



April 2016

141 Northwest Point Blvd
Elk Grove Village, IL 60007-1019
Phone: 847/434-4000
Fax: 847/434-8000
E-mail: kidsdocs@aap.org
www.aap.org

Executive Committee

President

Benard P. Dreyer, MD, FAAP

President-Elect

Fernando Stein, MD, FAAP

Immediate Past President

Sandra G. Hassink, MD, FAAP

Executive Director/CEO

Karen Remley, MD, FAAP

Board of Directors

District I

Carole E. Allen, MD, FAAP
Arlington, MA

District II

Warren M. Seigel, MD, FAAP
Brooklyn, NY

District III

David I. Bromberg, MD, FAAP
Frederick, MD

District IV

Jane M. Foy, MD, FAAP
Winston Salem, NC

District V

Richard H. Tuck, MD, FAAP
Zanesville, OH

District VI

Pamela K. Shaw, MD, FAAP
Kansas City, KS

District VII

Anthony D. Johnson, MD, FAAP
Little Rock, AR

District VIII

Kyle Yasuda, MD, FAAP
Seattle, WA

District IX

Stuart A. Cohen, MD, FAAP
San Diego, CA

District X

Sara H. Goza, MD, FAAP
Fayetteville, GA

Dear Medical Director:

The American Academy of Pediatrics (AAP) is a professional medical society of over 62,000 pediatricians, pediatric medical sub-specialists and pediatric surgical specialists dedicated to the health, safety, and well-being of infants, children, adolescents and young adults. I am writing to you to advocate for appropriate coverage and payment for children with lower urinary tract dysfunction (LUTD) that would benefit from biofeedback therapy.

Pediatric LUTD is often associated with incontinence (20% of children¹), urinary tract infection (7.1% of children²), constipation (10% of children³) and vesicoureteral reflux (1.8% of children⁴), all of which can be debilitating and embarrassing to the patient. Fortunately, significant advances have been made in the management of pediatric LUTD over the last two decades improving the quality of care that these children receive. Historically, a majority of children with LUTD were evaluated with invasive and expensive studies and prescribed medication⁵. This approach has been replaced by a modern, conservative and non-invasive method of evaluation and treatment that is well supported by the literature⁶⁻⁹.

The most recent approach for LUTD management emphasizes extensive voiding education as the first line of treatment. Patients are educated on the importance of appropriate fluid intake, timed voiding, regular bowel habits, proper hygiene, and proper position while voiding. If this does not lead to significant improvement or resolution of the symptoms, the patient is followed up with simple, non-invasive urologic screening studies in order to determine the underlying problem. Frequently, that problem is pelvic floor dysfunction where the pelvic floor contracts with voiding and sets up an abnormal voiding pattern. The appropriate management for increasing children's awareness of their pelvic floor muscles and treating pelvic floor dysfunction is non-invasive biofeedback treatment. Numerous articles confirm the use of biofeedback and its efficacy in treatment of pelvic floor dysfunction and overactive bladder associated with LUTD¹⁰⁻¹³. Biofeedback is best done in medical centers where advanced computer technology and the appropriate type of biofeedback are available. It is accomplished with a device that measures EMG potential of the pelvic floor and abdominal muscles and is a useful tool for teaching patients how to separate these muscle groups to use them individually.

Biofeedback treatment for LUTD shows high success rates in symptom resolution. It also decreases the rate of recurrent urinary tract infections, number of invasive studies and medication used on children, and need to do surgery for vesicoureteral reflux. Most children that develop a urinary tract infection are seen after hours in the Emergency Room. In addition, they need several screening studies along with medication which are costly. Another benefit, especially for females, is the reduction of vesicoureteral reflux. In vesicoureteral reflux, the urine backs up from

the bladder to the kidney, triggering a urinary tract infection that develops into pyelonephritis. The management of pyelonephritis often requires hospitalization and IV antibiotics. Not only is this very disruptive for the patient and family, but has significant cost impact for insurance companies. The biggest area of savings is related to surgery. Many girls with vesicoureteral reflux that develop a breakthrough urinary tract infection require surgery. The surgery is a 4 hour procedure, complicated, and requires a 4 to 5 day hospital stay.

Whereas, biofeedback is approved by Medicare and Medicaid in most states as well as commercial health plans, benefits coverage specifically for biofeedback for LUTD management varies. Many peer-reviewed studies support biofeedback for treatment of LUTD – it is not an experimental approach but a validated treatment that will benefit both the patient and insurers. Biofeedback in LUTD management provides an effective, non-invasive, conservative method of treatment with a high success rate decreasing the need for expensive studies, surgery and medication. Coverage of biofeedback is essential for patient participation.

I look forward to your response regarding your health plan's benefits coverage for treatment of LUTD with biofeedback therapy. The AAP is poised to work with health plans and payers for appropriate benefits coverage for biofeedback to help achieve the goals of improving quality of care and managing costs in a model of care that ensures children and families have access to appropriate care.

Should you require additional information, please contact Kathleen Ozmeral, AAP staff manager to the AAP Section on Urology at kozmeral@aap.org

Sincerely,



Benard P. Dreyer, MD, FAAP
President

BPD/ko

References

1. Lee SD, Sohn DW, Lee JZ, et al. An epidemiological study of enuresis in Korean children. *BJU Intl* 2000;85(7):869-873.
2. Shaw NK, McGowan LK. Evaluation of a rapid screening filter test for urinary tract infection in children. *Pediatr Infect Dis J* 1997;16(3):283-287.
3. Wald RE, Di Lorenzo KC, Cipriani KL, et al. Bowel habits and toilet training in a diverse population of children. *J Pediatr Gastroenterol Nutr* 2009;48(3):294-298.
4. Sargent MA. What is the normal prevalence of vesicoureteral reflux? *Pediatr Radiol* 2000;30(9):587.
5. Bauer SB, Retik AB, Colodny AH, et al. The unstable bladder in childhood. *Urol Clin North Am* 1980;7(2):321.
6. Herndon CDA, DeCambre M, McKenna PH. Changing concepts concerning the management of vesicoureteral reflux. *J Urol* 2001;166(4):1439-1443.
7. Chase J, Austin P, Hoebeker P, et al. The management of dysfunctional voiding in children: a report from the Standardization Committee of the International Children's Continence Society. *J Urol* 2010;183(4):1296-1302.

8. Pfister C, Dacher J, Gaucher S, et al. The usefulness of a minimal urodynamic evaluation and pelvic floor biofeedback in children with chronic voiding dysfunction. *BJU Intl* 1999;84(9):1054-1057.
9. Ballek NK, McKenna PH. Lower urinary tract dysfunction in childhood. *Urol Clin North Am* 2010;37(2):215-+.
10. Combs AJ, Glassberg AD, Gerdes D, et al. Biofeedback therapy for children with dysfunctional voiding. *Urology* 1998;52(2):312-315.
11. McKenna PH, Herndon CDA, Connery S, et al. Pelvic floor muscle retraining for pediatric voiding dysfunction using interactive computer games. *J Urology* 1999; 162(3):1056-1062.
12. Ladi-Seyedian S, Kajbafzadeh A-M, Sharifi-Rad L, et al. Management of non-neuropathic underactive bladder in children with voiding dysfunction by animated biofeedback: a randomized clinical trial. *Urology* 2015;85(1):205-210.
13. Koenig J, McKenna P. Biofeedback therapy for dysfunctional voiding in children. *Curr Urol Rep* 2011;12(2):144-152.