### Wound Infection Checklist

**Outpatient/Inpatient and Wound initial Evaluation**
- Document patient history, comorbidities and related issues that may increase likelihood of wound infection including:
  - Diabetes, COPD, ischemia, nicotine use, obesity, nutritional deficiencies, anemia, impaired renal function, BMI > 25, serum albumin < 2.5 g/dl
  - Perform valid peripheral neuropathy test, e.g. Semmes Weinstein monofilament or tuning fork.
  - Assess medications/therapy that may decrease immune response (>7 day corticosteroid use, chemotherapy, radiotherapy, etc.).
  - Document abnormal anatomy or gait that may cause skin injury.
  - Document pre-operative extended hospital stay or nursing home residence.
  - Obtain ABI or TBI to assess peripheral vascular disease, oxygenation of lower extremity wounds.
  - Document wound infection signs, impaired blood flow and risk factors for delayed healing:
    - Duration > 6 months, area > 5 cm² full-thickness
    - Increased pain, edema, erythema, heat, odor, drainage or wound-related leucocytes
    - Contamination or foreign matter in wound
    - Lack of protective sensation
    - Repeated or prolonged trauma or pressure
  - Take wound cultures using a validated technique only if signs of infection are present.
  - Use narrow-spectrum antimicrobial agents when feasible for non-severe infections to avoid development of antibiotic-resistant pathogens.

### Prevent Acute or Chronic Wound Infections
- To extent feasible alleviate all causes of delayed wound healing before prescribing antibiotics.
- Maintain a moist wound environment.
- Maintain homeostasis of patient before, during, and after all procedures, including surgery.
- Stop nicotine use at least 4 weeks before surgery or initiate nicotine cessation therapy for patients with chronic wounds or impending emergency surgery.
- Avoid blood transfusion before surgery unless required to improve patient outcomes.
- Maintain normal body temperature (36-38 C).
- Maintain blood oxygen saturation >95%.
- Manage patient to achieve normal blood glucose, hemoglobin, serum creatinine and platelet count.
- Prepare staff, patient and operating room per CDC standards (gowns, shoe covers, hair covers, and surgical gloves. Change gloves if penetrated).
- Clip, don’t shave sites of required hair removal.
- Use pressure redistribution under bony prominences.
- Decontaminate all surgical equipment between patients in accordance with facility protocols.
- Start prophylactic antibiotics 24 hours before surgery. Stop within 48 hours postoperatively.
- Apply CDC contact precautions to all patients with known multi-drug resistant organisms.
- Minimize duration of surgical procedures and of patient’s institutional stay.
- Avoid use of toxic agents either systemically or topically on wounds if feasible.

### Wound Management All Settings as Patient-appropriate
- Apply effective post-operative care standards including wound infection management and surveillance with feedback to all care providers per institutional or CDC standards.
- Avoid stress on incision lines to reduce likelihood of dehiscence by instructing patients on appropriate activities and weight bearing techniques.
- Apply a sterile non-gauze dressing to surgical wounds for 24-48 hours after surgery.
- Instruct patient on proper wound care and how to shower safely with or without cleansing their wound.
- Cleanse and debride wound to remove contamination, non-viable tissue and foreign matter using proper technique for wound size, severity and contamination level.
- Instruct patient to seek professional care quickly if they see signs of infection (increased pain, redness, swelling, heat, odor, drainage, or unexplained increase in wound area).
- Manage acute or chronic wound infections per institutional or CDC standards.
- Moisturize and protect wounds if site is dry or damaged.
- Use patient-appropriate wound dressings with evidence that they reduce pain, healing time and chances of infection.
- Continue to alleviate causes of chronic wound breakdown:
  - Off-load / protect wounds on sites of reduced sensation.
  - Redistribute pressure on bony prominences during 2 or more hour intervals of limited mobility.
  - In patients with venous insufficiency, provide adequate compression sufficient to reduce edema unless contraindicated.
  - Improve vascular perfusion for patients with ischemic ulcers or other conditions identified on evaluation, when feasible.
  - Assure adequate hydration, nutrient intake and environment to support wound healing and homeostasis.