The Resource Utilization Groups System of Nursing Home Reimbursement Policies: Influences on Occupational Therapy Practice

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Objective. This study explored the effects of federal and state reimbursement mechanisms on occupational therapy practice in the nursing home setting, specifically, the selection and scheduling of patients for treatment programs, the content of the therapy provided, and the documentation requirements.

Method. A questionnaire developed for the study was mailed to the chief occupational therapist in each of the 171 nursing homes located in New York City. Descriptive data on the research variables were collected from 83 respondents.

Results. Government regulation and reimbursement mechanisms specifically affected therapists’ treatment decisions and patient programming and scheduling in the nursing home setting. Survey results described the clinical impact of the resource utilization groups (RUGs) data collection periods. Negative effects were seen in a substantial incidence of withholding therapies from patients and the decline in the use of some traditional occupational therapy treatments. Positive effects included an increase in staff and equipment and therapists’ improved documentation skills.

Conclusion. Occupational therapy practitioners in the nursing home setting need to find ways to live with the realities of government reimbursement without compromising professionalism or clinical judgment. Documentation is the key to assuring that patients receive the therapy they need. Therapists should be aware of the regulations, document accordingly, and review those cases that were denied reimbursement to learn of documentation errors.

Demographic data indicate that the U.S. population is aging rapidly and that although only a small portion of the elderly population resides in nursing homes, usage will increase with the growing number of older persons (Ouslander, Osterweil, & Morley, 1991, chap. 1). According to the U.S. Bureau of the Census (1992), 12.6% of the population were over the age of 65 years in 1991. Within this group, 19.8% were between 75 and 79 years old, and 10% were over the age of 85 years. The Medicare Prospective Payment Assessment Commission (ProPac) (1990) predicted that by the year 2000, 13% of the U.S. population will be over the age of 65 years. ProPac’s findings for the nursing home population indicated that in 1990, 43% were over the age of 85 years, and 40% were between 75 and 80 years old.

The needs of the geriatric patient are many and are often complex. Most nursing home residents have more than one illness or disability. Common medical condi-
options include cardiac and lung diseases, diabetes, cancer, and renal failure; neurological conditions, such as Parkinson's disease, multiple sclerosis, and hemiplegia resulting from cerebral vascular accident; orthopedic conditions, such as joint replacement, fractures, and amputation; neuropsychiatric conditions, such as organic brain disease and Alzheimer's disease; and infections of the respiratory, urinary, or digestive tracts (Ouslander, Abrass, & Kane, 1994; Ouslander et al., 1991, chaps. 9–20).

Reimbursement and Legislation

Nursing homes, like many other types of health care facilities, depend heavily on reimbursements from federal (Medicare) and state (Medicaid) insurance programs. Occupational therapy became a fully reimbursable service for nursing homes in 1987 with the passage of the Omnibus Budget Reconciliation Act (OBRA; Public Law 100-203), which meant that these services must comply with government-established coverage criteria. Federal regulations promulgated in OBRA (1987) state:

To constitute covered occupational therapy for Medicare purposes the services must be reasonable and necessary for the treatment of the individual's illness or injury...that the therapy will result in a significant practical improvement of the individual's functioning within a reasonable and predictable amount of time...The services of an occupational therapist...in carrying out the [maintenance] program are not considered reasonable and necessary...and are excluded from coverage. (§ 4211)

Clarification of these regulations can be found in the Medicare Intermediary Manual (Health Care Financing Administration, 1987; see also, Allen, Foto, Moon-Sperling, & Wilson, 1989; Andersen, 1988; Bernstein et al., 1987). For example, reasonable means that the patient has at least fair rehabilitation potential, or there is a greater than 50% probability that there will be functional improvement. Necessary means that the severity of the patient's condition is such that the unique skills of an occupational therapist are needed to achieve improvement. Practical improvement must be demonstrable functional improvement, such as greater independence in dressing, eating, or transferring on and off the toilet. The predictable amount of time means that it is possible to estimate a time frame for achieving improvements. Substantial improvement must be documented in each 30-day progress note. Finally, occupational therapy services used to provide maintenance programs are not covered under Medicare regulations. The therapy provided must be restorative (i.e., the patient is expected to regain lost skills or improve functional abilities).

Individual states regulate their own Medicaid programs and may establish reimbursement guidelines that are more stringent than those for Medicare. One notable example is patient scheduling. New York State's Medicaid regulations require a patient to receive the same type of therapy for 5 consecutive days (i.e., occupational therapy, physical therapy, or speech therapy), whereas Medicare will allow the patient to receive a combination of therapies and qualify for reimbursement.

Medicaid's reimbursement system was phased in for nursing homes in New York state during this same period since 1987 (Dowling, Foley, Fries, & Schneider, 1989; Mitty, 1988; Nevin, 1987; Richardson, 1990). Under this system (a prospective payment system), facilities are reimbursed according to each resident's condition and the resources and manpower time required for that resident. The resident is then assigned to one of 16 hierarchical resource utilization groups (RUGs), and the facility is reimbursed accordingly. Data on residents are collected quarterly during RUGs data collection periods for Medicaid reimbursement purposes. Residents who require rehabilitation fall into the highest reimbursement category. Naturally, nursing home administrators are concerned that their rehabilitation services are provided in compliance with Medicaid's coverage criteria especially because Medicaid accounts for 45% of total nursing home expenditures (Brecher, 1990).

Opinions vary among occupational therapists about the impact of government reimbursement on the profession. Howard (1991) and Crabtree (1991) contended that the government has become too intrusive in occupational therapy practice. Others believe that government reimbursement has become a way of life, and, therefore, therapists should be aware of coverage criteria and expectations for documentation (Foto, 1988a, 1988b; Korn, 1989; Somers, 1991). Crabtree (1991) and Goldstein (1989) stated that denying a resident treatment for any reason violates the ethical principles of beneficence, justice, and autonomy. Mietelstadt (1985) discussed the ethical dilemma of the person's right to health care versus the government's duty to control health care expenditures.

The purpose of this study was to explore the effects of federal and state reimbursement mechanisms on occupational therapy practice in the nursing home setting. More specifically, it examined how these reimbursement mechanisms affect the way in which occupational therapy services are provided in the selection and scheduling of patients for programs, the nature or content of the treatment programs provided, and the documentation requirements.

Method

Sample

A convenience sample of all 171 nursing homes in New
York city was selected for the study from a listing obtained from the consumer advocacy group Friends and Relatives of the Institutionalized Aged (Kahn, 1994), and from the New York city telephone directories. The occupational therapy departments within each nursing home were the subjects of this study.

**Instrument**

A 25-item questionnaire was developed for the study. Most of the items were closed-ended questions that requested nominal or ordinal responses. Three open-ended questions required a numerical response. One open-ended question asked for the respondents' attitudes toward government reimbursement mechanisms. Ten questions were in Likert format.

To establish instrument accuracy and content validity, the questionnaire was reviewed by five occupational therapy experts in nursing home practice, an expert in government reimbursement mechanisms, and a group of occupational therapists in varied clinical practice. On the basis of their feedback, both content and format of the questionnaire was revised to improve clarity and adherence to the research questions.

**Data Collection**

The questionnaire, a cover letter explaining the purpose of the study, and a stamped, self-addressed return envelope were mailed to the chief occupational therapist in each of the 171 nursing homes. One month later, a follow-up mailing was done for nonrespondents.

**Data Analysis**

The data were organized into categories and analyzed by percentages and means of central tendency. Responses to the open-ended question about the respondents' attitude toward government reimbursement mechanisms were categorized according to recurrent themes or comments and then analyzed by percentages and measures of central tendency.

**Results**

Three facilities did not have occupational therapy departments, and one was listed twice in the directory under different names. One questionnaire was disregarded because it was incomplete. Eighty-three questionnaires were analyzed for a response rate of 50%.

When respondents omitted part or all of an item (question) the $n$ was adjusted in analyzing the data. Eighty respondents (96%) reported that their facilities accepted Medicare and Medicaid patients, and 81 facilities (98%) provided occupational therapy, physical therapy, and speech therapy services.

**Written Policy**

More than 80% of respondents indicated that a written policy existed for documentation. Approximately 50% reported that there were written policies on criteria as follows: patient selection for occupational therapy treatment programs (51%), frequency of patient treatments (51%), criteria for patient discharge from program (48%), and type of patient program (44%). Unwritten or recommended policies existed in approximately 30% to 35% of facilities, which when combined with the percentages for written policy, increased the range to between 80% and 96% of all facilities with policies for documentation of the foregoing items. Forty-seven percent of the facilities had no policy regarding the diagnosis for the patient to be placed in a program, and 37% had no policy for recording the content of the treatment session (see Table 1).

**Documentation**

When asked what must be included in occupational therapy documentation according to facility policy, respondents indicated the following in order of frequency: patient's program as restorative or maintenance (100%); patient's progress in therapy (99%); treatment goals (99%); description of patient's status (98%); patient's attendance (98%); patient's rehabilitation potential (74%); and time frame for goal achievement (71%). Seventy-three percent of respondents reported that documentation was more closely scrutinized during the RUGs data collection periods.

**Knowledge of Policy**

Respondents were asked to rate their knowledge of occupational therapy departmental policies, government reimbursement guidelines, and the RUGs data collection periods. The majority of respondents reported being at least somewhat familiar with these policies (see Table 2). The largest percentage of respondents indicated that they were very familiar with departmental policies and with the RUGs data collection periods.

**Programs and Schedules for Restorative and Maintenance Patients**

In 78% of the facilities, restorative patients were scheduled for occupational therapy 5 days a week. In 13%, the average frequency for restorative patients was 4 days, and in 9%, the frequency varied between 0 and 5 days a week. The average length of occupational therapy treatment ses-
Table 1
Percentage of Facilities With Policy for Various Aspects of Occupational Therapy Service

<table>
<thead>
<tr>
<th>Aspect of Occupational Therapy Service</th>
<th>Written</th>
<th>Unwritten or Recommended</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documentation</td>
<td>82</td>
<td>14</td>
<td>4</td>
</tr>
<tr>
<td>Selection criteria</td>
<td>51</td>
<td>34</td>
<td>11</td>
</tr>
<tr>
<td>Frequency of treatment</td>
<td>51</td>
<td>30</td>
<td>16</td>
</tr>
<tr>
<td>Discharge criteria</td>
<td>48</td>
<td>36</td>
<td>14</td>
</tr>
<tr>
<td>Type of program</td>
<td>44</td>
<td>37</td>
<td>17</td>
</tr>
<tr>
<td>Duration of program</td>
<td>35</td>
<td>37</td>
<td>27</td>
</tr>
<tr>
<td>Content of treatment</td>
<td>30</td>
<td>32</td>
<td>37</td>
</tr>
<tr>
<td>Diagnosis</td>
<td>18</td>
<td>32</td>
<td>47</td>
</tr>
</tbody>
</table>

Note. Values are rounded percentages of the total N. The sum of the horizontal rows does not equal 100% because the "Don't Know" column is eliminated here.

sions for all the facilities was 32 min. The frequency of qualifying a patient as "restorative" by scheduling him or her for a combination of therapies (i.e., occupational, physical, speech) for 5 consecutive days was reported to occur constantly (6%), frequently (2%), occasionally (23%), seldom (15%), and never (54%).

Maintenance programs existed in 85% of facilities but were not permitted or were discouraged in 10% of facilities. The remaining 5% had no policy regarding maintenance programs.

Although more than 82% of respondents indicated that patients may receive two or three types of therapy during a given period if needed, providing a patient with two types of therapy was discouraged in 16% of facilities, and providing three types of therapy was discouraged in 12%. When asked if limiting a patient to receiving only one type of therapy at a time may have a negative effect on recovery outcome, 66% of respondents either strongly agreed or agreed, 18% either strongly disagreed or disagreed, and 16% were neutral about the effect of limiting patients' therapies.

Seventy-two percent of respondents indicated that patients were never or seldom treated in a group situation. Twenty-one percent reported occasional group treatment, and only 7% used group format frequently or constantly.

During the RUGs data collection periods, there was greater emphasis on picking up restorative patients and assuring that patients were not absent from therapy in 82% of facilities. Furthermore, discharge of maintenance patients during RUGs data collection periods was recommended in 17% of facilities.

Factors in Determining Treatment Decisions for Patients

Although patients with degenerative diseases, such as Parkinson's disease, may be placed on restorative programs in 76% of facilities, in 18% of facilities, respondents indicated that the patient must be in an exacerbated period or must also have another treatable condition to receive occupational therapy. A patient who requires only general conditioning exercises and activities may be placed on a restorative program in 60% of facilities, and may not in 37% of facilities.

When questioned about factors other than evaluation findings that affected the decision to place a patient on a restorative treatment program, respondents indicated one or more of the following concerns: a functional improvement may not be achieved (51%), the patient may not show timely improvements (34%), documentation would not meet restorative reimbursement criteria (31%), and another discipline would treat the same patient problem (27%). Eighteen percent of the respondents had none of these concerns.

When asked if reimbursement concerns influenced their treatment planning, 27% of respondents said no, 39% said somewhat, 20% said moderately, and 14% said greatly. Respondents who indicated that they had concerns about reimbursement issues were asked to prioritize certain performance areas and components worked on in the treatment session. An average priority value for each component was computed (see Figure 1). Respondents gave high priority to skills such as feeding and wheelchair transfers, moderate priority to visual functioning and task organization, and low priority to housekeeping and psychosocial skills.

When asked how frequently patients are discharged

Table 2
Knowledge of Occupational Therapy and Government Policy

<table>
<thead>
<tr>
<th>Type of Policy or Guideline</th>
<th>Degree of Familiarity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational therapy department policies and procedures</td>
<td>1 1 15 80</td>
</tr>
<tr>
<td>Medicare reimbursement guidelines</td>
<td>5 8 36 51</td>
</tr>
<tr>
<td>Medicaid reimbursement guidelines</td>
<td>7 13 32 48</td>
</tr>
<tr>
<td>RUGs data collection periods</td>
<td>1 5 20 74</td>
</tr>
</tbody>
</table>

Note. Values are rounded percentages of the total N. 1 = unfamiliar; 2 = somewhat unfamiliar; 3 = somewhat familiar; 4 = very familiar. RUGs = resource utilization groups.

Three respondents reported that no occupational therapy policy existed.
from treatment programs before they are ready because of not meeting restorative coverage criteria, 89% of respondents reported this never or seldom occurs, 7% said occasionally, and 4% said frequently or often.

**Respondents' Opinions Relative to Reimbursement**

Sixty (72%) respondents expressed opinions about perceived effects of reimbursement regulations on their practice, and their responses varied as follows. Twelve (20%) viewed the reimbursement process as adversely affecting the quality of patient care by diverting therapists' time and attention away from patients' needs. Conversely, eight (13%) stated either that the reimbursement process had no influence on their practice or that they refused to be affected by it. Seven (12%) stated that reimbursement issues caused negative feelings among staff members, whereas six (10%) indicated that there were positive effects, such as therapists' improved documentation skills and increased occupational therapy staff and equipment.

The most frequently discussed issue was the RUGs data collection period. Fifteen (25%) respondents stated that there was increased pressure on staff members to pick up patients during RUGs data collection periods, which often resulted in inappropriate patients being placed on treatment programs. Five (8%) simply stated that reimbursement mechanisms generally caused too much pressure on staff members, whereas nine (15%) stated that they only felt pressured during the RUGs data collection periods.

Twenty-six (43%) respondents cited one or more of the following aspects of occupational therapy service as being affected by reimbursement mechanisms: documentation, patient selection criteria, treatment planning, and restorative scheduling. Five (8%) commented that their elderly patients improve slowly and that their conditions are difficult to treat within reimbursable time frames.

**Discussion**

Nearly all of the 83 occupational therapy departments were subject to federal and state reimbursement regulations because Medicare and Medicaid patients were accepted in those facilities. Results of the survey showed that federal and state reimbursement mechanisms for occupational therapy services in nursing homes exerted substantial influence on occupational therapy practitioners and affected the selection, scheduling, and treatment of patients.

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**Figure 1.** Respondents' prioritization of performance components worked on in the therapy treatment session. *Note: w/c = wheelchair.*
Documentation

It is not surprising that in more than 80% of the facilities, formal written policies existed for occupational therapy documentation requirements because government reimbursement is based on documentation review. Furthermore, in most of the remaining facilities, there were unwritten or recommended policies regarding documentation. Obviously, facilities can maximize reimbursement by requiring their occupational therapists to document according to government guidelines. All 83 facilities required a statement defining the patients' restorative or maintenance program. Nearly all facilities (98%) required the inclusion of other reimbursement criteria in documentation, such as the patients' attendance, status, progress, and treatment goals. Proper occupational therapy documentation would include these elements regardless of government policy; however, reimbursement concerns have made it more crucial.

Knowledge of Policy

Therapists must be knowledgeable about Medicare and Medicaid reimbursement criteria in order to document accordingly. Results showed that respondents were generally knowledgeable in these areas as well as the RUGs data collection periods, which is when documentation is reviewed (see Table 2). This suggests that facilities have educated staff members about government reimbursement criteria and documentation requirements.

Programs and Schedules

Medicaid reimburses nursing homes for rehabilitation services at a much higher rate than does Medicare. Results showed that a high percentage of restorative occupational therapy patients were scheduled 5 days a week as required by Medicaid regulations. This finding raises a reasonable question especially relative to the geriatric population: Do all these restorative patients need or tolerate 5 consecutive days of therapy, or are some scheduled only to meet this reimbursement criterion? Interestingly, nonreimbursable maintenance treatment programs were permitted in the majority of facilities; however, some facilities recommended the discharge of maintenance patients during the RUGs data collection periods. This finding shows that therapy for certain patients may have been periodically withheld because of reimbursement mechanisms. Additionally, nonreimbursable group treatment is a likely factor for the relatively infrequent use of groups.

Nursing homes can increase their number of reimbursable rehabilitation cases by providing patients with only one type of therapy at a time. In a substantial number of facilities (n = 25), therapists were either discouraged from or were not permitted to schedule patients for more than one therapy during a given period. Most respondents believed that this practice could adversely affect patient recovery outcomes.

Factors in Determining Treatment Decisions

Results showed that a majority of respondents reported that they were at least somewhat influenced by reimbursement mechanisms when selecting patients for occupational therapy treatment programs and when making treatment decisions. For instance, half the respondents indicated that after completing an evaluation, they had to consider the possibility that treatment would not result in a functional gain. Many others reported concern that the patient might not meet restorative reimbursement criteria. Perhaps these types of concerns influenced those respondents who reported that they would not place patients in general conditioning programs or would not treat patients with degenerative diseases who were in states of remission.

It can be speculated that documentation requirements affected respondents' prioritization of performance components worked on in the treatment session (see Figure 1). For instance, functional improvement of feeding or transfer ability is perhaps easier to demonstrate and document than that for psychosocial skills or managing leisure time in the nursing home setting. Housekeeping skills were also given low priority in treatment sessions probably because patients who live in nursing homes do not engage in many housekeeping tasks, and those who are discharged home usually have some type of home care arrangement.

Respondents' Opinions Relative to Reimbursement

Most respondents who answered the open-ended question reported that their practice was influenced by reimbursement mechanisms in some way, especially with regard to documentation, patient selection, and programming. Many believed that reimbursement had negative effects on the quality of patient care and on staff member morale. The pressure to increase restorative caseloads during RUGs data collection periods is indicative of facility administrators' financial priorities.

Comparison With Literature

The results of this study are consistent with the literature on government regulations and reimbursement mechanisms for nursing homes and occupational therapy documentation requirements (Allen et al., 1989; Andersen,
The results also raise an ethical concern that denying a patient needed treatment for monetary reasons violates the patient’s right to receive such services and violates the principles of beneficence and justice, which are found in our profession’s code of ethics (American Occupational Therapy Association, 1994; Crabtree, 1991; Goldstein, 1989).

The data collected in this survey provide information that is not found in the literature. Specifically, the findings describe nursing homes’ policies for occupational therapy documentation as well as therapists’ knowledge of these policies. The results also identify the clinical impact of government reimbursement and the RUGs data collection periods on therapists’ treatment decisions and on patient programming and scheduling. For example, in some instances, therapies were withheld from patients, and the infrequent use of group treatment was seen. Therapists’ negative and positive attitudes about how government reimbursement mechanisms have affected their practice have also been presented.

Limitations

One limitation of the present study is the survey response rate of 50%. Opinions vary in the literature about acceptable response rates for mail surveys, and there is no agreed-upon standard. However, most researchers consider 50% to be adequate for analysis and reporting, a rate very good (Babbie, 1989; Burns & Grove, 1993; Erdos, 1970). In the present study, data were collected on 50% of the entire population of nursing home occupational therapy departments in New York city. This sample can then be considered an adequate representation of New York city’s nursing home occupational therapy departments.

Two other limitations of the study relate to the questionnaire. It was not pilot tested before use, and some of the questions were comprehensive, which may have diminished the response rate.

Summary

This study should raise awareness among occupational therapists of the impact of government legislation and reimbursement on clinical practice in the nursing home setting. Although the rationale behind nursing home reform legislation, such as OBRA, was to improve the quality of life for nursing home residents, in actuality, many residents may have been adversely affected by the implementation of this legislation. Occupational therapy practitioners need to find ways to live with the realities of government reimbursement without compromising professionalism or clinical judgment. Meeting government documentation criteria can be difficult with the geriatric population because functional improvement is often achieved slowly and subtly. When cases (patients) are denied Medicare or Medicaid reimbursement, therapists should try to learn the reasons for the denial and review the documentation for possible errors or omissions. An area for future research is to explore the effects of government reimbursement mechanisms in other areas of occupational therapy practice and settings.

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