

## England & Wales Paediatric Flight Activity Data Report 2016

This report is written on behalf of the Paediatric Intensive Care Society (PICS) Acute Transport Group (ATG). The ATG have shared their flight data for January 1<sup>st</sup> to December 31<sup>st</sup> 2016.

This is the first comprehensive annual report written on behalf of the group which encompasses both fixed wing and rotary wing activity for England & Wales.

Two PCC Transport services did not report any flight activity for the year 2016. (NECTAR & KIDS)

**All services that undertook flight transfers are outlined in the table below.**

PCC Transport Service	ROTARY	FIXED WING	Turn Down
SORT	2	11 (Channel Islands Capital)	3 (Clinical) 1 (weather)
EMBRACE	32 (*TCAA, YAA, Bristow)	11 (3 Non NHS 8 NHS Funded with IAS)	10 (aircraft availability) 24 (Weather)
STRS	6 (*TCAA)	6 (1 NHS, 5 other/Gibraltar)	6 (Availability) 3 (Weather)
WATCH	13 (*TCAA, EMRTS)	1 (Capital)	14 (Weather) 7 (Clinical) 2 (Aircraft availability) 1 (Breach of FDP)
NWTS	20 (*TCAA/Bristow)	4 (Isle of Man)	6 (Weather) 2 (Staff not trained) 2 (Clinical) 1 (Out of Remit)
Leicester	11 (*TCAA)	5 (All ECMO Related)	4 (Weather) 9 (Aircraft availability)
NECTAR	0	4 (All NHS)	0
CATS	12 (*TCAA, Bristow)	8 (6 international Commercial Airline, 2 NHS- Capital)	2 (Weather)

\*TCAA – The Children’s Air Ambulance. Bristow – Search & Rescue. EMRTS & YAA – Local HEMS providers

In 2016 the overall flight activity undertaken by the PCC transport teams was 146 transfers.

The children's Air Ambulance (TCAA) had also collated their rotary wing "turn downs" for the year in collaboration with the transport teams.

A turn down is defined as "within flight hours" for TCAA, which vary in summer and winter. The reasons for "turn downs" are recorded in the above table. The number of turn downs recorded due to unavailability of the aircraft was 43.

If we exclude weather turndowns (n=54) the potential activity with TCAA had their aircraft been made available all of the time "within flight hours" would have been **186 transfers**.

Of the overall flight transfer activity (n=142) for 2016, there were 96 rotary wing transfers in this period all relating to NHS England Activity.

There were 50 fixed wing transfers over 2016 with 29 of the fixed wing transfers undertaken serving the island contracts (Gibraltar, Isle of Man, and Channel Islands) as well a number of international repatriations.

There were 21 fixed wing transfers undertaken on behalf of NHS England; this includes the ECMO transfers.

### **Missed Opportunities Data TCAA**

Over the last year the majority of services have provided data to TCAA using a common reporting template in order to try and identify where a rotary wing transfer might provide an advantage.

This figure collated by TCAA could represent the maximum number of rotary wing flight activity annually.

In 2016 there were 538 "missed opportunities" recorded nationally with TCAA. (This data records out of hour's activity that might have benefited from a flight transfer)

### **Common Reported Incident Themes Presented by the ATG (all aeromedical modes)**

Flight providers have internal risk management reporting systems (SMS). They may also be required to report to AAIB.

Additionally PICS transport team report incidents internally and to the ATG. The 2016 data generated some common themes

- Delay in land transport to meet aircraft (most common)
- Clinical team left at the destination unit as close to exceeding flight hours
- Clinical team left at referring unit as weather closing in (patient got better)
- Communications failure in cabin between team and flight deck
- Helipad unavailable
- Poor pre-flight planning (flew to wrong landing site)
- Divert to other landing site due to poor visibility

***The reporting interface remains a challenge for the PIC transport services and the flight providers where there may be different perceptions surrounding the same incident.***

### **Rotary Wing**

Most of the rotor wing providers produce a monthly incident report, which include the PICC transport teams and there is a higher reported concordance regarding risk actions. However there is more work to be done amongst the services in relation to the feedback mechanisms.

## **Fixed Wing**

There is less reported concordance in terms of risk actions for the fixed wing providers as reported to ATG.

There were two fixed wing aircraft incidents reported to ATG where the severities of the events were perceived differently by the provider and the clinical team.

## **Rotary Wing & Fixed Wing**

It was also identified that a number of flight providers have single pilot operation which is outside the minimum national standard set by PICS ATG.

This has been addressed directly by the PCC transport services with the flight providers so when the service request assistance dual pilot operation is now standard.

## **Challenges**

### ***Aeromedical flight provision in the UK lags behind most First World Countries with significant variation, fragmentation and infrastructure challenges.***

A number of challenges still exist for the PCC Transport Services and were discussed at the ATG.

1. Nationally there is still very poor helicopter landing site infrastructure
2. The Channel Islands & Isle of Man commission their own flight transport provider for their patient cohort that requires transfer for acute care in England (adult/paediatric/neonatal transfers). This remains a challenge for the PCC transport teams who undertake the clinical component of the contracts as they are expected to utilise the commissioned flight provider.
3. Non-pressurised fixed wing aircraft cabin still remains an issue when flying with the commissioned providers for the islands. This increases risk for the critically ill patient and makes the transfer more technically demanding for the staff.
4. A number of fixed wing aircraft are only able to accommodate space for three passengers once the stretcher is in place. Very often flight transfers form part of the services training programme so will have three staff members on board. Therefore the parents cannot always fly with their child. This means that they must undertake a separate flight/ferry journey. This is organised by the local teams.
5. Rotary wing aircraft configuration as it stands often cannot accommodate a parent again because of the training requirement.
6. In relation to fixed wing provision for the Islands some of the PCC transport services reported having to undertake the outbound leg to pick up the patient via either the postal plane or commercial flight as the air ambulance is not made available to them. Because of this the team have to utilise the local providers' kit and only bring consumables.
7. A dual pilot operation is not always offered as standard within both fixed wing and rotary HEMS providers.
8. Maintaining flight transfer competency of the clinical teams remains a challenge when reviewing flight transfer numbers per team.
9. There is no emergency fixed wing provider