THE 2020
SAFETY MANAGEMENT PLAN
FOR
MANAGEMENT OF THE ENVIRONMENT OF CARE

I. Introduction

The Safety Management Plan defines the mechanisms for interaction and oversight for the seven primary functions involved with the Management of the Environment of Care. These functions include safety, security, hazardous materials and wastes, emergency management, fire/life safety, medical equipment, and utilities management. The overall objective of this plan is to define methods/processes for the identification and management/minimization of the inherent safety risks associated with our healthcare operations. This Plan applies to (scope) Duke University Hospital and Clinics, the Private Diagnostic Clinics., and the Duke Primary Care practices. The two latter operating units are responsible for adapting and adopting the provisions of this Plan into the organization-specific plans for the management of the Environment of Care.

II. Organization of Participants

A. Administration of Safety Management Functions (EC.01.01.01, EP 1 and EP 4-9) -The Environment of Care (safety management) functions are administered by the following units and individuals:

Safety Management	Safety Officer and Duke University Safety Committee	Dr. Thomann
Security	Duke University Police Department	Officer Schlitz
Hazardous Materials	Biological - Biological Safety Division (OESO)	Dr. Schwartz
	Chemical – Occupational Safety & Hygiene Division (OESO)	Ms. Greeson
	Radioactive - Radiation Safety Division (OESO)	Dr. Yoshizumi
Hazardous Wastes	Biological - Environmental Services	Mr. Bass
	Chemical – Environmental Programs Division (OESO)	Dr. Thomann
	Radioactive – Environmental Programs Div. (OESO)	Dr. Thomann
Emerg. Management	Emergency Services	Mr. Zivica/ Ms. Puglia
Fire Safety/Life Safety	Fire Safety Division (OESO)	Mr. Knipper
	Facility Planning, Design, & Construction	Mr. Subasic
Medical Equipment	Clinical Equipment Management	Mr. Scoggin
Utilities Management	Medical Center Engineering and Operations – Clinic Building	Mr. Sexton
	Medical Center Engineering and Operations - Duke Hospital	Mr. Martin

Additional operating units supporting the Management of the Environment of Care include:

Medical Equipment	Clinical Equipment Management	Ms. Hughes
Employee Health	Employee Occupational Health and Wellness	Dr. Epling
Employee Health	Employee Occupational Health and Wellness	Dr. Said
Infection Prevention	Infection Prevention Department	Mr. Huslage
Risk Management	Clinical Risk Management	Mr. Legge
Risk Management	Corporate Risk Management	Mr. Boroski

Utilities - Campus	Facilities Management Department	Ms. Wolfe
Workers' Compensation	Workers' Compensation	Mr. Kyles

Each of the listed individuals has the primary responsibility for the design, implementation, and monitoring of a specific management plan for their function or operation, within the provisions/requirements defined in this Institutional plan for the management of the Environment of Care (EC.01.01.01, EP 3-9). The goal of these management plans is to provide a safe, functional, supportive, and effective environment so that the quality and safety for patients, staff members, and other individuals in the hospital is preserved. The Safety Officer and the Duke University Safety Committee (DUSC) provide oversight for the development, implementation, and monitoring of these activities. All EOC Management Plans are updates and evaluated at least annually (EC 04.01.01 EP 15).

B. Safety Officer (EC.01.01.01, EP 1) - Dr. Wayne R. Thomann is the designated Safety Officer for Duke University Hospital and Clinics, with the responsibility for coordinating the ongoing efforts of the participants in the Safety Management Plan to monitor and respond to conditions in the healthcare environment. He also serves as the Chair of the DUSC and is charged with leading the risk assessment/risk management activities and coordinating risk reduction activities related to the physical environment. Dr. Thomann is the Director of the Occupational and Environmental Safety Office (OESO) and performs the duties defined in his job description.

Dr. Thomann has been authorized to take appropriate action, including evacuation of facilities and terminating hazardous operations, whenever conditions pose an immediate threat to life or health or threaten damage to equipment or buildings.

C. Duke University Safety Committee (DUSC) (EC.01.01.01, EP 1) -The Duke University Safety Committee is composed of representatives from administration, clinical services, support services, and the Safety Officer. It is responsible for the direct oversight of all activities related to the management of the Environment of Care. The Committee operates as a standing committee of the Medical Staff and functions under a specific Mission Statement, which has been approved by the DUHS Board of Directors (governing body). At a minimum, the DUSC conducts bimonthly meetings. However, the Committee plans for eleven meetings a year and is scheduled to meet on the fourth Thursday of each month, except for a combined November/December meeting.

D. Integration with the Emergency Operations Plan (EOP) (EM.01.01.01 and EM.02.01.01) – Based on both the past experience with Emergency Preparedness being a part of the management process for the Environment of Care (EOC) and the necessary interactions with the EOC functions, Emergency Management (EM) will continue to be integrated in the overall planning and management of the EOC under the Safety Management Plan. Each EOC function leader is expected to include specific EM requirements/support in their individual management plans, as appropriate. The EM operation will continue to draw on DUSC expertise in developing the EOP, including development of the Hazard Vulnerability Analysis.

E. Integration with Infection Control (EC.02.02.01 and IC.01.01.01) – Based on both the past experience with Biological Materials being a part of the management process for the Environment of Care (EOC) and the necessary interactions with many of the EOC functions, Biological Materials will continue to be integrated in the overall planning and management of the EOC under the Safety Management Plan. Integration with the relevant Infection Control standards and elements of performance will be achieved through collaboration between the DUSC and the Hospital Infection Control Committee (HICC). The Chair of the DUSC is a standing member of the HICC and the Infection Prevention Department is represented on the membership of the DUSC. In addition, the function leaders for Biological Materials and/or Wastes will be invited to present appropriate updates to the HICC.

F. Private Diagnostic Clinics -The Duke University Hospital entered into a Memorandum of Understanding with the Private Diagnostic Clinics, PLLC on October 15, 1999. This memorandum defined points of agreement for the provision of technical, clinical, and support services by the Hospital to the PDC. The services provided include support for all of the essential functions within the Environment of Care and the provision of these services will be consistent with the Safety Management Plan for Duke University Hospitals and the individual functions covered under that plan. The Private Diagnostic Clinics' EOC Management Plan defines how the PDCs coordinate their operation with the Duke Hospitals' EOC Plans and also resolves any variances from the procedures/processes included in those plans. The PDCs have a standing member on the DUSC who is responsible for the management and reporting functions defined in the PDC's EOC Management Plan. Please note that the PDCs retain the ultimate responsibility for the management of their Environment of Care and are accredited separately from the DUH and Clinics.

G. Duke Primary Care Practices – The Duke University Safety Committee has entered into an administrative agreement with the Duke Primary Care practices for the provision of technical, clinical, and support services. The services provided include support for all of the essential functions within the Environment of Care and the provision of these services will be consistent with the Safety Management Plan for Duke University Hospital and the individual functions covered under that plan. The Duke Primary Care practices' EOC Management Plan defines how they coordinate their operation with the Duke Hospitals' EOC Plans and also resolves any variances from the procedures/processes included in those plans. The Duke Primary Care practices have a standing member on the DUSC who is responsible for the management and reporting functions defined in the Duke Primary Care EOC Management Plan. Please note that DPC retain the ultimate responsibility for the management of their Environment of Care and are accredited separately from the DUH and Clinics

III. Safety Management Activities (EC.04.01.01 EP 1-14)

A. Statement of Conditions (LS.01.01.01 EP 1-3) - In order to guard against the threat of fire and to comply with the NC Fire Code (**NC Fire Prevention Code, 2006 Edition)**, the Life Safety Code **(NFPA 101, 2012 edition)** and other legal and regulatory requirements, all new construction and major renovations in the hospital, medical center and clinic buildings are constructed to meet the fire safety code requirements.

Medical Center Engineering and Operations (E&O) has the primary responsibility for the Statement of Conditions and the document is maintained electronically through their office. Facility Planning, Design and Construction (FPDC) maintains building floor plans and provides E&O with updates. The Facilities Services Work Group (FSWG) coordinates the identification and resolution of facility deficiencies and provides oversight for the initiation and completion of Plans for Improvement (PFI). This group meets regularly, through the Facilities Services Work Group (FSWG) to review items under evaluation and the progress on PFIs. This working group is responsible for identifying any corrections that require special funding or scheduling and ensuring that a Plan for Improvement (PFI) is developed, when indicated.

B. Grounds and Equipment (EC.02.01.01, EP 5) - The process for supervising and maintaining all grounds and equipment includes the utilization of a computerized maintenance management system called "TRIMMS". Work orders and preventive maintenance schedules are generated from this program. Work histories are retained and analyzed on all grounds and equipment maintenance tasks. Annual work plans drive daily activities and are developed to meet grounds objectives. Additional aspects of maintaining and supervising all grounds and equipment are the responsibility of the Duke University Facilities Management Department's Grounds Operation and can be found in their operating procedures.

C. Employee Safety -Processes for reducing the risk of worker injury are addressed in the policies and procedures defined in the Duke University Safety Manual, the Duke University Radiation Safety Manuals, and the Duke University Hospital Infection Control Policy Manual. In addition, function leaders,

in collaboration with Employee Occupational Health and Wellness, manage specific programs for reporting, investigating, and providing appropriate follow-up of all incidents of occupational illness and personnel injury.

There is also an Institution-wide Workers' Compensation Advisory Committee that receives, reviews, and acts on trend data associated to work-related injuries and illnesses. This Committee works through the oversight departments, including OESO, EOHW, and others, to establish and monitor any corrective actions or procedural changes indicated for minimizing the risk of occupational injuries.

D. Smoking Policy (EC.02.01.03, EP 1, 4, and 6) - As defined in the "Tobacco-Free Environment Policy", Duke Medicine has become a Tobacco-Free Campus and smoking, and the use of other tobacco products including e-cigarettes, is prohibited within all areas of all DUH and Clinics, the PDCs, and Duke Primary Care buildings, as well as all adjacent Duke Medicine controlled property. A map, which delineates the tobacco-free areas, is included in the policy. The only exceptions are patients in specified circumstances as defined in the area-specific policies. The policy aims to both restrict smoking and to reduce the risk to people who smoke, including possible adverse effects on care, treatment, and services. The policy also reduces the risk of fire and exposure to passive smoking for others. All managers are responsible for monitoring compliance with this policy within all DUH and Clinic buildings. Strategies to eliminate the incidence of policy violations are developed when opportunities are identified, including the City ordinance against smoking in proximity to a healthcare facility.

E. Risk Assessment (EC.02.01.01, EP 1&3; EC.02.06.05, EP 1-3; EC.04.01.01, EP 12-14) - Each function leader is responsible for defining their method/system for proactively evaluating the impact of buildings, grounds, equipment, occupants, or internal physical systems on the safety and health of patients, staff, and other people coming to the hospital's facilities. These risk identification/assessment methods are defined in the individual management plans for each function. Specific examples of these risk assessment activities include, but are not limited to, the EOC Walkthrough Surveys, Engineering and Operations Image Rounds, Laboratory Safety Audits, Exterior Safety and Security tours, and Lighting and Grounds tours. In addition, members of the DUSC participate in root cause analyses as appropriate and also respond to the Joint Commission *Sentinel Event Alerts*.

Specific findings, recommendations, and opportunities for improvement are reported to the DUSC, which helps select and prioritize these risks to assure appropriate controls are implemented to achieve the lowest potential for adverse impact on the safety and health of patients, staff, and other people coming into the hospital's facilities. The prioritized risks are then either addressed immediately or integrated into the planning objectives and/or performance improvement processes for the respective function.

Potential hazards related to construction, renovation or maintenance activity are assessed through the Construction Risk Assessment (CRA)/Infection Control Risk Assessment (ICRA) process that identifies potential new or altered risks related to infection control, utilities or building systems, fire safety or interim life safety, general safety issues, emergency preparedness or response, and security. The CRA/ICRA are reviewed and monitored by the Facilities Services Work Group (FSWG) and their findings and recommendations are routinely reported to the DUSC.

Projects that could significantly impact life and/or fire safety result in the development an interim life safety plan, which may include specific training materials and information, the implementation of expanded fire drills, daily/weekly inspections/documentation and compliance of all contractors with ILSM during the construction period. The OESO Fire and Life Safety Division coordinates the planning, implementation and monitoring of all interim life safety measures. An ILSM inspection checklist that includes all twelve criteria as outlined in The Joint Commission's Life Safety Standards is utilized to identify all deficiencies and ensure compliance with ILSM measures as outlined in the Environment of Care.

F. Reporting -The administrative leader of each function reports relevant activities in general

accordance with a published EOC reporting schedule. Specific reporting responsibilities include seeking DUSC approval of the planning objectives for the function, end-of year evaluation of progress toward accomplishing those objectives (program effectiveness evaluation); seeking DUSC approval for a PI Plan for the function, along with monthly or quarterly reporting of the monitoring results; and routine reporting of safety management activities, such as, management of issues before the Committee, response to individual incidents, and training requirements.

All safety management activities are reported to the Executive Committee of the Medical Staff (ECMS) through presentation of the minutes of the DUSC and routine presentations by the Safety Officer. This information is also presented at the meetings of the Board of Directors of the Duke University Health System, Inc. (Governing Body) for comment and approval. Feedback and comment is encouraged from each of these groups and is then transmitted to the DUSC by the Safety Officer.

Significant actions and activities by the DUSC are reported routinely to all managers/supervisors through varied communications, which may include the newsletters from the OESO or function leaders, articles in "DUH publications, and/or other mailings when deemed appropriate.

G. Planning Objectives -The administrative leader of each function is responsible for the development of annual Planning Objectives. These objectives are developed in accordance with the mission of the Institution, any applicable laws or regulations, and all relevant accreditation standards; and they define the focus for resource utilization by each function. Many of the objectives include measurable outcomes and, thus, establish performance improvement opportunities for the function. Assessment of effectiveness and performance is accomplished by evaluating the progress each function makes towards its stated objectives.

The Committee selects one to three of the planning objectives for routine reporting in the Management Reporting session of its meetings. The objectives chosen for monitoring are those identified as having the highest priority for the Hospital.

H. Policy Development and Periodic Review - All policies related to the Management of the Environment of Care are submitted to the DUSC for consideration and approval. Such policies require final acceptance/approval from the ECMS and DUHS Board of Directors prior to implementation. The current frequency for review of existing policies is at least every three years for Institutional policies, including the Duke University Safety Manual.

Institutional safety policies are included in the Duke University Safety Manual. This manual is available on-line through the Intranet pages of the various organizational units and the OESO web-page. Hard copies of the Safety Manual are also available in strategic locations throughout the Institution, in case of difficulties in accessing the on-line versions. In addition, many of the hospital-specific policies are made available through the DUH section of the DUHS intranet webpage. All personnel have access to these policies via the Policy links on the website.

Department-specific fire safety policies have been developed as part of the safety audit program. These policies address the fire hazards and responses specific to the major operating units.

I. Performance Improvement (PI) (EC.04.01.05, EP 1 and EC.04.01.03 EP 2) - The administrative leader of each function is responsible for the development of Performance Improvement indicators, which are based on priorities identified by the function and the DUSC. The DUSC has the responsibility for approving the indicators, including monitors and thresholds. All PI activities are developed in collaboration with the Accreditation and Regulatory Affairs Office to assure that the PI activities for the Management of the Environment of Care are appropriately integrated into the Institutional initiatives defined in the Performance Improvement Plan for Duke University Hospital and its Medical Staff.

All PI activity/experience is routinely reported to the DUSC and this information is provided to the DUHS

Board of Directors through the routine reporting channels. All elements of the PI process are subject to change at any time based on Institutional experience, regulatory change, or administrative input.

Function leaders also use the DUHS 3-D methodology, or other similar performance improvement tool, to develop and present their PI efforts.

J. Effectiveness Monitoring (EC.04.01.01; EC.04.01.03, EP 2) - In addition to the Performance Improvement and self-assessment activities and reporting, the effectiveness of the safety management program is assessed through a variety of environmental tours, audits, and inspections, which link back to the Risk Assessment activities defined in element "E" above. All hospital and clinic areas where patients are served are subject to an environmental tour on a bi-annual basis, at a minimum. Other areas where patients are not served are toured at least annually.

The environmental tour processes is characterized as the EOC Walkthrough Survey, which provides an objective assessment of the hazards, control measures, and employee knowledge regarding security, fire and life safety, biological safety, chemical safety, radiological safety and general safety, medical equipment management, emergency response and reporting, and utility services. They also include an evaluation of the building maintenance and housekeeping.

Additional environmental tours are conducted in conjunction with the Durham City Fire Marshal's inspection of all DUH and Clinic buildings. The Durham Fire Marshal's Office provides similar inspections for the Durham-based PDCs and Duke Primary Care practices. Such inspections are also coordinated, whenever possible, with the Fire Marshals in the host city/county for other DUH, PDC or Duke Primary Care operations. Details of these tours are provided in the management plans and operating procedures for the individual functions.

The findings and recommendations regarding many of these environmental tours are reported back to the audited area for action and analyzed for deficiencies and trends. Significant "systems" issues are also presented to the DUSC for possible action.

K. Incident Monitoring, Reporting and Investigation (EC.04.01.01, EP1-1) -The hospital has established processes for continually monitoring, internally reporting, and investigating conditions and incidents within the facilities. The responsibility for managing the reporting and investigation of incidents involving property damage or security, occupational injury, and patient or visitor injury is shared among the various functions as follows:

1. Property Damage and Security (EC.04.01.01, EP 5&6) - Incidents of property damage or security are reported to the Duke University Police Department, who has the primary responsibility for investigation and follow-up. Other functions may then support the resolution of the incident, depending on the specific type or ownership of the property involved. For example, Clinical Risk Management may become involved when patient or visitor property is affected.
2. Work-Related Injuries and Illnesses (WRIIs) (EC.04.01.01, EP 4) - All occupational injuries are to be reported through the Safety Reporting System (SRS). Employee Occupational Health and Wellness (EOHW), Occupational and Environmental Safety, and Workers' Compensation are all immediately provided an electronic version of the incident report. Appropriate investigation and/or follow-up are then conducted by these offices. The Duke University Workers' Compensation Advisory Committee (WCAC) provides oversight of the management of WRIIs and Workers' Compensation costs and materials reviewed and developed through the WCAC are periodically reported to the DUSC and the DUH Leadership.
3. Patient and Visitor Injuries (EC.04.01.01, EP 3) - All patient and visitor injuries are reported to Clinical Risk Management through the Safety Reporting System (SRS) for investigation and follow-up. The investigation of these incidents may be supported by Infection Prevention, Duke

University Police Department, OESO, Clinical Equipment, or Utilities Management, depending on the circumstances surrounding the incident. If the patient injury meets the definition of a sentinel event, as determined by the Sentinel Event Senior Team, a root cause analysis is performed in accordance with the Sentinel Event policy and procedure.

4. Hazardous Materials and Waste Spills and Exposures (EC.04.01.01, EP 8) – All hazardous materials and waste spills, exposures and other related incidents are reported to OESO via the 911-notification system through the Duke University Police Department or the 115 (919 684-8115) Blood and Body Fluid Hotline. Around-the-clock response is available for all such incidents. Details of this response are provided in the Emergency Response Guide and the Hazardous Materials and Waste Management Plans.

5. Fire Safety Management Problems, Deficiencies, and Failures (EC.04.01.01, EP 9) – Processes for reporting and investigating fire-safety management problems, deficiencies, and failures are described in the Fire and Life Safety Management Plan. Responsibility for these processes is shared by the OESO Fire and Life Safety Division; Facility Planning, Design, & Construction; and Medical Center Engineering and Operations.

6. Medical/Laboratory Equipment Management Incident (EC.04.01.01, EP 10) – All medical device incidents are reported to the Associate Director/DUHS Clinical Risk Management at 684-3277 (during the day) and ID 970-2404 (evenings and night). The reporting personnel should also enter the occurrence into the Safety Reporting System (SRS). Laboratory equipment issues are managed through the Clinical Laboratory administrative structure.

7. Product Safety Recalls (EC.02.01.01, EP 11) – The DUHS has appointed a Senior Recall Team to coordinate the appropriate management of applicable recall notifications. All equipment hazard notices and recalls are coordinated through the DUHS Procurement and Supply Chain Management. Recalls can be initiated externally by the FDA, the manufacturer, the distributor, or other knowledgeable or authoritative entities. Recalls can be initiated internally by notification of safety or quality concern to the DUHS Vice President for Medical Affairs, the DUHS Patient Safety Officer, DUHS Clinical Risk Management Director, the DUHS Vice President for Acute Care Entities, the DUHS Vice President for Ambulatory Services, and/or the Director for Quality Management, Acute Care Services. Details of the process are available in the Recall Procedure Policy available in the Duke University Health System Policies Manual.

8. Utility System Problems, Failures, or User Errors (EC.04.01.01, EP 11)– Problems, failures, or user errors related to utility systems are reported to Medical Center Engineering and Operations as described in the Utility Management Plan and the Utilities User's Guide.

9. General - Employees are encouraged to report all incidents of exposure, injury, or safety concerns to the OESO for investigation and follow-up. All such requests are added to the case file tracking system utilized by OESO for monitoring such events. In addition, any safety concern or incident can also be submitted through the SRS Reporting System. Any incidents of laws or policies being broken can also be reported to the DUHS Corporate Compliance Office through the IntergrityLine (1-800-826-8109). In addition, patient safety issues, concerns, and suggestions can be reported to the Patient Safety Action Task Force using the Patient Safety Concern form. The Patient Safety Action Task Force encourages reporting of "close calls" and "near misses" to allow a focus on correcting the systems that allow errors to occur and strengthening the systems that help prevent errors.

The specific details for the reporting and investigation of these various incidents are addressed in the management plans for the individual functions.

L. Integration with the Patient Safety Program – The monitoring and response activities defined in the Safety Management Plan and individual function plans are integrated into the patient safety program

through frequent interactions between responsible personnel and participation on appropriate oversight committees. In particular, the DUH Safety Officer is appointed to the Performance Improvement Oversight Committee (PIOC), which has the primary responsibility for coordinating and integrating the activities of the Patient Safety and Clinical Quality (PSCQ) Committee and the DUSC. Finally, members of the DUSC participate in root-cause analyses, when appropriate.

M. Safety Training (EC.03.01.01 EP 1-2 and HR.01.04.01, EP 1) – Safety training requirements and processes are covered in the Safety Training Policy, which is in Chapter 5 of Section I of the Duke University Safety Manual. All new employees are required to complete orientation training, which covers all of the functions within the Environment of Care. This orientation is supplemented by work area-specific training, focusing on the work area safety policies. This training is provided under the direction of the immediate supervisor. All employees are also required to participate in annual update training, which includes updated information on all of the functions within the Environment of Care. The updated training includes information regarding new programs, requirements, and also performance improvement initiatives associated with the EOC. Additional, in-service or on-going training is provided as necessary to address new safety procedures, information, or expectations.

Hazard-specific training requirements are assigned to personnel based on their exposure risks related to their job duties. This training is typically required upon hire or upon assuming new job responsibilities. It is updated based on regulatory requirements or hospital policy; and staff are usually required to take the update training annually.

The OESO and the LMS are used to compile and maintain the EOC training records; supervisors and managers have access to run reports from a database with this information in-order to monitor their Department-specific/workgroup-specific performance. Targeted information is communicated to the adminsitration and the governing body.

N. Management of MRI Associated Risks (EC.02.01.01, EP 14 & 16) – All MRI operations fall under the purview of the Department of Radiology and their policies and procedures define how the hospital manages magnetic resonance imaging (MRI) safety risks associated with patients who may experience claustrophobia, anxiety, or emotional distress, patients who may require urgent or emergent medical care, patients with medical implants, devices, or imbedded metallic foreign objects (such as shrapnel), ferromagnetic objects entering the MRI environment, and acoustic noise

The Department of Radiology also ensures that the hospital manages the magnetic resonance imaging (MRI) safety risks by restricting access of everyone not trained in MRI safety or screened by staff trained in MRI safety from the scanner room and the area that immediately precedes the entrance to the MRI scanner room, making sure that these restricted areas are controlled by and under the direct supervision of staff trained in MRI safety, and posting signage at the entrance to the MRI scanner room that conveys that potentially dangerous magnetic fields are present in the room. The signage indicates that the magnet is always on except in cases where the MRI system, by its design, can have its magnetic field routinely turned on and off by the operator.

O. Certifications, Accreditations, and Competencies (EC.03.01.01, EP 1) – Some participants in the management of the Environment of Care are required to possess specific certifications or accreditations and demonstrate certain competencies that are essential to the duties they perform. Each of the function leaders is responsible for defining these qualifications and assuring appropriate compliance with them. Details of these requirements are included in the individual function management plans.

P. Planning Design and Construction (EC.02.06.01, all EPs and EC.02.06.05, all EPs) - Duke Facility Planning, Design & Construction's mission is to provide functional space that promotes a healing

and caring environment for our patients, visitors and staff. All space design is done such that it is appropriate to the care and treatment for the patients' specific needs. All healthcare capital improvement projects (new construction or renovation) are designed based upon the following current codes and guidelines:

- North Carolina Building Code – All volumes
- North Carolina Division of Health Service Regulation – Includes NFPA 101 Life Safety Code and NFPA 99
- AIA Guidelines for Design and Construction of Hospital and Healthcare Facilities (reference only)
- Duke University Medical Center and Health System Guidelines

During the design phase of a project a Construction Risk Assessment (CRA) and an Infection Control Risk Assessment (ICRA) are conducted for each project and design is adjusted to minimize the impact to the patient care environment. Once the project is approved, the CRA/ICRA are finalized and submitted to the Facilities Services Work Group for approval prior to construction beginning. The approved CRA and ICRA are then reviewed at the preconstruction meeting and interim inspections are done throughout construction to ensure compliance.

IV. Performance Improvement Project for Safety Management (EC.04.01.03, EP 2 and EC.04.01.05, EP1)

A. Work-Related Injuries and Illnesses – The primary performance improvement project for Safety Management involves continuing revision of the initiatives to reduce work-related injuries to further focus on the targeted high-risk operating units. In particular, the focus is on patient handling injuries as addressed through the Duke MOVES program. The impact/benefit of this initiative will be monitored and reported through the DUSC and the Workers' Compensation Advisory Committee.

V. Management Plan Evaluation (EC.04.01.01, EP 15)

The Safety Officer will evaluate the Safety Management Plan annually for its scope, objectives, performance, and effectiveness. Any changes in *scope* will be addressed during the annual update of the Plan, and any changes in the range of application or interactions will be incorporated into the updated Plan. Annual planning *objectives* will be developed through interactions with DUSC members and hospital administration. These objectives will address the primary operational initiatives for maintaining and enhancing the "safety" of the Environment of Care. A year-end summary of the *effectiveness* in accomplishing these objectives will also be presented to the DUSC. The *performance* of the Plan will be assessed through progress in achieving the Performance Improvement Standards defined within the Plan. The annual evaluations, updates, and planning efforts will be presented for Committee review and action during the first quarter of the new "calendar" year. This information will be provided to the ECMS, DUH leadership and the DUHS Board of Directors through the routine reporting channels.