Economics of Interstitial Cystitis in Clinical Practice

John B. Forrest, MD, FACS

University of Oklahoma Health Science Center-Tulsa; Urologic Specialists of Oklahoma, Inc., Tulsa, OK

Urologists may be concerned that treatment of patients with interstitial cystitis (IC) is not economically feasible, and the time spent on these patients could be used for more profitable urologic therapy. However, care of IC patients can provide urologic practices with increased revenue opportunities through a wide range of procedures, including IC evaluation and management, treatment planning, and diagnostic, therapeutic, and even surgical techniques. Current Procedural Terminology (CPT) and evaluation and management (E&M) charge codes are provided for many types, levels, and complexities of IC procedures. Some of these treatments may use physician extenders who generate profits without additional overhead costs. Further, IC therapy may involve the use of many in-office services, such as urodynamics, biofeedback, and peripheral nerve stimulation that can be economically profitable. Rather than being an economic drain, patients with IC can enhance the profitability of a urologic practice while they receive much needed care. [Rev Urol. 2002;4(suppl 1):S44-S48]

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> **¬** his article deals with many of the practices associated with the care of patients suffering from interstitial cystitis (IC). Concerns are sometimes expressed in urologic communities that the care of patients with IC is too time consuming and economically unrewarding, because the time diverted to treating IC patients could be used for more economically profitable urologic care. However, because of multiple factors, including such issues as the shift from surgical reimbursements to office reimbursements, the care of IC patients does provide many practices with increased revenue opportunities.

This article outlines various facets of care we give IC patients within our large, single-specialty urologic practice. A pooled-revenue model is employed within the practice, with all physicians sharing equally in the revenues. Fees cannot be discussed, but they are generally regionally specific and are determined by contract. It is our policy to avoid capitation. However, if capitation is necessary, the costs of much of the care, particularly the costs of therapeutic items, should be "carved out" of the capitation contract.

In this article, Current Procedural Terminology (CPT) codes, maintained by the American Medical Association, are provided for each evaluation and management (E&M), diagnostic, and/or therapeutic step, taking the reader through the initial evaluation, treatment planning, and flow of patients over time. The appropriate codes are shown in parentheses after the procedure and listed in the related practice. The vast majority of the patients referred to our practice have been previously evaluated by physicians and are physician-referred. This is particularly true for patients with IC who may have consulted multiple physicians prior to the urologic referral. Because they have been physician-referred, most new IC patients are coded as an initial consultation, Level 4 or 5 (99244 or 99245), depending on the complexity of their problems and the time invested with the patient, including time spent on outside record review. At the first visit, a urinalysis, along with a urine culture, is routinely obtained (81000, 87086, 87088, and P9612). Occasionally, the patient presents for a second opinion in regard to the management of their condition. In this situation the following codes are employed: 99274, 99275.

At this first visit, a decision is reached whether to do an in-office cystoscopy or an outpatient cys-

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tables. In addition, various modes of establishing the diagnosis of IC are reviewed, along with the economic implications of each diagnostic maneuver. The role of diagnostic adjuncts, such as urodynamics, is also assessed. Finally, the potential for clinical research in regard to IC patients within busy practices is reviewed.

Clinical and Business Practice Guidelines

The clinical and business practice guidelines discussed here reflect the experiences of the author in caring for IC patients in a urologic practice, which, because of many local and regional trends, is a tertiary referral toscopy under anesthesia with a hydraulic distention of the bladder. Some patients who have previously undergone a cystoscopy to establish the diagnosis of IC are also seeking an additional opinion in regard to managing their IC.

Cystoscopy and Instillation

With select patients, in some clinical situations, a cystoscopy (52000) is carried out in the office setting. If this is the case, a potassium sensitivity test is performed prior to the cystoscopy. Codes are charged for both the instillations (51700 \times 2), and a J code is assigned to the potassium chloride (KCl) solution, depending on

Table 1 Current Procedural Terminology (CPT) Codes for **Urodynamic Procedures**

Procedure	CPT Code
Cystometrogram, complex	51726
Electromyography (EMG)	51784
Voiding pressure	57195
Rectal	51797
Uroflow	51741
Urethral pressure profile	51772

local costs. Bladder washings (51700) are obtained for urinary cytology. Additionally, if it is clinically indicated during the visit, bladder emptying can be assessed either by a bladder catheterization (P9162) or transabdominal ultrasound (76857, G0001).

In the author's experience, a cystoscopy performed under anesthesia with a hydraulic distention of the bladder (52260) provides invaluable information both in regard to the degree of mucosal changes associated with IC and, perhaps more importantly, bladder capacity under anesthesia. Bladder washings are again done to rule out carcinoma in situ, but bladder biopsies (52204) are rarely employed. The author does not use intravesical therapy when a hydraulic distention of the bladder is performed because of concerns regarding the systemic absorption of intravesical agents when the mucosa are disrupted.

Urodynamic Evaluation

In our practice, we do not routinely employ urodynamic evaluations in assessing IC patients. However, in patients with severe intractable urgency, urgency incontinence, stress incontinence, or mixed incontinence,

Table 2 Appropriate Evaluation and Management (E&M) and J Codes for **Intravesical Therapies**

Therapy	E&M Code
Bladder instillations	51700
Heparin	J1644
Marcaine	J3490
Dimethyl sulfoxide (DMSO)	J1212

urodynamics can be very valuable. Additionally, in patients with established IC, urodynamics are essential to define the parameters of bladder function before continence-restoring surgery is performed. Within our 15person practice, 2 comprehensive urodynamic labs are fully staffed, and they are booked for appointments many weeks in advance. The appropriate codes for urodynamic procedures are presented in Table 1.

Follow-Up Office Visit

The most important office visit occurs once the diagnosis of IC is established. This is the office encounter that explains the diagnosis and treatment options for the patient. It also includes treatment expectations as well as a plan for treatment. This visit should be coded as an established patient at either Level 3 or 4, depending on the time invested in counseling the patient (99213 or 99214). The majority of the author's patients are treated with multidrug oral therapy. These patients are seen again after completing 1 month and 3 months of oral therapy in order to assess their clinical response. Generally, established Level 3 or 4 codes (99213 or 99214) are used for these visits, with time as the major variable, along with a focused physical examination. Frequently, it is appropriate to assign additional International Classification of Diseases, Ninth Revision (ICD-9) codes for conditions such as urgency (788), urgency incontinence (788.31), or hematuria (599.7) with these visits.

Intravesical Therapy

In a relatively small subgroup of patients, intravesical therapy is employed as an adjunct to oral therapy to enhance the clinical response. It is also used in patients who cannot tolerate oral drugs and in patients in whom oral therapy is ineffective. Multiple intravesical therapies have been employed, and they are listed with the appropriate code in Table 2. A bladder instillation code is also charged with an E&M code in the proper setting (51700 and 99211-99213).

provides premixed vials, needles, syringes, and catheters (Table 3).

IC Flares

Symptomatic flares of IC may occur from time to time. Within our practice, protocols exist to handle these flares. The patient is seen immediately by the nursing staff, if the physician is not available, to determine the presence or absence of bacteriuria. If the flare is not found to be associated with bacteriuria, based on the results of a urinalysis (81000), immediate intravesical therapy is instilled by the nursing staff, along with the appropriate oral analgesics, which have been outlined to the nursing staff by protocol (99211, 51700, J1644, and J3490). If the midstream urine specimen suggests bacteriuria, a urine culture is obtained (87086,

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Intravesical therapy provides an important source of practice revenues, and it can be delivered by physician extenders with no increase in overhead expenses. Appropriate codes in these settings should reflect the absence of physician involvement during the visits (99211), but codes for instillation supplies and medications should be assigned. After completing a 6-week intravesical protocol, the patient again sees the physician, who assesses the clinical response and outlines further therapy.

Home Instillation

A small subset of patients may also wish to pursue intermittent selfcatheterization in order to instill intravesical agents, most commonly heparin and marcaine, at home. For that situation, the patient is instructed in self-catheterization techniques by the nursing staff, and the clinic

87088, and 87184). Antibiotic therapy is initiated along with appropriate oral analgesics within 48 hours, pending the results of the urine culture. It is important to note that

Table 3 Medical Supplies Provided by a Urologic Practice for the Home Instillation of Intravesical Agents, With the Appropriate Evaluation

and Management (E&M) Codes

Item	E&M Code
Urethral catheter, simple	53670
Catheter supplies	A4351
Heparin	J1644
Marcaine	J3490

Table 4 Biofeedback Therapies: Evaluation and Management (E&M) Codes for the Initial and Follow-Up Visits

Therapy	E&M Code
Established Level 1 (modifier 25)	99211
Electromyogram	51784
Biofeedback training	90901
Activities of Daily Living (ADL) (15-minute increments)	97535
Electrical stimulation (15 minutes)	97032

patients with IC who develop bladder infections will experience many more severe bladder symptoms than the routine patient with acute bacterial cystitis.

Biofeedback

Certain patients may benefit from biofeedback techniques ranging from urgency/frequency management to methods of lowering resting pelvic floor muscular tone. Patient selection. along with well-trained biofeedback personnel, is critical to success. Reimbursement issues are geographicdependent and highly variable. The codes for biofeedback therapy are presented in Table 4.

Neuromodulation

Neuromodulation may be accomplished, when it is appropriate, with both peripheral percutaneous techniques or permanent implant techniques, preceded by a test stimulation. It is our practice to employ peripheral sural nerve stimulation. Coding for in-office peripheral nerve stimulation is presented in Table 5. Permanently

therapies may benefit from a cystectomy and urinary diversion. Multiple techniques of urinary diversion are used with the understanding that some patients who undergo a continent diversion may develop a symptomatic IC-like pattern within their continent reservoirs. Appropriate codes for these surgical procedures are presented in Table 6.

Clinical Trials

In some practices, the care of patients suffering from IC may provide unique opportunities for physicians and patients to participate in clinical research trials. If clinical research is to be pursued, however, several principles must be well defined. First, a clearly documented understanding of good clinical practice guidelines

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implanted sacral nerve stimulators are becoming increasingly popular. Some reimbursement issues, however, exist in regard to permanent implants. On occasion, peripheral nerve blocks may be helpful, both diagnostically and therapeutically (64425 and 64430).

Cystectomy and Urinary Diversion Although exenterative surgery is rarely employed in patients with IC, some patients who have failed all

must exist within the practice. There must be a clear and strong commitment among all physicians within the practice to refer patients for clinical research. Second, the best source of patients for this research will be

Table 6 Appropriate Current Procedural Terminology (CPT) Codes for Cystectomy and Urinary Diversion

Surgical Procedure	CPT Code
Cystectomy, complete with ureteroileal conduit	51590
Cystectomy, complete with continent diversion by	
any technique	51596

Table 5
Current Procedural Terminology (CPT) Coding for
In-Office Peripheral Nerve Stimulation Procedures

Procedure	CPT Code
Ilioinguinal nerve block	64425
Pudendal nerve block, plus E&M code	64430

active patients within one's practice. Referral of patients within a practice should be seamless for the physician and effortless for the patient. Third, very competent research staff must be in place to recruit, screen, enroll, and closely follow patients. Maintenance of flawless records is imperative. Additionally, physicians managing a practice must measure the cost of clinical research. Frequently, research reimbursements appear to be generous

but, when objectively measured against space and personnel costs, may offer very little margin in economic return.

Conclusion

This article has attempted to elucidate many of the economic issues associated with the care of patients with IC. IC patients present unique opportunities to use physician extenders in legitimate care activities that generate

profitability at no additional overhead. Further, many in-office services, such as urodynamics, biofeedback, and peripheral nerve stimulation, may be offered which can be economically rewarding. In conclusion, rather than being an economic drain on a urologic practice, patients suffering from IC can provide the practice with opportunities for economic enhancement while delivering needed care to this population of patients.

Main Points

- Contrary to the belief that the care of interstitial (IC) patients is time consuming and economically unrewarding, treatment of IC patients can provide urologic practices with increased revenue opportunities.
- Urologic practices provide IC evaluation and management, treatment planning, and diagnostic, therapeutic, and even surgical procedures from the initial referral to follow-up visits that have economic implications. Some of these procedures may use physician extenders who generate profitability at no additional overhead costs.
- IC therapy may involve the use of many in-office services, such as urodynamics, biofeedback, and peripheral nerve stimulation.
- Current Procedural Terminology (CPT) and evaluation and management (E&M) codes cover charges for all types, levels, and complexities of IC therapy.