

A Virtual Communication Workshop to Increase Confidence Using Telehealth Modalities

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ABSTRACT

Introduction: COVID-19 ended in-person communication training workshops at our institution, so we sought to provide a way for family medicine residents to hone their telephone and audio-visual skills online.

Methods: We developed a 2-hour online workshop where residents practiced delivering serious news to family members via telephone or videoconferencing call and measured participant confidence via pre-, post-, and 6-month surveys.

Results: Participant confidence in delivering serious news via telephone and videoconferencing increased. Sustained confidence at 6-month follow-up was not confirmed.

Discussion/Conclusions: Offering an online opportunity to practice delivering serious news by telephone or videoconferencing call appears to be a successful way to bolster confidence. Participants found using realistic scenarios and discussion of best practices most helpful.

INTRODUCTION

Physician-patient communication has been tied to measurable outcomes, such as patient satisfaction, adherence to treatment plans, and clinical outcomes.¹⁻³ Additionally, interpersonal and communication skills comprise 1 of the 6 core domains of physician competency as determined by the Accreditation Council for Graduate Medical Education (ACGME).⁴

An important part of family medicine residency training is advancing communication skills as guided by the ACGME. While

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many of these skills are honed over time through observation and practice, communication skills workshops have become common in residency training to address communication skills deficits and to prepare residents for future clinical encounters.^{5,6}

Since 2016, Mayo Clinic Health System in Northwest Wisconsin has collaborated with the University of Wisconsin-Eau Claire to hold quarterly daylong Palliative Care Communication Workshops for various health care team members, including family medicine residents, to practice difficult communication assignments in the safe setting of small groups. These work-

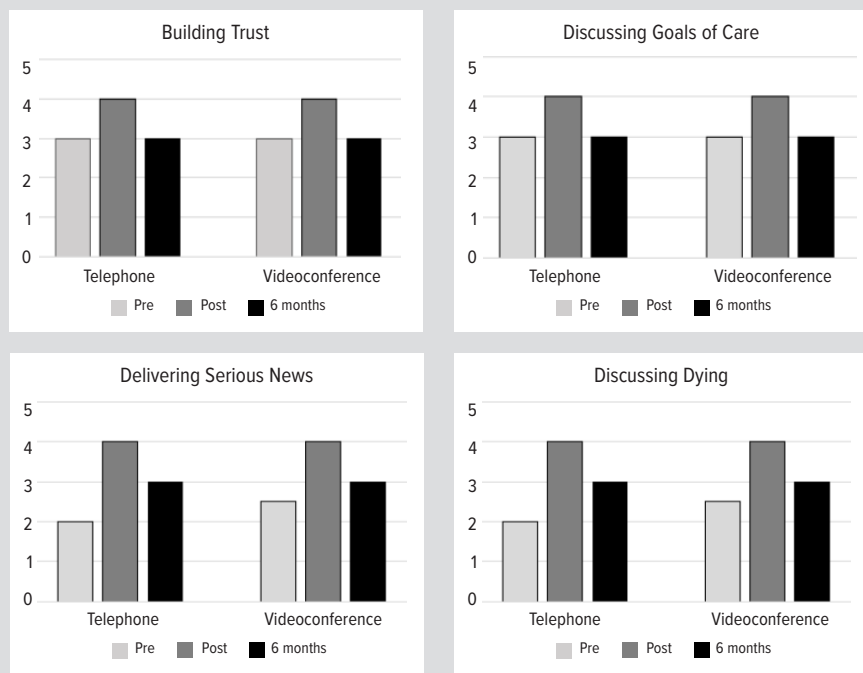
shops traditionally resulted in increased confidence among attendees in navigating challenging health care conversations.

Since safety protocols resulting from the COVID-19 pandemic suspended this in-person training, we wondered if similar confidence could be developed through a synchronous online classroom experience. To our knowledge, at the time of our study, there were no communication programs that taught phone and video skills online. Since then, there have been a few other pilot studies⁷⁻¹⁰ and some adaptation of tools to deliver bad news via remote modalities.^{11,12} In sharing our experience, we hope to promote development of other communication education.

METHODS

We developed a 2-hour workshop using the Zoom video communication platform where residents practiced delivering serious news to family members via telephone or videoconference. Each workshop hosted up to 4 participants to mimic the small group nature of an in-person session, and participants completed role-plays and discussions about 4 different challenging

Figure. Median Scores of Participants' Self-reported Confidence Performing 4 Tasks by Telephone or Videoconference Pre, Post and 6 Months Following Communication Workshops



follow-up survey was administered with Qualtrics XM (Experience Management Company, Provo, Utah) using a slightly different 5-point confidence scale (1 = not at all, 2 = somewhat lacking, 3 = neither confident nor not confident, 4 = somewhat confident, and 5 = extremely). To compare across all 3 surveys, we mapped “neither confident nor not confident” (score = 3 in the third survey) to “a little confident” (score = 2 in the first 2 surveys), and “somewhat confident” (score = 4 in the third survey) to “somewhat confident” (score = 3 in the first 2 surveys). Median confidence scores reflect the consensus confidence of the participants. Given the small sample in this pilot study, the analysis is limited to describing the general trends.

In all 3 surveys, participants were asked to respond to open-ended questions about what aspects of managing care by phone/video they found most challenging. In the third survey, participants also were asked what components of the Palliative Care Communication Workshop were the most helpful in advancing their communication skills for providing care by phone/video visits.

Table. Friedman’s Analysis of Variance of Participants’ Self-reported Confidence on 4 Tasks by Telephone and Videoconferencing Across 3 Times (Before, After, and 6 Months Following Communication Workshop)

	χ^2 Statistic	P value
Building Trust		
Telephone	9.33	.01 ^a
Videoconference	9.08	.01 ^a
Delivering Serious News		
Telephone	7.58	.02 ^a
Videoconference	9.75	.01 ^a
Discussing Goals of Care		
Telephone	5.25	.07
Videoconference	7.58	.02 ^a
Discussing Dying		
Telephone	9.75	.01 ^a
Videoconference	9.75	.01 ^a

^aP < .05.

RESULTS

All 12 resident participants completed pre- and post-surveys, while 6 returned the 6-month follow-up survey. The trends in residents’ confidence performing communication tasks are shown in the Figure. Before the workshop, participants were “somewhat confident” in their skills establishing trust and discussing care goals by phone and videoconference but were less confident about delivering serious news or discussing end-of-life issues regardless of communications modality. Immediately after the workshop, confidence increased substantially, and most participants were “fairly confident” about their ability to perform all 4 tasks either by phone or videoconference. Six months later, confidence levels in the 6 respondents returned close to their pre-workshop levels across all tasks.

Comparison of the repeated measures was performed using Friedman’s analysis of variance. Differences across the 3 times (before, after, and 6 months following the communication workshop) showed a statistically significant increase for 7 of the 8 measures (Table).

All 3 surveys asked the residents to list the most challenging aspects of managing health care by telephone and by videoconference. Lack of nonverbal communication cues, time management, technical difficulties, and establishing rapport and trust were most frequently mentioned.

tion tasks—establishing trust, discussing goals of care, delivering serious news, and discussing dying. The Appendix contains an overview of the curriculum.

Assessment was conducted with pre-, post-, and 6-month follow-up surveys. The pre- and post- surveys were administered with REDCap Version 10.6.14 (Vanderbilt University, Nashville, Tennessee) using a 5-point confidence scale (1 = not at all, 2 = a little, 3 = somewhat, 4 = fairly, and 5 = very) for 4 tasks across 2 different communication modalities (telephone and videoconferencing). Due to an institutional change in software, the 6-month

The 6-month survey also asked what components of the workshop were most helpful. The most frequent responses were practicing the skills via the mock scenarios and discussing best practices.

DISCUSSION

Results indicate increases in participant confidence in establishing trust, discussing goals of care, delivering serious news, and end of life via phone and video encounters immediately after our online communication skills workshop. Participants identified that actual application of skills in realistic scenarios and discussion of best practices were the most helpful aspects of the workshop. Six months later, postworkshop confidence levels in the 6 respondents were not maintained. This finding may be due in part to temporal degradation of confidence in clinical skills, the different wording of the Likert scale in the 6-month survey, or the lower frequency of needing to engage in these conversation topics via virtual encounter as a family medicine resident. Degradation of clinical skills in medical learners has been seen as early as 12 weeks after given training for that skill.¹³

The COVID-19 pandemic accelerated the transition to telephone and video health, which can pose communication challenges. Creating strategies to improve clinicians' confidence and competence in conveying warmth, caring, sincerity, and validation by phone and video can lead to better therapeutic relationships with patients.¹⁴

The small sample size of this study limits the ability to draw more robust conclusions. Additionally, the variations in the survey scale, the change in surveying software, and the low response rate for the 6-month follow-up limit the direct comparison of data to measure longer-term outcomes.

Future work could include a larger number of participants and participants across different specialties to allow for more robust statistical analysis and generalizability. Using additional follow-up surveys at various intervals after the workshop would be informative to assess the rate of confidence decay. Further work exploring the rank order of the perceived challenges uncovered here could help identify what additional training is needed.

CONCLUSIONS

Overall, offering an online opportunity to practice delivering serious news to loved ones by telephone or videoconferencing appears to be a successful way of conveying principles of effective communication and bolstering resident short-term confidence.

Delivering serious news—a difficult skill even when done in person—can be more difficult when limited to a virtual encounter by phone or video. This pilot study demonstrated the value and feasibility of teaching residents to deliver difficult news using phone/video, as well as demonstrating the need for additional training.

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Appendix: Available at www.wmjonline.org.

REFERENCES

1. Zachariae R, Pedersen CG, Jensen AB, Ehrnrooth E, Rossen PB, von der Maase H. Association of perceived physician communication style with patient satisfaction, distress, cancer-related self-efficacy, and perceived control over the disease. *Br J Cancer*. 2003;88(5):658-665. doi:10.1038/sj.bjc.6600798
2. Brown MT, Bussell J, Dutta S, Davis K, Strong S, Mathew S. Medication adherence: truth and consequences. *Am J Med Sci*. 2016;351(4):387-399. doi:10.1016/j.amjms.2016.01.010
3. Zolnieriek KB, Dimatteo MR. Physician communication and patient adherence to treatment: a meta-analysis. *Med Care*. 2009;47(8):826-834. doi:10.1097/MLR.0b013e31819a5acc
4. Accreditation Council for Graduate Medical Education. Family Medicine Milestones. 2019:1-26. Accessed March 24, 2024. <https://www.acgme.org/globalassets/pdfs/milestones/familymedicinemilestones.pdf>
5. Morgan ER, Winter RJ. Teaching communication skills: an essential part of residency training. *Arch Pediatr Adolesc Med*. 1996;150(6):638-642. doi:10.1001/archpedi.1996.02170310072013
6. Dedy NJ, Bonrath EM, Zevin B, Grantcharov TP. Teaching nontechnical skills in surgical residency: a systematic review of current approaches and outcomes. *Surgery*. 2013;154(5):1000-1008. doi:10.1016/j.surg.2013.04.034
7. Collini A, Parker H, Oliver A. Training for difficult conversations and breaking bad news over the phone in the emergency department. *Emerg Med J*. 2021;38(2):151-154. doi:10.1136/emered-2020-210141
8. Edwards S, Keillor L, Sandison L, Millett A, Davies F. Time-critical telephone conversations in the emergency department: lessons learnt from a pilot educational project to improve communication skills over the telephone in response to the COVID-19 global pandemic. *Emerg Med J*. 2022;39(9):712-715. doi:10.1136/emered-2020-210481
9. Rivet EB, Cholyway R, Edwards C, et al. Video-mediated breaking bad news simulation. *Clin Teach*. 2021;18(4):424-430. doi:10.1111/tct.13387
10. Rivet EB, Edwards C, Lange P, Haynes S, Feldman M, Cholyway R. Telehealth training for surgeons to empathetically deliver bad news via video-mediated communication. *Am Surg*. 2023;89(3):440-446. doi:10.1177/00031348211030458
11. Sobczak K. The "CONNECT" protocol: delivering bad news by phone or video call. *Int J Gen Med*. 2022;15:3567-3572. doi:10.2147/IJGM.S358723
12. Vitto C, Del Buono B, Daniel L, Rivet E, Cholyway R, Santen SA. Teaching toolbox: breaking bad news with virtual technology in the time of COVID. *J Cancer Educ*. 2022 Oct;37(5):1429-1432. doi:10.1007/s13187-021-01975-7
13. Fisher J, Viscusi R, Ratesic A, et al. Clinical skills temporal degradation assessment in undergraduate medical education. *J Adv Med Educ Prof*. 2018;6(1):1-5.
14. Kim SS, Kaplowitz S, Johnston MV. The effects of physician empathy on patient satisfaction and compliance. *Eval Health Prof*. 2004;27(3):237-251. doi:10.1177/0163278704267037

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