The Road to Building a Bladder Management Algorithm
Mary S. Via¹, RN, CRRN; Alice M. Christaldi¹, BSN, RN, CRRN; Melody F. Sharp², DNP, RN; Stimis R. Smith¹, MBA, RN, CRRN; ¹Carilion Clinic, Roanoke, VA; ²Jefferson College of Health Sciences, Roanoke, VA

### Introduction
- Health care professionals follow clinical algorithms to aid in decision making
- Algorithms are effective in facilitating learning and adherence to best practice (DuPen, Ersek, & Jablonski 2011)
- Review of policies and procedures at our facility revealed a need for bladder management guidelines specific to inpatient rehabilitation patients
- Literature search failed to yield uniform information on bladder management relating to urinary retention; target to catheterize varied between 100-350ml
- Essential First Steps: Nursing administration and physician practice buy in of building an algorithm

### Methods
- Experienced rehabilitation nurses and physicians gave input toward components of the clinical algorithm
- Key elements:
  - clinical indicators for bladder management
  - time of admission to first bladder scan
  - target post void residual (PVR) for performing intermittent urinary catheterizations
  - intervals for timed voiding
  - specific tasks with alternatives to meet bladder management goals
- Multiple revisions were completed through inter-professional collaboration prior to implementation of the algorithm
- Team meetings were held to validate the accuracy, clarity, and usefulness of the algorithm

### Results
- The algorithm was introduced to staff through didactic presentation prior to implementing a six month pilot study on stroke patients
- Experience rehabilitation nurses and physicians gave input toward components of the clinical algorithm
- Results:
  - Exemplary adherence to clinical guidelines
  - Improved patient outcomes

### Conclusion
- The use of the developed algorithm was effective in our study
- With slight modifications to the clinical indicators and interval of timed voiding, this algorithm can be used on a wider range of rehabilitation patients

### References

Acknowledgment: This project and poster presentation is being supported by Carilion Clinic Inpatient Rehabilitation Unit and Jefferson College of Health Sciences
Contact information: Mary S. Via: msvia@carillionclinic.org