Does Insurance Provide Adequate Coverage for Physical Therapy Visits for Common Orthopedic Diagnoses? A Survey Study

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Objectives: This study aimed to analyze the association between physical therapists' recommended number of visits for a full recovery from common orthopedic injuries/surgeries and the extent of insurance coverage for these visits.

Methods: A prospective observational study was conducted with board-certified physical therapists. A qualitative questionnaire was used to gather physical therapists' demographics and the recommended number of physical therapy visits to achieve a full recovery after 11 common orthopedic diagnoses. Physical therapists also were asked to report whether they believe that insurance provides an adequate number of visits overall. In addition to the qualitative survey, insurance coverage details of major Alabama companies were obtained for comparison. Descriptive statistics of the participating therapists were analyzed for sex, age, degree/training, and years of experience. Kruskal-Wallis statistics were used to analyze variance between the aforementioned groupings when compared with the reported average number of sessions.

Results: The survey (N = 251) collected data on the average number of physical therapy sessions that are necessary for a complete recovery as recommended by physical therapists for 11 common orthopedic diagnoses. From this survey, the average number of necessary visits ranged from 11.3 visits (ankle sprains) to 37.3 visits (anterior cruciate ligament reconstruction), with the overall average number of visits being 23.8. Only 24% of physical therapists believed that insurance companies provided enough coverage. Insurance coverage varied but often required additional procedures to allocate the adequate number of visits for the studied orthopedic pathologies.

Conclusions: The majority of practicing physical therapists in Alabama perceive insufficient insurance coverage for physical therapy visits for most orthopedic diagnoses. This study has implications for healthcare decision making and patient-centered rehabilitation goals. Physicians and physical therapists can use this information to optimize treatment decisions and rehabilitation goals. Patients will benefit from improved physical and economic well-being. This study has the potential to drive further research and influence national insurance policies to better serve patients' needs.

Key Words: healthcare access, health insurance coverage, orthopedic pathologies, physical therapy, recovery time

Physical therapy is crucial for patients recovering from musculoskeletal pathologies. The goal of rehabilitation is to restore function, reduce pain, and improve quality of life.[1] Physical therapy following musculoskeletal injuries and surgeries often is the first line of treatment for patients. There are several studies that show the many physical and psychological benefits of physical therapy for patients postoperatively or postinjury.[2–7]

It is well established that there are many socioeconomic barriers to health care in the United States.[8–13] A recent study highlighted some of the barriers patients face in the outpatient musculoskeletal therapy and rehabilitation setting.[14] The Patient

Key Points

- An analysis of insurance plans in Alabama found that most insurance plans do not provide coverage for enough visits to attain a full recovery from common orthopedic surgical pathologies.
- To minimize burden on both patients and clinicians, patients should be able to obtain adequate physical therapy with minimal delays caused by additional prior authorizations and other administrative obstacles.
- Insurance companies should determine coverage based on individual patients and pathologies instead of offering generalized coverage that is identical for all pathologies regardless of severity.

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Protection and Affordable Care Act (PPACA, Public Law 111-148), enacted in 2010, aimed to enhance access to affordable health care for all Americans. One of its significant provisions mandates coverage of essential health benefits by insurance companies, including rehabilitative and habilitative services, expanding access to physical therapy. Before the PPACA, many health insurance plans either did not cover physical therapy or had restrictive limits on the number of visits or the conditions that were eligible for coverage.[15] Even after the enactment of the PPACA, one of the major barriers for patients is being able to understand and effectively take advantage of rehabilitation coverage through their health insurance policy. Often, the significant variability in coverage between and within federal and private payers is confusing for both patients and providers, which leaves providers unable to maximize the care of their patients.

Several studies have discussed rehabilitation programs and return-to-function protocols after various musculoskeletal injuries or surgeries.[16–20] Previous studies have identified the general time line for a full recovery; however, those studies did not include the number of physical therapy sessions in their analysis. As such, there may be a disconnect between how many physical therapy sessions that licensed physical therapists recommend and what insurance companies are willing to cover. It is currently unclear whether there are evidence-based criteria that are being used by insurance companies to determine policies for physical therapy coverage.

As such, there is an apparent gap in the literature evaluating the discrepancy between recommended and covered physical therapy visits. The purpose of our study was to evaluate whether the number of physical therapy visits deemed necessary by licensed physical therapists matches the allotted number of covered visits by insurance. Our hypothesis was that the number of visits approved by insurance would be deemed insufficient for most orthopedic pathologies by the licensed professionals administering the rehabilitation.

Methods

This study was a prospective observational survey study conducted in a clinical rehabilitation setting and was deemed institutional review board exempt. The study population included board-certified physical therapists in the state of Alabama. Physical therapists were recruited to complete the study survey via e-mail or telephone interview. The study survey included background questions regarding the physical therapists' age, sex, physical therapy training/degree(s), and number of years in practice. They were then asked to provide the number of physical therapy sessions they would deem necessary, on average, for a complete recovery from a multitude of orthopedic injuries and surgeries. These included ankle sprain, anterior cruciate ligament (ACL) reconstruction (autograft), meniscus repair, medial collateral ligament sprain (nonsurgical), rotator cuff repair (surgical), shoulder anterior labrum repair, reverse shoulder replacement, anatomic shoulder replacement, total knee replacement, hip replacement using a posterior approach, and hip replacement using an anterior approach. Physical therapists were asked to consider the "average patient" when defining the average number of physical therapy sessions. Lastly, they were asked whether they believed that insurance companies approve enough physical therapy visits for most orthopedic diagnoses. The survey questions can be viewed in the Appendix (http://links.lww.com/SMJ/A404).

The second arm of the study obtained insurance plan data on the exact number of physical therapy visits that each major insurance carrier in Alabama would cover for the same orthopedic diagnoses. The insurance companies included in the analysis were Medicare, Medicaid, BlueCross BlueShield of Alabama (BCBS), UnitedHealthcare (UHC), UHC Student Resources, Viva, Aetna, and Veterans Affairs. The number of covered physical therapy visits for each plan was determined by contacting the various plans or through an insurance coordinator at a physical therapy clinic. The number of visits covered by insurance was then compared with the number recommended by physical therapists across the state of Alabama from the data collected in our survey.

Descriptive statistics of the participating physical therapists were analyzed for sex, age, degree/training, and years of experience. Kruskal-Wallis statistics were used to analyze variance between the aforementioned groupings when compared with the reported average number of sessions.

Results

Questionnaire Data

Of the 289 physical therapy clinics contacted, there were a total of 251 responses from physical therapists licensed in the state of Alabama. Of the 251 participants, there were 109 females and 142 males. The majority (71.7%) of the participants were age 40 years or younger. In regard to training/degree(s), 79.3% (n = 199) held a Doctor of Physical Therapy degree, 12.7% (n = 32) held a Master of Physical Therapy degree, and 8.0% (n = 20) responded "other." The majority (76.1%) of participants had been in practice 15 years or fewer.

The average number of physical therapy sessions to achieve a full recovery estimated by the surveyed physical therapists for each condition are shown in Table 1. Notably, ACL reconstruction and rotator cuff repair have the highest average number of estimated visits, at 37.3 and 31.3, respectively. In contrast, ankle sprain, medial collateral ligament sprain, and hip replacement using anterior approach were the lowest average number of estimated visits at 11.3, 15.0, and 17.5, respectively. Furthermore, only six of the one pathologies were estimated at an average of 25 visits or fewer.

Kruskal-Wallis statistics were analyzed for variance in the estimated number of visits to achieve full recovery for each of the indications based on sex, age, and years of experience of the physical therapist. With the exception of ankle sprains, there was no variance due to sex. Physical therapist age was found to

Table 1. Measures of central tendency, with n = 251 for responses to the question, "On average, how many physical therapy sessions total do you think is adequate for a full recovery from each injury/surgery listed?"

Pathology	No. visits		
	Mean	Maximum	Minimum
Ankle sprain	11.3	35	4
ACL reconstruction (autograft)	37.3	180	15
Meniscus repair	23.7	65	6
Medial collateral ligament sprain (nonsurgical)	15.0	40	4
Rotator cuff repair	31.3	80	2
Shoulder anterior labrum repair	27.9	100	9
Reverse shoulder replacement	27.2	78	8
Anatomic shoulder replacement	27.3	78	8
Total knee replacement	23.0	60	12
Hip replacement (posterior approach)	20.6	48	8
Hip replacement (anterior approach)	17.5	43	6

ACL, anterior cruciate ligament.

have significant variance ($P < 0.05$) when comparing the average number of estimated sessions for all pathologies except anatomic shoulder replacement. In general, as the age of the physical therapist increased, the average number of estimated sessions decreased. The same inverse relationship was observed when comparing years of experience to the reported average number of estimated visits. The variance of years of experience was significant ($P < 0.05$) for all pathologies except anterior labrum.

The physical therapists also rated adequacy of insurance coverage for physical therapy visits in general on a 5-point Likert scale (with 1 being "not at all" and 5 being "absolutely"). The results are shown in the Figure 1. The average rating from physical therapists for adequate insurance coverage was 2.6. Of the physical therapists surveyed, 48% answered with a 1 or 2. Lastly, the Kruskal-Wallis analysis found that there was significant ($P < 0.05$) variance between the responses. In general, those who ranked higher adequacy of insurance coverage tended to estimate a lower average number of physical therapy sessions to fully recover.

Health Insurance Coverage of Physical Therapy

Coverage of physical therapy sessions varies by insurance company. For instance, VIVA Health, encompassing VIVA UAB (University of Alabama at Birmingham) and VIVA Medicare, approves 12 therapy visits, with an additional 12 visits upon request of an extension. If the need for therapy surpasses the 24-visit limit, then VIVA Health mandates the submission of provider documentation for review, which can take several weeks for companies to process and approve. The coverage provided by BCBS insurance plans depends on the first three letters of the contract. Plans commencing with the letters "PPA" provide coverage for 15 to 30 visits of physical therapy, occupational therapy, and speech-language pathology combined. The specific number of covered visits depends on the terms of the individual company contract. Conversely, plans beginning with "LGB" offer a strict limit of approximately 15 visits for physical therapy, occupational therapy, and speech-language pathology combined. For individual plans, BCBS awards 30 rehabilitation and habilitation visits per person per year for the Gold, Silver, and Bronze plans. The BCBS Medicare Advantage plan offers 20 visits, and additional visits need prior authorization. For the BCBS Medicare Supplement plan, it is dependent on Medicare and what it covers.

The coverage provided by Medicare, Medicaid, UHC, and Aetna is contingent upon medical necessity. For Medicare and Medicaid, certain intervals require a reevaluation of the patient's

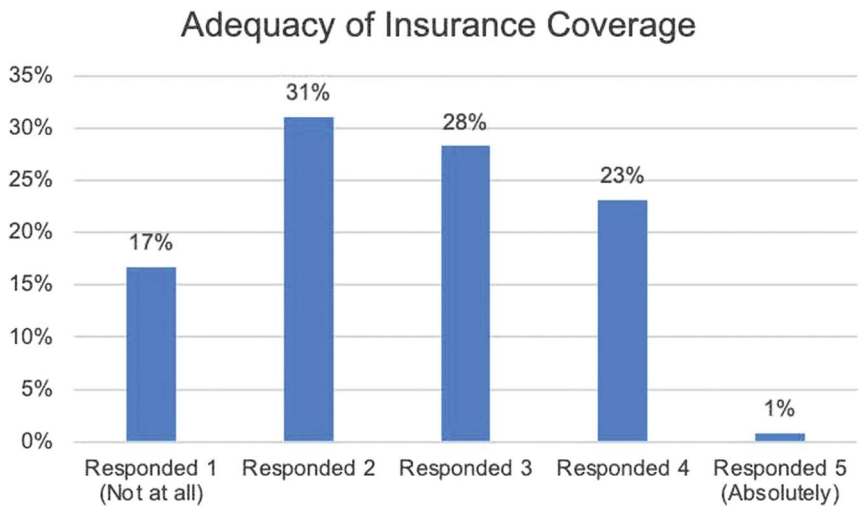

Fig 1. Responses (n = 251) to the sliding scale question, "Do you think insurance companies, on average, approve enough physical therapy visits for most orthopedic diagnoses?"

updated care plan. For UHC, it is essential that the facility where the patient will receive therapy is within the UHC network. Plans such as UHC Student Resources require referrals from the referring provider, and benefits can be verified only once the participating school has confirmed student enrollment in classes. There is a maximum limit of 25 visits per school year. Finally, Veterans Affairs health insurance allows a maximum of 15 visits for therapy services. If additional visits are needed, then a request for services form must be submitted. A summary of health insurance coverage can be found in Table 2.

Discussion

The most important finding of this study is that based upon what licensed physical therapists deem adequate, most insurance plans do not appear to provide automatic coverage for visits for a full recovery from common orthopedic surgical pathologies.

Only 24% of physical therapists believed that insurance companies provided enough coverage, whereas 48% believed that coverage was inadequate. In accordance, this can be explained by the inverse relationship between physical therapists' appraisal of coverage and the average number of visits. Respondents who ranked higher insurance adequacy correlated with lower average number of estimated visits. The remaining 28% of physical therapists provided a neutral response, highlighting the complexity and diversity of opinions among the surveyed physical therapists. More physical therapists in Alabama perceive that there is insufficient insurance coverage for most orthopedic physical therapy indications.

When analyzing the data from individual insurance companies, Medicare, Medicaid, UHC, and Aetna cover as many visits that are medically necessary given the proper documentation presented by the patients' physician. The other insurance companies either have a maximum number of visits per patient per year or have an initial limit to number of visits before another authorization needs to be submitted but do not have a maximum number of visits that will be covered within 1 year.

This study revealed that the average number of visits recommended by physical therapists for a full recovery varied across different orthopedic pathologies, ranging from 11.3 visits for ankle sprains to 37.3 visits for ACL reconstructions. Regarding the 11 studied orthopedic pathologies, the average number of visits overall is 23.8 visits. Even though prior authorizations with VIVA Health, Veterans Affairs, and BCBS Medicare Advantage cover 12, 15, and 20 visits initially for all pathologies, these initial visit allowances do not cover enough physical therapy visits for common surgical rehabilitation programs. This indicates that these insurance plans' base coverage is not high enough for most of the common orthopedic pathologies, especially those that typically need a higher average number of visits such as ACL reconstruction (37.3 visits), rotator cuff repair (31.3 visits), shoulder anterior labrum repair (27.9 visits), anatomic shoulder replacement (27.3 visits), and reverse shoulder replacement (27.2 visits).

The insurance companies analyzed for this study cover physical therapy in a generalized fashion in that they do not provide coverage for physical therapy based on a patient's diagnosis. Both BCBS and UHC Student Resources have a maximum number of therapy sessions covered in 1 year—30 and 25, respectively—regardless of type of pathology. This may limit the recovery ability of patients with the pathologies whose estimated number of visits for full recovery averages higher than 25 sessions. Insurance companies' limiting coverage of physical therapy to a maximum number of visits covered in 1 year creates multiple problems.

One such issue that may arise when an insurance company has a maximum number of covered physical therapy visits is when a second injury/surgery occurs within the same year. At this point, the patients may have used up most or all of their allowed physical therapy visits, and they do not have enough visits left over to sufficiently rehabilitate their second injury.

Table 2. Summary of health insurance coverage for PT

Insurance company	Summary of coverage for PT	Max no. visits
VIVA Health	12 visits with initial prior authorization Additional 12 visits with second prior authorization After 24 visits, clinical request with diagnosis and medical necessity from physician must be submitted	No maximum number of visits (insurance covers as many visits as medically necessary)
BCBS of Alabama	For individual plans (Gold, Silver, and Bronze plans), BCBS awards 30 rehabilitation and habilitation[a] visits per person per year	30 visits
	The Medicare Advantage plan offers 20 visits and then prior authorization must be obtained	None
	Supplemental Medicare plan is dependent on Medicare and what it will cover	None
Medicare, Medicaid, UHC, Aetna	Coverage depends on medical necessity	None
Veterans Affairs	The initial 15 visits are automatically covered, and any further visits require a formal request for services.	None
UHC Student Resources	Maximum of 25 visits per school year	25 visits

BCBS BlueCross Blue Shield; PT, physical therapy; UHC, United Healthcare.

[a]*Rehabilitation and habilitation includes occupational therapy, physical therapy, and speech-language pathology.*

Furthermore, almost all of these insurance companies consider physical therapy under the same category of "rehabilitation and habilitation," which encompasses physical therapy, occupational therapy, and speech-language pathology. As such, if a patient were to need occupational therapy and/or speech-language pathology in addition to physical therapy, this would create an episode of insufficient coverage. This could occur whether the need for these therapies is due to the same pathology or a completely separate pathology. In this situation, the physical therapists must consider the time course for the orthopedic pathology and also how many visits the patient will need to have left over for their needed occupational therapy or speech-language pathology. This would lead to rationing of therapy and may hinder appropriate and timely recovery. Furthermore, this may explain the trend for older and more experienced physical therapists to have fewer visits compared with younger and less-experienced physical therapists; their practice may be biased by insurance policy rather than solely the needs of the patients.

Our study is not without limitations. The study was largely a survey study with responses from physical therapists practicing in Alabama and has the inherent biases of any survey study. In addition, the study was conducted in one state and may not hold external validity regarding other states; however, given that health insurance is valid across state lines for most major insurance companies, our results are likely representative of other states as well. This study also considers the "general patient," and it does not account for potential variability among patients based upon age, activity level, and other patient-specific factors. Accounting for every potential individual variable that may influence recovery is not feasible. As such, we were interested only in the average patient, so these individual differences would become diluted.

Conclusions

The results of this study demonstrate the gap in insurance coverage for physical therapy as it relates to the 11 common orthopedic pathologies studied. The data and conclusions from this study and future studies have the potential to guide policymakers in crafting insurance policies such that patients are able to obtain adequate physical therapy with minimal delays.

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