Urinary Retention (UR) Prevention Practices/Guidelines

- **Patient Centric Education**- Consistent materials/information presented before surgery, during the hospital stay, and reinforced post-discharge. Including, but not limited to:
  - Importance of Early Ambulation (example: U of M Patient Education hand-out)
  - Ambulation expectations introduced by the surgeon before surgery

- An **aggressive Catheter-associated Urinary Tract Infections (CAUTI) program** influences a very limited use of urinary catheters intraoperatively and post-operatively.

- **POHA**
  - Assessment and documentation of any pre-existing UR
  - Patients are asked to empty their bladder just prior to being taken to OR.
  - Identify potentially unknown, pre-existing, urinary retention. After the patient voids, perform baseline bladder scan to check for Post Void Residual. A PVR per scan >150cc is considered pre-existing, baseline urinary retention (this is Beaumont Troy and HFWB practice)

- **Intra-operative**
  - Minimal use of urinary catheters in the OR- unless there is a medical reason. Not routinely placed or used for short cases.
  - Top performing sites do not place a foley unless the OR case is anticipated to be 4 hours or greater.

- **Post-op**
  - If a urinary catheter is placed, it is removed ASAP, either in OR, PACU, or shortly after the patient arrives to the floor (unless documented as contraindicated).

- **Early Ambulation – Common Themes at Top Performing Sites**
  - Early ambulation and continued frequent ambulation is structured, with measured distances documented and engages patients and families with visual cues.
  - No one stays in bed until the morning of POD 1 unless there is a contraindication documented.
  - Usually ambulated within 2-3 hours after surgery
  - Who ambulates the patient for the first time?
    - Nursing – they do not wait for P.T. to do it.
    - All RNs and CNAs are trained and comfortable ambulating spine surgery patients
  - At Mercy Health St. Marys - No Urinals or Bedside Commodes. Unless there is a medical contraindication, patients are ambulated to the bathroom.

- **Bladder Protocols – Common Themes at Top Performing Sites**
  - Hospital Urinary Catheterization Procedure advocates Clean Intermittent Catheterization (CIC) for urinary retention over indwelling catheter use.
  - Strict CAUTI guidelines followed. Infection prevention calls on every catheter, every day to determine its appropriateness.
  - If the patient is a female who has undergone a hysterectomy, they are to use the “male” setting on the scanner.
  - Regular recalibration of bladder scanners should be performed to ensure accuracy.

HFWB Protocol Example:

Procedure: Follow the steps below as indicated to monitor and prevent urinary retention in postoperative spine surgery patients.

- Identify indications for a bladder scan:
  - Urinary Retention
- When to check for urinary retention if unable to void:
  - Postoperatively – upon arrival to unit from PACU and every 6 hours;
  - Within 6 hours of indwelling urinary catheter removal or straight catheter;
  - When patient is symptomatic of bladder distension (i.e. discomfort, pain, feeling of fullness, palpable bladder).

Performing a Bladder Scan (see Figure 1.):

1. If patient has been unable to void for 6 hours or is symptomatic perform bladder scan.
   - If bladder scan is >350mL, straight catheterize patient and monitor every 6 hours for 24 hours. Consider indwelling urinary catheter and/or urology evaluation to attempt trial of void at later date if unable to void successfully in 24 hours.
   - If bladder scan is <350mL, re-check in 2 hours by bladder scan.
   - If bladder scan is being performed as a PVR, bladder scan must be completed within 30 minutes of void.

Figure 1.