Economic Impact Analysis
Virginia Department of Planning and Budget

18 VAC 85-80 – Board of Medicine/Department of Health Professions
Regulations Governing the Practice of Occupational Therapy
December 5, 2001

The Department of Planning and Budget (DPB) has analyzed the economic impact of this proposed regulation in accordance with Section 9-6.14:7.1.G of the Administrative Process Act and Executive Order Number 25 (98). Section 9-6.14:7.1.G requires that such economic impact analyses include, but need not be limited to, the projected number of businesses or other entities to whom the regulation would apply, the identity of any localities and types of businesses or other entities particularly affected, the projected number of persons and employment positions to be affected, the projected costs to affected businesses or entities to implement or comply with the regulation, and the impact on the use and value of private property. The analysis presented below represents DPB's best estimate of these economic impacts.

Summary of the Proposed Regulation

The Board of Medicine (the board) is proposing new language to clarify the types of occupational therapy tasks that can be and cannot be delegated to unlicensed personnel by the licensed occupational therapists. The board is also proposing new language to clarify which titles can be used by the graduates from an occupational therapy program who are not licensed at the time, the duration of their practice under the designated titles, and that the designated titles must be used on any identification or signature in the course of their practice.

Introduction

Occupational therapy practices are subject to these regulations. A recent survey[1] of occupational therapists conducted by the Department of Health Professions (DHP) indicates that practitioners in Virginia provide their services at school settings, skilled nursing facilities, acute

[1] Virginia Board of Health Professions, 2000, "Study on the Appropriate Level of Regulation for Certified Occupational Therapy Assistants Pursuant to SJR 153 (2000)."

care facilities, outpatient therapy settings, adult rehabilitation facilities, industrial and pediatric rehabilitation facilities, vocational training facilities, academia, and home health facilities.

A number of occupational therapy services may be performed by unlicensed assistants under the supervision of a licensed occupational therapist. However, the types of tasks that can be delegated to unlicensed personnel are not listed in the current regulations. According to DHP, this has been creating a dilemma for occupational therapy licensees and health care facilities about what tasks may be appropriately delegated to unlicensed assistants in practice.

There are two main groups of unlicensed assistants with respect to their knowledge on occupational therapy prior to starting an employment. These groups are occupational therapy assistants and occupational therapy aides. The DHP study indicates that occupational therapy assistants either have an associate degree or a certificate from an approved occupational therapy program prior to their employment. Throughout the United States, most assistants further establish their credentials by taking the exam offered by the National Board of Certification in Occupational Therapy, Inc. (NBCOT) to be able to use the title and a registered trademark "Certified Occupational Therapy Assistant." Occupational therapy aides, on the other hand, develop their skills and knowledge during their employment.

It can be inferred from the DHP study that Virginia is one of the few states that do not regulate occupational therapy assistants. Out of 49 states, only three did not have licensure, certification, or registration regulations for the assistants. While most states have regulations for assistants, assistants as well as aides are not regulated in Virginia. Thus, from a regulatory perspective, there is no distinction between the two groups. However, the two groups differ in other aspects.

One difference is in wages. The following table provides average compensation received by the occupational therapists, assistants, and aides in this industry. The table reveals that the median and mean[2] hourly wages of licensed occupational therapists in Virginia are significantly higher than what is paid to unlicensed occupational therapy assistants and aids. This provides incentives for the therapists to delegate some of their tasks to assistive personnel. If both groups of the assistive personnel can perform the same tasks equally well, the benefits for the

[2] Given relatively significant differences between some of the median and mean estimated figures, the median hourly wage may be more appropriate to use here because the median is statistically more robust than the mean is.

occupational therapist from task delegation are greater for the aids because they are paid lower wages relative to assistants. The median hourly wage paid to the assistants is $5.50 higher than what is paid to aids. However, the decision to hire must also incorporate the differences in additional revenues each assistive personnel generate. These wage differentials can be taken as an indication that the productivity of assistants, on average, is greater than that of aids. This is consistent with the earlier finding that the knowledge of assistants, on average, is better than that of aids.

Table: Compensation and Employment in Virginia's Occupational Therapy Profession

Occupation Title	*Wage Estimates*			*Estimated Employment*
	Median Hourly	*Mean Hourly*	*Mean Annual*	
Occupational Therapists	$23.81	$24.45	$50,850	1,950
Occupational Therapist Assistants	$16.24	$17.11	$35,580	527
Occupational Therapist Aides	$10.74	$13.74	$28,580	1,120

Source for the compensation data: 2000 State Occupational Employment and Wage Estimates, Bureau of Labor Statistics, U.S. Department of Labor.

The level of employment also seems to differ significantly between the assistants and the aids despite the uniform regulatory treatment of the two groups. This is another indication that these groups differ in some other characteristics that are important to their employer. It is difficult, however, to make a conclusive statement on the relative levels of employment because of limited data availability. Because of licensure requirements, DHP has accurate information only on the number of licensed therapists. The most recent information at DHP indicates that there are 1,950 licensed therapists in Virginia.

The information on the number of assistive personnel is not readily available because there is no licensure requirement for these practitioners. Consequently, DHP does not have any information on the assistive personnel. NBCOT is the only source of reliable information for the licensed occupational therapy assistants while neither DHP nor NBCOT has any information on the occupational therapy aids. The only source of data for the aids is the occupational therapists that responded to the survey. Given these limitations, the survey information is used first to

estimate the total number of assistive therapy personnel.[3] It is estimated that there are about 1,647 occupational therapy assistants and aids in the Commonwealth. Then, the total number of assistive personnel is broken down between the assistants and the aids.[4] It is estimated that there are about 527 therapy assistants and about 1,120 therapy aids in Virginia. In other words, about one third of the assistive personnel are assistants with credentials from NBCOT and colleges while the remaining two thirds are aides without extensive education background in this field.

Estimated Economic Impact

The proposed rule states that initial assessment of a patient, evaluation or development of treatment plans, and any tasks requiring a clinical decision or the knowledge, skills and judgment of an occupational therapist cannot be delegated to unlicensed personnel. The routine tasks that can be delegated to unlicensed personnel include those that do not require professional judgment and that do not jeopardize health and safety of the patient. The delegated tasks will have to be patient specific and communicated to the unlicensed personnel with clear and specific instructions covering performance of activities, potential complications, and expected results. Examples of activities that can be delegated include interviewing patients to obtain background information, screening for services to evaluate and determine patients problems, administering standardized tests, documentation, selecting and performing interventions to restore a physical function, referral to other agencies, evaluating progress of patients, developing home programs, instructing caregivers, and terminating therapy when the goal is achieved.

There are many tradeoffs licensed therapists face when delegating tasks to unlicensed personnel. They have incentives to delegate tasks to free some of their time for other activities. For instance, they may use the additional time to provide services to more patients. This will allow the therapists to increase the revenues over what could be generated without any assistive personnel. However, delegation also introduces costs. Aside from the labor costs, liability of the therapists will be higher as they are responsible for the others' mistakes. Although there are mitigating factors such as supervision, delegation will still increase the potential risk of harming

[3] According to the survey, 560 occupational therapists supervised 473 assistive personnel, which includes assistants and the aids. If the number of assistive personnel per occupational therapist did not change over time, there should be about 1,647 personnel assisting all of the occupational therapists practicing currently.
[4] NBCOT informed DHP in 1999 that there were 501 licensed occupational therapy assistants and 1,854 licensed occupational therapists in Virginia. The number of currently licensed assistants is expected to be 527 since the number of licensed therapists has increased from 1,854 to 1,950, representing a certain growth rate.

the patients. This may be costly in terms of liability costs or in terms of losing the license to practice therapy. There is likely to be additional costs due to principal agent problems. For example, assistants may not expend all of their effort and customer satisfaction may be compromised. Finally, there is a chance that a third party payor such as an insurance company may deny reimbursement if its policy prohibit payments for services provided by unlicensed personnel.[5]

The therapist's decision to delegate is further complicated by the presence of two distinct groups of assistive personnel. This is because benefits and costs would likely vary between delegation to assistants and delegation to aids. For example, it seems that potential liability risks would be higher for delegation to an aid than delegation to an assistant because of education differences. In this complex decision making process, licensed therapists are likely to take into account all of the additional benefits and costs and choose a level of delegation between assistants and the aids that would be optimal for them.

Information about the patient complaints may be helpful to understand the potential risk of harm that may be posed by delegation of therapy tasks to assistive personnel. Data from the 28 states responded to the survey indicate that less than 4 complaints in 20,000 therapy assistant-years are reported and less than a quarter of the complaints resulted in a disciplinary action. It is unlikely that all of these complaints were related to delegation of responsibility. What is more is that the complaint and disciplinary action rates for the services provided by licensed therapists are the same at this degree of precision. This suggests that the likelihood of risk of harm to patients posed by the therapists and the assistants is almost the same. On the other hand, there is no data to assess the likelihood of risk of harm to patients posed by the therapist aids.

Probability of potential harm to patients in Virginia seems to be lower than the 28-state average. DHP is aware of six complaints against licensed occupational therapists since 1993. None of these complaints resulted in a disciplinary action. Two of the cases were related to standard of care and unprofessional conduct while other cases were related to fraud, unlicensed activity, and business issues. When normalized, these six complaints translate to almost one

[5] It is noted in the survey that in few instances, Trigon denied payment for services provided by an unlicensed assistant. Also, the shift in Virginia's policy in 1998 from certification to license may be attributed to anecdotal evidences for denial of payment. However, there is lack of evidence at this time that denial of payment occurs frequently.

complaint out of 20,000 therapist-years. More importantly, there was only one complaint for the services provided by unlicensed assistants over a five-year period, which is also a smaller likelihood relative to the other states. The survey responses do not contradict with these findings.

Another dimension of the delegation of responsibility is the settlement costs when a malpractice is claimed. The DHP study provides settlement information from another source[6] where it is reported that occupational therapists paid between $27,000 and $33,000 in current dollars[7] for cases involving improper treatment, burns from hot pack, falling, and sexual misconduct.

In addition, the DHP study indicates that not all of the occupational therapists necessarily delegate tasks to assistive personnel. Of the 560 respondents about 50.9% indicated that they are supervising assistants and/or aides and 49.1% indicated that they do not. This implies that currently about 993 therapists may be supervising assistants/aids and 957 therapists may not be supervising any assistive personnel.

Also, based on 285 therapists who indicated that they are supervising assistants/aides on a regular basis, the delegation patterns are identified. These patterns are summarized in the next table where delegation "under supervision" means that the licensed therapist is sufficiently aware of patient's needs and status and has ongoing written and/or verbal communication with assistive personnel who are providing the services. Delegating "independently" means no oversight is provided to assistive personnel by the licensed therapist. The table reports only the highest delegation pattern.

The table reveals that most of the licensed occupational therapists delegate their responsibilities to assistants under supervision and most never delegate tasks to aids. For example, 57.1% of the therapists delegate referral services to assistants under supervision but only 6% delegate it to the aids independently or under supervision. Only the therapeutic intervention task is delegated to aids by most of the therapists. Furthermore, DHP study notes that activities that entail discretionary judgment such as the selection of appropriate interventions

[6] Ranke, B., A., Moriarty, M., P., 1997, "An Overview of professional liability in occupational therapy," American Journal of Occupational Therapy, 51(8), pp. 671-680.
[7] Reported figures are adjusted by the Consumer Price Index.

Table: Task Delegation Patterns in Virginia's Occupational Therapy Profession

Task	*Delegation Pattern*	
	To an Assistant	*To an Aid*
Interviewing to obtain background and social history	Never delegate (37.6%)	Never delegate (93.3%)
Screening for OT services	Never delegate (40.3%)	Never delegate (96.6%)
Administering standardized assessment instruments	Never delegate (44.5%)	Never delegate (97.1%)
Recommend referral to appropriate professionals and agencies	Under supervision (57.1%)	Never delegate (94%)
Select appropriate interventions to restore function	Under supervision (63.9%)	Never delegate (85.1%)
Document intervention / treatment plan	Under supervision (60.1%)	Never delegate (83%)
Provide therapeutic interventions	Independently (49.5%)	Under supervision (64.4%)
Evaluate patient progress	Under supervision (71.4%)	Never delegate (85.3%)
Modify intervention plan	Under supervision (68.2%)	Never delegate (92.7%)
Instruct caregivers in assisting patient in discharge environment	Under supervision (50.2%)	Never delegate (78.9%)
Develop home programs	Under supervision (59.6%)	Never delegate (91%)
Terminate services when goals are achieved	Under supervision (60.7%)	Never delegate (97.9%)
Serve as a resource person or consultant	Under supervision (48.9%)	Never delegate (82.1%)

Source: Virginia Board of Health Professions, 2000, "Study on the Appropriate Level of Regulation for Certified Occupational Therapy Assistants Pursuant to SJR 153 (2000)."

and evaluating patient progress are often delegated to the assistants under supervision. Finally, delegation of activities to assistants performed independently is uncommon. Taken together, these results suggest that the assistants assume a much larger role in delivery of therapy services than the aides do.

According to DHP, the proposed regulations are clarifications and the tasks that are currently delegated could continue to be delegated. Also, personal communications with several occupational therapists indicate that the proposed language is consistent with what is being

delegated in practice. Provided that the proposed regulation has no impact on the current delegation patterns exist in the occupational therapy profession, there should be no significant economic impact. It is for those whose current delegation patterns would be limited by the proposed changes, this proposal may increase compliance costs and may reduce the liability risks. On the other hand, the therapists who start delegating more responsibilities due to the proposed clarifications may reduce compliance costs with a corresponding increase in liability risks.

Another proposed amendment to this chapter will clarify that the occupational therapy graduates may practice under the designated titles "Occupational Therapist, License Applicant," or "O.T.L.-Applicant" for up to one year from the date of graduation while waiting for the results of the licensure examination. The designated titles must be used on any identification or signature during their practice as licensed applicants. DHP has been receiving inquiries from license applicants regarding the practice of occupational therapy while waiting for the examination results.

This change is a clarification of the current language. This change may reduce the confusion among license applicants that currently exists. This, in turn, could reduce the small costs associated with inquiries currently incurred by DHP and the regulants.

Businesses and Entities Affected

Licensed occupational therapists and unlicensed persons who work as occupational therapist assistants or aides are subject to the proposed regulations. Currently, there are approximately 1,950 persons licensed to practice occupational therapy. It is estimated that about 993 therapists delegate some of their responsibilities to assistive personnel. The exact number of unlicensed occupational therapy personnel is not known, but estimated to be about 1,647.

Localities Particularly Affected

The proposed regulations apply to all localities throughout the Commonwealth.

Projected Impact on Employment

It is unlikely that the proposed changes will have a significant impact on employment.

Effects on the Use and Value of Private Property

No significant impact on the use and value of private property is expected.