

BACKGROUND

- Before COVID-19, telehealth was sparingly used, and early adopting patients and providers expressed satisfaction.¹⁻²
- In March 2020, ambulatory visits rapidly shifted to telehealth to limit patient exposure to the healthcare setting.¹⁻²
- Many providers and patients utilized telehealth for the first time during this period, and their experiences varied.¹⁻²
- Telehealth ambulatory volumes have stabilized, and utilization remains higher than pre-2020 volumes.
- Little is known about the differences in patient experience and expectations between in-person and telehealth video visits in this new paradigm where patients or providers can choose the type of visit.
- We compare patient experience survey data for in-person and telehealth video visits, including quantitative and open-ended items, to explore the similarities and differences at two time periods for pediatric patients.

METHOD

- We used a concurrent convergent parallel mixed methods design to examine the patient experiences of pediatric in-person and video-visit telehealth patients.³
- The qualitative and quantitative components were collected simultaneously using the Medical Practice Telemedicine Survey and the Medical Practice Pediatric Survey.
- Data were merged during interpretation using a triangulation design.
- We also examined the Natural Language Processing codes, provided by the survey vendor, which labeled each comment positive, negative, neutral, or mixed.⁴⁻⁵
- Pediatric patients who returned an in-person or video-visit survey for ambulatory services between 10/1/2020-10/31/2020 or 10/1/2022-10/31/2022 were included.
- Qualitative data was analyzed using a directed content analysis approach.
- Codes were based on the Institute of Medicine's Six Domains of healthcare quality⁶ and developed/applied in an iterative fashion by two researchers.
- Quantitative analysis utilized descriptive statistics, including t-tests and chi-squared as appropriate.

RESULTS

Table 1. Patient characteristics

| | Inperson (n=236) | Telehealth (37) | |
|-----------------------|------------------|-----------------|----------|
| Sex | | | p=0.184 |
| Female | 117 (89.3%) | 14 (10.7%) | |
| Male | 119 (83.8%) | 23 (16.2%) | |
| Race/Ethnicity | | | p<0.0001 |
| Asian | 1 (0.4%) | 0 | |
| Black | 48 (20.3%) | 9 (24.3%) | |
| Two or More | 4 (1.7%) | 0 | |
| White | 132 (55.9%) | 16 (43.2%) | |
| Other | 8 (3.4%) | 5 (13.5%) | |
| Unknown | 7 (3%) | 7 (18.9%) | |
| Hispanic/Latino | 36 (15/3%) | 0 | |
| Age Mean(std) | 10.1 (10.4) | 9.3 (5.4) | p=0.6283 |
| Payor | | | p=0.513 |
| Commercial | 80 (34.6%) | 10 (27%) | |
| Marketplace Plan | 4 (1.7%) | 0 | |
| Managed Care | 23 (10%) | 4 (10.8%) | |
| Medicaid | 100 (43.3%) | 19 (51.4%) | |
| Self-Pay | 11 (4.8%) | 0 | |
| Tricare | 13 (5/6%) | 4 (10.8%) | |
| Survey Format | | | p=0.074 |
| Internet | 217 (92%) | 337 (100%) | |
| Paper | 19 (8.1%) | 0 | |

Figure 1. Likelihood of Recommending

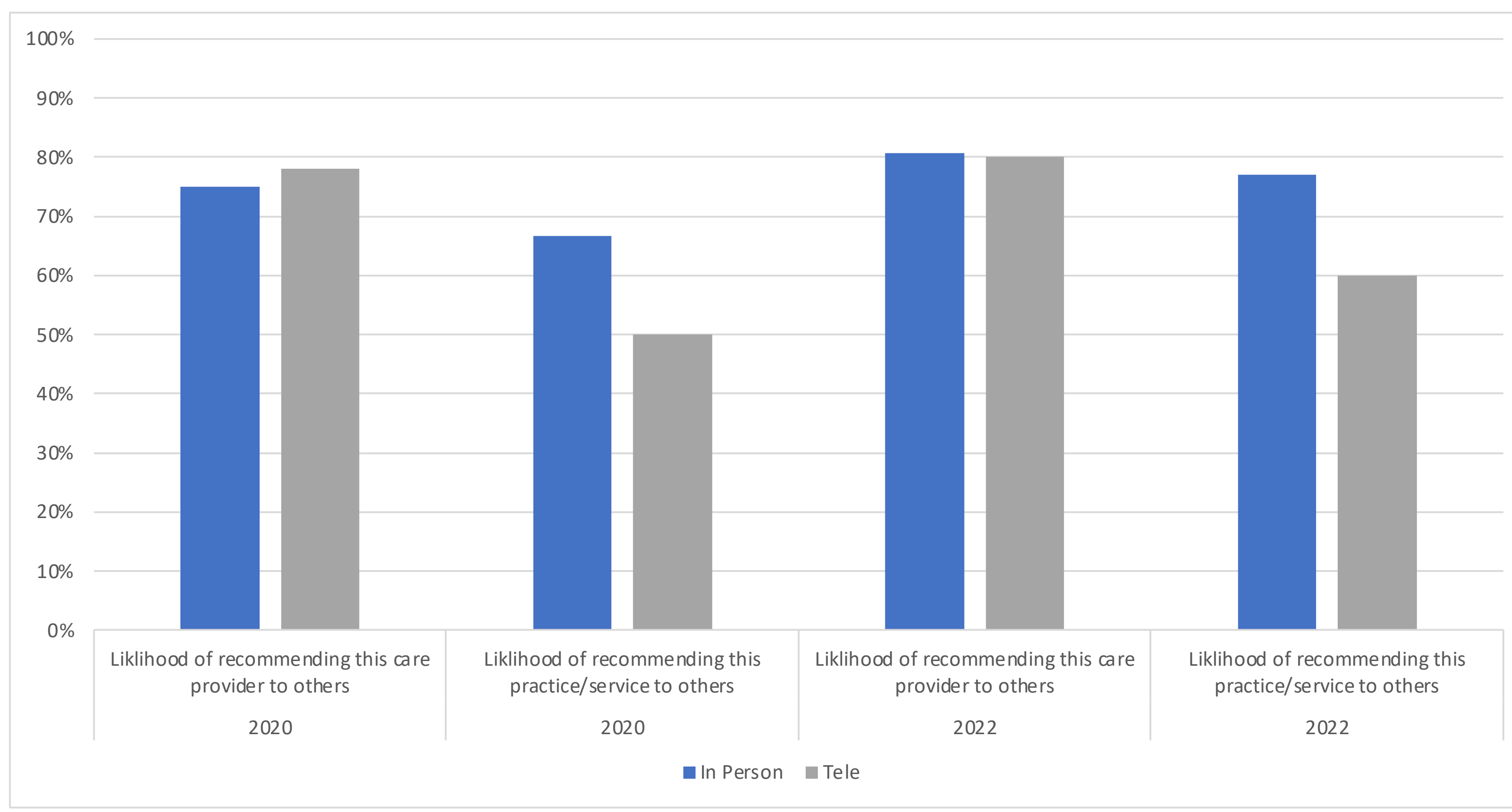


Figure 2. Percent of Top Box Responses 2020

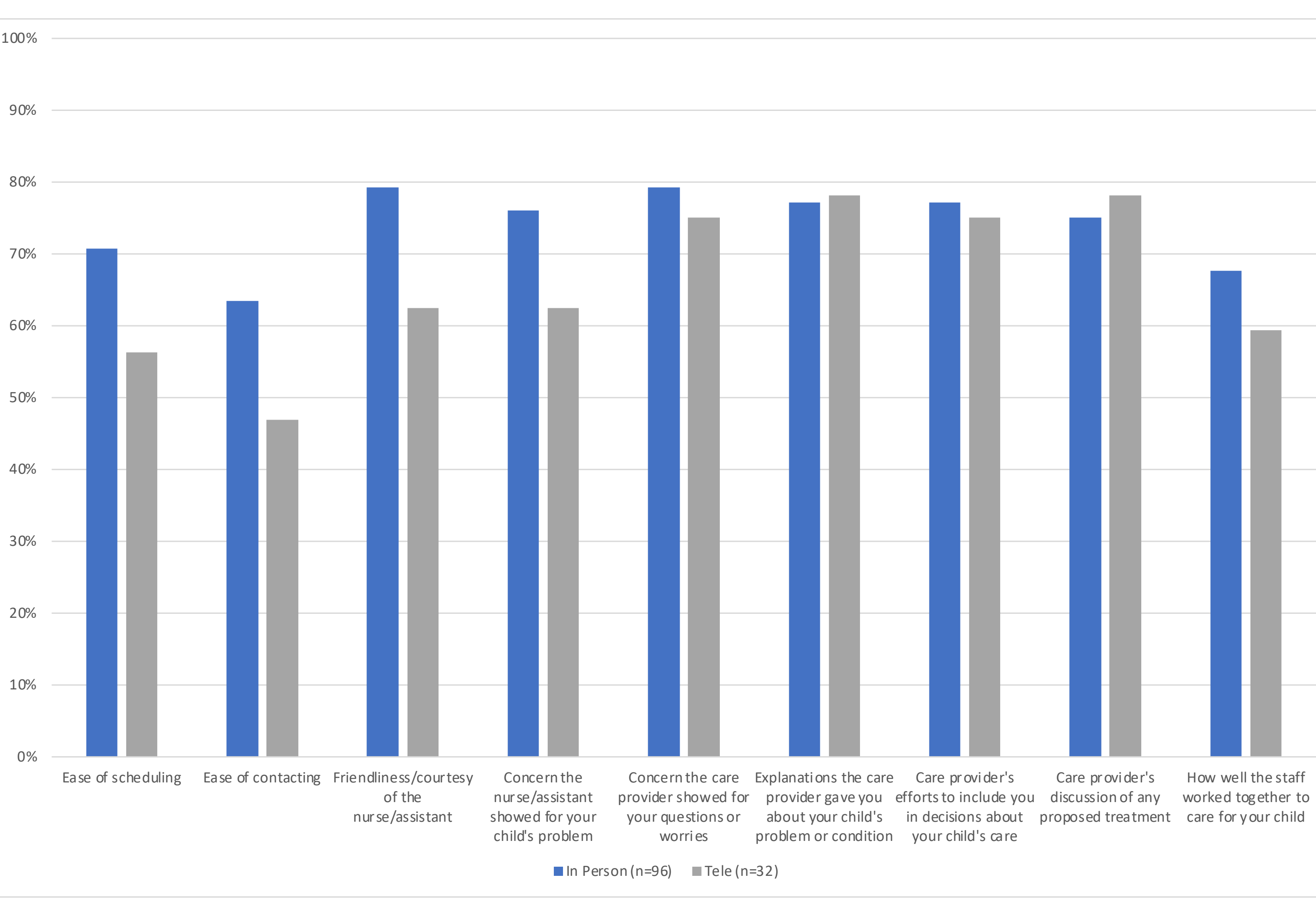


Figure 3. Percent of Top Box Responses 2022

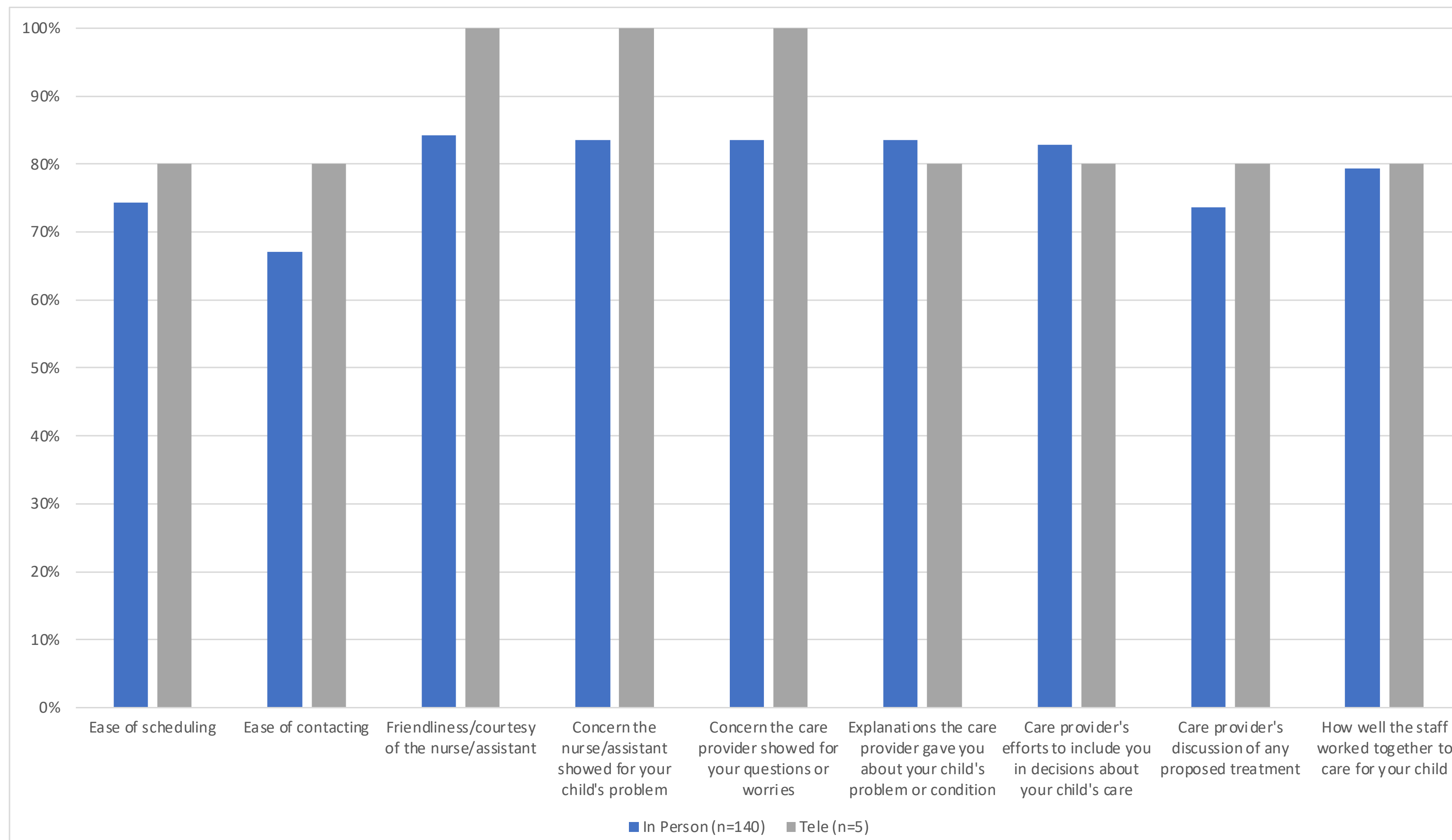


Table 2. Representative Quotes

| Category | In-Person | Telehealth |
|------------------|---|---|
| Safe | Cleanliness was much better but still could use a little deeper clean in restrooms | N/A |
| Effective | Was one of the best dr visits I have experienced. Very thorough. I never felt rushed which I typically feel in a Dr office. He took the time we needed to discuss all my daughters issues. We have a plan that I feel confident with. | Dr. [Name] is the best. He was glad to see my granddaughter and got her back on track with the great medical care. |
| Timely | 6 months to get an appt is outrageous | They got my son in quickly and gave him plenty of time on the telehealth call to hear about his issues. |
| Patient Centered | • Very brief, dismissive, spoke over me when I attempted to bring up a concern with the treatment he suggested. • Explains things well, and very caring towards my son | She [Dr.] is very knowledgeable and able to convey relative information in layman's terms. The doctor was well-versed in answers to questions and empathized while giving prudent recourse that I understood and agreed with. It was a great visit! |
| Equitable | Good attention, made us feel confident that they have people who speak Spanish. It is easy to schedule the appointment. Just hard to get into the clinic | Very convenient for us living in [city] |
| Efficient | | • Wasn't intuitively obvious about how to log on. Had to call support. Our virtual appointment was interrupted in the middle of apt and had to reconnect. • Everything was great and we were glad not to spend five hours driving back and forth that day! |

CONCLUSIONS

- This study found no differences in any patient experience survey measure top-box scores between telehealth and in-person visits in either year.
- This illustrates that categorical satisfaction scores are minimally sensitive to the care delivery method if the cohort of providers and the organizational policies are the same.
- Therefore, qualitative remarks are important for identifying care process issues, especially when processes change, the learning curve matures, and categorical measures become less sensitive.
- These findings have implications for practice, as it is important not to review quantitative survey results in isolation.
- The patients' comments provide rich detail on improving the quality of the patients' experiences.
- In addition, we found that patient issues differ across visit types; in-person triggers are related to personal interactions, while video visits trigger technical annoyances.

REFERENCES

1. Mehrotra, A., Cherner, M., Linetsky, D., Hatch, H., Cutler, D., Schneider, E. (2021). The impact of COVID-19 on outpatient visits in 2020: Visits remained stable, despite a late surge in cases. Commonwealth Fund. Available at: <https://www.commonwealthfund.org/publications/2021/feb/impact-covid-19-outpatient-visits-2020-visits-stable-despite-late-surge>
2. Ramaswamy, A., Yu, M., Drangsholt, S., Ng, E., Culligan, P., Schlegel, P., Hu, J. (2020). Patient satisfaction with telemedicine during the COVID-19 pandemic: Retrospective cohort study. *Journal of Medical Internet Research*, 22(9): e20786.
3. Creswell JW, Clark VLP. *Designing and conducting mixed methods research*. Third ed. Sage; 2017:520.
4. AHRQ. Analyzing CAHPS Survey Data. Accessed 06-21-2023, <https://www.ahrq.gov/cahps/surveys-guidance/helpful-resources/analysis/index.html>
5. HCAHPS. A Note About HCAHPS "Boxes". Centers for Medicare & Medicaid Services. Accessed 10-17-23, <https://www.hcahpsonline.org/en/summary-analyses/>
6. AHRQ. Six Domains of Healthcare Quality. AHRQ. Accessed 6/19/2023, 2023. <https://www.ahrq.gov/talkingquality/measures/six-domains.html>