LAC + USC MEDICAL CENTER STANDARDIZED PROCEDURE FOR UTILIZING THE BLADDER SCANNER (ADULT PATIENT)

I. Purpose:

A. To outline the process and criteria by which an RN who has completed training for urinary bladder scanning may perform bladder scanning to defer placement of or remove indwelling urinary catheter on adult patients in the inpatient units including ICUs and medical-surgical units.

II. Procedure Statements:

The Standardized Procedure for utilizing the bladder scanner establishes the guidelines which will ensure bladder scanners are utilized to assist the RN in assessing the need for an indwelling bladder catheter. This standardized procedure delegates the authority to the RN to utilize a bladder scanner to assess for adequate bladder emptying by scanning the bladder to assess urinary volume and any urinary retention. Only RN's are authorized to initiate this standardized procedure after completion of training and after providing evidence of competency.

III. Definition:

Bladder scanning is a non- invasive procedure for measurement of urinary bladder volume using a portable ultrasound instrument which creates a 3-dimensional image of the urinary bladder. The bladder scanner automatically calculates and displays urine volume measurements based on the bladder image.

IV. Procedure:

- A. Bladder scanning will be performed in the following situations:
 - Patients with urinary incontinence and retention
 - Patients with neurologic disorder causing impaired ability to void
 - Patients with dehydration
 - Patients with acute renal failure
 - Patients receiving hemodialysis treatment
- B. Bladder scanning will not be performed if the patient is pregnant or has an open suprapubic wound
- C. Procedure steps
 - 1. Explain procedure to patient
 - 2. Assemble equipment: bladder scanner, ultrasound gel, gloves
 - 3. Wash hands prior to procedure
 - 4. Assess if patient has an urge to void and assist as indicated
 - 5. Place the scanhead on the gel or gel pad pointing slightly downward toward the location of the bladder
 - 6. Hold the instrument steady using enough pressure to maintain good skin contact until the scan is complete and screen displays the bladder volume. It is recommended to repeat bladder volume measurements 3x to ensure accuracy of result.
 - 7. Assess volume of urine output with bladder ultrasound scanner as follows:
 - If patient's urine volume is less than or equal to 200 ml consult physician for deferring indwelling catheter placement and for further instruction regarding patient's fluid needs

- If urine volume is greater than 200ml but less than 400 ml continue to monitor urine output and consult physician for further instructions
- If greater than or equal to 400 ml consult physician regarding catheter placement
- D. Circumstances requiring communication with Physician of primary service:
 Results of bladder scanning

V. Requirements for Certification for Performance of Standardized Procedure:

- A. Education: The RN will receive in-service education on the standardized procedure for the use of bladder scanner to determine placement or discontinuation of the indwelling urinary catheter by the designated nursing staff educators.
- B. Training: The RN will demonstrate psychomotor skill in using the bladder scanner correctly.
- C. Competency: The competency of the RN will be validated yearly by the designated nursing staff educator / Nurse Manager of the unit encompassing the knowledge of the standardized procedure and bladder scanning procedure.
- D. Record Keeping: Nurse manager will maintain records of staff completion of training and competency review for three years

VI. References:

- How to Guide: Prevent catheter associated urinary tract infections. Cambridge, MA: Institute for Healthcare Improvement; 2011. (Available at <u>www.ihi.org</u>).
- Gould CV, Umscheid CA, Agrawal RK, Kuntz G, Pegues DA & HCPAC. Guideline for prevention of catheter associated urinary tract infections 2009.
- Urinary Tract Infection (Catheter- Associated Urinary Tract Infection [CAUTI] and Non- Catheter-Associated Urinary Tract Infection [UTI] and other Urinary System Infection [USI]).CDC; January 2015.
- Streamlined Evidenced-Based RN Tool: Catheter Associated Urinary Tract Infection (CAUTI) Prevention. American Nurses Association: 2015.