Voiding Cystourethrogram (VCUG)
What is a Voiding Cystourethrogram?
Fluoroscopy is a special form of X-ray that produces real-time video images, as opposed to pictures on film, making it possible to see internal organs and joints in motion. A voiding cystourethrogram (VCUG) is an X-ray exam of the bladder and lower urinary tract that uses fluoroscopy and a contrast material to create the images. It is often performed on children to check bladder function. While the bladder is filled with a water-soluble contrast material and then emptied, the radiologist is able to view and assess, in real time, the anatomy and function of the bladder and lower urinary tract.

CPT Code
74455 Voiding (most common)
74430 Nonvoiding
51600 Injection

Indications
This examination is often recommended after a urinary tract infection to check for a condition known as vesicoureteral (VU) reflux. Urinary tract infection may be the only symptom of the problem. A voiding cystourethrogram cannot evaluate obstruction of flow of urine from the kidneys. Additional examinations are needed if obstruction is suspected.

Contraindications
Untreated urinary tract infection, hypersensitivity to contrast media, pregnancy.

How Does Your Patient Prepare?
There is no preparation required for the test.

What Happens During the Test?
A medical history is obtained. The technologist will position the patient on the table. Several X-rays are taken of the bladder. After cleaning the genital area, a catheter will be inserted through the urethra or penis. The catheter will be filled with a water-soluble contrast material. Images will be taken by fluoroscopy during the filling and emptying process. After the exam, the catheter is removed. A voiding cystourethrogram is painless. A local anesthetic is usually applied to minimize the discomfort of inserting the catheter. The antiseptic used to clean and prepare for the insertion of the catheter may feel cold. Some patients may experience mild discomfort when the catheter is inserted and the bladder is filled with the contrast material.

After the Exam
After the exam there are no restrictions. Urine may be pink the first time after the catheter is removed. A burning sensation is not unusual after a catheter is removed. Pain and inflammation should subside within one to two days.

The Results
A radiologist will analyze the images and send a signed report to the referring physician within one business day.

(Information adapted from www.radiologyinfo.org and Dr. Paul Keller)
This information is intended for use as merely a guideline for referring physicians and their staff members only. It contains information pertaining to the most commonly ordered exams and indications. However, Shawnee Mission Medical Center Radiology does not recommend any particular examination. Individual radiologist preference or patient circumstances may dictate ordering alternative studies. Although contrast codes are not needed to place an order, the following contrast codes may be used in placing orders:
CT Contrast Q9967, MRI contrast A9577 and A9579.