



How Type of Office Visit Influences Attitudes and Preferences for Telemedicine

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Background

- The Covid-19 pandemic has caused significant changes in how healthcare is delivered.
- Telemedicine use surged over 4000-fold in the past 2 years and is now used in 85% of USA medical practices.
- Numerous studies have shown a favorable opinion of telemedicine from both the patient's and physician's perspective.
- This study explores how type of office visit influences attitudes towards telemedicine and how it may be used more effectively.

Methods

- Each patient had a telemedicine visit from April 2020 to October 2021. Surveys were delivered by mail or in person to 1100 randomly selected patients of Sierra Endoscopy Center and Sierra Nevada Gastroenterology Medical Associates, a community-based practice in Grass Valley, CA.
- 320 surveys were returned completed.

Methods

- Surveys contained a 5-point Likert scale set of questions rating the quality, communication, compassion, thoroughness and convenience of telemedicine visits.
- In-person visits were directly compared to telemedicine visits for the same qualities.
- Demographics were recorded (see table).
- Surveys were separated into 3 categories based on type of visit: new complaint, follow-up of existing problem, procedure-related visit.
- Statistical analysis and chi-square testing were used to determine statistical significance.

Results

- Quality, communication, thoroughness and compassion during telemedicine visits rated high with Likert scores of 4.3-4.7 (5=strongly agree) for all groups. Comparing the 3 groups (new complaint, follow-up, procedure-related visit) with chi-square testing, no statistical difference in ratings was seen. Follow-up patients had the highest Likert scores in all categories. Patients with new complaints preferred in-person visits over telemedicine visits for quality, communication, thoroughness and

Results

compassion, which was rated statistically significantly higher ($p < 0.05$). Telemedicine visits were favored for convenience in all groups, with highest ranking in follow-up patients (73%).

		New Complaint ¹	Follow-Up Visit	Procedure Related ²
Gender	Male	113 (51.4%)	21 (46.7%)	17 (30.9%)
	Female	107 (48.6%)	24 (53.3%)	38 (69.1%)
		New Complaint	Follow-Up Visit	Procedure Related
Age	Age <30	3 (31.4%)	3 (6.8%)	0 (0.0%)
	Age 31-39	7 (3.2%)	1 (2.3%)	2 (3.6%)
	Age 40-49	11 (5.0%)	3 (6.8%)	4 (7.3%)
	Age 50-59	47 (21.5%)	10 (22.7%)	10 (18.2%)
	Age 60-69	69 (31.5%)	8 (18.2%)	13 (23.6%)
	Age 70-79	70 (32.0%)	16 (36.4%)	20 (36.4%)
	Age 80+	12 (5.5%)	3 (6.8%)	6 (10.9%)
		New Complaint	Follow-Up Visit	Procedure Related
Ethnicity	White	194 (90.7%)	41 (91.1%)	48 (92.3%)
	Black	1 (0.5%)	0 (0.0%)	1 (1.9%)
	Hispanic	9 (4.2%)	3 (6.7%)	0 (0.0%)
	Asian	7 (3.3%)	1 (2.2%)	3 (5.8%)
	Other	3 (1.5%)	0 (0.0%)	0 (0.0%)

1 New Complaints Include: Abdominal Pain, Change in Bowels, Heartburn, Nausea or Vomiting, Liver Problems and Inflammatory Bowel Disease

2 Visit primarily focused on setting up scope for screening or surveillance of polyps or Barrett's

Discussion

- This study showed type of office visit did not affect satisfaction or ratings of telemedicine visits.
- Type of visit did reveal preferences for either in-person or telemedicine visits.
- Patients with New Complaints preferred in-person visits. This was influenced by their perception that compassion is more effectively delivered in person.
- This suggests that non-verbal communication such as body language, facial expression and tone is conveyed more effectively in person than over the phone or video calls.
- Patients who came for Follow-Up and Procedure Related visits rated telemedicine more convenient and preferable than in-person visits for future visits.
- This suggests that patients with stable or less acute problems prioritize convenience over other factors when selecting type of visit.
- Further studies are needed to determine what other factors will influence and improve quality of telemedicine visits.