Use of Utilization Management Methods in State Medicaid Programs

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This article describes the use of utilization management (UM) methods by State Medicaid programs. The use of optional UM methods range from zero in one State to eight in four States, with a median of five. A majority of States have programs for ambulatory surgery, preadmission certification, lock-in, primary-care case management, and targeted case management. Overall, no UM method was judged by States to have an adverse effect on access or quality of care. For UM methods mandated by the Medicaid program, more than one-third of the States rated physician certification as minimally effective.

INTRODUCTION

State Medicaid programs are increasingly emphasizing managed care approaches to better organize care and control expenditures. Managed care is generally characterized by the existence of a provider network, the assumption of risk by the network or an intermediary, and the use of UM methods. Medicaid enrollment in managed care organizations is growing rapidly. Between 1993-95, the Medicaid enrollment in managed care plans more than doubled, from 4.8 million to 11.6 million. In 1995, enrollees in managed care plans constituted 32 percent of all Medicaid enrollees (Health Care Financing Administration, 1995a). This number is more than triple that in 1987.

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This trend will likely continue. The majority of Medicaid beneficiaries in managed care have been enrolled under freedom-of-choice waivers that allow States to mandate participation in managed care (Rotwein et al., 1995). More recently, though, States have dramatically increased their requests to operate demonstration programs under section 1115 of the Social Security Act. A major incentive for operating such a program is that other limits on the use of managed care in a State's Medicaid program can be waived (Riley, 1995).

The wish to control costs motivates States' interest in increasing the use of managed care. Total Medicaid expenditures have increased rapidly in recent years and exceeded $130 billion in 1993 (Buck and Klemm, 1993; Health Care Financing Administration, 1995b). After education, Medicaid constitutes the largest item in State budgets (National Association of State Budget Officers, 1995).

One way in which managed care organizations are thought to control costs is through the use of UM methods. There are a variety of such methods, but they all generally seek to limit unnecessary care or to promote greater use of cost-effective alternatives. For instance, second surgical opinion programs try to discourage unnecessary surgery by having patients obtain another opinion before committing to the surgery.

Although UM methods are used extensively by managed care organizations, they also can be used within conventional insurance plans (Miller and Dial, 1993). The extent to which this is the case could limit savings expected from

substituting a managed care program for a fee-for-service one.

This may be an important consideration for States planning to increase their use of managed care within their Medicaid programs. Many State Medicaid programs already pay providers at less than prevailing rates (Holahan, 1991), thus potentially limiting savings that might be realized through negotiated discounts. Better management of utilization then potentially becomes a more important component of cost control. However, if the Medicaid program already extensively uses UM methods, this source of potential savings may also be limited.

Unfortunately, we have little information by which to assess the relevance of this issue for Medicaid. Program requirements mandate States to have physician certification of hospital admissions and to have utilization review of hospital stays. However, the effectiveness of these requirements in controlling costs is unknown. Regarding the use of optional methods, Lindsey (1989) found that 15 States had a second surgical opinion program. The same study reported that 27 States had a preadmission screening program. There is not much information available about the use of other optional methods.

This article addresses these problems by reporting the findings of a survey of State Medicaid programs of their use of a variety of UM methods in 1993. In addition to providing information about these methods, programs rated their impact on program costs (expenditures), quality of care, and beneficiary access to services.

SOURCE AND LIMITATIONS OF THE DATA

HCFA contracted with Mathematica Policy Research to survey State Medicaid programs about their UM methods (Frazer, Chu, and Felt, 1994). Twelve UM methods were included in the survey. Nine of these methods are optional for Medicaid programs, whereas three are required. The Technical Note lists the nine optional methods along with a definition of each. (The mandatory methods are described and discussed later.)

After development and pilot testing in two States, the questionnaires were mailed to the Medicaid agencies in the remaining States and the District of Columbia in July 1993. Responses were received from all States but New Jersey and Arizona.

The survey asked the agencies to rate each method's perceived impact on program costs, quality of care, and beneficiary access to care. Survey instructions requested that the respondents at the State agencies be the person most knowledgeable about each method. Where the ratings were from evaluations, copies of the report were requested. Very few of the ratings were based on any evaluation. Thus, the ratings reported in this article were based on the judgments of State officials who are familiar with the use and effects of the UM methods surveyed.

RESULTS

Table 1 shows the frequency of use of the nine optional methods. The number of methods employed range from zero in one State to eight in four States, with a median of five. The following methods are used by 30 or more States: ambulatory surgery (33), preadmission certification (36), lock-in (43), primary-care case management (30), and targeted case management (40).

The number of methods used by a State does not seem related either to geographical region or the size of a State's Medicaid program. States employing the most UM methods (7 or 8) are: California, Indiana, Iowa, Maryland, Massachusetts, Minnesota,

Table 1

Use of Utilization Management Methods by State Medicaid Programs: 1993

State	Ambulatory Surgery Program	Preadmission Testing Policy	Same-Day Admission Surgery Policy	Second Surgical Opinion Program	Preadmission Certification Program	Lock-in Program	High-Cost Case-Management Program	Primary-Care Case-Management Program	Targeted Case-Management Program	Total
Alabama			X			X		X	X	4
Alaska			X		X	X			X	4
Arkansas	X	X	X			X		X	X	6
California	X	X	X		X	X	X	X	X	8
Colorado		X		X		X		X		4
Connecticut					X	X			X	3
Delaware		X	X	X	X	X				5
District of Columbia			X			X				2
Florida	X				X			X	X	4
Georgia	X				X	X		X	X	5
Hawaii				X		X			X	3
Idaho					X	X			X	3
Illinois	X					X		X	X	4
Indiana	X	X	X	X	X	X			X	7
Iowa	X		X	X	X	X		X	X	7

See source at end of table.

Table 1—Continued

Use of Utilization Management Methods by State Medicaid Programs: 1993

State	Ambulatory Surgery Program	Preadmission Testing Policy	Same-Day Admission Surgery Policy	Second Surgical Opinion Program	Preadmission Certification Program	Lock-in Program	High-Cost Case-Management Program	Primary-Care Case-Management Program	Targeted Case-Management Program	Total
Kansas						X		X		2
Kentucky	X				X	X		X	X	5
Louisiana	X					X		X	X	4
Maine	X					X			X	3
Maryland	X	X	X	X	X	X		X	X	8
Massachusetts	X			X	X	X	X	X	X	7
Michigan	X				X	X	X	X	X	6
Minnesota	X			X	X	X	X	X	X	7
Mississippi					X			X	X	3
Missouri	X	X	X	X	X	X		X	X	8
Montana	X				X	X		X	X	5
Nebraska	X			X	X	X			X	5
New Hampshire										0
New Mexico	X				X	X		X	X	5
Nevada	X	X	X		X	X	X	X	X	8
New York	X				X	X		X	X	5
North Carolina	X				X		X		X	5
North Dakota					X	X			X	3
Ohio	X				X	X	X		X	5

See source at end of table.

Table 1—Continued
Use of Utilization Management Methods by State Medicaid Programs: 1993

State	Ambulatory Surgery Program	Preadmission Testing Policy	Same-Day Admission Surgery Policy	Second Surgical Opinion Program	Preadmission Certification Program	Lock-in Program	High-Cost Case-Managment Program	Primary-Care Case-Management Program	Targeted Case-Management Program	Total
Oklahoma	X				X	X			X	4
Oregon					X	X			X	3
Pennsylvania	X		X	X	X	X	X	X	X	8
Rhode Island					X	X			X	3
South Carolina	X				X	X		X	X	5
South Dakota							X	X		2
Tennessee	X	X	X	X	X	X	X			7
Texas	X			X	X	X			X	5
Utah		X	X		X	X		X	X	6
Vermont	X	X	X		X	X	X		X	7
Virginia	X					X		X		3
Washington	X			X	X	X		X	X	6
West Virginia	X					X		X	X	4
Wisconsin	X			X	X	X			X	5
Wyoming	X		X	X	X					4
Total	33	11	16	15	36	43	11	30	40	_

SOURCE: Buck, J.A., and Silverman, H.A., 1996.

Missouri, Nevada, Pennsylvania, Tennessee, and Vermont. Those using the fewest methods (3 or fewer) are: Connecticut, the District of Columbia, Hawaii, Idaho, Kansas, Maine, Mississippi, New Hampshire, North Dakota, Oregon, Rhode Island, South Dakota, and Virginia.

States were asked about various features of the UM methods that they employ. Characteristics of individual UM methods in State Medicaid programs are presented in Table 2. For each type of method, the percentage indicates the proportion of reporting States with that method with the specified characteristic. For each percentage, the table lists the number of States with the method that provided information on the characteristic. The characteristics listed identify if the method was initiated before 1985, if it applies to all recipients, if payment is denied for non-compliance with UM requirements, or if the method has ever been evaluated for effectiveness. Additionally, Table 2 identifies the proportion of reporting States that say that the method is viewed negatively by either recipients or providers.

Results show that lock-in, preadmission testing and same-day surgery programs are the methods that States have used the longest. In contrast, the use of high-cost case-management, ambulatory surgery, and primary-care case-management programs is relatively recent. Nearly all States with ambulatory surgery, preadmission testing, or same-day surgery programs applied them universally. In only one State did all recipients receive primary-care case management.

One issue in assessing the effectiveness of UM methods is the incentives that providers have for compliance. No reporting State with a second surgical opinion program denies full or partial payment for service because of failure to meet program requirements. This is not generally the case for other UM methods for which such a penalty could apply. Nevertheless, for each of the other methods, there are a few States that fail to impose a penalty for non-compliance.

Table 2 also shows that, in many cases, States do not assess the effectiveness of their UM methods. Lock-in and high-cost case-management programs were evaluated by the highest percentage of States. However, even for these programs, one-half of the reporting States that had them did not assess them. (This characterization does not apply to primary-care case-management programs. States must conduct an evaluation as a condition of receiving permission to have such a program.) Other information in Table 2 reveals that, at least in the judgment of State administrators, recipients and providers accept most UM methods. As might be expected, however, one-half of the reporting States indicate that recipients view lock-in programs negatively. Also, one-fourth or more of States report that providers have negative attitudes about second surgical and preadmission certification programs. This may be because these programs sometimes question physician judgment.

STATE RATINGS

States were asked to rate the impact of each of their UM methods in three areas: Medicaid program costs, quality of care for Medicaid recipients, and access to health care for Medicaid recipients. A five-point rating scale was used: 1 indicated a severe adverse effect, 5 indicated a strong beneficial effect, and 3 indicated no significant effect.

The means of these ratings are presented in Table 3. No UM method had a mean rating of less than 3.00. Overall, therefore, none was judged to have an adverse effect in any area. Judgments about the degree of their beneficial effects varied, though. Also, most methods were rated as having an adverse effect by a few States in one or more areas.

Table 2

Characteristics of Utilization Management Methods in State Medicaid Programs

Method	Initiated Before 1985	Applies to All Recipients	Payment Denied for Non-Compliance	Effectiveness Evaluated	Viewed Negatively by Recipients	Viewed Negatively by Providers
			Percent			
Ambulatory Surgery Program	33.3 (30)	96.8 (31)	83.9 (31)	20.0 (30)	0.0 (28)	0.0 (31)
Preadmission Testing Policy	62.5 (8)	90.9 (11)	81.8 (11)	9.1 (11)	0.0 (10)	0.0 (10)
Same-Day Admission Surgery Policy	61.5 (13)	92.9 (14)	85.7 (14)	14.3 (14)	0.0 (13)	0.0 (13)
Second Surgical Opinion Program	41.7 (12)	85.7 (14)	0.0 (11)	33.3 (15)	7.7 (13)	38.5 (13)
Preadmission Certification Program	45.5 (33)	66.7 (33)	93.8 (32)	46.9 (32)	9.1 (33)	25.0 (32)
Lock-In Program	73.8 (42)	78.6 (42)	92.9 (42)	50.0 (42)	50.0 (42)	7.3 (41)
High-Cost Case-Management Program	0.0 (12)	N/A	N/A	50.0 (12)	0.0 (12)	0.0 (12)
Primary-Care Case-Management Program	18.2 (33)	3.0 (33)	N/A	N/A	6.5 (31)	3.3 (30)
Targeted Case-Management Program	N/A	N/A	N/A	35.0 (40)	0.0 (41)	2.4 (41)

NOTE: Percentages indicate the proportion of reporting States with that method with the specified characteristic. Numbers in parentheses indicate the number of responses on which the percentage is based. N/A is not applicable.

SOURCE: Buck, J.A., and Silverman, H.A., 1996.

The exceptions were preadmission testing, second surgical opinion, and primary-care case management, which had no adverse rating by any State in any of the three areas.

States rated preadmission testing, preadmission certification, and lock-in as the most effective cost-containment methods. Targeted case-management, second surgical opinion, and ambulatory surgery programs were seen as having only modest positive effects on costs. The three UM methods that use case management were judged as having the most beneficial effects on access to care. Most methods, however, were seen as having limited positive effects on access. This may be because many UM methods act to limit utilization in one way or another. The positive rating for lock-in, although limited, seems somewhat surprising because this program acts to restrict the ability of some individuals to use multiple providers. However, in most cases, the individual is allowed to choose the primary-care physician that he or she is assigned to, so this could be seen as not affecting access.

High-cost case-management and lock-in programs were rated as having the most positive effects on quality of care. This may be because these programs seek out primary caregivers to manage care for those with high service utilization. Other UM methods were also rated as having modestly positive effects on quality of care, but less so than these.

Mandatory Physician Certification and Utilization Review

In addition to the nine optional UM methods, the survey requested informa-

Table 3

Mean Ratings of Costs, Access, and Quality for Utilization Management Methods

Method	Costs			Access			Quality		
	Mean	S.D.	N	Mean	S.D.	N	Mean	S.D.	N
Ambulatory Surgery Program	3.83	0.73	30	3.34	0.60	29	3.43	0.56	30
Preadmission Testing Policy	4.40	0.49	10	3.11	0.31	9	3.33	0.47	9
Same-Day Admission Surgery Policy	4.07	0.46	14	3.00	0.39	13	3.38	0.74	13
Second Surgical Opinion Program	3.80	0.60	10	3.27	0.45	11	3.70	0.46	10
Preadmission Certification Program	4.34	0.54	32	3.00	0.36	31	3.90	0.73	31
Lock-In Program	4.31	0.65	39	3.47	0.91	38	4.35	0.57	40
High-Cost Case-Management Program	4.20	0.87	10	4.00	0.50	8	4.40	0.49	10
Primary-Care Case-Management Program	4.29	0.45	21	4.00	0.00	15	4.06	0.24	16
Targeted Case-Management Program	3.51	0.91	35	4.24	0.59	37	4.09	0.55	35

NOTE: S.D. is standard deviation.

SOURCE: Buck, J.A., and Silverman, H.A., 1996.

tion on mandatory UM methods. Medicaid statutes and regulations require that the State Medicaid agency ensure that physicians certify the necessity for admission and continued stays in general hospitals, nursing facilities, and mental hospitals. States also must have a utilization review program for such facilities. State monitoring may be direct or through contractors (e.g., professional review organizations).

Survey results show that States have significant reservations about the utility of physician certification. Of those responding, nearly 40 percent judge it to be not effective or only marginally effective in containing costs. Almost one-third would discontinue this activity if it were not required.

This result is not necessarily surprising. Without fiscal or other incentives, physicians may not be motivated to limit unnecessary hospitalization. Also, States may believe that other methods, such as pre-admission certification, are more effective in limiting inpatient care.

All reporting States have retrospective utilization review programs, and about three quarters also identify concurrent review programs. In 82 percent, professional review organizations or other third parties are responsible, at least partly, for retrospective review of claims or records. Nearly 90 percent judge retrospective review to be somewhat to very effective in containing costs, and all but one would continue this activity if it were not required. A similar percentage judge concurrent review to be effective in containing costs.

DISCUSSION

One possible source of cost savings achieved by managed care organizations in the private sector is their extensive use of

UM methods. However, this study shows that such activities are not restricted to such organizations. Nearly all State Medicaid programs employ one or more UM methods. Ambulatory surgery, preadmission certification, lock-in, primary-care case management, and targeted case management are the most frequently used methods.

Overall, no UM methods were judged by States to have an adverse effect on access or quality of care. States rate preadmission testing, preadmission certification, and lock-in as the most effective cost-containment methods. A majority of States indicate that the UM methods required by the Medicaid program (utilization review and physician certification) were somewhat or very effective in containing costs. However, about one-third rated physician certification as minimally effective and would discontinue it if it were not required.

Despite the limitations of the data discussed earlier, these findings have several implications for the increasing use of managed care within State Medicaid programs. For the first time, this study establishes that States already make considerable use of UM methods in their programs. All States must have utilization review and physician certification, and five optional UM methods are used by one-half or more of the States. This suggests that the expectation that contracting with managed care organizations will produce significant savings in Medicaid programs may not be met. When coupled with the lower fees that many programs already pay providers, it may make it more difficult for managed care organizations to squeeze savings from the programs.

This is not to say that no changes should be expected in UM methods with the increased use of Medicaid managed care. The extent to which these methods are used in Medicaid programs and the nature of their use differ in some ways from the private sector. Limited data show that preadmission certification, preadmission testing, utilization review, and high-cost case management are used in most private sector plans of all types (The Wyatt Company, 1988; Miller and Dial, 1993). Medicaid programs also use preadmission certification and utilization review extensively, but do not commonly require preadmission testing or high-cost case management. Another UM method, ambulatory surgery, is used in about two-thirds of State Medicaid programs, but less than one-half of private sector plans.

A final consideration concerns the rigor with which these programs are administered. This survey shows that some State Medicaid programs either do not apply UM methods to all recipients or fail to deny payment for non-compliance with UM requirements. Thus, as currently implemented, the potential of UM methods in State Medicaid programs may not be fully realized. This suggests that although the

TECHNICAL NOTE

Utilization Management Methods

Method	Description
Ambulatory Surgery	A program that encourages or requires that specified surgical procedures be performed on an outpatient rather than inpatient basis. These include: (1) programs that provide lists of surgical procedures that normally will not be covered if performed on an inpatient basis, and (2) programs that offer financial incentives for providing specified surgical services in ambulatory settings.
Preadmission Testing	A policy that directly encourages or requires preoperative testing in an outpatient rather than inpatient setting. A diagnosis-related group payment system would not be included in this definition.

TECHNICAL NOTE-Continued

Utilization Management Methods

Method	Description
Same-Day Admission Surgery	A policy that directly encourages or requires that patients be admitted on the same day as their scheduled inpatient surgery.
Second Surgical Opinion	A program or policy that covers or requires one or more additional opinions when a physician recommends surgery.
Preadmission Certification	Also known as prior authorization, preadmission screening, or preadmission review programs. A program or policy that requires prior approval of hospital admissions. (Requirements under section 1902(a)(44) of the Social Security Act that the physician recommending the admission sign a statement that admission is warranted are not included.)
Lock-In	Also known as recipient restriction. A program that identifies recipients who have made inappropriate or excessive use of services, and assigns them to a single provider who supervises their care. These programs differ from high-cost case-management programs because they target individuals believed to misuse services; high-cost case-management programs attempt to reduce costs for expensive but appropriate care.
High-Cost Case Management	Programs that identify high-cost patients and facilitate the development and implementation of less costly appropriate courses of care. These programs differ from lock-in programs because they focus on reducing costs for costly but appropriate care; lock-in programs target individuals believed to be misusing services.
Primary-Care Case Management	Also known as a "gatekeeper" program. A program that provides for or requires all non-emergency medical treatment for a recipient to be coordinated by a particular primary-care provider. These operate under section 1915(b) waivers.
Targeted Case Management	Program that covers or establishes case-management (also known as case coordination) services for defined special populations, such as the disabled, pregnant women, or young children. The case managers work with clients directly to collect information on their health needs, and assist them in obtaining appropriate services.

overall use of UM methods may not change as Medicaid programs move to contract with managed care organizations, their mix and characteristics could.

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