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Evaluating the Implementation of a Relationship-Centered Communication Training for Connecting With Patients in Virtual Visits

Rachyl Pines, PhD[1], Marie C. Haverfield, PhD[2], Stephanie Wong Chen, MHA[1], Ethan Lee[1], Cati Brown-Johnson, PhD[3], Merisa Kline, MHA[1], and Barbette Weimer-Elder, RN, PhD[1]

Abstract

The use of telehealth, specifically virtual visits, has increased and adoption continues. Providers need effective training for how to communicate with patients to develop a connection during virtual visits. This article describes the implementation and evaluation of a course called *Mastering Presence in Virtual Visits*. Results show that although providers perceive lack of time, technology issues, and lacking experiential knowledge as barriers to enacting course behaviors, the course was feasible and acceptable. Following the course, providers rated key course behaviors as helpful for practice, and 80.7% of providers were likely to recommend the course to a colleague. The course shifted provider perceptions of the purpose, patient experience, and procedures in virtual visits. Prior to the course, providers perceived virtual visits as fundamentally different than in-person visits. However, after the course, they recognized the importance of connection in virtual visits and how to foster that connection. Providers continue to require support in conducting high-quality virtual visits. Online, asynchronous courses, developed in partnership with providers, are feasible and effective for encouraging behavior change. **Key findings:** When asked on a needs assessment in 2020, communication strategies to connect with patients in virtual visits were a top provider need. Partnering with providers to create online, communication training content is effective for increasing the acceptability of courses about virtual visits. Asynchronous, online courses can meet provider needs for communication strategies to connect with patients in virtual visits.

Keywords

patient–provider communication, quality improvement, telehealth, virtual visits, relationship-centered communication

Introduction

Telehealth became the primary medium for providing patient care during COVID-19. For example, at Stanford Health Care, in March 2020, virtual visits occurred at rates 50 times higher than in previous months with ~3000 virtual visits per day.[1] Shifting to telehealth created challenges including access to technology, navigation of online interfaces, new check-in procedures, privacy, and relational concerns.[2] The increased use of telehealth required providers to adapt and explore new ways to connect with patients to avoid potential depersonalization of the care experience.[3] Adoption of telehealth continues with Stanford Health Care conducting ~53 000 virtual visits in fiscal year 2023, demonstrating the importance of feasible and effective training for providers on how to communicate with patients in virtual visits.[4,5]

This quality improvement project describes the implementation and evaluation of a telehealth visit course called *Mastering Presence in Virtual Visits*, offered by the Physician Partnership Program (PPP) at an academic medical center. The PPP offers a

[1] Department of Patient Experience, Physician Partnership Program, Stanford Medicine, Palo Alto, CA, USA
[2] Department of Communication Studies, San José State University, San Jose, CA, USA
[3] Evaluation Sciences Unit, Stanford Medicine, Palo Alto, CA, USA

Corresponding Author:
Rachyl Pines, Department of Patient Experience, Physician Partnership Program, Stanford Medicine, 300 Pasteur Drive, Palo Alto, CA 94305-5101, USA.
Email: rpines@stanfordhealthcare.org

series of communication courses and coaching services that incorporate the relationship-centered communication (RCC) guidelines offered by the Academy of Communication in Healthcare, and develops a curriculum based on provider needs using the ALPS model of organizational change that occurs in 4 phases labeled *Ask*, *Listen and Learn*, *Partner*, and *Study, Synthesize and Support (ALPS)*.[6] The impetus for the *Mastering Presence in Virtual Visits* course resulted from a needs assessment in 2020 where providers were *asked* about their communication needs. Of the almost 300 respondents, providers identified communication in virtual visits as their top need for communication training, describing challenges with relationally connecting with patients. PPP engaged in *listening and learning* by developing an evidence-based, interactive online course that introduces providers to strategies that foster connection with patients during a telehealth visit and encourages providers to reflect and engage with the strategies to facilitate adoption in practice.

Aligned with the ALPS model, provider feedback was gathered before and after the course to identify opportunities for quality improvement. This article (1) describes provider perceptions of goals and barriers to engaging with specific communication behaviors relevant to course content; (2) examines course feasibility and acceptability in the form of likelihood to recommend, helpfulness of course communication strategies, and relevance; and (3) explores the perceived impact of course including adoption of new skills and insights related to telehealth versus in-person visits.

Design and Method

Development of the workshop occurred in *partnership* with providers and leveraged two evidence-based frameworks. The first framework, Tele-Presence 5 was adapted from *Stanford Presence 5* in the transition to telehealth at the beginning of the COVID-19 pandemic.[7] Tele-Presence 5 leveraged rigorous approaches taken to derive the Presence 5 practice including systematic literature review[8]; design thinking interviews with analogous professionals[9]; qualitative interviews with clinicians[10]; observations of patient visits, and expert Delphi panel and clinician input via surveys, interviews, and focus groups.[11] Tele-Presence 5 framework emphasizes: prepare with intention (eg, pausing between back-to-back visits); listen intently and completely (eg, communicating listening through facial expressions); agree on what matters most (eg, reassuring patients that you are there for them, despite the virtual nature of the interaction); connect with the patient's story (eg, inviting the patient to comment on visible personal items); and explore emotional cues (eg, pausing and putting hand over heart as appropriate).

The second framework, RCC, is integrated within each module according to the behaviors recognized by the Academy of Communication in Healthcare.[12] RCC behaviors include PEARLS©, which stands for partnership, emotion, apology, respect, legitimation, and support. PEARLS© offer providers a guide for how to recognize, acknowledge, and validate patients' emotions. Setting the agenda involves eliciting patient concerns and provider visit priorities. Towards the end of the visit, providers are encouraged to practice ART© loops or ask respond, tell, to assess patient understanding of the after-visit plan. Providers are also introduced to teach-back methods which involve encouraging the patient to reiterate the plan to reconfirm patient understanding. See Figure 1 for a visual representation of frameworks.

Partnering involved provider interviews across a range of specialties about their strategies to connect with patients during virtual visits and gathering feedback on course content before implementation. Interview content was integrated into the five-module course, offering a peer-to-peer resource during the training. Each module focuses on one of Tele-Presence 5 practices.[7] The online course is asynchronous, with the option to pause and save progress and revisit content at any time to accommodate busy schedules. The structure of each module is as follows: (a) prompt providers to reflect on their current communication behaviors, (b) introduce research and outcomes associated with the practice, (c) display patient quotes (*partner*) to convey the patient perceived impact of the practice, (d) identify challenges to engage in a particular practice, (e) review recommended strategies to help facilitate adoption of communication behaviors, (f) provide peer insights via video of high-performing telehealth providers who describe challenges experienced and strategies used to engage with the practice, and (g) evaluate provider knowledge through a Coach's Corner.

Procedures

For this quality improvement project (#70904), prior to the workshop, providers completed an optional pre-course survey which included a series of open-ended and Likert scale questions regarding anticipated barriers to implementing new behaviors. After course completion, providers completed an optional post-course survey to determine course feasibility, acceptability, and perceived impact of the course on provider behavior.

Data Analysis

Analysis of qualitative data was conducted using inductive coding in Microsoft Excel. The analysis began by examining barriers to engaging in six specific course behaviors. Only those participants who rated their engagement in the behavior as less than "Half of the time" were asked to provide an open-ended response regarding perceived barriers to that behavior. Erroneous answers, such as "very interesting," were excluded from the analysis.

Analysis of barriers to behaviors was focused on one to two behaviors per week until all six were completed. SW and EL began by coding barriers to four behaviors individually, and then shared findings during weekly team meetings to gauge

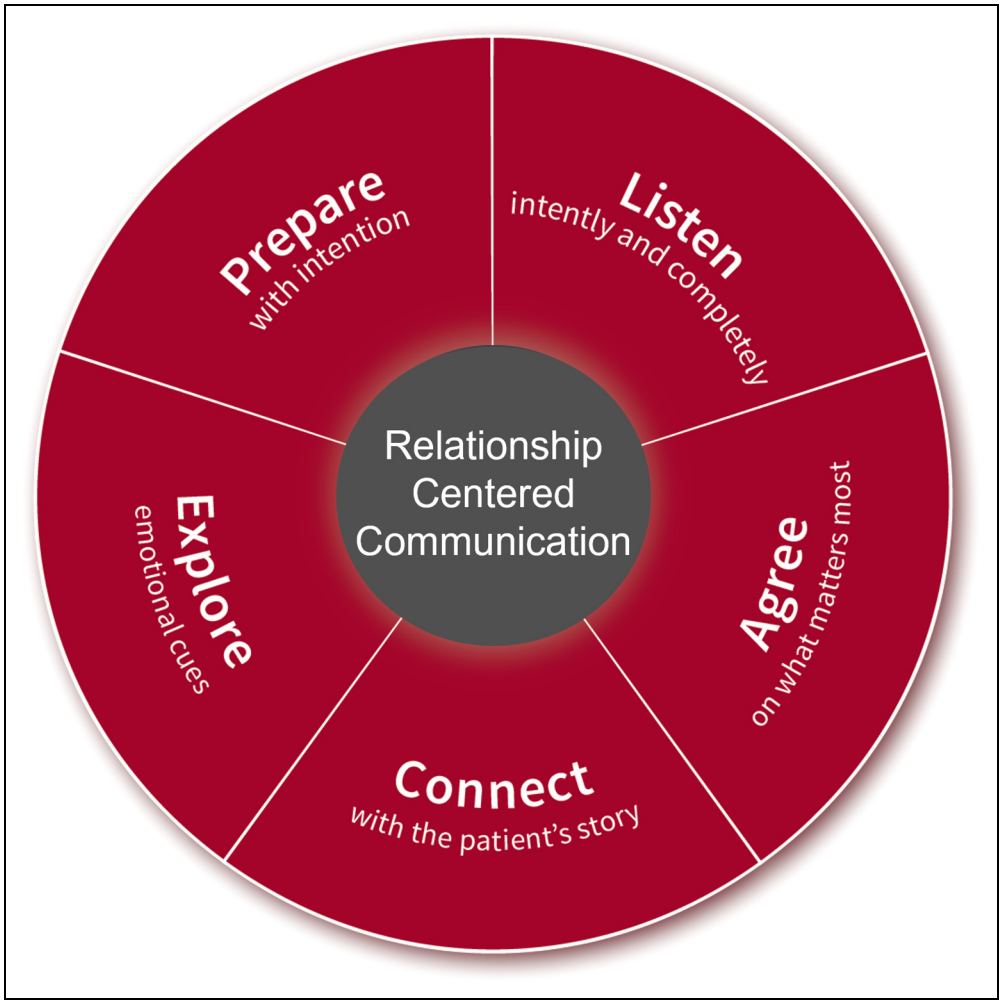

Figure 1. Connecting to build a presence in virtual visits through a relationship-centered framework.

accuracy and similarity. EL coded the remaining two behaviors individually and shared the results with RP to ensure rigor. Lastly, EL coded up a level of abstraction to identify commonalities and differences within and between behavior barriers and larger conceptual themes that encapsulated all behavior barriers.

Results

A total of 321 Stanford providers completed the *Mastering Presence in Virtual Visits* course between January 1, 2021, and July 1, 2023. Of them, 62.8% (n = 123) were women, 35.2% (n = 69) were men, 84% (n = 163) were clinical faculty, 57.1% (n = 108) were outpatient providers, and 34.9% (n = 66) report providing care in both inpatient and outpatient settings,[a] and a median 10 hours per week providing virtual visits (SD = 19.48).

Goals and Barriers

Prior to the course, providers were asked about their hopes for the course. Among the 168 providers that responded, the most common response was wanting to learn something new (n = 32). Other common responses were to improve some skills in general. For example, "To improve upon what I do and to learn some techniques with this new way of patient care" (n = 29). Other responses were more specific to a course objective (co-create the agenda, n = 20; increase efficiency, n = 20) or one of the Tele-Presence 5 skills (n = 6) such as stating they hoped to "prepare with intention." However, providers were also asked to describe anticipated barriers to engaging in behaviors taught by the course.

Lack of Time. The first and most common barrier was a lack of time for both the provider and the patient. Providers described being "over-scheduled" and only having 15 min available per visit. This compressed schedule often caused a ripple effect where one provider described, "I am running late and trying to wrap up the visit to go to the next patient." Providers also noted that patients tended to schedule virtual visits because they were less likely to have the time to spend on an in-person visit and were often juggling other tasks like work and childcare. Providers perceived that

these barriers led to rushed visits where efficiency was prioritized over connection.

Technology Issues. Time pressures were often exacerbated by technology issues, which is the second common barrier. At times, providers felt more rushed because they needed to complete the visit before some technology issue cut it short. They prioritized the medical issue at hand over trying to form an emotional connection. Providers described challenges with "the technology available, and patients' access to the internet." They also described patients or themselves being unfamiliar with the technology, or barriers to physical contact for physical exams or emotional connection. One provider said, "HUGE tech challenges and HUGE FRUSTRATION with the technology/patients asking to do phone visits."[b] Beyond struggling with connectivity and interface issues, providers also juggled different screens during visits to type notes, meaning they could not always see the patient while interacting with them. One provider described, "I switch screens to check labs, studies and notes from other specialists, so I may not be looking at the patient all the time during the visit."

Experiential Knowledge. Some providers reported lacking practice or awareness as the barrier to engaging in course behaviors. Providers either did not know about the behavior at all, or did not know how often they engaged in that behavior because they were not self-monitoring. This unfamiliarity led to providers feeling behaviors were "forced and artificial," and therefore were less likely to implement behaviors. One provider said, "sometimes I find it awkward to ask the patient to repeat back. I need to get over that." Others did not seem opposed to implementing the behaviors, and stated the barrier was that they were, "Just not in the habit of doing it in general."

Implicit Bias. Lastly, providers made assumptions about patients, which inhibited providers from establishing connections. Patients were characterized in many ways including that they already would understand visit instructions. Providers also often assumed they knew what a patient was thinking or feeling, especially if it aligned with their clinical goals for the visit. One provider described a barrier to co-creating the visit agenda to be that they already had "shared assumptions with patients that they will express their goals." Others reported relying on intuition to work best with patients, stating for example, "I rely on my intuition to help me. Patient has a good understanding."

Feasibility and Acceptability

The post-course survey asked providers how likely they were to recommend the course, the helpfulness of the Tele-Presence 5 PLACE tools, and the perceived relevance of the course. Among participating providers, 80.7% (n = 121) gave a Top Box score for likelihood to recommend the course, which meant most providers were "extremely likely" to recommend the course to a colleague. Providers also found the Tele-Presence 5 framework to be helpful to their practice (see Table 1).

Following the course, providers were asked how the course could be made more relevant. Common positive responses included that, "All were very relevant" and "Appropriate course to cover multiple provider specialties." Providers also shared constructive feedback including that the course would be better with more realistic examples. Examples of this feedback included, "try to show how you do it in 15 min visit," "showing some actual patient examples on how to re-direct to agree on what matters most," and "I would have loved to hear more examples of different phrases/methods re: setting the agenda—when the peers gave examples how they do/phrase certain items, or exhibit nonverbal cues for the patient's benefit, I found those examples helpful." Others provided feedback about timing of the course saying, for example, "it was hard to focus after a full day of patients. Doing small snippets at lunchtime would be more useful." Many providers also desired some content and assistance on self-care. One provider said, for example, "I need help with not feeling overwhelmed and with taking care of myself."

Perceived Impact

After the course, participants were asked to reflect on what they thought before the class, and then how that perception changed, if at all ("Before I thought … Now I know …," n = 99). Most people responded with a recognition for improvement in their communication skills with patients during telehealth visits. One provider said, "Before I thought … I was doing a good job connecting with patients during video visits. Now I know … I was only so so—a lot more deliberate thought and actions need to occur on my

Table 1. Helpfulness of Tele-Presence 5 Framework.

Tele-Presence 5 framework course content	n	Topbox Score	Mean (max 5)	Std. Dev
Prepare with intention	149	43.6% (n = 65)	4.19	0.86
Listen intently and completely	149	47.0% (n = 70)	4.28	0.81
Agree on what matters most	149	42.3% (n = 63)	4.19	0.87
Connect with the patient's story	148	43.9% (n = 65)	4.26	0.77
Explore emotional cues	148	43.2% (n = 64)	4.23	0.81

part to make the most out of the interaction." Relatedly, many providers recognized the worth of the course, noting that the course could help them enhance their care delivery. One provider stated, "Before I thought … Another useless meeting. Now I know … There is always room for improvement." Others stated specific ways that they intend to improve their skills following the course. One way providersplanned to improve was to better prepare with intention and reduce rushing between visits. Providers reflected that this would help with their self-care. Some providers said that although their reflection did not change, taking the course affirmed their skills. One provider said, "Before I thought … I am fairly skilled at video visits. Now I know … I have the skills needed to do video visits."

Providers were also asked about what behaviors they were committing to practice (n = 114). The most common responses were preparing with intention, listening, co-creating the agenda or agreeing on what matters most, and exploring and responding to emotions. To further encourage the practice of learned behaviors, learners were invited to sign up for one-on-one coaching. Thirteen people signed up for coaching following the completion of the course.

Notably, 12 participants' responses reflected ways that the course shifted their conceptualization of connection in a virtual visit. These respondents stated ways that they thought the purpose, patient experience, and procedures in virtual visits were fundamentally different than in person. However, after the course, they recognized the importance of connection in a virtual visit and how they could foster that connection. One provider said, "Before I thought … Virtual visits is mostly provider-driven. Now I know … Virtual visits is an interaction; effective virtual visits involve preparation and participation of both provider and patient."

Discussion

This quality improvement project occurred in the *Study* component of the ALPS model to assess impact, which enables the *Synthesis* of findings and *Support* to evolve and advance communication training curriculum.[6] Evaluation results of implementing the *Mastering Presence in Virtual Visits* course suggest course acceptability and value to providers despite perceived barriers to engaging in course behaviors. Specifically, providers stated that they were committing to practice many of the Tele-Presence 5 behaviors consistent with the pre-course survey communication behaviors, suggesting that providers see new opportunities for engaging in RCC behaviors in telehealth visits.

In addition to the impact on behaviors, results demonstrate ways to continue to improve the course to meet provider needs. Providers offered constructive feedback to enhance course curriculum and structure including, incorporating patient–provider virtual visit vignettes that demonstrate enactment of behaviors across varying visit lengths, and including more peer insight videos that illustrate how a provider communicates with a patient, both verbally and nonverbally. This may increase provider self-efficacy and the adoption of different skills. Feedback about the length of the course presents some possibilities for future course design. Setting expectations for course pace at the start of the course, such as encouraging providers to stop whenever they feel tired or overwhelmed by course content, or dividing the course into multiple, smaller components may help to mitigate perceived burden. Adding a brief module that emphasizes self-care and how to be mindful of this before, during, and after care delivery could also extend the applicability of the training and support provider needs.

In addition to course improvements, findings add to the growing body of literature on training for communication in virtual visits for medical students[13] and training tailored for specific care settings (ie, virtual surgical consults,[14] maternal, and child health telephone visits[15]). Although many communication courses are transitioning to delivery via telehealth, showing promising results,[16] fewer courses focus on communication specific to fostering connection via virtual visits across a range of visit types. *Mastering Presence in Virtual Visits* offers strategies for fostering connection in virtual visits across disease areas and visit types, using an evidence-based theoretical framework.[7]

Limitations

This project has limitations. This course occurred with providers at one academic medical center which may differ from others. Also, the length of time spent and actual engagement in the course was not captured due to the limitations of the learning management system. This demonstrates the importance of robust systems for assessing the impact of asynchronous learning. Although post-course surveys produced helpful insights about self-reported intended behavior change directly following the course, future projects should use observational and longitudinal data to determine provider behavior change. Similarly, because this was not a randomized controlled trial, we cannot know if provider behavioral intention changes are due only to completing this course. Finally, future work should assess the impact of course implementation on patient-reported virtual visit experiences.

Practical Implications

Virtual visits remain an important modality for care access, particularly for under-resourced patient populations.[17] Trainings prepare providers to connect with patients during virtual visits. Results demonstrate that this course is effective for increasing awareness and promoting the adoption of RCC behaviors to bolster connection.[12] Further, this course can be adapted to diverse patient population characteristics and healthcare needs. For example, disease/diagnosis-specific modules, or modules for engaging in cultural humility, can be added to continue to improve provider skills and the

patient–provider relationship.[18] Broadly, it is feasible and acceptable for providers to implement this course in an online learning management system. Providers find the course to be valuable; it addressed expressed needs for communication strategies to connect with patients during virtual visits.

Conclusion

As telemedicine use has increased and sustained since the COVID-19 pandemic began, providers need continued support and training on how to connect with patients in virtual visits using evidence-based communication strategies. To support providers in these needs, PPP implemented the *Mastering Presence in Virtual Visits* course. Analysis of pre and postsurvey data from course participants indicated that they find the course useful and helpful, and provide feedback for continued improvement of course content and delivery.

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Consent Statement

Not obtained nor required. There were no patient participants in this project.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Ethical Statement

This initiative was deemed a Quality Improvement project by the Stanford University IRB (#70904). As such, no consent was required, and we are permitted to publish it. However, this work should be referred to as a project or initiative.

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ORCID iD

Rachyl Pines https://orcid.org/0000-0002-7847-4666

Notes

a. Percentages are reported as valid percent due to the survey being optional and missing data.
b. Capital letters were used in the original written response.

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