

## UW HEALTH JOB DESCRIPTION

### ECMO Specialist

<b>Job Code:</b> 520011	<b>FLSA Status:</b> Non-Exempt	<b>Mgt. Approval:</b> J. Koch	<b>Date:</b> July 2021
<b>Department:</b> ECMO/3032106		<b>HR Approval:</b> K. Fleming	<b>Date:</b> October 2021

### JOB SUMMARY

The Extracorporeal Membrane Oxygenation (ECMO) Specialist (ES) is responsible for ensuring appropriate patient care through the continuous monitoring and assessment of the ECMO circuit, related technology, and patient status. The incumbent identifies and corrects problems associated with the ECMO procedure and initiates and evaluates interventions consistent with protocol. The ES consults with the ECMO physician when patient condition and/or protocol limits or directives are in question. As a member of the ECMO team, this position works closely with other team members and health care providers to provide patient care in accordance with the patient's individualized care plan.

### MAJOR RESPONSIBILITIES

#### I. Clinical Practice/Quality of Care

*The ES systematically and continuously collects and assesses data in collaboration with the ECMO team to provide therapeutic care for the patient and family.*

- A. Monitors and adjusts ECMO circuit settings (e.g. heat exchanger temperature, pump flow, sweep gas) to maintain parameters established by the ECMO physician.
- B. Recommends administration of blood products, fluids, and/or medications as warranted by ECMO status.
- C. Assesses the cardiopulmonary status of the patient through test results (e.g. ABGs, CBC, etc.) and physical assessment findings.
- D. Performs patient assessment to anticipate and prevent potential problems (e.g. variances in blood pressure, perfusion, ventilation, and heart rate).
- E. Monitors and manages intake and output records to ensure appropriate fluid levels.
- F. Monitors coagulation results to assess clotting status; adjusts heparin infusion per ECMO Heparin protocol.
- G. Evaluates chest x-rays for endotracheal tube placement, cannulae position, and status of the lung fields in determining patient status and weaning guidelines; supports and maintains patency of the cannulae while patient is undergoing ECMO in collaboration with the ECMO physician.
- H. Supports ECMO team research through the collection of ECMO-related data, preparation, and presentation of research abstracts and/or other documentation.
- I. Demonstrates expertise in adult, neonatal, and/or pediatric care including patient assessment, technical skills, and psychosocial aspects of care.
- J. Actively participates in the evaluation of new equipment. Effectively identifies and troubleshoots equipment problems.

#### II. Collaboration

*The ES will participate as a member of the ECMO Team, working with the health care providers in providing quality care for the patient and their family.*

- K. Initiates multidisciplinary collaboration to positively impact the outcomes of care provided.
- L. Collaborates with the ECMO physician and other health care providers involved in the management of the patient to coordinate all tests and evaluations (e.g. head and cardiac ultrasounds and EEGs) and provide care in accordance with the patient's individualized care plan.
- M. Recommends modifications in patient management to the ECMO physician based on the relationship between patient diagnosis and ECMO circuit and/or lab parameters.
- N. Initiates steps to support and enhance the patient's responsibility and self-determination in decision-making concerning health, treatment, and well-being.
- O. Evaluates effectiveness of teaching interventions and patient/family level of understanding and adjusts teaching and plan of care accordingly.

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### III. Communication

- P. Participates in monthly interdisciplinary ECMO case reviews and in-services to share information and determine appropriateness of patient care plans.
- Q. Utilizes the ECMO flow sheet to maintain ongoing complete and detailed documentation of patient history and the amount of blood and other fluids administered and any complications that may occur.
- R. Provides family/parental education and reinforces medical counseling initiated by the ECMO physician.
- S. Provides a clear and concise end of shift report for oncoming ECMO Specialist regarding machine settings, patient status, and patient care plans.

### IV. Quality Improvement

*The ES will accurately identify and diagnose an issue, identify alternatives, implement a plan, and evaluate and communicate results.*

- T. Problem solves through critical evaluation of databased information and continuous improvement efforts that lead to effective quality-based outcomes.

**ALL DUTIES AND REQUIREMENTS MUST BE PERFORMED CONSISTENT WITH THE UW HEALTH PERFORMANCE STANDARDS.**

### JOB REQUIREMENTS

Education	Minimum	Graduate of a Commission on Accreditation for Respiratory Care (CoARC) accredited School for Respiratory Care OR Degree in Nursing OR Graduate of Perfusion Program
	Preferred	Baccalaureate degree
Work Experience	Minimum	One (1) year of critical care experience
	Preferred	Two (2) years of critical care experience
Licenses & Certifications	Minimum	<ul style="list-style-type: none"> <li>• Licensed as Respiratory Care Practitioner AND RRT Credentialed by the National Board for Respiratory Care</li> <li>OR</li> <li>Registered Nurse license in the state of Wisconsin</li> <li>OR</li> <li>Certified Clinical Perfusionist (CCP) as recognized by the American Board of Cardiovascular Perfusion (ABCP) and State of Wisconsin Licensure as a Licensed Perfusionist</li> </ul>
	Preferred	<ul style="list-style-type: none"> <li>• BLS/CPR certified</li> <li>• Advanced Cardiovascular Life Support (ACLS) or willingness to obtain</li> <li>• Pediatric Advanced Life Support (PALS) or willingness to obtain</li> <li>• Neonatal Resuscitation Program (NRP) or willingness to obtain</li> <li>• Adult Critical Care Specialty (ACCS) certification</li> <li>• Neonatal/Pediatric Specialty (NPS) certification</li> <li>• Certified Critical Care Registered Nurse (CCRN)</li> </ul>
Required Skills, Knowledge, and Abilities		<ul style="list-style-type: none"> <li>• Satisfactory maintenance of clinical competencies</li> <li>• Satisfactory completion of the internal ECMO training program</li> <li>• Satisfactory completion of required special procedure classes (e.g. blood administration)</li> <li>• Knowledge regarding quality improvement and standards of care within practice area</li> <li>• Experience teaching patients and families</li> <li>• Excellent communication skills</li> <li>• Knowledge of and ability to evaluate and assess arterial blood gas measurements</li> <li>• Ability to respond to emergent or stressful situations appropriately, calmly, and in a timely manner</li> </ul>

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### AGE SPECIFIC COMPETENCY (Clinical jobs only)

Identify age-specific competencies for direct and indirect patient care providers who regularly assess, manage and treat patients.

**Instructions:** Indicate the age groups of patients served either by direct or indirect patient care by checking the appropriate boxes below. Next,

<input checked="" type="checkbox"/>	Infants (Birth – 11 months)	<input checked="" type="checkbox"/>	Adolescent (13 – 19 years)
<input checked="" type="checkbox"/>	Toddlers (1 – 3 years)	<input checked="" type="checkbox"/>	Young Adult (20 – 40 years)
<input checked="" type="checkbox"/>	Preschool (4 – 5 years)	<input checked="" type="checkbox"/>	Middle Adult (41 – 65 years)
<input checked="" type="checkbox"/>	School Age (6 – 12 years)	<input checked="" type="checkbox"/>	Older Adult (Over 65 years)

### JOB FUNCTIONS

Review the employee's job description and identify each essential function that is performed differently based on the age group of the patient.

### PHYSICAL REQUIREMENTS

**Indicate the appropriate physical requirements of this job in the course of a shift.** *Note: reasonable accommodations may be made available for individuals with disabilities to perform the essential functions of this position.*

Physical Demand Level		Occasional Up to 33% of the time	Frequent 34%-66% of the time	Constant 67%-100% of the time
	<b>Sedentary:</b> Ability to lift up to 10 pounds maximum and occasionally lifting and/or carrying such articles as dockets, ledgers and small tools. Although a sedentary job is defined as one, which involves sitting, a certain amount of walking and standing is often necessary in carrying out job duties. Jobs are sedentary if walking and standing are required only occasionally and other sedentary criteria are met.	Up to 10#	Negligible	Negligible
	<b>Light:</b> Ability to lift up to 20 pounds maximum with frequent lifting and/or carrying of objects weighing up to 10 pounds. Even though the weight lifted may only be a negligible amount, a job is in this category when it requires walking or standing to a significant degree.	Up to 20#	Up to 10# or requires significant walking or standing, or requires pushing/pulling of arm/leg controls	Negligible or constant push/pull of items of negligible weight
X	<b>Medium:</b> Ability to lift up to 50 pounds maximum with frequent lifting and/or carrying objects weighing up to 25 pounds.	20-50#	10-25#	Negligible-10#
	<b>Heavy:</b> Ability to lift up to 100 pounds maximum with frequent lifting and/or carrying objects weighing up to 50 pounds.	50-100#	25-50#	10-20#
	<b>Very Heavy:</b> Ability to lift over 100 pounds with frequent lifting and/or carrying objects weighing over 50 pounds.	Over 100#	Over 50#	Over 20#
List any other physical requirements or bona fide occupational qualifications:		Must be able to move or reposition patients of any weight or size with the assistance of another person(s) and/or equipment		

**Note:** The purpose of this document is to describe the general nature and level of work performed by personnel so classified; it is not intended to serve as an inclusive list of all responsibilities associated with this position.