

INTRODUCTION

BACKGROUND

Telehealth can be used to conduct pre-discharge virtual home safety evaluation:

- **Need -** Older Adult patients with more functional deficits require a more comprehensive evaluation for function and home assessment.
- **Problem** Standard home safety evaluations cannot be administered until the patient has discharged.
- **Solution** Use of Telehealth to conduct pre-discharge virtual home safety evaluations.
- **Outcome** Increase in patient-centered intervention, functional carryover from in-hospital to home environment, quality of life (QOL), and intervention satisfaction.

LITERATURE REVIEW

The literature reports the following benefits of pre-discharge evaluation: Reduced the use of resources when conducting home assessment. (Ninnis,

- K., et. al. 2019)
- Empowerment of patients and caregivers to participate in the intervention planning process. (Ninnis, K., et. al. 2019)
- Modification in patient treatment plans. (Latulippe, K., et. al. 2022)
- More appropriate occupational therapy recommendations at discharge. (Latulippe, K., et. al. 2022)

CLINICAL EXPERIENCE

Clinical application showed the following benefits of pre-discharge evaluation:

- Better understanding of home safety hazards than patient reports.
- Equipment order early in intervention and put into place prior to patient discharge.
- Increased interventions involving more than activities of daily living.







THESIS STATEMENT

Using telehealth technology to complete pre-discharge home safety evaluations for the older adult population receiving inpatient rehab reinforces patientcentered care increasing patient functional carryover, QOL, and intervention satisfaction; ultimately improving overall family satisfaction.

PICO QUESTION

In high complexity older adult patients, how does receiving a pre-discharge virtual home safety evaluation compared with standard care procedures affect the family's overall satisfaction post-discharge?

THE EFFECTIVENESS OF TELEHEALTH WITH THE OLDER ADULT **POPULATION RECEIVING INPATIENT REHAB**

Jonathan J. Smith MS, OTR/L, CNS, CPAM Department of Occupational Therapy, **Baylor University**

DESIGN & IMPLEMENTATION



POPULATION

- 8 Participants, Older Adults ages 60+, High complexity 5+ performance deficits, need for comprehensive chart review and evaluation. (AOTA, 2016)
- Participants were divided into 2 groups. 4 in the experimental group and 4 in the control group.
- Experimental group Participants received a pre-discharge virtual home safety evaluation.
- Control group Participants did not receive a pre-discharge virtual home safety evaluation.

INSTRUMENTS & PROCEDURES

- Functional Independent Measure (FIM): Figure: 1 Measured functional carryover from in-hospital to home environment.
- Assessment Carer QOL (AC-QoL) Figure: 2 Measured quality of life post discharge.
- Theme Feedback Satisfaction Questionnaire (TFSQ) Figure: 3– Measured satisfaction of intervention.



Overall Satisfaction – Measured by: 1.) Comparing the experimental and control group scores using the combined sums for the FIM, AC-QOL, and TFSQ. (Table: 1; Graph: 1) 2.) Comparing the group scores using a non-parametric Wilcoxon sum-rank test. (Table: 2; Graph: 2)

|--|

Exporimontal	FIM		TESO	Control	FIM	AC 001	TESO
Experimental	FIN	AC-QOL	JISQ	Control	T LIVI	AC-QOL	IISQ
1	3	37	15	1	-1	29	5
2	2	38	13	2	-1	30	6
3	0	40	15	3	0	30	8
4	1	38	12	4	-1	30	8
Total Score	6	153	55	Total Score	-3	119	27

Table: 2

Subjects	Experimental Group	Control Group	
1	55	33	
2	53	35	
3	55	38	
4	51	37	
Median	54	36	
Average	53.5	35.75	
P>.05	P-value =0.0294		

General Feedback – Provided data on areas for process improvement.



TABLES & GRAPHS

•Table: 1; Graph: 1 – Display the score based on the sum of each group score. The experimental group had more functional carryover, QOL, satisfaction, and ultimately, overall intervention satisfaction. • Graph: 2: – Display the score based on the Wilcoxon sum-rank test. The experimental group showed greater overall satisfaction than the control group. • **Table: 2** – Displays a P-value of .02343 which is less than the 0.05 significance level showing a scientifically significant difference in the experimental and control group data supporting the effectiveness of pre-discharge virtual home safety evaluation for the study population.

IMPLICATIONS FOR OT:

- Telehealth use in various facility settings
- Telehealth use with other patient populations

LIMITATIONS

- Small sample size
- All male participants
- Decreased recruitment time

population.

and intervention satisfaction.

property delivered.

ADL and mobility.

been valuable.

•Participants that received an evaluation felt it was valuable.





RESULTS

Development of telehealth related quality improvement projects

SUMMARY

•Using telehealth to provide pre-discharge virtual home safety evaluation can be beneficial to the older adult population receiving inpatient rehab. •The literature and clinical application support the method of telehealth with the

•Data from measures used in the study showed increased functional carryover, QOL,

- Non-parametric testing showed a significant scientific difference in the overall satisfaction of participants that received the telehealth intervention.
- •General feedback indicates that both groups have had to wait on equipment due to reasons such as not appropriate for home environment, clinician error, and damaged
- The Experimental group experienced this to a lesser degree with less impact on

•Participants that did not receive a virtual home safety evaluation felt it could have