

Comparing Virtual Visit Patient Order Compliance With Patient Reported Satisfaction During the COVID-19 Pandemic

Priya Sasankan MD, MBA¹, Katie Shen MD¹, John McMichael PhD², Ruishen Lyu MS³, William Carey MD², Ari Garber MD, EdD²
Departments of Internal Medicine¹, Gastroenterology and Hepatology² and Quantitative Health Sciences³
Cleveland Clinic, Ohio



BACKGROUND/AIMS

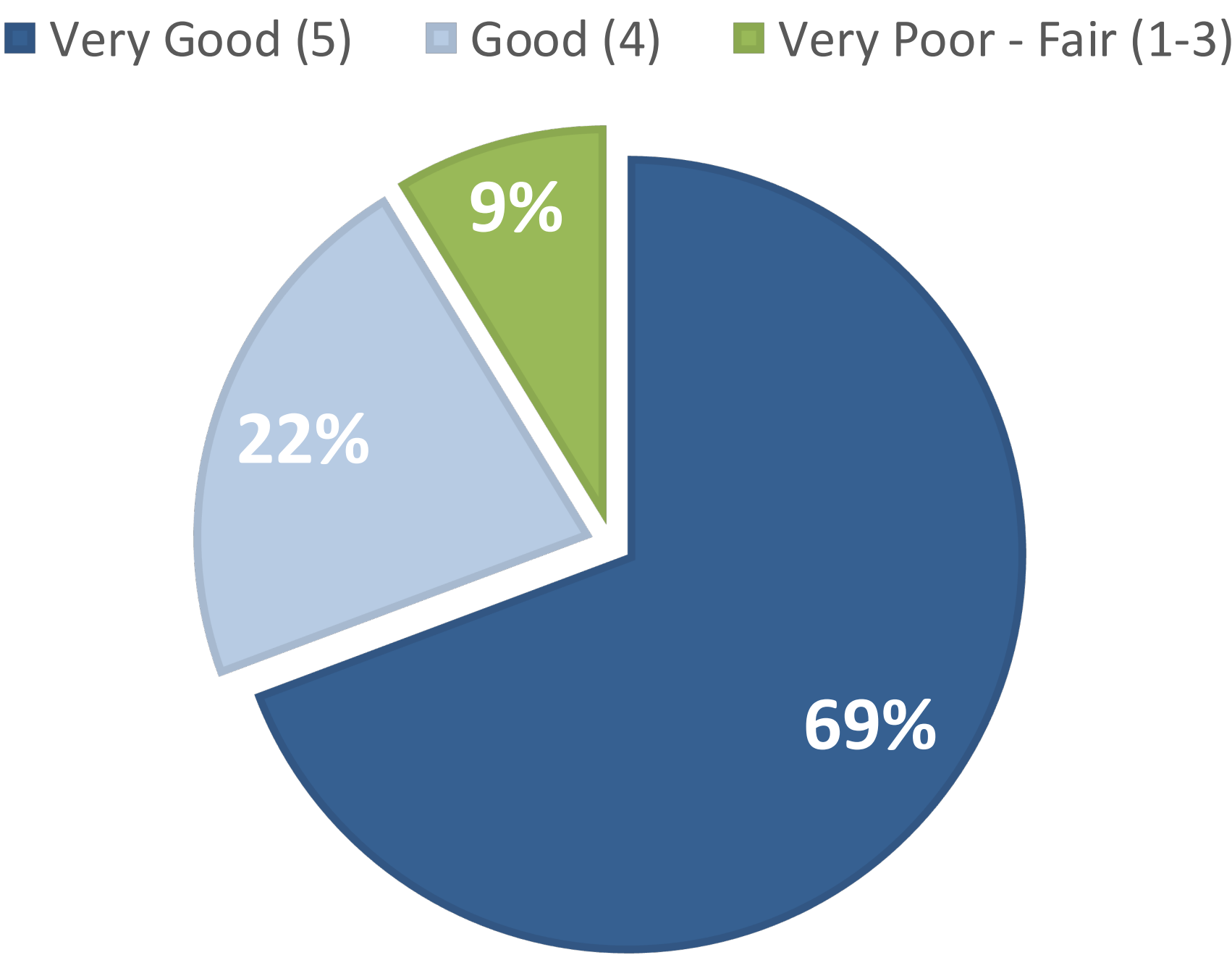
- Telemedicine emerged during the COVID-19 pandemic as a means for assessing patients in the outpatient setting while reducing the transmission of viral disease.
- In gastroenterology, several studies have evaluated both patient and provider satisfaction related to telehealth visits during the pandemic.
- Our team previously showed that when compared to in-person visits, patients evaluated virtually during the pandemic were less likely to complete orders.
- The purpose of our study was to assess post-virtual visit patient satisfaction survey ratings and correlation with follow up order completion.

METHODS

- Patient responses to an electronic survey distributed via MyChart from April 2020–May 2022 were gathered with responses to various questions graded using a five-point Likert scale.
- Using natural language processing, we assessed the number of orders placed for patients during these encounters and determined compliance based off of order completion.
- A generalized linear mixed effects model with fixed effects for visit type, and random intercepts for intra-patient correlation was used.
- A multivariable model was built controlling for age, socioeconomic status, BMI, ASA class, dementia, stroke and congestive heart failure.

RESULTS

Figure 1. Patient Survey Response to Satisfaction of Ease of Virtual Care



- Among 241 patients who responded to the satisfaction survey, 69.3% of patients reported a score of 5, equivalent to ‘very good’, 22.0% reported a score of 4, equivalent to ‘good’, and 8.7% reported a score between 1-3 equivalent to a range from ‘very poor to fair’.
- Multivariate analysis revealed that patients who reported a score of 4 were 91% less likely to complete orders compared to those who reported a score between 1-3 ($p = 0.049$). No significant difference was found comparing a score of 5 to 1-3.
- Patients with the highest SES (75K-200K) were 51% more likely to complete orders ($p=0.005$).

CONCLUSIONS

- While a majority of patients overall rated a positive experience with virtual visits, patients who were to rate their virtual experience as ‘good’ were significantly less likely to complete their follow up orders.
- These findings highlight that some dissonance may indeed exist between virtual visit patient satisfaction and the clinical effectiveness of virtual visits.

REFERENCES

1. Dobrusin A, Hawa F, Gladshiteyn M, Corsello P, Harlen K, Walsh CX, Alaparathi L, Weinstein M, Baig N, Sousa A, Gunaratnam NT. Gastroenterologists and Patients Report High Satisfaction Rates With Telehealth Services During the Novel Coronavirus 2019 Pandemic. Clin Gastroenterol Hepatol. 2020(11):2393-2397.
2. Serper, Marina, Frederick Nunes, Nuzhat Ahmad, Divya Roberts, David C. Metz, and Shivan J. Mehta. 2020. "Positive Early Patient And Clinician Experience With Telemedicine In An Academic Gastroenterology Practice During The COVID-19 Pandemic". Gastroenterology 159 (4): 1589-1591.

Table 1. Survey Satisfaction Response Compared to Order Completion			
Factors	Odds Ratio	95% CI	p-value
Likert 4 vs 1-3	0.090	[0.013,0.641]	0.049
Likert 5 vs 1-3	0.191	[0.031,1.162]	0.072