Job Class Profile: Medical Flight Specialist

Pay Level: CG-36  
Point Band: 790-813

JOB SUMMARY

The Medical Flight Specialist provides patient care of an emergency and routine nature during air medical transports and providing emergency medical treatment at the scene of a traumatic incident or acute medical problem. Work involves providing advanced assessment, treatment and care to patients of all ages while recognizing physiological differences between age groups. Work is performed under a medical control system with written protocols and an on-line medical control physician available as needed.

Key and Periodic Activities

— Assumes patient care management during inter-facility transports of critically ill or unstable patients.
— Applies treatment therapies of medical disorders and traumatic injuries in accordance with protocols or physicians orders with consideration of the effects of the aviation environment on patient medical outcomes and response to therapies.
— Provides medical interventions including performing initial and ongoing patient assessment during air transport; maintaining patient airway; managing respiratory functions; monitoring blood oxygen levels and administering oxygen as required; performs cardiac monitoring, cardiopulmonary resuscitation and manual external defibrillation in accordance with established protocols; recognizes and treats hemorrhage, hypovolemic and septic shock; initiates intravenous therapy via venipuncture including calculating rates, maintaining flow, and administering medications.
— Responds to the scene of an emergency outside the hospital setting and provides patient care during transfer.
— Records patient information including vital signs, neurological status, glucose monitoring and documents assessment of findings, treatment provided and patient response.
— Maintains clinical practice and continuing education to keep current in the field of critical care medicine focusing on adult and pediatric critical care areas.
— Ensures effective communication between staff, physicians and Medical Flight Services crew prior to, during and post Medical Flight Services patient care.
— Reviews and interprets blood, diagnostic and radiological findings including but not limited to blood results, Electrocardiogram (ECG), chest x-ray and computerized tomography (CT) scan of patients during initiation of medical care.
— Restocks medical, narcotic supplies and equipment.
— Provides staff clinical education as required for new hires entering the flight program.
— Provides staff orientation on transport in the aviation environment as required for new hires in
### Key and Periodic Activities

- critical care.
  - Checks and cleans equipment.

### SKILL

#### Knowledge

**General and Specific Knowledge:**
- Nursing and related organizational and professional policies and procedures.
- Patient assessment, diagnoses, treatment and therapies.
- Medical Administration.
- Nursing related equipment and technology.
- Advanced Cardiac; International Trauma; Advanced Trauma; Pediatric Advanced Life Support.
- Neonatal Resuscitation Program.
- Advanced Life Support in Obstetrics.
- Huet Training and recertification (Helicopter evacuation and crash survival).
- Flight Physiology.
- Survival Training in Arctic Environment.
- High Angle Rescue.

**Formal Education and/or Certification(s):**
- Minimum: Undergraduate Degree or Diploma in Nursing. Registered with the Association of Registered Nurses of Newfoundland and Labrador or successful completion of an Advanced Care Paramedic program accredited by the Canadian Medical Association and current registration with the Provincial Medical Oversight Program of Newfoundland and Labrador.

**Years of Experience:**
- Minimum: 3 years experience as an emergency or critical care nurse or 3 years experience in a high volume, performance based system as an Advanced Care Paramedic or Critical Care Paramedic.

### Competencies:
- Nursing practices.
- Calibrating equipment.

### Interpersonal Skills

- A range of interpersonal skills are used including listening to information from patients and others involved in the medical transport and care of patients; asking questions to gain information regarding patient condition; providing routine information and direction to the Medical Flight Services team; providing care and comfort to patients; gaining the cooperation of the Medical Flight Services team to complete work tasks; and providing expert advice.
- Interaction occurs with employees within the immediate work area, department, within and outside the organization; supervisors and managers; patients and health care personnel including physicians and nurses.
- The most significant contacts include the patients being cared for; pilots and Medical Flight Services team members; physicians, hospital staff, supervisors and managers.
## EFFORT

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<th>Physical Effort</th>
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<td>Work demands regularly result in fatigue, requiring periods of rest.</td>
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<td>Lifting, pushing and pulling patients on stretchers to and from planes and ambulances; loading and off loading equipment bags weighing between 10 – 50 lbs. and carrying to provide patient care on site.</td>
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<td>Work requires sitting, standing and walking to provide patient care. The provision of patient care during flight requires working in awkward or cramped positions requiring bending, kneeling and stretching.</td>
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<td>Fine finger and precision work is required to utilize medical supplies and equipment during patient care and prepare medications. Equipment typically requires controlled movement.</td>
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<td>Gross motor skills requiring strength and coordination are required to transport patients and carry medical equipment bags (also requiring balance).</td>
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<td><strong>Visual</strong> concentration is required to prepare medications, monitor equipment and patient condition during in-flight transport, often in low light conditions.</td>
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<td><strong>Auditory</strong> concentration is required to listen for medical equipment alarms, patient verbal responses, pilot instructions and to conduct patient assessments.</td>
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<td>Other sensory demands such as <strong>touch and smell</strong> are utilized when conducting patient assessments and performing medical procedures (i.e. Cardiopulmonary Resuscitation).</td>
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<td><strong>Eye hand coordination</strong> is required for patient transport and monitoring and to use medical equipment and instruments as part of patient care.</td>
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<td><strong>Repetition requiring alertness</strong> is evident in performing patient assessment to determine status of injuries or illness.</td>
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<td><strong>Higher than normal levels of attentiveness or alertness for the health and safety of others</strong> is evident in performing patient care from assessments to medical interventions.</td>
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<td><strong>Time pressures</strong> exist when transporting critically ill or injured patients to care centres within time frames for life-saving interventions by physicians/surgeons. <strong>Interruptions</strong> in flight schedules may be caused by adverse weather conditions or by the availability of aviation transport.</td>
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<td><strong>Lack of control over work pace</strong> occurs as a result of adverse weather, aircraft maintenance or mechanical issues.</td>
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<td><strong>Exact results and precision</strong> are required during medical preparation and administration such as Intravenous (IV) line placement and when completing patient care reports.</td>
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<td>Work involves a series of tasks and activities which are different and unrelated and require a broad range of skills and knowledge.</td>
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<td>Typical challenges or issues involve patient transport and the provision of care. Changes in patient condition or diagnosis results in immediate medical interventions; limited or no aircraft availability due to aircraft maintenance or expired daily pilot flying time and staff scheduling are typical issues.</td>
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<td>References available to address typical challenges or issues include standard Paramedicine and Medical Transport policies and procedures; Critical Care Transport Team protocols; Air Ambulance On-line Medical Control; physicians and hospital management personnel.</td>
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RESPONSIBILITY

**Accountability and Decision-Making**

- Work tasks and activities are highly monitored or controlled due to medical protocols, policies and procedures.
- Without formal approval, independent decisions are made regarding equipment purchases and replacement less than $4,000 as well as small scale office/medical supplies (i.e. medications, IV and airway supplies).
- Supervisory approval is required for protocol change or process and use of contracted helicopter services for medivac operations or charter aircrafts and out-of-province medical transports.
- Some discretion is exercised within predetermined limits in arranging transports of low to moderate priority; administering medications or pharmacologic interventions based on patient status or condition and adjusting ventilators, IV medication/infusions.

**Impact**

- Results of work tasks and activities are felt within the immediate work area, department, within and outside the organization and on the patients under care.
- Results of work tasks and activities directly impact the medical equipment used in patient care; material resources; processes and systems of medical flight services; patient information and the health and safety of patients.
- Consequences of mistakes or errors in medication or treatment procedures are felt within the immediate work area, department, within and outside the organization and on patients and family members.
- Consequences of mistakes or errors impact on equipment used due to incorrect calibration or lack of maintenance; delays in patient transport slows the process and system of medical flight services; patient information in terms of assessment or treatment and mistakes in patient care negatively impacts patients and family members.
- Typically, consequences of mistakes or errors are identified and resolved within a 24 hour time period. Any problems or issues with patients, staff or resources must be addressed to ensure patient safety.

**Development and Leadership of Others**

- Not responsible for the direct, full-time supervision of staff.
- Development and leadership responsibilities include providing staff orientation to medical flight services and staff clinical education to new hires entering the flight program.

WORKING CONDITIONS

**Environmental Working Conditions**

- Special precautions and safety equipment are required and include: in-flight emergency procedures; hearing protection; reflective and fire resistant clothing; protective eye and footwear.
- The likelihood of minor cuts, bruises, abrasions, illnesses or injury is unlikely if safety equipment is used and precautions followed.
- The provision of patient care and medical transport of patients results in exposure to distracting noise; glare from equipment monitors; aircraft fumes; limited ventilation and lighting; vibration; chemicals; bodily fluids; odours; working in awkward or confining workspaces;
sharp medical objects, air travel and adverse weather conditions while in transport.