UW HEALTH JOB DESCRIPTION

SURGICAL CLINICAL MONITORING TECHNOLOGIST, LEAD

Job Code: 510040	**FLSA Status: Non-Exempt**	**Mgt. Approval: J. Curt**	**Date: 11.2018**
Department: Surgical Services-Anesthesia/51010		**HR Approval: M. Buenger**	**Date: 11.2018**

JOB SUMMARY

Under the medical direction of an Anesthesiologist, the Lead Surgical Clinical Monitoring Technologist provides assistance during the institution of invasive hemodynamic monitoring and performs both invasive and non-invasive measurements and testing of hemodynamic functions of surgical patients. The lead technologist performs specialized analytical and clinical measurements and testing for the clinical laboratory. This position ensures all instrumention used meets clinical lab standards. Intraoperative autotransfusion is utilized during procedures when a significant amount of blood loss is expected. The technologist independently operates this device ensuring a safe blood product. The technologist provides for the maintenance and monitoring of equipment to perform these tests and ensures that strict quality control and safety standards are maintained at all times. The position serves as a resource to members of the department for technical questions related to Surgical Clinical Monitoring. The lead technologist manages workflow and staffing for cases as appropriate.

MAJOR RESPONSIBILITIES

Clinical Physiological Measurements

- Responsible for professional testing in conjunction with the administration of anesthesia and the monitoring during adult and pediatric operative procedures.
- Multi-lead electrocardiographs by application of electrocardiographic leads and the operation of a multichannel strip chart recorder.
- Ensures proper operation and function of the Anesthesia machines and monitoring equipment.

Hemodynamic Monitoring

- Under the medical direction of the attending Anesthesiologist, provides assistance during invasive hemodynamic monitoring including peripheral artery or pulmonary artery catheterization and subsequent measurement of intravascular pressures for adult and pediatric patients.
- Obtains blood samples from intravascular catheters for biochemical analysis including ACT.
- Performs cardiac output measurements by injection of an indicator and the subsequent computations of hemodynamic parameters.
- Flow trac hemodynamic real time cardiac output monitoring
- Sets up Transesophageal Echocardiogram (TEE) Instrumentation and basic functions.
- Site Rite
- Activated Clotting Time (ACT) Hemochron
- Blood Gas Analyzer: Quality Assurance + performing tests
- Submits accurate records of all measurement performed to be placed in Health Link.

Intraoperative Autotransfusion

- Provide and set up disposable material needed to collect shed blood.
- Assist with determining the composition of the fluids in the collection chamber. Determine if there are sufficient red blood cells to warrant processing.
- Aseptically assemble autotransfusion disposables.
- Process shed blood from the collection chamber, separating red blood cells from other components. Wash the RBC's until free of debris. Transfer the washed Red Blood Cells (RBC's) into an appropriately labeled blood transfer pack. Deliver this blood to anesthesia for reinfusion.
- Repeat this process until collection is discontinued.
- Maintain chronological intra-operative autotransfusion record via the Electronic Medical Record (EMR).
- Provide anesthesia and the nursing staff with the estimated blood loss and the total number of blood units recovered through proper documentation in Health link.
- Properly enter charge document. Restock all used supplies.
- Dispose of contaminated materials and disinfect equipment in accordance with general operating room processes and procedures concerning biohazardous waste.

Quality Control and Safety

- Determine that all measurement equipment has been found electrically safe before its use, maintaining particular attention to equipment attached directly to patients.
- Ensure that the maintenance of all measurement equipment has been carried out prior to use.
- Ensure for or provide for the correct calibration of all measurement equipment prior to use.
- Collaborates and works in cooperation with the Anesthesia Clinical Biomedical Engineer, the UW Health Plant Engineering Department and the UW Health Electrical Safety Division to ensure availability of an adequate amount of functioning and safe monitoring equipment in the operating room

Department Contributions

- Participate in training of technical and medical personnel, including medical students, house staff, physicians and nurses, in the proper use of all equipment and procedures utilized by the anesthesia clinical monitoring service.
- Participate in self-initiated and departmental continuing education programs in order to maintain clinical skills.
- Evaluate integration of new designs, corrections and alternative methodologies into existing technology.
- Initiate the investigation and appropriate correction of errors in both precision and assurance of measurements and equipment.
- Serve as a resource to members of the department for technical questions related to Surgical Clinical Monitoring.
- Organize and deliver lectures and presentations to physicians, nurses and other medical and paramedical staff on measurements provided by the monitoring service.
- Participate in and share call responsibilities for cases in which clinical monitoring services are required.
- Assist Anesthesia/Perfusion with blood gas analysis, transportation, and blood bank needs.
- Assist Anesthesia with safe transfer of surgical patients to post op location.

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

JOB REQUIREMENTS

Education	Minimum	Bachelor's degree in Biology, Chemistry, Physics, Medical Technology, or relevant Clinical Science.
	Preferred	
Work Experience	Minimum	Three (3) years of experience performing relevant anesthesia related analytical or clinical measurement or surgical related monitoring services.
	Preferred	Five (5) years of experience performing relevant anesthesia related analytical or clinical measurement or surgical related monitoring services.
Licenses & Certifications	Minimum	Basic Life Support/CPR
	Preferred	
Required Skills, Knowledge, and Abilities		• Knowledge of the basic principles and physiology of anesthesia monitoring procedures. • Knowledge of strict sterile techniques and safety procedures. • Knowledge of quality control standards related to analytical and clinical measurement. • Excellent analytical and interpretive abilities. • Ability to perform advanced trouble shooting and problem resolution. • Ability to work under stress and tight deadlines.

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,

X	Infants (Birth – 11 months)	**X**	Adolescent (13 – 19 years)
X	Toddlers (1 – 3 years)	**X**	Young Adult (20 – 40 years)
X	Preschool (4 – 5 years)	**X**	Middle Adult (41 – 65 years)
X	School Age (6 – 12 years)	**X**	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.

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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
	Sedentary: 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**
	Light: 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	**Medium:** 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#**
	Heavy: 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#**
	Very Heavy: Ability to lift over 100 pounds with frequent lifting and/or carrying objects weighing over 50 pounds.	**Over 100#**	**Over 50#**	**Over 20#**
Other - list any other physical requirements or bona fide occupational qualifications not indicated above:				

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.