Effect and Durability of an In-depth Training Course on Physician Communication Skills

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ABSTRACT

Introduction: Effective clinical communication skills are integral to a successful and therapeutic clinician-patient relationship and are associated with improvement in adherence, outcomes, and lower medicolegal risk. However, in stark contrast to other clinical and cognitive skills, practicing physicians generally receive little ongoing training or assessment of individual performance in communication.

Objectives: To assess the effect of an in-depth physician communication course on patients’ perception of clinician skill in communication.

Methods: We analyzed the effect of a 3-day dedicated course on clinical communication skills among 65 clinicians assessed by a randomized patient survey.

Results: Patients were significantly more satisfied with their physician on 6 specific communication skills after the physician received the Communication Skills Intensive training. The effect persisted at 12 months’ follow-up. In addition to the improved patient satisfaction scores, attendees stated that they learned many practical communication skills and valued the course.

Conclusion: Health systems looking to improve patient demands, high medical complexity, financial communication. Modern practices are faced with time constraints, and reduced visit times can threaten the effectiveness of clinician communication skills. The consequences of workload compression are associated with improvement in adherence, outcomes, and lower medicolegal risk. However, in stark contrast to other clinical and cognitive skills, practicing physicians generally receive little ongoing training or assessment of individual performance in communication.

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Conclusion: Health systems looking to improve patient satisfaction, adherence, and outcomes need to consider focused training, resources, and time for practitioners to engage in a communication skills intensive course.

INTRODUCTION

Effective clinician-patient communication is fundamental to building a therapeutic relationship,1–2 enhancing diagnostic accuracy,3 improving both physician and patient satisfaction,4–5 reducing burnout,6 and mitigating medicolegal risk.7,8 Well-established clinical communication skills include a warm greeting and introduction, eliciting the patient’s perspective, demonstrating empathy, active listening, delivering an appropriately detailed explanation, and shared decision making. These skills are key components of many commonly used communication models such as the Four Habits (invest in the beginning, elicit the patient’s perspective, demonstrate empathy, and invest in the end),8 the E4 model (engaging, empathizing, education, and enlisting),9 ALERT (Always: Listen carefully, Explain understandably, Respect what the patient says, and manage Time perception),10 and ILS (Invite, Listen, Summarize).11

Although attention to clinical communication is now common in many medical school and residency curricula,12–15 there remains a need for practicing clinicians to refresh and refine their communication skills. The consequences of workload compression and reduced visit times can threaten the effectiveness of clinician communication. Modern practices are faced with time constraints, increasing patient demands, high medical complexity, financial difficulties, and electronic medical record charting. A number of organizations have sought to address and reinforce communication skills for practicing physicians, including university training programs, medical groups, and independent companies. The programs offered run the gamut from online modules and videos, to one-on-one coaching, brief lectures, half-day and full-day classes, and multiday intensive courses. Each of these requires resource allocation, not only for participating in the program itself but also indirect costs from taking clinicians out of the patient care environment for that time. The aim of this study was to assess the effect of an in-depth physician communication course on patients’ perception of clinician skill in communication.

METHODS

Course Description and Study Sample

Kaiser Permanente Colorado offers a biannual Communication Skills Intensive (CSI) course for clinicians wishing to improve their communication by providing them with the opportunity to learn and practice new skills outside the examination room. The Kaiser Permanente Colorado CSI course consists of 3 full days of training among a group of 16 to 20 participants. The course was designed and implemented following a similar program created by Stein using content-based lectures, small-group skills practice with care actors, group feedback, and self-reflection. Participation in the CSI is completely voluntary; although most participants self-selected to participate, a lesser number were encouraged to attend. Absolutely no participants were forced or coerced to join the program, and attendance was never made a condition of employment. The mechanism by which a particular attendee arrived at the course was confidential and not made known to faculty or other participants. The participant-to-faculty ratio was 2:1, which allowed for a high degree of coaching and facilitation.

Participants included for this assessment were 75 clinicians who attended the course between 2010 and 2016. Ten of those clinicians were also in leadership positions and were removed from the analysis because their primary duty was as a leader, not as a clinician, and they therefore received unique training on “Staff
Table 1. Pre- and post-Communication Skills Intensive (CSI) training performance on key communication skill items from Art of Medicine patient survey

<table>
<thead>
<tr>
<th>Communication skill</th>
<th>Sample size (n)</th>
<th>Pre-CSI average (%)</th>
<th>Post-CSI average (%)</th>
<th>t statistic</th>
<th>p value</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall physician interaction</td>
<td>65</td>
<td>73.8</td>
<td>77.0</td>
<td>2.13</td>
<td>&lt; 0.05</td>
<td>0.122</td>
</tr>
<tr>
<td>Courtesy/respect</td>
<td>65</td>
<td>79.6</td>
<td>83.4</td>
<td>3.86</td>
<td>&lt; 0.001</td>
<td>0.0806</td>
</tr>
<tr>
<td>Listening</td>
<td>65</td>
<td>74.9</td>
<td>79.1</td>
<td>3.29</td>
<td>&lt; 0.01</td>
<td>0.1028</td>
</tr>
<tr>
<td>Understanding</td>
<td>57</td>
<td>73.5</td>
<td>77.1</td>
<td>2.66</td>
<td>&lt; 0.05</td>
<td>0.1020</td>
</tr>
<tr>
<td>Explaining</td>
<td>65</td>
<td>73.5</td>
<td>77.4</td>
<td>2.97</td>
<td>&lt; 0.01</td>
<td>0.1054</td>
</tr>
<tr>
<td>Managing fear and anxiety</td>
<td>57</td>
<td>59.6</td>
<td>65.4</td>
<td>2.49</td>
<td>&lt; 0.05</td>
<td>0.1753</td>
</tr>
</tbody>
</table>

* Pre- and post-CSI averages represent percentage of patients providing a 5 (excellent) rating on a 1 to 5 scale (ie, top-box rating).

SD = standard deviation.

Coaching” and “Leadership Conversations.” Thus, 65 participants who attended the CSI training between 2010 and 2016 were included in this analysis. Three (5%) of the 65 clinicians who attended CSI training were physician assistants, and the remaining 62 (95%) were physicians. Forty-four (68%) of the clinicians were from primary care departments (Internal Medicine, Family Medicine, Pediatrics). The remaining 21 clinicians (32%) were medical specialists or surgeons (eg, emergency medicine, gynecology, psychiatry). Twenty-nine (45%) of the clinicians attending the CSI course were men. Years of practicing medicine at Kaiser Permanente ranged from 0 to 27 years, with a mean of 6.27 years and median of 3 years.

**Art of Medicine/Patient Feedback of Clinician Communication**

Patient ratings of clinicians’ communication skills were assessed using a commercial standardized survey (Art of Medicine [AoM], HealthCare Research, Denver, CO). The AoM patient survey collects a minimum of 75 completed surveys per clinician per year. Patients with a recent clinician encounter are randomly selected to complete a brief survey about the clinician on several aspects of their communication (eg, listening, explaining, treating with courtesy/respect, understanding the patient’s concerns, managing fear and anxiety, and an overall interaction rating). Data collection for the AoM program is continuous. The 65 clinicians who completed the CSI course had AoM survey data for the year before and the year after the clinician’s attendance at CSI.

**Data Analysis**

The effectiveness of the CSI training was assessed using paired-samples t-tests before and after the CSI training performance on the AoM patient survey program. Specifically, paired-samples t-tests compared patient ratings of a clinician’s communication effectiveness from the year before the CSI training against ratings from the year after CSI training. Additionally, the annualized pre- and post-CSI training data were aggregated by month across all 65 clinicians who attended CSI training, to compare patterns in monthly performance for the 12 months leading up to and 12 months after training.

**RESULTS**

Six separate paired t-tests were performed comparing pre- and post-CSI training performance on key communication skill items from the AoM patient survey (Table 1). Results from those statistical tests suggest that patients were significantly more satisfied with their physicians on all 6 AoM communication skills questions after CSI training compared with their ratings before attending the CSI training. For example, the average patient rating of “Overall interaction” before training and after training was 73.8% and 77.0%, respectively (Figure 1).

Whereas results from the paired-samples t-test suggest that patient ratings of clinician’s overall interaction was significantly higher after clinicians completed the communication skills training compared with before receiving training, the findings do not indicate the practical effect or clinical importance of the training. Dividing the mean change in overall interaction (3.23%) by the difference in standard deviation between pre- and posttraining (0.122) yields a Cohen d effect size of 0.26. Although t-tests provide an indication of statistical importance (ie, is the change in patient ratings owing to the intervention or is it owing to random chance), the Cohen d effect size quantifies the practical significance of the training. A Cohen d effect size of 0.26 is somewhere between a small and medium effect size. One interpretation of this effect is that the mean patient rating of overall interaction among clinicians who completed training is better than 60% of clinicians before receiving training (ie, at least a 10–percentage point improvement in mean performance between the distribution of scores before and after training). More importantly, a patient’s satisfaction with his/her clinician...
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is related to improved compliance and adherence with treatment plans. Specifically, patient compliance with and adherence to recommended treatment plans increase as patient satisfaction with a clinician increases. Therefore, training programs with even small effect sizes that demonstrate positive impact on patients’ ratings of their physicians could mean the difference, for example, between a patient taking medications as prescribed vs skipping days or discontinuing a medication once visible signs of disease disappear.

The mean performance of the 65 clinicians who completed the CSI course changed from a score of 73.8% before course completion to a postcourse completion score of 77%. This improvement in average performance after completing the communications course resulted in 5 additional clinicians averaging a patient rating greater than 74% a year after course completion (34 clinicians before vs 39 after; Figure 2.)

At the conclusion of each CSI course, attendees were asked to provide anonymous written evaluations pertaining to their experience and learnings. Comments were overwhelmingly positive in terms of practical learnings and perceived value of the program (see Sidebar: Feedback from Attendees of the Communications Skills Intensive Course).

DISCUSSION

A variety of virtual and in-person clinical communication training programs exist, but little is known about their short- or long-term effectiveness, specifically, when it comes to patient ratings of physicians. In 1999, Brown et al19 reported that clinician participation in a 2-day (10-hour) communication skills training program did not improve patient satisfaction ratings on the AoM survey. Although participants’ self-reported ratings of their communication skills increased, the mean AoM score actually improved more in the control group than in the participant group, leading the authors to postulate whether communication skill training programs needed to be longer and more intensive.

Perhaps taking the aforementioned suggestions to heart, Stein16 in 2007 published the results of a 10-year retrospective study looking at the outcomes of a multiday, residential CSI program. Similar to our program, Stein’s residential course required a substantial commitment of time and resources. Participants in both trainings completed prework reading, participated in didactic lectures and group discussion, and then practiced communication skills with highly trained improvisational care actors. Peer feedback and self-reflection were also key components of

![Figure 2. Distribution of 65 clinicians by patient ratings of communication before and after clinicians completed Communication Skills Intensive (CSI) course.](image)
both courses. Stein demonstrated a significant and sustained improvement in Member Patient Satisfaction scores after attendance at her program, concluding that the benefit extended to physicians, patients, and health care organizations.

Fallowfield et al\(^1\) enrolled 160 UK oncologists into a 3-day communication skills training course (using structured feedback, videotape review, role-play with simulated patients, and interactive discussion). They demonstrated significantly improved use of open-ended questions and expressions of empathy but did not specifically monitor actual patient satisfaction. Building on the notion that cancer care physicians need especially good communication skills, Lenzi et al\(^2\) enrolled Italian oncologists in a 3-day intensive workshop also focusing on lectures, small-group work, and role-play. Improvement was seen when the researchers compared before and after questionnaires on practitioners’ self-knowledge of communication skills and assessment of patients’ fears and concerns, but again patient satisfaction scores were not evaluated.\(^2\)

In our study, patient evaluation of specific communication skills was universally improved as a result of the 3-day intensive communication skills course across a range of medical specialties. Our program was not limited to a single specialty communication focus (ie, oncologists only). Perhaps most importantly, the “overall” rating of the physician was statistically significantly higher. This effect was durable and found to persist up to 12 months after the course.

In reviewing the outcomes from these studies, one might wonder why the outcomes seem more robust with the passage of time. Certainly, there has been increased focus on the importance and value of excellent clinical communication skills.\(^2\) Medical schools and residency training programs now place a strong emphasis on clinical communication in their curricula, meaning that physicians are beginning their practices much more skilled in this area. In addition, patient satisfaction with their clinicians’ communication skills has become increasingly publicized, whether in a rigorous reporting format (Consumer Assessment of Healthcare Providers and Systems survey)\(^2\) or more informal Web sites such as third-party reviews and social commentary. Thus, clinicians’ awareness of this critical aspect of their practice has likely increased.

Figure 1 illustrates the statistically significant improvement in patient ratings among clinicians who completed the CSI course. Figure 2 portrays improvement in patient ratings in terms of individual clinician performance. Specifically, 5 additional clinicians exceeded the 74% patient rating threshold after participating in communications training. An examination of the lower-performing clinicians from Figure 2 suggests that 7 clinicians had an average performance below a 60% threshold before training compared with just 1 clinician performing below 60% after completing communications training. Clinical leaders should be encouraged by these findings that otherwise skilled physicians who might struggle with certain aspects of communicating with patients are able to improve that critical aspect of their medical practice. Generalizability of our results to other communication intensive courses would depend on many factors, including participant selection and engagement, course content and design, and faculty quality.

A final question pertaining to these and similarly published results is “So what?” Maybe it is not surprising that taking a group of professionals off-site and equipping them with practical communication skills leads to improved patient satisfaction scores. Perhaps the more important outcomes occur later, indirectly and beyond easily measurable parameters. That patients are statistically significantly more satisfied with their physicians’ communication skills is admirable, but if this effort ultimately leads to improved adherence, better health outcomes, lower malpractice risk, stronger therapeutic alliances, reduced physician burnout, and health care cost savings, then the investment would seem to be more than worth it.

**CONCLUSION**

A 3-day concentrated educational effort to enhance clinician communication skills is an effective method of improving patients’ satisfaction scores with their physician. Patients were significantly more satisfied with clinicians on 6 specific communication skills after training compared with prior results. The effect was persistent at a mean of 12 months of follow-up. Health systems looking to improve patient-reported outcome measures should consider focused training, resources, and time for physicians to engage in an intensive communication skills course.

**Disclosure Statement**

The author(s) have no conflicts of interest to disclose.

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**How to Cite this Article**


**References**


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Uniting Tenderness with Steadiness

Hospital physicians and surgeons should minister to the sick . . . reflecting that the ease, the health, and the lives of those committed to their charge depend on their skill, attention, and fidelity. They should study . . . in their deportment, so to unite tenderness with steadiness, and condescension with authority, as to inspire the minds of the patients with gratitude, respect, and confidence.

— Thomas Percival, 1740-1804, English physician, health reformer, ethicist, and author