

## **Interfacility Transport Resource Document 2021**

Interfacility patient transfers often involve a complicated set of medical decisions. Referring facilities must ensure that patients receive appropriate care during interfacility transfer and upon discharge. Emergency medical service providers deliver a wide range of transport medical services. The specific types of skills and medicines that can be administered during transport depend upon established statewide protocols, clinical guidelines, and staffing. This document is intended to assist referring and receiving physicians and other hospital staff with determining which type of transport is best suited to an individual patient's need. The Pennsylvania Department of Health currently licenses ambulances at the basic life support (BLS), intermediate advanced life support (iALS), advanced life support (ALS), critical care transport (CCT), and air medical transport levels. Each tier of transport medical care is authorized to administer specific medications and perform particular skills.

### ***Basic Life Support (BLS)***

A BLS ambulance is staffed by at least one emergency medical technician (EMT) and an EMS Vehicle Operator. EMTs provide non-invasive monitoring of vital signs and are trained to administer oxygen, control bleeding and stabilize fractures. EMTs do not provide intravenous/intraosseous therapy. BLS transports are for stable patients who do not require medications or cardiac monitoring.

### ***Intermediate Advanced Life Support (IALS)***

Advanced Emergency Medical Technicians (AEMTs) provide basic EMS and a limited set of ALS. AEMTs perform all the BLS skills listed above as well as use of Alternative Rescue Airways, suctioning, placement of a saline lock IV, IO placement, obtaining but not interpreting a 12 Lead ECG, and blood glucose monitoring. IALS transports are indicated for stable patients who do not require medications or monitoring beyond simple ALS interventions such as IV fluid administration.

### ***Advanced Life Support (ALS)***

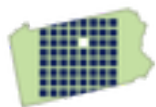
ALS ambulances are staffed with at least one paramedic, prehospital nurse, or prehospital advance practice provider (e.g. physician's assistant). ALS personnel are trained to perform and interpret 12-lead ECGs, administer intravenous fluids, administer specific infusions, and provide cardiac monitoring.

### ***Critical Care Transport (Paramedic)***

State approved CCT programs staff ambulances with two ALS providers in addition to an EMSVO, of which one must be trained in an expanded scope of critical care transport. The State of Pennsylvania requires the presence of a PHRN for certain medications, but a CCT licensed paramedic ambulance provides additional services beyond the regular ALS scope of practice under a set of expanded statewide protocols. CCT crews transport patients requiring some forms of mechanical ventilation and certain infusions not routinely carried on an ALS ambulance.

### ***Critical Care Transport (PHRN/Paramedic)***

Critical Care Transport provided by licensed agencies provide air or ground transport with an expanded scope of practice determined by agency-specific protocols (air ambulance agencies) approved through the Department of Health. These teams are staffed with at least two advanced personnel (most commonly prehospital nurses or paramedics) trained as critical care providers. Capabilities of these critical care teams include the administration of paralytics and additional infusions based on an expanded scope of practice. An air ambulance CCT team may transport patients with advanced modes of mechanical ventilation or who are receiving blood products. The CCT staffed with an on board PHRN is best suited to interfacility transfers involving critically ill patients requiring vasoactive medications.



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**Capabilities of Various Transport Levels of Care**

	<b>BLS (Emergency Medical Technician)</b>	<b>iALS (Intermediate Advanced Life Support)</b>	<b>ALS (Advanced Life Support)</b>	<b>Critical Care Transport (Expanded Scope Paramedic)</b>	<b>Critical Care Transport with agency specific protocols (PHRN, PHP, PHPE)</b>	<b>Specialty Care Transport (Neonatal<sup>5</sup>, Pediatric<sup>5</sup>, ECMO)</b>
<b>Monitoring (Vitals and SpO2)</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>Cardiac monitoring</b>	No	No	Yes	Yes	Yes	Yes
<b>Antibiotics</b>	No	No	Yes	Yes	Yes	Yes
<b>Mechanical Ventilation</b>	No	No	Yes (Limited to volume control modes and no anticipated need for adjustment)	Yes (Limited to volume control modes and no anticipated need for adjustment)	Yes (All modes approved by agency medical director, titration of settings)	Yes
<b>Vasopressors</b>	No	No	Yes (Limited and not titrated)	Yes	Yes	Yes
<b>Bilevel Positive Airway Pressure</b>	No	No	No (CPAP permitted)	Yes	Yes	Yes
<b>Chest tube to suction or water seal</b>	No	No	No	Yes	Yes	Yes
<b>Sedation and Paralysis</b>	No	No	No (Limited to sedation)	Yes* (Limited sedation; may include paralysis when risks > benefits or CCT appropriately trained)	Yes (Sedation and paralysis)	Yes (Sedation and paralysis)
<b>Cardiac pacing, transvenous</b>	No	No	No	No	Yes	Yes
<b>Blood and blood products</b>	No	No	No	Yes – monitoring of current infusion	Yes	Yes

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### **Air Medical Transport Considerations**

Consultation with a transport medicine / EMS physician is recommended when considering the interfacility transport of a patient in need of critical care (refer to resource document below).

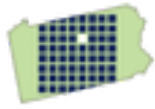
Consider aeromedical transport when:

1. Air medical transport confers a significant, time saving benefit to the patient
2. Air medical crews can perform a skill or deliver a therapy beyond the capabilities of the local EMS agency/ground crews
3. Specialty care resources needed but otherwise unavailable (Neonatal transport, ECMO, balloon pump)
4. Local EMS resources are not sufficient to meet patient needs. (No available ambulances, planned interfacility transport would leave a community without EMS coverage, etc)
5. Neonatal and Pediatric transports require specialty team care when the patients exceed the resources available by the local EMS provider. A pediatric transport system should be capable of rapidly delivering advanced pediatric skilled critical care to the patient's bedside at the referring hospital and of maintaining that level of care during transport to the receiving hospital.

### **Additional Resources**

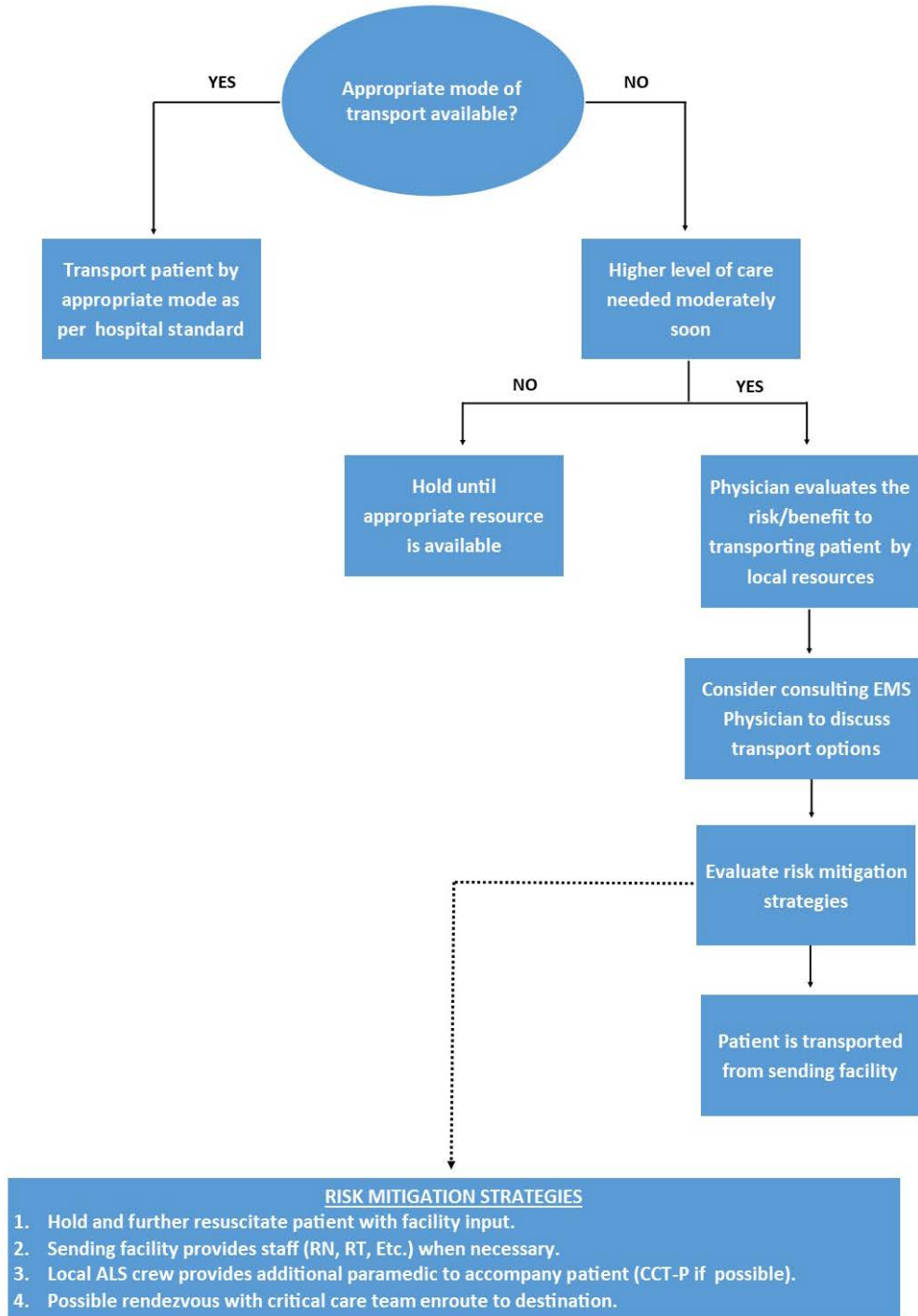
The following documents from the Pennsylvania Department of Health contain additional information about the scope of practice and capabilities of emergency medical services providers and can be viewed at [www.pehsc.org/resources/clinical](http://www.pehsc.org/resources/clinical)

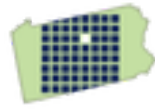
1. [Scope of Practice Documents](#)
  - a. EMR, EMT, AEMT, Paramedic (BLS & ALS)
  - b. Ground Critical Care Transport Agency (Ground CCT)
  - c. Air Ambulance Services (Air CCT)
2. [Approved Medications List](#)
  - a. Approved Medications List by Level of Provider
3. [EMS Clinical Protocols](#)
  - a. Basic Life Support (BLS)
  - b. Advanced Life Support (ALS)
  - c. Ground Critical Care Transport (Ground CCT)
  - d. \*Air CCT transport protocols are determined at the individual agency level and approved through the PA DOH
4. **Air/Ground Critical Care Transport Agency Contacts**
  - a. Refer to the list of air/ground critical care transport services in your region.
  - b. Contact the numbers listed for just-in-time assistance in determining the appropriate level of care and mode of transport needed for your patient whenever there is a question regarding the potential need for critical care transport or transport by air medical services.



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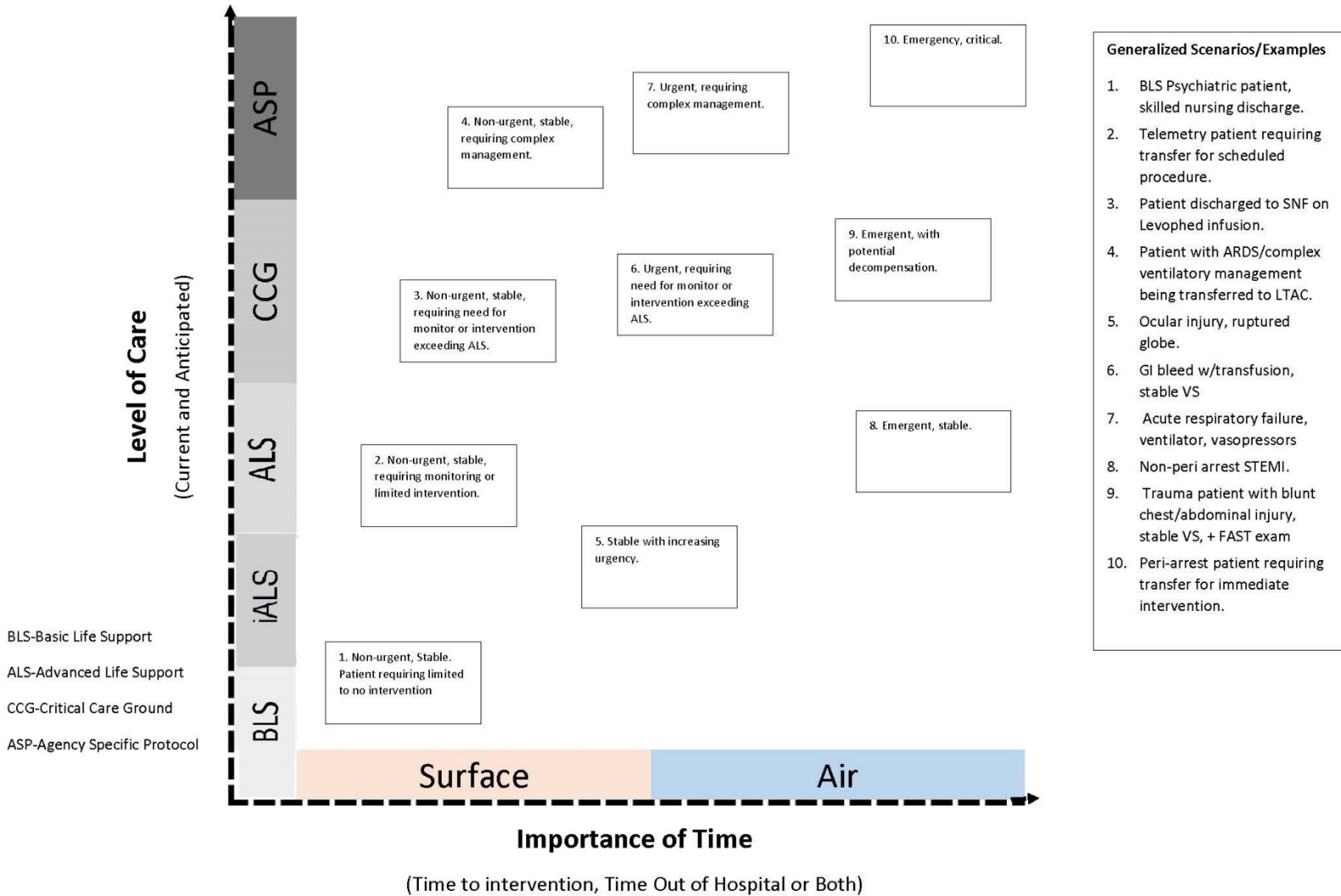
**Ideal vs. Available Resource Decision Algorithm**

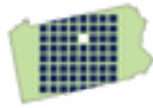




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EMS Transport Decision Axis with Examples





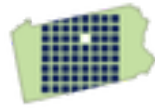
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**Pennsylvania Critical Care Transport:  
Resource Contact Information**

<p><b>Allegheny Health Network Lifeflight (A/G)</b> 412-359-3333</p> <p><b>STAT MedEvac (A/G)</b> 800-633-7828 or 412-647-9424</p> <p><b>EmergyCare (G)</b> 814-870-1020</p> <p><b>Community Ambulance Service (G)</b> 814-437-3016</p> <p><b>Superior Ambulance Service (G)</b> 724-458-5350</p>	<p><b>Geisinger LifeFlight (A/G)</b> 800-852-7828</p> <p><b>STAT MedEvac (A/G)</b> 800-633-7828 or 412-647-9424</p> <p><b>LifeLion Critical Care Transport Service (A/G)</b> 717-531-7777</p> <p><b>Temple Transport Team (A/G)</b> 866-483-8326</p>	<p><b>Geisinger LifeFlight (A/G)</b> 800-852-7828</p> <p><b>Lehigh MedEvac (A/G)</b> 610-402-6200</p> <p><b>LifeLion Critical Care Transport Service (A/G)</b> 717-521-7777</p> <p><b>PennSTAR (A/G)</b> 800-543-7827</p> <p><b>St. Lukes Emergency &amp; Transport Service (A/G)</b> 215-538-4543</p> <p><b>Temple Transport Team (A/G)</b> 866-483-8326</p>
<p><b>Allegheny Health Network Lifeflight (A/G)</b> 412-359-3333</p> <p><b>STAT MedEvac (A/G)</b> 800-633-7828 or 412-647-9424</p>	<p><b>Conemaugh MedStar (A/G)</b> 800-633-7827</p> <p><b>Geisinger LifeFlight (A/G)</b> 800-852-7828</p> <p><b>LifeLion Critical Care Transport Service (A/G)</b> 717-531-7777</p> <p><b>PennSTAR (A/G)</b> 800-543-7827</p> <p><b>STAT MedEvac (A/G)</b> 800-633-7828 or 412-647-9424</p> <p><b>Temple Transport Team (A/G)</b> 866-483-8326</p>	<p><b>Lehigh MedEvac (A/G)</b> 610-402-6200</p> <p><b>LifeLion Critical Care Transport Service (A/G)</b> 717-531-7777</p> <p><b>JeffSTAT (A/G)</b> 215-955-4444 or 800-533-3121</p> <p><b>PennSTAR (A/G)</b> 800-543-7827</p> <p><b>St Lukes Emergency &amp; Transport Service (A/G)</b> 215-538-4543</p> <p><b>STAT MedEvac (A/G)</b> 800-633-7828 or 412-647-9424</p> <p><b>Temple Transport Team (A/G)</b> 866-483-8326</p>

A = Air Transport Capabilities  
G = Ground Transport Capabilities

\* Agency listings based on self designation - not intended to be exclusive in that area.



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**Pennsylvania PEDIATRIC/NEONATAL Critical Care Transport:  
Resource Contact Information**

<p><b>AHN West Penn Hospital</b> Allegheny Health Network LifeFlight (A/G) 412-359-3333</p> <p><b>UPMC Children's Hospital Pittsburgh</b> 412-692-5000</p> <p><b>UPMC Hamot Hospital St. Vincent Medical Center</b> EmergCare (G) 814-870-1020</p>	<p><b>Geisinger Medical Center Children's Hospital</b> Geisinger LifeFlight (A/G) 800-852-7828</p> <p><b>Children's Hospital Pittsburgh</b> 412-692-5000</p> <p><b>Penn State Hershey Children's Hospital</b> LifeLion Critical Care Transport Service (A/G) 717-531-7777</p> <p><b>Temple University Hospital</b> Temple Transport Team (A/G) 866-4T3-TEAM (866-483-8326)</p>	<p><b>Geisinger Medical Center Children's Hospital</b> Geisinger LifeFlight (A/G) 800-852-7828</p> <p><b>Lehigh Valley Health Network</b> Lehigh MedEvac (A/G) 610-402-6200</p> <p><b>Penn State Hershey Children's Hospital</b> LifeLion Critical Care Transport Service (A/G) 717-521-7777</p> <p><b>Children's Hospital of Philadelphia (A/G)</b> 800-590-2160</p> <p><b>Temple University Hospital</b> Temple Transport Team (A/G) 866-4T3-TEAM (866-483-8326)</p>
<p><b>AHN West Penn Hospital</b> Allegheny Health Network LifeFlight (A/G) 412-359-3333</p> <p><b>UPMC Children's Hospital Pittsburgh</b> 412-692-5000</p>	<p><b>Conemaugh Health System</b> Conemaugh MedStar (A/G) 800-633-7827</p> <p><b>Geisinger Medical Center Children's Hospital</b> Geisinger LifeFlight (A/G) 800-852-7828</p> <p><b>Penn State Hershey Children's Hospital</b> LifeLion Critical Care Transport Service (A/G) 717-531-7777</p> <p><b>Children's Hospital of Philadelphia</b> 800-590-2160</p> <p><b>UPMC Children's Hospital Pittsburgh</b> 412-692-5000</p> <p><b>Temple University Hospital</b> Temple Transport Team (A/G) 866-4T3-TEAM (866-483-8326)</p>	<p><b>Lehigh Valley Health Network - Reily Children's Hosp.</b> Lehigh MedEvac (A/G) 610-402-6200</p> <p><b>Penn State Hershey Children's Hospital</b> LifeLion Critical Care Transport Service (A/G) 717-531-7777</p> <p><b>Children's Hospital of Philadelphia (A/G)</b> 800-590-2160</p> <p><b>St. Christopher's Hospital for Children (A/G)</b> 888-STCHRIS (888-782-4747)</p> <p><b>UPMC Children's Hospital Pittsburgh (A/G)</b> 412-692-5000</p> <p><b>Temple University Hospital</b> Temple Transport Team (A/G) 866-4T3-TEAM (866-483-8326)</p> <p><b>Nemours A.I. DuPont Hospital for Children (A/G)</b> 800-962-0023</p>

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\* Resource listings not intended to be exclusive or confined to a geographic region.