

Telehealth Visit Compliance and Satisfaction in Brain Injury Patients Discharged from Inpatient Rehabilitation during the Coronavirus Pandemic

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Background

- Patients with moderate to severe brain injury often develop significant disability prompting an inpatient rehabilitation (IPR) course
- Post-injury complications can include cognitive, somatic, emotional, behavioral and functional deficits which frequently require continued outpatient management
- Outpatient follow-up in brain injury patients is especially challenging given these underlying cognitive impairments and complex injuries¹
- In response to the Coronavirus (COVID-19) pandemic, many outpatient offices closed, but this also compromised access to routine medical care
- Telemedicine gained popularity during this time, allowing for continuity of care while maintaining appropriate safety measures²

Objectives

- Investigate brain injury patient follow-up compliance utilizing telemedicine services after discharge from inpatient rehabilitation
- Assess patient and caregiver satisfaction with this interface to understand barriers to care

Methods

- Patients under the care of a brain injury medicine physiatrist discharged from IPR during the COVID-19 pandemic and scheduled for initial outpatient follow-up between June 1st, 2020 and December 30th, 2020 were included
- Majority of the patients were scheduled for an initial telemedicine follow-up visit through our healthcare system platform
- Retrospective chart review was completed to identify:
 - Time to follow-up after IPR discharge
 - Rate of no shows
 - Appointment platform utilized (video or telephone)
 - Management changes made during the encounter
- Patients seen after 10/01/20 were contacted for feedback on the telemedicine encounter

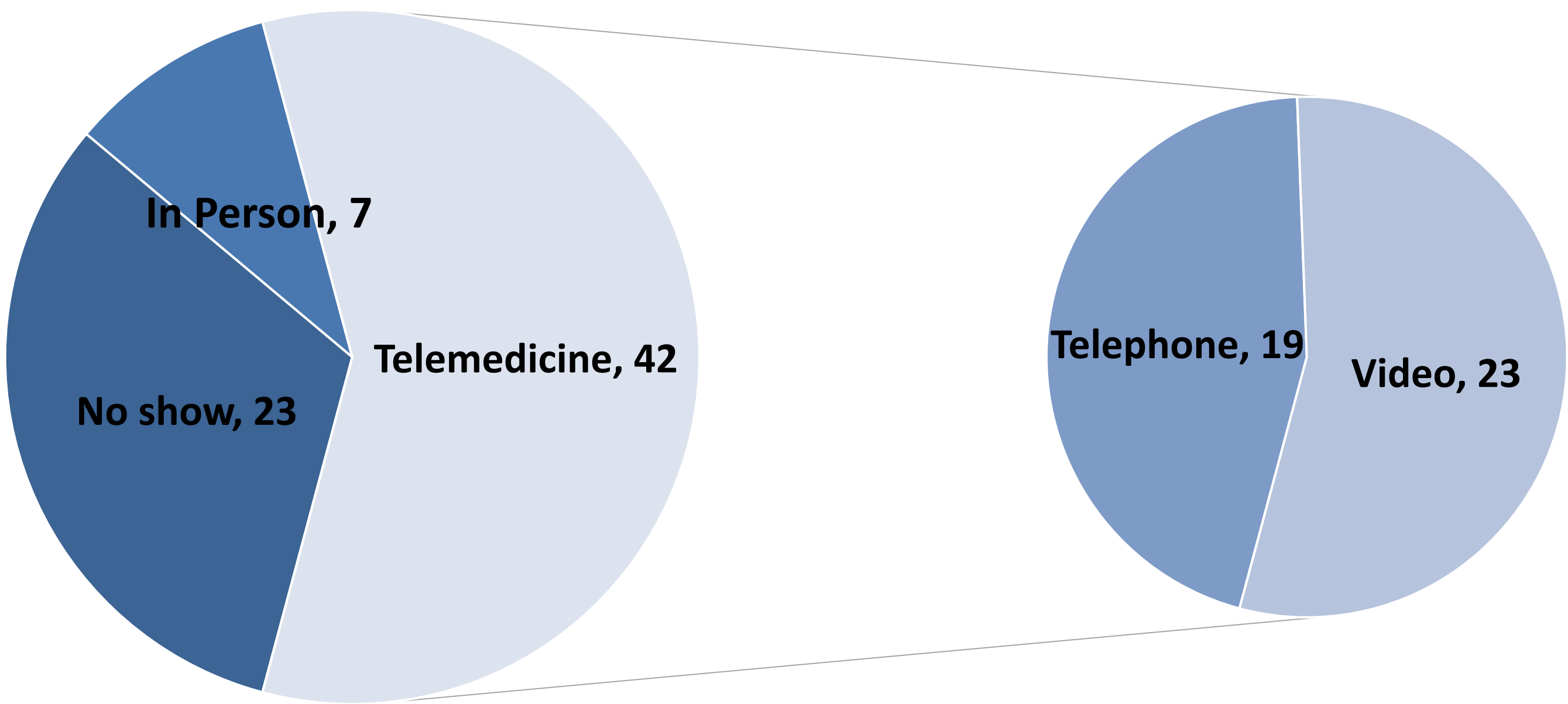
Results

Brain Injury Inpatient Rehabilitation Discharges Scheduled for Initial Follow-up (June 2020 to December 2020)

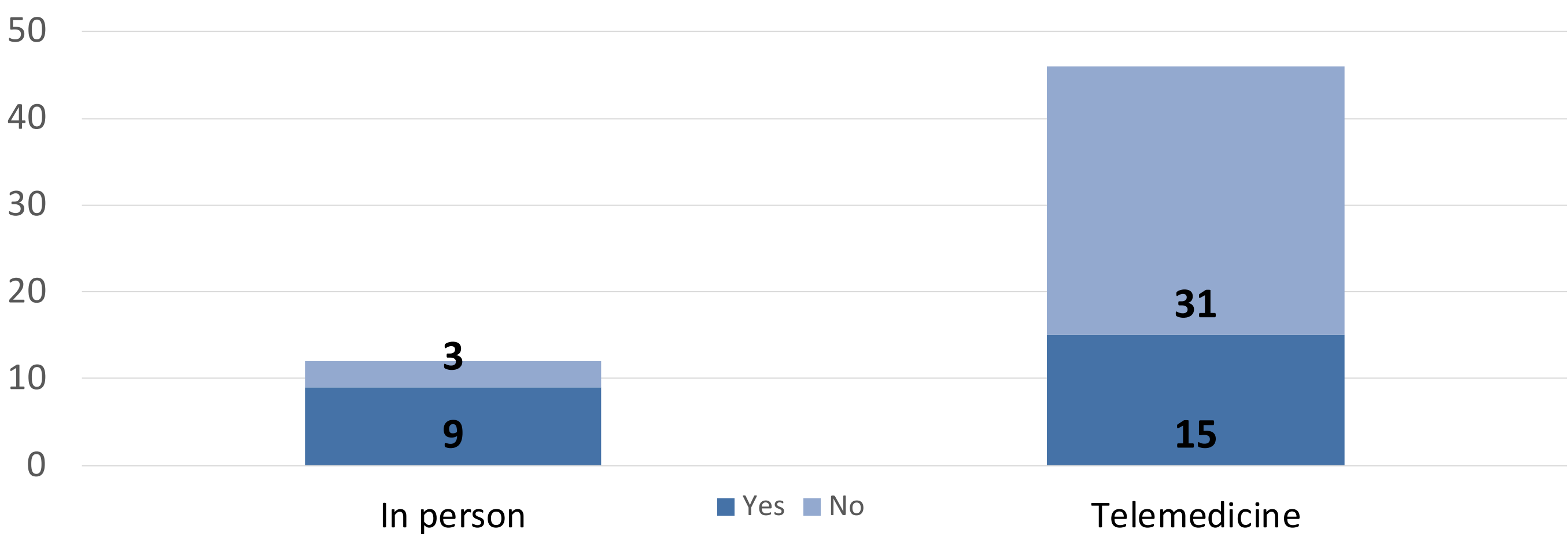
Number of Patients Discharged from IPR	Home	SNF	Other
89	72	16	1

Average Time (days) from IPR Discharge to Follow-up	
Home	31
SNF	45

Home Discharge Follow-Ups



Management Changes During Follow-Up Encounter



Results (Cont.)

Patient/Caregiver Telehealth Feedback Themes



Conclusion

- Follow-up after discharge from IPR for brain injury patients is important, but can be challenging
- Optimizing management is time-sensitive especially given that the greatest gains are made within the first few months of injury
- In-person evaluation is ideal, but in the setting of a global pandemic telemedicine provides a safe & convenient follow-up method
- Video encounters allow for more thorough evaluation of clinical status as compared to telephone visits
- Comparison of brain injury follow-up rates and time to follow-up before and after the coronavirus pandemic should be investigated
- Factors contributing to no show rate and patient/caregiver preferences for in-person, phone, and video visits should be explored

References

1. Heidi J. Graff, Ulla Christensen, Ingrid Poulsen & Ingrid Egerod (2018) Patient perspectives on navigating the field of traumatic brain injury rehabilitation: a qualitative thematic analysis, Disability and Rehabilitation, 40:8, 926-934, DOI: [10.1080/09638288.2017.1280542](https://doi.org/10.1080/09638288.2017.1280542)
2. Patel SY, Mehrotra A, Huskamp HA, Uscher-Pines L, Ganguli I, Barnett ML. Trends in Outpatient Care Delivery and Telemedicine During the COVID-19 Pandemic in the US. *JAMA Intern Med.* Published online November 16, 2020. doi:10.1001/jamainternmed.2020.5928 Text