

FLIPPING A PATIENT'S UNDERSTANDING OF THEIR CHRONIC PAIN- A CASE SERIES

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INTRODUCTION

- Chronic pain affects more than 1 in 5 adults in the United States.
- Psychologically Informed Physical Therapy is a multimodal rehabilitation approach to treat pain by using behavioral strategies from psychology.
- In a previous study utilizing a flipped learning model, patients with chronic low back pain demonstrated increased understanding of risk factors and physical activity, increasing self-efficacy to prevent further complications.

OBJECTIVE

- The purpose of this study is to describe how a flipped learning pain education model used in physical therapy influences the number of physical therapy visits needed to achieve an improvement in the Patient-Specific Functional Scale (PSFS).
 - The PSFS is patient-specific measure that can be used to objectively measure functional progress of self-selected goals on a scale of 0-10 based on limitations.

METHODOLOGY

- Case series (retrospective chart review) of 28 patients with chronic pain were treated between January 2023-April 2024.
- **Inclusion:**
 - Chronic pain-related diagnosis
 - Treating physical therapist was Sharna Prasad (PI)
 - Treated using a flipped learning pain education model incorporating The Pain Management booklet by Matt Del Brocco
 - Have a pre- and post-treatment PSFS score
- **Exclusion:**
 - Spinal cord stimulator

DISCUSSION

- The flipped learning pain education model resulted in a low number of visits and significant change in the PSFS.
- PTs may consider this approach when working with patients with chronic pain to impact the quality of their treatment.
- This method gives agency to the patient, empowering and engaging them in their own recovery.
- The burden of getting better is on the patient and the PT is the expert coach.
- Further research is needed on the flipped learning model's impact on reducing the number of PT visits compared to usual care.
- Future studies should determine the efficacy of the flipped learning model in comparison to usual care through randomized controlled trials among various populations of different ages and at specific pain regions.

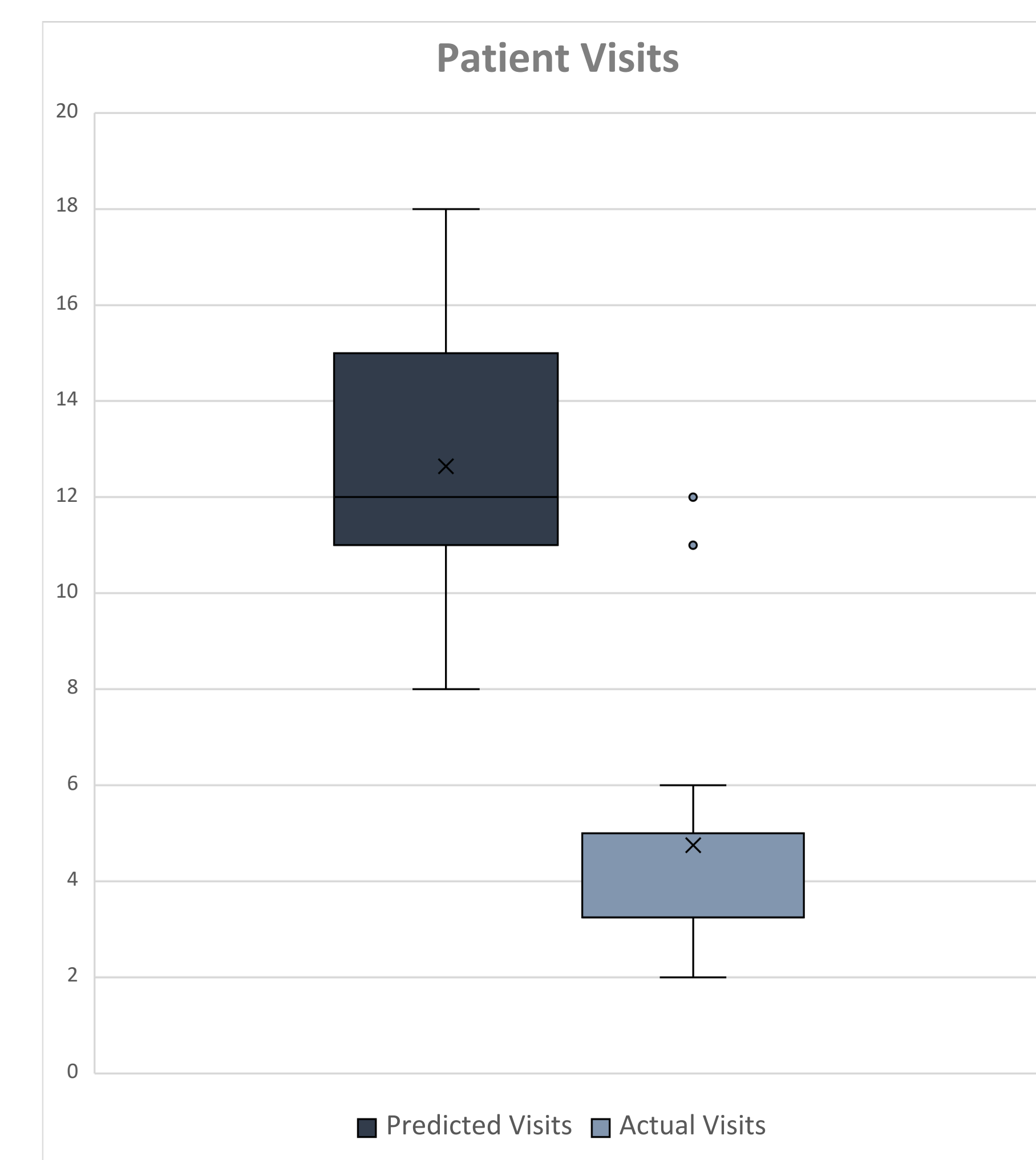


Table 1. Patient Characteristics

Characteristic	n	%
Sex		
Female	19	67.9
Male	9	32.1

Table 2. Outcome Measures

Outcome Measures	Median	n
QOL		
Baseline	7	7
End	8	18
PROMIS*		
Baseline	37.5	2
End	48.5	7
30-Second Chair Stand*		
Baseline	9	1
End	12	6
Forward Flexion*		
Baseline	5	1
End	2.5	16
Balance*		
Baseline	4	0
End	3	19

*= not everyone has data for this outcome measure

MEASUREMENTS

- Age, categorized into 5-year intervals (e.g. 30-34 years)
- Sex
- Diagnosis
- Location of pain
- Number of physical therapy sessions
- Estimated number of physical therapy visits needed to improve function
- Pain 1-10 (Pre and post)
- PSFS scores (Pre and post)
- PROMIS Physical Function**
- 30-second Chair Stand**
- 4-stage balance test**
- Focus On Therapeutic Outcomes (FOTO)**
- Quality of life Scale 0-10**
- Trunk forward flexion with tape measure**

RESULTS

- **Median age group:** 60-64 years
- **Most common location of pain**
 - Lower extremity (n=13)
 - Low back (n=11)
- **Baseline pain level***
 - 7/10 VAS (minimum 1; maximum 10).
- **Predicted number of visits***
 - 12 (min 8; max 18)
- **PT visits***
 - 5 minimum, 12 maximum
- **PSFS scores*:**
 - **Initial visit:** 2 (minimum 0; maximum 5.3),
 - **Last visit:** 8.6 (minimum 2.3; maximum 10.0) (p<0.001).
- Data was not normally distributed, therefore the Wilcoxon signed-rank test was used to compare the PSFS values at baseline and discharge

CONCLUSION

- The flipped learning pain education model in PT led to a statistically significant increase in the PSFS scores over an average of 5 visits.

RESOURCES FOR PAIN MANAGEMENT



*= median value
** (Pre and post, if available)



ACKNOWLEDGEMENTS

We would like to thank Samaritan Physical Rehabilitation in Lebanon, Oregon for providing us with patient data, as well as Sharna Prasad for being the lead physical therapist who assisted with guiding our research.