	50																			
	40																			
	30																			
	20																			
	10																			
$ETCO_2$																				
SpO_2 (Pre-Duct/Post if necessary)																				
	CVP																			
	ECG (✔ = sinus)																			
Ventilation																				
	Mode:																			
	PIP/PEEP																			
	Rate																			
	FiO_2																			
	Tidal Volumes																			
	(High flow NC) Flow																			
	I:E Ratio																			
NO PPM /cylinder contents																				

REF

Date	
Time	
Blood Gases: **Art/Cap/Ven** (KPI)	
pH	
$PaCO_2$	
PaO_2	
HCO^3	
B.E	
Lactate	
Glucose	
NA^+	
K^+	
Ca^{2+}	
HB	
Neurological GCS /15	
RT Pupil Size/Reaction (KPI)	
LT Pupil Size/Reaction	
SEDATED (S) MUSCLE RELAXED (MR)	

INFUSIONS/FLUIDS

Date	Time	Drug	Amount added	Solution	Volume	Dose	Prescriber	Admin/Check
DD MM YY	HH MM							/
DD MM YY	HH MM							/
DD MM YY	HH MM							/
DD MM YY	HH MM							/
DD MM YY	HH MM							/
DD MM YY	HH MM							/
DD MM YY	HH MM							/
DD MM YY	HH MM							/
DD MM YY	HH MM							/

Bolus Date	Bolus Time	Fluid	Drug	Dose	Prescriber	Sig 1	Sig 2	Bolus Delivered
DD MM YY	HH MM							
DD MM YY	HH MM							
DD MM YY	HH MM							
DD MM YY	HH MM							
DD MM YY	HH MM							
DD MM YY	HH MM							
DD MM YY	HH MM							

RECORD OF BLOOD PRODUCTS RECEIVED

Date	Time	Product	Date	Time	Product
DD MM YY	HH MM		DD MM YY	HH MM	
DD MM YY	HH MM		DD MM YY	HH MM	

Prescribed on blood prescription and administration record ☐

DRAINAGE

Time	HH	MM	HH	MM	HH	MM	HH	MM	HH	MM	HH	MM	HH	MM
Urine Output													
NGT Loss													
Other Losses	SPECIFY												

MANAGEMENT/STATUS PRIOR TO TRANSFER		TIME	REF HOSP	TRANSP TEAM	DETAILS (size, route, site etc.)
Airway	Primary Intubation	HH MM			Size Leak Yes No Taped at Oral Nasal Cuff
	Re-Intubation (for leak/elective)	HH MM			Size Leak Yes No Taped at Oral Nasal Cuff
	Repositioning ETT	HH MM			Re-Taped at
	Trachy Change/LMA/Surgical Airway	HH MM			Size
Breathing	Mechanical Ventilation	HH MM			Secretions
	NIV	HH MM			
	HFNC	HH MM			
	Inhaled Nitric Oxide	HH MM			Ppm
	Suction/Physio	HH MM			Size On drainage Yes No
	Chest Drain	HH MM			Left Right Bilat
CVS	Inotropes: A=Adrenaline, NA=Noradrenaline	HH MM			Drug 1 Dose
	D = Dopamine, DB = Dobutamine	HH MM			Drug 2 Dose
	M = Milrinone, V= Vasopressin	HH MM			Drug 3 Dose
	Central Venous Access	HH MM			No. of Lumens Size Site
	Arterial Line	HH MM			Size Site
	Intra-osseous Needle	HH MM			Size Site
	Peripheral Access / Sites Flushed and Patient	HH MM			Size Site Size Site Size Site
	CPR/ Defibrillation (select)	HH MM			Joules delivered
Neuro	CT Scan	HH MM			Type
	3% Saline/Mannitol	HH MM			Dose
	ICP Monitoring	HH MM			
	Sedation/Muscle Relaxant	HH MM			
Misc	ECMO	HH MM			
	Urinary Catheter	HH MM			Size
	NGT/OGT	HH MM			Size

ADVICE GIVEN TO IPATS / REFERRING TEAM BY ACCEPTING SPECIALIST

Cardiology Neurology Endocrine Neurosurgical Other PLEASE SPECIFY

Whilst in referring unit	Advice Given by Received by Actions

PARENTS' DATA

Mum's Name		Dad/Partner's Name	
Mobile No's		Marital Status	
Immunisation		Patient I.D. Bands Yes No	SPECIFY IF NO
Allergies		Acknowledgement form Yes No	SPECIFY IF NO
Parents given name of Hospital/Unit Yes No		Parents given contact No's Yes No	
Parents given information leaflet Yes No		Parent have mode of transport Yes No	

REF

HANDOVER

REFERRING HOSPITAL SIGN-OVER OF PATIENT

Referring Doctor (Name and IMC) Signed	BLOCK CAPS	Transport Doctor (Name and IMC) Signed	BLOCK CAPS	Date DD MM YY
Referring Nurse (Name and Grade) Signed	BLOCK CAPS	Transport Nurse (Name and Grade) Signed	BLOCK CAPS	Time HH MM

RECEIVING PICU SIGN-OVER OF PATIENT

Accepting Doctor (Name and IMC) Signed	BLOCK CAPS	Transport Doctor (Name and IMC) Signed	BLOCK CAPS	Date DD MM YY
Accepting Nurse (Name and Grade) Signed	BLOCK CAPS	Transport Nurse (Name and Grade) Signed	BLOCK CAPS	Time HH MM

NOTES

Date:

Time:

Signature:

MRN:

REF

AUDIT AND TRANSPORT METRICS

GROUND TRANSPORT METRICS: GROUND AMBULANCE TRANSFER

Base to Referring Unit (KPI)	Left at	HH MM	Arrived at	HH MM
Referring Hospital to Receiving Unit (KPI)	Left at	HH MM	Arrived at	HH MM
Receiving Hospital to Base Unit (if applicable) (KPI)	Left at	HH MM	Arrived at	HH MM

Garda escort required? ☐ Yes ☐ No

UNTOWARD EVENTS Identify all critical incidents during transit (tick all that apply)

☐ **No critical incidents** (KPI)	☐ Loss of oxygen	☐ Vehicle accident	Equipment Serial Number
☐ Accidental Extubation	☐ Loss of inotropes	☐ Vehicle breakdown	
☐ Required intubation in transit	☐ Loss of O2 sats monitoring >1 min	☐ Use of replacement vehicle	
☐ Required chest drain insertion	☐ Loss of I.V. access	☐ Journey abandoned	
☐ Significant desaturation or bradycardia	☐ Cardiac arrest, successfully resuscitated	☐ Delayed connection	
☐ Significant unanticipated hypotension	☐ Equipment failure or incompatibility	☐ Emergency diversion	
☐ Ventilator Failure	☐ Team diverted to other patient	☐ Other critical incident	

COMMENTS

What went well?

What could have gone better?

Any system issues identified?

AIR TRANSPORT METRICS

Helicopter ☐ Fixed Wing ☐	NACC Desk Contacted at	HH MM	Ambulance Arrived at	HH MM
Base Unit to Aircraft	Left at	HH MM	Arrived at	HH MM
Flight Time to Referring/Receiving Landing Site	Take off	HH MM	Landing	HH MM
Landing site to Referring/Receiving Unit	Left at	HH MM	Arrived at	HH MM
Referring/Receiving Unit to Landing Site	Left at	HH MM	Arrived at	HH MM
Base Landing site to Receiving/Base Unit	Left at	HH MM	Arrived at	HH MM

PIM2 AUDIT DATA AT FIRST LOOK (PICU PATIENTS ONLY)

☐ Elective Admission (tick if this is an elective admission)	Is evidence available to assess past medical history? ☐ Yes ☐ No	1st Systolic blood pressure
	☐ Cardiac arrest before admission	Blood gas measured ☐ Yes ☐ No
MAIN REASON FOR ADMISSION	☐ Cardiac arrest OUT of hospital	Arterial PaO_2 Arterial PaO_2
☐ Asthma	☐ Cardiomyopathy or myocarditis	. kPa mmHg
☐ Bronchiolitis	☐ Severe combined immune deficiency	Base excess (arterial/capillary/venous)
☐ Croup	☐ Hypoplastic Left heart syndrome	mmol/l
☐ Obstructive Sleep Apnoea	☐ Liver failure main reason for admission	Lactate (arterial/capillary/venous)
☐ Recovery post surgery	☐ Following cardiac bypass	. mmol/l
☐ DKA	☐ Spontaneous Cerebral Haemorrhage	FiO_2 .
☐ Other	☐ Neurodegenerative Disorder	Intubation ☐ Yes ☐ No
	☐ Human Immunodeficiency Virus (HIV)	Face Mask/Nasal Prongs ☐ Yes ☐ No
		CPAP ☐ Yes ☐ No