THE UNIVERSITY OF KANSAS HOSPITAL

Health System Supplier Handbook

This self-directed learning module is designed for easy progression through the sections without assistance from hospital personnel. Once complete, attest in Vendormate that you have completed successful study of the information provided in this packet. For access to any of the departments affiliated with The University of Kansas Hospital, the requirements stated above must be completed prior to your next visit or before a procedure involvement. This guide is not an exhaustive list of requirements and additional requirements may be added by the health system or at the department level.

Overview: Introduction to *Above the Line* Supplier Expectations

The University of Kansas Health System values partnership with our Vendors and Sales Representatives. Your continued structured efforts and support of our organization, The University of Kansas Health System, promotes our ability to provide our patients with the highest quality care and satisfaction.

Primary Goal of *Above the Line*: Establish framework for our supplier evaluation program for our Sales and Service Representatives that fosters continued partnership and dedication in helping us provide world class care to our patients.

Each Sales Representative will need to review the following information:

Above the Line Criteria

Above the Line is a program for the recognition of our sales and service representatives that have gone above and beyond by supporting the system's mission and providing outstanding service that meets and exceeds the University of Kansas Hospital expectations. The program emphasizes contributions towards both clinical and business goals for the organization – the following are general guidelines (subject to change):

- Each Sales Representative will be evaluated on the following **Clinical** Components:
    - Clinical Staff perception of Sales Representative's accessibility for support and effectiveness with procedures; through demonstrated respect and trust from the clinical team.
    - Practical product knowledge with comprehensive procedural understanding. The ability to know about their products capabilities in any unforeseen circumstance.
    - Provides effective follow-up communication to close the loop on requests and product needs.

- Each Sales Representative will be evaluated on the following **Business** Components:
    - Provides pricing at a health system requested benchmarks to promote cost goals for the organization
    - Complete product information and communication with Value Analysis Team serves as an effective partner by following New Product Request and Trial policies while communicating with the Value Analysis Team and providing all requested information
    - Follow all business and supply chain policies; for example, follows all Bill-only guidelines and or other invoicing procedures/requirements
    - Sales Representative partners with supply chain for all purchasing and distribution; for example, orders and ships product according to specified fill rates and within freight terms determined by contractual obligations

VendorMate

Vendor credentialing is a vital component to the successful management of regulatory requirements for Health Care Industry Representatives (sales and service representatives);

- Checking In: Between the hours of 7:00 a.m. to 8:00 p.m. (Monday through Friday), you may enter through the front lobby and receive your Vendor Badge. Vendors should then check in on the ground level by valet services.
    - In order to be qualified for privileges to visit our facility, each Sales Representative must have a completed, up-to-date VendorMate profile.
    - If a sales and service representative does not have a complete VendorMate profile they will not be allowed access until the profile has been completed.
    - Please review www.vendormate.com for any additional questions or concerns; the Value Analysis department are the administrators of the vendor credentialing program/services

- We discourage unscheduled meetings or "dropping in" with our hospital providers; prior to arriving at the hospital, please make arrangements with the Clinician/Administrator that you plan to see. When a physician has requested your presence, it is still important that you contact the coordinator for that unit/specialty. The unit leadership representative will ensure your name is on the roster for admission to the unit/procedural area. Vendor representatives must only go to areas where they have specific appointments or approval and are not permitted in any other areas. Individual units may have policies that cover their individual needs and concerns.

- **Sales Activities:** KUH has strict guidelines on soliciting and/or the distribution of literature on hospital property

- **Access to Phones:** All vendors and service representatives may not utilize hospital/clinic phones to conduct their routine business. The use of two-way pagers and/or cell phones in the OR's is limited (with the exception of KUH approved transceivers). Please place pagers on silent mode while in the OR. Cell phones and two-way pagers can be used outside patient care areas, to include the hallways outside the OR's.

  **Please follow all other hospital provided conduct policies and other recommended practices*

MedApproved and the New Product Process

- To provide standardized processes for the execution of new products at the University of Kansas Hospital; promote clinical effectiveness, safety and quality for patients and staff; all products and equipment will be processed through a well-defined pathway for business operations to appropriately prepare a product request for multi-disciplinary review.
- To introduce a product into all product lines at The University of Kansas Hospital, the following steps must take place in order to ensure that your product is introduced appropriately into the system. If you do not follow hospital policy for introduction of product, the product will not be reimbursed if used or introduced into the hospital formulary.
  - New product request will be completed in the product review system (MedApproved) www.MedApproved.com
  - Vendor(s) will submit general product information.
  - Answer the assessment questions defined by the hospital.
  - Submit supplemental documentation.
  - Provide contract and product cost data in an editable format.
- The hospital value analysis department will reach out to you once sponsorship and clinical need of your product has been confirmed. Please do not continue to contact clinical sponsor to seek status of the product addition – our team will contact you and identify your designated point of contact. Deadlines for submission will be enforced and products will not be prioritized or escalated easily. Please contact the Value Analysis department for further details.
- The University of Kansas Hospital has a structured evaluation policy/procedure. Please see review the evaluation policy and sample evaluation form.

Cost Expectations

- The University of Kansas Hospital has been conducting a review of our pricing competitiveness in comparison with other academic medical centers through the University Health system consortium (UHC).
- The measurement we use is the Price Competitive Index (PCI) ; this indicates the degree to which the organization's pricing is competitive by manufacturer and/or UNSPSC. The PCI values range from 0.0 to 1.0. A lower value indicates highly competitive pricing while values closer to 1.0 indicate less competitive pricing.
- The University of Kansas Hospital's system goal is to achieve a PCI score at the 0.25 percentile or less.

Service Expectations

- The vendors must meet the hospital's high standards of ethics, fiscal responsibility, and patient safety – we seek to partner with individuals and other companies that share the same cultural dedication to customer service.
- The supplier performance must perform *Above the Line* in the following: proactive communication, front line service, clinical support, policy compliance, and product availability.

Additional Hospital Policies

- **Code of Ethics:** The University of Kansas and its Subsidiaries are proud of our tradition of ethical and responsible conduct. We expect all officers, employees, members of the Hospital's medical staff, independent contractors, consultants and other representatives of the Hospital to adhere to the highest standards of conduct whenever acting on behalf of the Hospital. The Code of Ethics play an important role in the Hospital's Corporate Compliance Program by defining the standards of conduct expected of Representatives. Adherence to the Code of Ethics promotes an overall atmosphere of ethical and honest behavior in the performance of our job duties. This atmosphere is fundamental to facilitating compliance with the laws, rules, and regulations that affect the Hospital, and fostering our patients' and the community's confidence the Hospital's integrity.

- **Purchase Order Requirement: No PO, No GO:** Vendor provided items will not be accepted and/or used during procedures unless accompanied by a Purchase Order (P.O.). All items found to not have had prior approval or a PO and then subsequently billed to the hospital will be viewed as donations and patients will not be charged.

- **Vendor – Bill Only:** All vendors are required to physically deliver Bill Only forms within 48 business hours of the procedure to the department contact upon completion of each surgical procedure. All documents that do not meet certain

qualifications are considered incomplete and will require immediate vendor action within 48 business hours of the surgical procedure. Please review the attached Vendor Bill-Only policy for any additional questions or concerns.

- **Parking (Attachment A)**
  - Main Campus Parking:
    - Park in the Olathe Parking Garage located on the Southwest corner of the main campus – just East of Rainbow Blvd. on Olathe Blvd.
  - Indian Creek Campus Parking:
    - Parking is available on the South side of the main Indian Creek building.

- **Sales and Services Representative Policy:** This policy has been developed in order to advance the safety and security of the Hospital and its patients and to promote good working relationships between and among representative, hospital staff members, clinicians, and physicians. Policy statement includes: The University of Kansas Hospital Authority, University of Kansas Physicians, The University of Kansas Medical Center, and Kansas University HealthPartners, Inc. Please refer to the Sales and Services Representative Policy for additional information.

Hand Washing

- Hand washing is the single most important thing you can do to ensure the best patient outcome and maintain your own health. The majority of hospital acquired (nosocomial) infections could be eliminated with effective hand washing techniques. Everyone carries with them resident microorganisms. These microorganisms have seated themselves not only on the surface of our skin, but also securely in the deep epidermal layers of our skin. Although they may not be harmful to us, they can be devastating to another person if transmitted.
- Abrasions and cuts on the skin create an optimal environment for infection if not cared for properly. All cuts and abrasions should be covered with an occlusive dressing prior to entering the procedure room. Individuals with infected cuts, lesions, lacerations, etc. should not be permitted into the procedural area.
- To minimize the potential for retention of harmful microorganisms on your skin, wash regularly. The Centers for Disease Control (CDC) has issued guidelines for hand washing. Although basically common sense, they are good rules of thumb to follow. Wash your hands:
  - prior to and after using the restroom
  - prior to and after eating
  - prior to and after smoking or blowing your nose
  - prior to entering the OR and after leaving the OR
  - following removal of gloves: the integrity of non-sterile exam gloves and sterile surgical gloves are not, nor do they claim to be, 100% free of breaks or holes

- **Hand Washing Technique:** To properly wash your hands, complete the following steps:
  - Wet hands and as much exposed arm as possible.
  - Liberally apply lotion soap to your hands and exposed areas of arms.
  - Lather ALL surfaces for approximately 15-30 seconds. The areas under the fingernails and the cuticle areas frequently culture high for microbes. It is important to note that heavy scrubbing of the skin is of no additional value. The converse is true. Heavy scrubbing will break down the surface of the skin and can cause dermatitis.
  - Rinse all soap from hands and arms.
  - Pat dry with paper towel (do not rub)

    - **Fingernails:** Fingernails should be well manicured and free of jagged edges, this aids in the removal of harmful bacteria from the hands when washed. Artificial nails may harbor fungi and other microorganisms that can be harmful and are not recommended. Nail polish should be free of chips or cracks.

Infection Prevention

Standard Precautions: Standard Precautions currently recommended by OSHA and the CDC are guidelines for safe practice in the workplace. It is critical that needle sticks, cuts and blood exposures be prevented. One should assume that all blood and body fluids are infected and direct contact should be avoided if at all possible. If inadvertent exposure occurs, thorough cleansing of the area should occur as soon as possible. Potential for exposure is a reasonably anticipated skin, eye, mucous membrane or parenteral contact with blood, blood tinged body fluids or other potentially infectious materials. They include semen, vaginal secretions, pleural fluid, amniotic fluid, saliva, feces, and urine. Standard Precautions can be divided into three major categories:

- Barrier precautions, PPE (personal protective equipment)
- Hand washing

- Sharps precautions

Gloves are to be worn when there is a potential for direct contact with blood and or body fluids, non-intact skin, invasive procedures, when the skin on the practitioner's hands is interrupted, if working directly with contaminated instruments or situations involving phlebotomy.

Masks/protective eyewear is to be worn to prevent contact of potentially infectious blood and/or body fluids with mucous membranes of the oral cavity, respiratory tract and/or eyes. Masks should be worn whenever aerosolization or exposure to blood or body fluid is likely.

Impervious Gowns are worn to prevent contact of blood or other body fluids with clothing or skin. These items are to be removed prior to leaving the surgical suite.

Shoe covers are recommended and should be worn when involved in procedures that are likely to produce gross contamination, (e.g., orthopedic procedures)

Tuberculosis: Vendors should restrict themselves from cases with TB patients, if it is necessary per surgeon request for the vendor to be present during the case they can work with the Core Desk to secure the appropriate PPE.

Human Immunodeficiency Virus (HIV)/Hepatitis B & C: Within the OR these threats are significant due to the fact there is blood and/or body fluid exposure on almost every case. How we deal with this exposure is of utmost importance.

Methods of Transmission in the Operating Room: HIV is found in blood, semen, and vaginal secretions of carriers. These substances can be found in the typical OR during various procedures. There have been documented transmissions after skin or mucous membranes were exposed. Precautions have also been applied to feces, saliva, nasal secretions, sputum, or vomitus. The rationale is that there is a possibility that these substances may contain blood, yet may not be visible to the naked eye. Orthopedic surgical procedures expose personnel to high-speed drills and sharp instrumentation with potential for aerosolization/exposure of bloody fluid.

Protocol Following Blood Borne Pathogen (BBP) Exposure: If you sustain a puncture type injury or a BBP exposure while in the OR:
- Wash the exposed area thoroughly.
- Notify the charge nurse.
- File an injury report.

The CDC estimates that HIV is 100x less virulent than the Hepatitis B virus (HBV). Your chance of contracting hepatitis is far greater than HIV. Standard precautions should be followed at all times to protect yourself.

MRSA/VRE: These are two of the most prevalent drug resistant bacteria found. What makes these organisms a challenge in the hospital is many of our patients are compromised, and in surgery we offer the bacteria a portal of entry that they would not otherwise have. These bacteria are resistant to most of the antibiotics on the market, so they are very difficult to kill. We maintain these patients on Contact Isolation. This entails wearing gloves and a gown when entering the room. These items must be removed when leaving the room, and, of course, thorough hand washing is essential. These practices will help in the "contain and confine" theory, and lessen the chance of spreading the organisms to another patient.

Confidentiality

It is tempting to discuss patient events with your family and friends. Don't. It is never appropriate to discuss patient events outside of the hospital setting. Federal rulings have clarified and reinforced the responsibility of all of us to protect all patient information. The issue of patient confidentiality is of utmost importance. Every patient who enters any hospital facility has the right to the expect privacy. This means you must never divulge a patient's name and situation to anyone who is not directly involved with their care. For example, it is not acceptable to discuss the cases you are involved with in the hospital elevator, cafeteria, lobby, hallways, or anywhere else where a lack of privacy may be an issue. The patient has the right to expect their medical record will also be held in confidence. Normally vendors have no need to have access to the patient's chart, therefore vendors should not be viewing the record. This is a tremendously important issue. ***Follow all other hospital provided confidentiality documents and other recommended practices.***

Sterile Processing Department

Appropriate attire such as "bunny suits" or clean scrubs and hair covering are required attire for the hospital SPD Processing area. Representatives/Vendors are limited in access to the restricted area of the Decontamination area of SPD – must obtain permission from the Supervisor or Lead Technician. Under no circumstances is a vendor to decontaminate items that belong to KUH or that have been loaned/consigned to our organization.

Bringing In Loaner Instruments for the OR

Vendors must also refer to the hospital Loaner Instrumentation Policy for additional information. Loaner instruments must be delivered to the back door of the Sterile Processing Department. Loaner trays should have a completed loaner instrumentation form dropped off on the unit. Loaner instrumentation and implants that are left in the delivery area after the procedure are not the responsibility of the Hospital. SPD staff has been instructed not to sign contracts accepting responsibility for trays of loaner instruments, equipment, or implants.

All Loaner instrumentation and/or any other items needing sterilization should be accompanied with sterilization instructions, preferably on company letterhead. Loaner instrumentation will be washed prior to set-up when they are brought in from outside.

It is highly required that the instruments arrive 24-hours prior to their use. This allows adequate processing time. Instruments loaned to the hospital for certain procedures must be accompanied with at a minimum these pieces of information:

- Date of surgery
- Name of patient
- Surgeon
- Name of Procedure

If the information is lacking, the instruments will not be accepted. Trays should be clearly labeled in order to assist the SPD staff in labeling the tray properly. It is recommended that the company call prior to sending a courier to pick-up instruments after a procedure. All trays must be checked out of the hospital.

Repairs/Loans: No equipment or instrumentation will be removed from any of the sites unless accompanied by authorization of Sterile Processing and/or clinical personnel. KUH hospital personnel must complete this process with the vendor.

In-service Requirements

In-Service Training provides an individual the opportunity to develop specific knowledge and skills needed to perform their assignments for all nursing units, departments and staff involved in the evaluation or initiation of new products. This will be coordinated by the vendor in advance through the hospital with the Director of Business Operations/Value Analysis or Designee, after approval has been received to trial the product. All in-services must be approved by the Director of Business Operations/Value Analysis or Designee in advance of the training being conducted.

It is the responsibility of the vendor representative to obtain an in-service education log sheet and to ensure that all KUH staff sign in when attending an in-service session. These log sheets must be returned to the educator or department manager. It is the policy of KUH that all education and continuing education units (CEU's) are provided at no charge. Vendor representatives who conduct in-service sessions must provide documentation of their competency and/or credentials. As product demonstrations and trials may impact other departments in the facility, vendor representatives must work with education staff or management staff from all potential areas that may be impacted by this product or equipment. All education of facility staff and physicians must be coordinated and completed prior to the day of the procedure or implementation. If the education has not been completed, the product or equipment will not be approved for use.

Vendor should refer to the hospital Temporary Equipment Policy for details.

Procedural Areas at the University of Kansas Hospital

The University of Kansas Health System values partnership with our Vendors and Sales Representatives. Your continued compliance with our policies and procedures makes an impact on the outcomes of our patients. The following are specific guidelines for the procedural/surgical areas of our hospitals:

Physical Environment: (Procedural Specific Vendors)

- Procedural rooms/suites are designed with successively more restricted zones. The closer you get to the actual procedural room, the more restricted the zone.
    - In unrestricted zones, authorized personnel may work and wear street clothing. Shipping cardboard may be found in this area. This area includes outer hallways, dressing rooms, and bulk storage rooms.
    - In semirestricted zones, personnel wear scrubs, hairs covers, and have the option of wearing shoe covers. No shipping cardboard may enter this area. Only freshly laundered hospital provided scrubs and covered scrubs are allowed in this area. This area includes the hallways around the OR's, decontamination areas, and the scrub sinks.
    - In restricted zones, personnel wear close-fitting masks at all times in addition to the other surgical attire. This area includes OR's and sub-sterile rooms between OR's.
    - Backpacks or other personal belongings are restricted from being brought into a semi restricted or restricted area

Personnel In The Room

- At the patient's head: the anesthesiology resident & anesthesiology attending have the responsibility for maintaining the patient's airway, for monitoring and managing the patient's vital signs, for maintaining the patient's analgesia, and for administering fluids.
- The circulating nurse is in charge of the room: She/he has the responsibility to assess the patient's needs, to function as the patient's advocate and to anticipate the needs of the surgical and anesthesia teams. The circulator also communicates with other departments to ensure that all necessary supplies and equipment are at hand.
- Within the sterile field there may be a number of persons; the surgeon, assisting surgeon, other assistants, and scrub personnel. Assisting surgeons are frequently resident physicians or physicians in fellowships. Medical students may also be in the sterile field, as may nursing students, surgical technology students, and other trainees.
- Outside of the sterile field: X-ray technicians, perfusionists, respiratory therapists, representatives from OR, and observers (including vendor representatives)

Aseptic Technique

- Aseptic technique (procedures used to maintain sterility or prevent contamination) is essential in all procedural areas. If breached, the consequences can be far-reaching and potentially devastating to the patient. The patient is particularly at risk for invasion of exogenous bacterial infections because the most significant protective barrier (the skin) is interrupted during a procedure.

- When there is a breach in aseptic technique or when it is noticed that instruments are contaminated, it must be reported so corrective action can take place immediately. A delay in reporting such incidents unnecessarily places the patient at great risk. Placing of the patient's wellbeing above personal/professional embarrassment demonstrates good surgical conscience.

    - **Sterile versus Non-Sterile Personnel:** Physicians, assistants, and hospital personnel who have performed a surgical hand scrub and donned sterile gowns and gloves should be considered sterile. Care must be taken to avoid inadvertent contamination of these team members. The surgical gown is considered sterile in the front from axilla to waist level, from hands to just above elbows and from side to side. Although the back of the gown is considered unsterile, it is poor technique and inappropriate to touch a scrubbed team member on the shoulder or back. If you need to gain the attention of the surgeon or member of the sterile team, it is highly recommended that you enlist the assistance of the circulating nurse. Non-scrubbed personnel in the room include the anesthesiologist or nurse anesthetist and the circulating nurse.

    - **Sterile Field:** The sterile field consists of those areas in the procedural rooms that are covered with sterile drapes as well as personnel wearing sterile gowns. Sterile fields are set up and maintained under well-defined rules that everyone who enters the procedural area must understand and follow. Sterile fields may be blue, green, or white in appearance. Clear plastic bags may be used to drape equipment such as microscopes, saline slush/warming machines, and fluoroscopy units. It is best to be aware of your location (360o around you) and ask before you touch anything or back into something. Generally speaking, the sterile field includes:
        - The patient
        - The back table
        - The Mayo stand
        - The microscope, C-Arm, slush machine, or other draped equipment
        - Radiological equipment
        - The surgeon, assistant, & scrub person

- The personnel in the room constantly monitor the sterile field. You should maintain an area around the sterile field of no less than one foot. Don't reach over, touch, or pass closely by any sterile field at any time. All items within the sterile field should

be sterile. All items placed upon or within the sterile field should be sterile. When presenting items to the sterile field there are a variety of things to be checked: proper packaging, package integrity, and sterile indicators are a few. Although presentation of supplies to the sterile field is not a difficult skill to master, it is one that requires practice to become proficient. The sales representatives will not engage in this activity.

- **Talking in the Surgical Suite:** Keep conversation to a minimum. Nosocomial infections of nasopharynx origin are common surgical site infections. Talking in the surgical suite should be kept to conversations that are pertinent and essential. The patient should always be the focus of your attention. During induction of and emergence from anesthesia, it is always courteous to the anesthesia provider and the patient to refrain from talking. There have been studies that indicate patients may experience some awareness while under anesthesia. This is one reason why conversations within the surgical suite should be pertinent, essential, and *always* professional. Another reason talking should be kept to a minimum is the surgical mask itself. Once saturated with moisture, the mask lacks effective filtration properties. Human breath is laden with moisture that is expelled while breathing, talking, sneezing, and coughing. The mask is a protective barrier that benefits both the wearer and the patient, when worn properly. Masks are covered more in-depth in the Surgical Attire section of this module.

- **Traffic Patterns:** Movement in and around the procedural suite should be limited to that which is absolutely necessary. Air turbulence is created with movement that in turn increases the likelihood of bacterial fallout from the skin and lint from draping materials to contaminate the sterile field and wound. Shaking of items should not be done in a procedural environment. When it is necessary to move around a functioning room, you should face the sterile field at all times. One should never take a pathway between two sterile fields. It is the responsibility of the entire surgical team to monitor and protect the sterile field and the integrity of the room. Entry into and exit from a procedural room should be done only when absolutely necessary. Vendors: Once inside the procedure room, the circulating/procedural nurse will show you where to stand. Please stay where directed in order to avoid contamination of the sterile field.

Surgical Attire

Surgical attire is multipurpose. Not only do procedural personnel wear surgical suits, gowns, and masks, they also wear sterile gloves and eyewear to protect against transmission of blood borne pathogens and other hazardous materials.

- **Scrub Suit**: The standard scrub suit consists of a two-piece pantsuit made of a closely woven fabric. Attempts should be made to ensure the scrub attire stay as clean as possible while donning the suit. Scrub pants with draw string ties should have the ties tucked in. Long sleeved jackets should be worn by non-scrubbed personnel and be snapped closed when in the OR. These practices will lessen the likelihood of contaminating the sterile field when moving near it. Long sleeved jackets are also useful for non-scrubbed personnel to keep warm.

- **Hair Coverings**: Hair coverings come in a variety of styles. The most prudent one to wear is the bouffant type hair covering. Shedding hair and dandruff can be a major source of bacteria in the environment, therefore, all hair should be covered. Hair coverings are required when entering a semi-restricted area of the OR. A hood may be necessary to confine and contain the hair. Persons with beards should cover facial hair.

- **Shoe Covers**: Historically, the purpose of shoe covers was to keep the shoes of the surgical team clean and reduce the tracking of blood throughout the surgical suite. In today's environment of deadly blood borne pathogens, the shoe cover has taken on an additional significance, that of personal protective equipment (PPE). Shoe covers are optional in the surgical arena. This means the responsibility of self-protection has fallen on the individual team member. It is highly recommended that all components of protective attire be worn when the risk of exposure to blood and or body fluids is likely. Please remember to remove shoe covers before leaving the OR arena.

- **Masks**: Masks are required in restricted areas of the OR when sterile supplies are open. To don a mask properly the fit should be snug. The top tie should be tied high up on the back of the head and the lower ties should be tied at the base of the neck. There should be a no gapping on the sides of the mask. Gapping allows respiratory contaminants to escape, unfiltered, into the clean surgical environment. Respiratory contaminants increase a patient's risk to post-surgical wound infection. Masks are not to be left hanging around the neck, placed on top of the head or stored in a pocket for future use. Once worn, masks are contaminated with respiratory expiration and should be discarded. The life of a mask is limited to approximately 1½ to 2 hours. The mask should be changed after each case or when soiled. When removing a mask, handle it by the strings only. Immediately wash hands after handling a soiled mask to avoid cross contamination of patients, staff members and equipment.

- **Jewelry**: It is preferable that all jewelry be removed prior to entering the OR. Rings, watches and bracelets can harbor harmful microorganisms. The only allowable jewelry is a watch and wedding band; any earrings should be small and completely covered

at all times by the hair cover. There should be no dangling jewelry outside of the scrub suit. It is not recommended practice to attach jewelry to the exterior of the scrub suit. This creates the possibility of the item falling into the sterile field.

- **Vendor Identification & Dress**: KUH scrubs can be obtained from Laundry & Linen in the basement of the hospital. These scrubs must be returned to the "scrub" machine, located in the locker rooms. Change into scrub clothing and fold your clothing or hang-up on hangers, if any are available. Put on a hair cover (and shoe covers if desired). Surgical masks are located in the scrub sink areas, next to the procedural room doors. There will NOT be available locker space in the dressing rooms, so it is best to leave purses and backpacks at home, as well as any jewelry or expensive clothing. Theft of clothing and other articles is a risk you are assuming by leaving items unattended in our locker rooms. Scrub clothing has limited pocket space.

  Wear your Vendor Badge on your scrubs. It is also recommended that you wear your nametag so your name can be read. KUH Scrubs are not to be worn outside the facility. Cover gowns are not required within the facility.

Potential Hazards in the Operating Room

- **Fire:** Equipment used on a routine basis during a surgical procedure can be a source of possible combustion, given the oxygen-enriched atmosphere. Although fire in the OR is a rare occurrence, it is always a possibility. The code that you will hear announced in situations of a fire is "Code Red."

- **R.A.C.E.:** If a fire should start in the surgical suite, the first concern is always for the safety of human life, the patient's, visitors, and OR personnel. You may or may not be directly involved in the rescue of patients or personnel. However, preparation for emergency situations is necessary. The R.A.C.E. mnemonic may help prevent panic by aiding memory for effective steps to a fire emergency.
  - **R** - Rescue those in immediate danger
  - **A** - Activate the nearest fire alarm
  - **C** - Confine and contain the fire, if possible, without endangering yourself or others
  - **E** - Evacuate the room, area, floor or department

  If deemed necessary, the patient should be removed from the room. Due to the production of toxic gases from burning materials in the procedure room, time is essential. If the patient is under anesthesia, the entire procedural table should be moved to prevent injury to the patient and staff. Know the locations of all fire alarms within the department and where the nearest alarm is to your location. Should a fire break out within your surgical suite, you can be of great assistance by simply initiating the fire alarm or dialing 911. Fire alarms go directly to the fire department, thus allowing them to know the exact location of the fire within the hospital.

  It is preferable, but not always possible, to extinguish the fire in the room. You may be asked to participate in the following:
  - Activate the fire alarm to notify the fire department or call 911. You may also be requested to notify the front desk.
  - Obtain the fire extinguisher nearest to the room.

  Always know where the closest fire extinguisher is to your location. Proper application of the device is imperative to the personal safety of the operator and other personnel within the vicinity. Another mnemonic to help with this is PASS.
  - **P** - Pull the pin from the handle
  - **A** - Aim the delivery device at the base of the flame
  - **S** - Squeeze the handle of the fire extinguisher
  - **S** - Sweep. Deliver the contents of the extinguisher in a sweeping motion over the base (bottom) of the fire.

  Incorrect application may cause the fire to splash back and injure the operator of the fire extinguisher. Once evacuated from the room, close the door. If the fire is too large to be extinguished with a fire extinguisher, smoke and fumes will likely seep out into the common OR corridor. This may require the evacuation of the department. Know the quickest way out of the department and out of the building. You should not bring in supplies and place them where they would block an exit.

Laser Safety: Lasers are used in a variety of surgical procedures. Generally, the atmosphere in a laser case is one of extreme caution. Many safety procedures are meticulously followed. The facility will provide you with laser safety glasses or goggles to wear while attending a surgical case that involves laser. Regular prescription glasses do not have the necessary wavelength protection to adequately protect your eyes from damage and should not be relied upon for protection. The possibility of stray laser beams damaging your skin does exist. Wearing a long sleeved warm-up jacket will help in this area. High filtration surgical masks, specific for laser use, are available. Stray laser beams can create a fire hazard. When not in use the laser is on standby. You will hear the

circulating nurse, scrub person and surgeon communicating the status of the laser frequently during the case. The surgical team is constantly monitoring the field and the room for possible hazards.

Electrical Safety: Just about every device used in the procedure rooms are electrical. With so much equipment in operation at one time, the source and type of system becomes important. The length of the electrical cords also is an important safety feature. Electrical cords should be contained and should not be attached to extensions if at all possible. Within procedure rooms are line isolation monitors (LIM). Their purpose is to continuously monitor the relation between the capacity and resistance in the two lines and the ground. Therefore, should degradation of electrical equipment used with an isolated electrical system occur and leakage of current goes to ground, the LIM warning system will alarm. This warning alerts personnel to a potentially dangerous situation. Generally, the initial course of action is to unplug the last piece of equipment plugged in. If this is unknown, equipment is unplugged in a systematic fashion until the offending article is located. If the offending article happens to be a piece of equipment you are demonstrating, try another plug. If it is the outlet, your equipment will work satisfactorily in another one. If your equipment is faulty, the LIM will alarm. The article is then removed from service until the biomedical engineers can examine it and make needed repairs. Faulty outlets require maintenance to make the necessary repairs. Until this has been accomplished the outlet will be tagged as "Out of Order" to prevent inadvertent usage while faulty. Assure the integrity of your equipment prior to in-service and operation within the department. It is expected that equipment is delivered in proper condition to perform properly and safely. Cords and plugs should be intact without evidence of fraying.

Check the plug/outlet compatibility. If you need an adapter, the staff must be informed of this in advance of your arrival. All equipment must be checked by the Biomedical Department before being brought to the procedural area. Each time the equipment leaves the hospital property it is to be rechecked. Biomed hours are from 7:30 to 4:30 M-F. After hours Biomed clearance necessitates calling in a technician and it is preferred that items be inspected during normal working hours. Biomed will affix a sticker to the equipment to communicate that it has been checked and is acceptable to use.

Electrical Outages: Electrical outages in the hospital setting can be quite disruptive. The hospital has a back-up generator(s) for emergency electrical supply. When there is an interruption of the commercial electrical supply to the hospital, the generator automatically begins supplying electricity within 10 seconds. The generator will continue supplying energy until commercial power is restored. During the period before the generator kicks in, it is important to refrain from movement. Doing so could result in injury or contamination of the sterile field

Miscellaneous Safety: There are many structural and equipment hazards in a procedure room. IV poles, prep stands, air hoses (attached to wall, ceiling, or tank source), electrical cords, lifts/steps/stools/ stands, electrical and medical gas booms that hang from the ceiling, etc. can create hazardous surroundings for visitors of the OR. Be aware of your surroundings at all times.

Radiation Safety

Radiography is common in the procedural setting. X-rays are utilized frequently to visualize structures within the body that cannot be seen without assistance. Cumulative effects of radiation exposure have been linked to a variety of health problems and birth defects; radiation has the ability to modify molecules at the cellular level. To lessen your likelihood of over or inadvertent exposure to radiation remembers that time, distance, and shielding are all factors to be considered. All precautions from hazards of radiation exposure must be observed when x-rays are taken, fluoroscopy is used, or during implantation of radioactive material.

- **Time** - Length of exposure is always a determining factor for risk. Whenever possible, limit your time to radiation exposure. If this is not possible, attempt to employ the following two factors; both reduce exposure significantly.
- **Distance** - Radiation scatters when it hits the patient but only travels a short distance. There is a significant exponential decrease in radiation exposure with increased distance.
- **Shielding** - When you know you are going to participate in a surgical procedure that involves radiation exposure (x-rays or fluoroscopy), it is important to wear a lead apron or other supplied shields. When exposed to radiation, you should always face the source. This will provide the maximum amount of protection that the lead apron has to offer. Lead absorbs approximately 95%-99% of the scattered radiation and is an excellent source of protection. Lead doors are used in the OR. During cases that require x-rays, staff members may stand behind the lead door for protection from radiation. It is not recommended that sterile personnel leave the surgical suite because of decreased air quality outside the room.