Surgery Resident Goals, Objectives and Responsibilities  
Via Christi – St. Francis  
Burn Unit Rotation  
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General Goals and Objectives

**Patient Care**
Residents must be able to provide patient care that is compassionate, appropriate and effective for the treatment of health problems and the promotion of health. Residents are expected to:

- Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families.
- Gather essential and accurate information about their patients.
- Make informed decisions about diagnostic and therapeutic interventions based on patients' information and preferences, up-to-date scientific evidence, and clinical judgment.
- Develop and carry out patient management plans.
- Counsel and educate patients and their families.
- Use information technology to support patient care decisions and patient education.
- Perform competently all medical and invasive procedures considered essential for the area of practice.
- Provide health care services aimed at preventing health problems or maintaining health.
- Work with health care professionals, including those from other disciplines, to provide patient-focused care.

**Medical Knowledge**
Residents must demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care. Residents are expected to:

- Demonstrate an investigatory and analytic thinking approach to clinical situations.
- Know and apply the basic and clinically supportive sciences which are appropriate to their discipline.

**Practice-Based Learning and Improvement**
Residents must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices. Residents are expected to:

- Analyze practice experience and perform practice-based improvement activities using a systematic methodology.
- Locate, appraise, and assimilate evidence from scientific studies related to their patients’ health problems.
- Obtain and use information about their own population of patients and the larger population from which their patients are drawn.
- Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness.
- Use information technology to manage information, access on-line medical information; and support their own education.
- Facilitate the learning of students and other health care professionals.

**Interpersonal and Communication Skills**
Residents must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their patients’ families, and professional associates. Residents are expected to:

- Create and sustain a therapeutic and ethically sound relationship with patients.
- Use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning and writing skills.
- Work effectively with others as a member or leader of a health care team or other professional group.

**Professionalism**
Residents must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population. Residents are expected to:

- Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society which supersedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development.
• Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality or patient information informed consent, and business practices
• Demonstrate sensitivity and responsiveness to patients’ culture, age, gender, and disabilities

**Systems-Based Practice**
Residents must demonstrate and awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value. Residents are expected to:

- Understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice
- Know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources
- Practice cost-effective health care and resource allocation that does not compromise quality of care
- Advocate for quality patient care and assist patient in dealing with system complexities
- Know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance

**Specific Goals, Objectives & Responsibilities**

**Educational Goals**
The goals of burn care are to understand outpatient and inpatient burn care, to be consistent in the manage of wound care and critical care in relation to burns. It is also to understand the relationship of acute resuscitation to the mechanisms of the body.

- Understand the physiology ongoing with an acute major burn
- Understand respiratory response to the metabolic challenge
- Nutritional appropriateness for major burn and other hypermetabolic patients
- Understand topical agents used for wound care

**Objectives**

**Resuscitation**

- Understand the level at which resuscitation should be given on a patient
- Be able to define the basics for Parkland formula versus hypertonic saline with dextran resuscitation
- Understand the physiological response of the heart and kidneys to initial resuscitation
- Determine the end points of resuscitation and the appropriateness of invasive monitoring

**Pulmonary Care**

- Understand the interaction between resuscitation and need for pulmonary care
- Understand the need for escharotomies in certain patients with circumferential chest burn
- Understand the ongoing process of response of the lungs to major burns and burns wound sepsis
- Understand and deal with differences between normal ventilation and pressure control ventilation
- Under the basics for when the patient can be weaned from pressure control ventilation and the end point of extubation

**Large Wounds**

- Understand the ongoing process for wound care and closure of the burn wound surface
- Understand agents in relation to topical application, efficacy and response of the body to the agents
- Understand which agent would be best utilized in selective situations

**Outpatient Care**

- Identify patients that need to be admitted or can be treated as outpatients
- Understand rationale for care
- Understand costs of care and assist patients with economic needs
• Be able to differentiate between 1st, 2nd and 3rd degree burns for outpatients

**Critical Care**

**Sepsis**
• Understand factors that would indicate the early onset of sepsis
• Understand the types of antibiotics and support needed for a patient who is becoming septic
• Understand when surgery/replacement of lines is warranted in selected situations.

**Cardiac**
• Understand the response of the heart to initial resuscitation and initial cardiac depression
• Understand ongoing efficacy of cardiac function to allow for maximum performance
• Understand stress relationship between hyperdynamic state and cardiac performance

**Renal**
• Recognize the significant loss of renal function with initial resuscitation
• Understand and deal with a mixed ATN response after initial resuscitation and antibiotic usage
• Understand the fluid needs on an ongoing basis of a patient who has open areas

**Metabolic**
• Know the metabolic needs of various burn patients
• When nutritional support should be initiated
• Define the differences between TPN and enteric feedings
• Understand the need for and the nature of enteric feedings

**Electrical**
• Understand pathophysiology and current flow of electrical injury
• Be able to differentiate type of injuries that could occur based on voltage
• Be able to perform adequate resuscitation and discuss evaluation criteria for electrical injuries
• Be able to differentiate between when patient will need fasciotomies

**Escharotomies**
• Understand need for escharotomies
• Define difference between escharotomies and fasciotomies, and when each is indicated
• Adequately perform escharotomies at the bedside

**Surgical Experience**

**Skin grafts**
• Understand when skin grafts are needed and the timing
• Know the rationale for full thickness versus split thickness skin grafts
• Differentiate between sheet and mesh grafts
• Be able to perform adequate debridement for good skin take
• Understand the care and need for continued care of the wound bed post-split thickness skin graft

**Donor sites**
• Understand the types of wound care that can be performed for donor site
• Understand observation and need for secondarily treating donor sites that become infected
• Differentiate between the depth and size of donor sites that are needed

**Other Skin Diseases**

**Toxic epidermal necrolysis**
• The disease process
• Appropriateness of care
Necrotizing fasciitis

- The disease process
- Timing for surgery and need for surgery
- Adequate debridement and wound care
- Timing of closure and types of closure available