

# Physical Therapists' Perceptions on the Use of Telehealth in Patient Care

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## Introduction

- The AHCA defines telehealth as “The practice of health care delivery by a practitioner who is located at a site other than the site where a recipient is located for evaluation, diagnosis, or treatment.”<sup>1</sup>
- Telehealth is an emerging practice in physical therapy and can be beneficial in increasing health care access for many individuals with mobility deficits, with a lack of transportation, or living in remote areas.
- However, many health professionals are still skeptical and question its feasibility.
- Previous studies exploring telehealth have focused primarily on the barrier of its implementation.

## Purpose/Research Questions

- The objective of this study was to explore the perceived benefits of telehealth amongst physical therapist and physical therapist assistants.
- This study sought to answer the following research questions, “What are the perceived benefits of the use of telehealth by physical therapist and physical therapist assistants?” and “Are there relationships between demographic characteristics of physical therapist or physical therapist assistant and their perception of benefits of the use of telehealth?”

## Methods

- The survey was developed using previous surveys as a template that assessed the acceptance of telehealth in other health care fields. The 15 items were rated either 1-Strongly Disagree, 2-Disagree, 3-Agree, or 4- Strongly Agree.
- After IRB approval, data were collected using the anonymous online survey.
- The survey was distributed to over 14,000 active physical therapist in Florida via email addresses obtained from the Florida Board of Physical Therapy website.
- The Director of Clinical Education of the Doctor of Physical therapy at Florida Gulf Coast University also distributed the survey to key clinical contacts for further distribution. The physical therapist assistants were reached via this mode of contact.
- Descriptive and correlational statistics were generated to determine quantitative relationships between demographic characteristics and perception variables.

## Results

- 310 responses from licensed physical therapists were collected at the time of the survey’s cessation.
- All of the responses received were from physical therapists, no physical therapist assistants completed the survey.
- Of the 310 respondents, 30 were excluded due to not being employed, 1 was excluded for reporting their age as “18 years old”, data were analyzed for the remaining 279 responses.
- From the 279 included respondents, 68% of the respondents were female, 32% were male.
- The respondent’s ages ranged from 26-80, there was a mean age of 47.70 (SD=11.80), median 48, mode 50.
- The respondent’s years employed ranged from 0-50, the mean years employed was 21.73 (SD=12.19), median 23, mode 20.
- The respondent’s hours of patient care per week ranged from 0-80, the mean hours was 29.18 (SD=16.24), median 32, and mode 40.
- The 279 respondents reported if they were familiar with telehealth technology, 40 Strongly Disagreed, 60 Disagreed, 139 Agreed, and 40 Strongly Agreed.
- For all 15 advantages and ease of use items, the answer “Agree” was the mode response for each item.

**Table 1.** Descriptive Statistics for Benefits of Telehealth

	N	Min	Max	Mean	Std. Dev.
Transport Cost	279	1	4	3.26	0.709
Patient Care Cost	279	1	4	3.02	0.734
Save Clinician's Time	279	1	4	2.76	0.732
Timely Healthcare Delivery	279	1	4	3.06	0.626
Quality Care	279	1	4	2.90	0.800
Improve Outcomes	279	1	4	2.83	0.742
Cancellation Rate	279	1	4	2.88	0.775
Access to Healthcare	279	1	4	3.22	0.705
Access to Specialists	279	1	4	3.13	0.711
Access to Remote Regions	279	1	4	3.23	0.763
Access to Patient Info	279	1	4	3.10	0.692
Adjunct to Face-to-Face	279	1	4	3.19	0.712
Monitor Adherence to HEP	279	1	4	3.11	0.753
Feasible in my Setting	279	1	4	2.76	0.912
Willingness to Collaborate with Specialists	279	1	4	3.01	0.791

**Table 2.** Correlation Between Demographics and Telehealth Benefits

	Age	Years Employed	Hours of PT Care
Transport Costs	.058 (.337)	.078 (.195)	-.103 (.087)
Patient Care Cost	.084 (.162)	.093 (.123)	-.074 (.216)
Save Clinician's Time	.025 (.678)	-.011 (.861)	-.049 (.417)
Timely Healthcare Delivery	-.00018 (.998)	.017 (.782)	-.055 (.363)
Quality Care	.031 (.611)	.030 (.620)	-.034 (.575)
Improve Outcomes	.014 (.815)	.009 (.880)	-.050 (.404)
Cancellation Rate	.014 (.810)	-.0169 (.779)	-.032 (.592)
Access to Healthcare	-.039 (.512)	-.052 (.384)	-.171 (.004)**
Access to Specialists	-.022 (.709)	-.023 (.704)	-.158 (.008)**
Access to Remote Regions	.081 (.180)	.092 (.124)	-.053 (.376)
Access to Patient Info	.035 (.556)	.067 (.264)	-.135 (.024)**
Adjunct to Face-to- Face	.038 (.526)	.046 (.440)	-.099 (.098)
Monitor Adherence to HEP	.097 (.107)	.078 (.191)	-.097 (.107)
Feasible in my Setting	.075 (.212)	.063 (.291)	-.024 (.693)
Willingness to Collaborate with Specialists	-.057 (.339)	-.036 (.555)	.040 (.507)

\*\* Indicates significance p<.05

## Data Analysis

- Data was analyzed using SPSS.
- Descriptive statistics were generated from the demographic characteristics to observe the population of respondents.
- Descriptive statistics were generated from the advantages and ease of use sections of the questionnaire to determine which were perceived benefits.
- A Spearman Rho correlation was used to analyze the relationship between the demographic characteristics and the 15 item responses.

## Discussion

- Telehealth aims to improve the health care world by increasing patient access to clinicians, reducing costs of care, improving the monitoring of patients by clinicians, and more.
- 64% of respondents either agreed or strongly agreed that they were familiar with telehealth while 90% reported very low to low experience with telehealth. This indicates that though they may have heard of telehealth, very few have worked with it. This lack of experience may cause few clinicians to understand how telehealth can benefit patient care.
- Feasibility of implementing telehealth in current setting was viewed lower than the benefits (Mean = 2.76).
- Age and years of employment of respondents did not show statistical significant relationship to any of the benefits of telehealth technology.
- The number of hours of practice per week was negatively associated with telehealth’s benefits improving patients’ access to health care and specialists, and therapists’ access to patient information.
- Limitations of this study included the lack of responses from physical therapist assistants (n=0), and that several of the respondents were not currently in practice or working less than 10 hours per week.
- In future studies, further analysis of why PTs who work many hours see less benefit in telehealth.

## Conclusions

- There continues to be a relatively low utilization of telehealth within the physical therapy community.
- Further research is needed to explore the real and perceived benefits of implementing telehealth in physical therapy settings.
- Additional research that addresses personal experiences with telehealth will help to increase the awareness of the technology.