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The Costs and Financing of Incontinence

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As a prevalent health problem, urinary incontinence is costly to the health care system, to patients, and to their families. This chapter presents

information on the current costs of treating incontinence and the ways in which these costs are met through the health care payment system.

COSTS OF INCONTINENCE

Few studies have systematically examined the costs of incontinence, although some have considered various components of the cost, such as the added costs of labor or supplies used to manage incontinence in long-term care institutions. The U.S. Surgeon General has estimated that \$8 billion is spent on incontinence in this country (20); others have estimated that incontinence accounts for up to one-third of the cost of care in geriatric wards in Great Britain (27). The bases for these estimates, however, have not been detailed. The costs of incontinence go far beyond monetary considerations: withdrawal from social activities, psychological distress, burden on family and caregivers, and subsequent predisposition to institutionalization are all important potential effects of incontinence that are difficult to quantify (105).

One report has examined the overall costs of incontinence in nursing homes in this country (111). Several specific assumptions were used to arrive at the cost estimates; however, the figures reported in that study generally concur with the limited data available from the other reports. If only "first-order" costs are considered (i. e., the costs of managing incontinence without the costs of any complicating conditions), in 1983, incontinence added between \$3 and \$11 to the daily costs of caring for a nursing home patient. The range of costs is accounted for by differing costs of various techniques of management. Blue pads, launderable diapers and bedpads, disposable diapers and catheters were the four methods of management considered in the analysis cited. Of the three components of these costs—labor, laundry, and supplies—the labor involved in managing the incontinent patient was the major contributor.

Interestingly, the first-order costs were calculated to be lowest for patients managed with indwelling catheters. However, "second-order" costs (those associated with managing complications of incontinence and its treatment) are highest with indwelling catheters because of the high incidence of urinary tract infections associated with this treatment. Although the precise incidence of urinary tract infections requiring specific treatment in chronically catheterized nursing home patients is not known, a conservative estimate of these second-order costs of incontinence is between \$2,000 and \$3,000 per patient per year. Thus, when one considers total costs, the costs of catheter management are comparable to those of other techniques with lower risks of morbidity. If methods of preventing morbidity from indwelling catheters could be developed, such as adding an antibacterial substance to the drainage bag (39,96,143), these devices might then be less costly than other types of incontinence management in the nursing home setting. The National Institute on Aging is currently funding a study addressing these methods (164).

The total costs of incontinence in long-term care institutions may or may not be covered by different sources of third-party reimbursement. In general, although Medicaid reimbursement covers the costs of managing incontinence, nursing homes may have inadequate incentives to care for incontinent patients because they represent a relatively costly condition. Given present fixed reimbursement rates in most States, the first-order costs of incontinence (up to \$11 per day) represent close to one-third of the daily per diem for nursing home patients provided by Medicaid (about \$37 per day in California). The result is often nurs-

ing home reluctance to accept incontinent patients. The second-order costs, such as the costs of hospitalization to treat skin breakdown and urinary tract infections, are often covered by Medicare or other third-party payers. Thus, the nursing home administrator may be less concerned with these types of costs. However, several States have developed, or are developing, case-mix reimbursement strategies that recognize the increased costs of incontinence (142).

Assuming that there are approximately 600,000 nursing home patients with some degree of urinary incontinence and that in three-quarters of these patients the incontinence is of sufficient severity that catheters or other specific management techniques are used, the yearly costs of in-

continence in U.S. nursing homes can be estimated at between \$0.5 and \$1.5 billion (first-order costs only). This represents between 3 and 8 percent of the total expenditure on nursing home care in this country (111).

The costs of incontinence in the community are much more difficult to estimate. No study has addressed these costs in any detail. Table 4-1 summarizes some of the major direct costs for various approaches to treatment.

Loss of productivity in both those afflicted with incontinence and those caring for the incontinent patient could be substantial. Incontinence can place physical, psychological, and economic burdens on patients and caregivers—costs that are difficult to estimate. In addition, incontinence is

Table 4-1.—Estimated Relative Costs of Treatments for Incontinence (1983)

Treatment	cost	Components and methods of estimate
Intravaginal electrical stimulator	\$ 600 ^c	Suggested retail price of device; can also be rented for \$95 per month
Artificial sphincter	3,500	Device and surgical fee = \$2,300
Periurethral Teflon injection	1,050 ^c	Four hospital days = 1,200 Surgical fee = 450
Silicone-gel prosthesis	3,900 ^a	Two hospital days = 600 Surgical fee = 2,700
Bladder-neck suspension	3,800 ^c	Four hospital days = 1,200 Surgical fee = 2,000
In-dwelling catheter	1,059 ^b	Six hospital days = 1,800 Includes supplies, labor, and laundry (see Ouslander and Kane, 1984)
Disposable pads	2,522 ^b	Includes supplies, labor, and laundry
Disposable diapers		
Long-term+ are (LTC)		
institution	1,836^b	Yearly cost of three diapers per day
Community	821	("Attends) at \$0.75 per diaper
Reusable pads or diapers		
LTC institution	1,583^b	(See Ouslander and Kane, in press.) Yearly
Community	425	cost of four undergarments ("Dignity Pants") at \$15 per garment and disposable pads at \$1 per day
Drug treatment:		
Urge incontinence		
Ditropan (oxybutinin)	240 ^{a c}	5 mg three times daily
Tofranil (imipramine)	46 ^{c e}	25 mg three times daily
Urispas (flavoxate)	175 ^{c e}	200 mg three times daily
Stress incontinence		
Sudafed (ephedrine)	142^{c e}	60 mg three times daily
Premarin (estrogen)		
Vaginal cream	48 ^{a c}	1 g three times weekly
Oral	47 ^{c e}	0.3 mg daily

^aDoes not include the cost of urologic diagnostic evaluation generally necessary before instituting treatment (Up to \$600).

^bMinimum estimate of daily cost in a nursing-home setting. Does not include costs of managing secondary complications related to treatment and/or incontinence (Ouslander and Kane).
^ccost of a year's supply; includes \$2.00 monthly pharmacist's fee.

SOURCE: J. Ouslander, R. Kane, S. Vollmer, and M. Menezes, University of California at Los Angeles, 1984.

often *cited* as a major factor in the decision to institutionalize a dependent person. Although no empirical data precisely define the role of incontinence in precipitating admission to long-term care institutions, certain suggestive data (in addition to the commonly quoted anecdotal information) indicate that incontinence plays a major role in nursing home admission. In one study of stress in caregivers of frail, elderly, community-dwelling persons, difficulties with toileting and incontinence were highly correlated with caregiver burden (10.5). Most incontinent patients in nursing homes are admitted to the nursing home at a time when they are already incontinent (112). Thus, from the limited data available, it would appear that incontinence is an important factor in the decision to institutionalize dependent persons.

A critical question, and one that has never been systematically addressed, is the potential cost effectiveness of evaluation and specific treatment for incontinence. It appears that few (less than 5 percent) incontinent patients in the nursing home setting have any specific evaluation of their incontinence (112). Although the proportion of incontinent patients that can be completely cured is unknown, many can clearly benefit from an evaluation that identifies treatable conditions; in most instances, this treatment will lead to substantial amelioration of the incontinence. Some experts estimate that one-third of incontinent patients can be completely cured and most others kept dry and comfortable with appropriate management (32,81, 174). From a purely economic perspective, even extensive evaluation may be a cost-effective intervention overall (111). Moreover, improvements in the quality of life of incontinent patients and their caregivers likely far outweigh the purely monetary benefits of evaluation and specific treatment for incontinence.

PAYMENT FOR URINARY INCONTINENCE

Except for services delivered as part of an acute hospitalization, Medicare coverage for incontinence products is quite limited. Part B of the program pays for a prosthetic device that replaces a permanently inoperative internal body organ

The cost of a typical extensive urologic evaluation for incontinence is approximately \$600 (111). The components of such an evaluation include: consultation for history and physical examination (\$150); urinalysis and culture (\$50); voiding cystourethrogram (\$40), cystoscopy (\$100); urodynamic tests, including cystometrics, urine flowmetry, and urethral pressure profile (\$225); and a followup visit (\$35) (111).

However, many treatable conditions can be identified by a much less extensive, less expensive, and less invasive evaluation (87). The role of urodynamic testing in the diagnosis and management of incontinence is especially controversial, particularly in the geriatric population. If properly performed and interpreted, these tests can clearly identify genitourinary conditions that underlie incontinence and that require specific treatment (2,15). However, the testing requires specialized equipment and highly trained personnel, which are available in only a few medical centers; it is relatively expensive and invasive (requiring repeated bladder catheterizations); and it is uncomfortable and inconvenient—especially for frail elderly patients.

Some investigators state that most patients can be properly diagnosed and treated using an algorithmic approach without urodynamics (81); others feel that treating an incontinent patient without urodynamics is like treating a cardiac arrhythmia without an electrocardiogram (32). Because most treatments are used for specific conditions, some type of diagnostic evaluation should be carried out before the treatments are instituted. Identifying the most practical and cost-effective strategies for diagnosing different types of incontinent patients should be a major area of future research.

or function. Thus, sphincters would qualify, but catheters and pants or diapers would not. Medicare's home-health program will permit reimbursement to a home-health agency for supplies ordered by a physician and deemed reasonable

and necessary for the treatment of the patient, but only a small proportion of incontinent persons will be covered by the constrained Medicare home-health benefit, because it is available only to those patients requiring skilled nursing care. Thus, Medicare does not pay for most urinary incontinence pads and pants used outside the hospital.

Medicare will pay for inpatient hospital care associated with incontinence in the same way that it pays for all hospital care. Medicare coverage of acute care hospital costs changed dramatically with the introduction of prospective payment in October 1983 (Public Law 98-21). The prospectively set price per admission does not vary with the use of a given incontinence device, just as it is insensitive to all inpatient services.

Coverage for urinary incontinence products under Medicaid varies from State to State. Coverage is available in such States as New York, California, Florida, Illinois, and Michigan, but not in other States. Even in those States in which Medicaid covers the products, the type and extent of coverage vary considerably. Additionally, the States' requirements for coverage and payments change frequently. In California, for example, disposable diapers, pants, disposable pant liners, disposable underpads, and urinary drainage/irrigation supplies are covered under Medicaid. However, these are subject to requirements such as quantity limitations (two pants per prescription), prior authorization and prescription documentations, and patient age limitations (age 5 or older).