CASE REPORT

A model for remote remediation to address communication deficits identified during clinical placement

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Abstract

Clinical case problem: Effective communication is vital for the successful transmission of information and has been attributed to better patient outcomes, patient satisfaction, and patient safety. Deficits in soft skills, such as communication, can be challenging to address due to a lack of standardized remediation strategies. This case report describes a student identified for inadequate communication skills during an intermediate clinical experience. To prepare the student for future clinical experiences, the faculty developed a comprehensive remote remediation plan.

Case description: A four-step remote communication remediation plan was developed and implemented utilizing optimal-fidelity patient simulations. As the remediation occurred during a global pandemic limiting in-person contact, the scenarios were based on telehealth encounters and included faculty debriefing. A challenging communication component was embedded within each simulation. Outcomes including a communication survey to assess verbal and nonverbal skills, student self-reflection, and clinical performance assessment post-remediation demonstrating the transfer of newly acquired skills were used to evaluate the effectiveness of the intervention.

Implications: The remote remediation was effective. Careful planning ensured that all deficiencies were targeted using multiple teaching modalities. This remediation plan may be adapted to target other soft skill development and implemented for formative or remedial training, based on learning objectives and student needs.

MeSH terms: *Communication*; *allied health occupations*; *education*; *simulation training*

Keywords: *Remediation*; *communication*; *remote teaching and learning*; *simulation training*; *case report*

Effective communication is vital for the transmission of information between healthcare stakeholders and has been attributed to better patient outcomes,[1,2] patient satisfaction,[3] and patient safety.[4] Breakdown in communication is a leading cause of sentinel events reported by hospitals.[5] In physical therapy (PT) education, communication has been recognized as one of the essential skills required for entry into the clinical education phase of training.[6–8] The expansion of telehealth sparked by the Covid-19 pandemic highlights the need for effective communication, taking on even greater significance in the virtual therapeutic encounter.[9] Communication is a skill that must be critically evaluated during clinical training programs.

Despite the magnitude of its importance, most health profession programs lack a distinct curriculum for training and objectively assessing communication competency.[10] Within PT education programs, effective communication is commonly learned implicitly as part of the hidden curriculum.[11] Lack of standardized assessments focused on communication skills precludes faculty from formally addressing these deficits.[12] It is often

not until the first clinical experience when inadequate performance in this area is reported.[13] The clinic is a dynamic and unpredictable environment that can challenge students and accentuate underlying deficits that were either overlooked during didactic coursework, or were identified but underestimated in their level of deficit.[14] During clinical placements, Clinical Instructors (CI) who observe poor student communication such as poor body language (i.e. suggesting disinterest), use of medical jargon with patients, and inadequate questioning during patient interviews, report such findings to Directors of Clinical Education (DCE) and document them on the Clinical Performance Instrument (CPI). Once documented, the PT program is charged with implementing supplemental training to address the problem. If the student is unsuccessful in demonstrating effective communication in the clinic, the student may receive a failing grade. Deficits unrelated to hands on skills can be challenging to address, especially with a lack of standardized remediation.[15] Due to the critical impact communication has on patient care, carefully designed learning modules where students' communication skills are assessed with psychometrically sound evaluation measures are warranted.[16] This case report describes a student rated to have inadequate communication skills by the CI mid-way through the clinical placement that did not improve with CI and DCE interventions. To best address deficits and forestall failure and possible dismissal, the faculty developed a unique and comprehensive remediation plan.

Case description

The student demonstrated communication deficits during academic training as well as the student's first clinical placement. Feedback was provided by faculty regarding those deficits, but the severity of those deficits did not rise to level requiring an intervention. It was not until the student began the second (of four) full time clinical experiences in an out-patient setting that a remediation strategy was initiated because of poor CPI ratings and CI feedback. During the midterm assessment of the second clinical experience, the CI reported deficits in the student's verbal and non-verbal communication skills. The student was described as 'timid and soft spoken which didn't match the pace and location of [the] practice', such that it would interfere with effective patient care. Other concerns included the student's lack of eye-contact with patients, an inability to effectively convey important information to patients or to discuss sensitive issues suggestive of red flags (i.e. painful bowel movements, inability to engage in sexual relations). The student also had difficulty transmitting sensitive patient information to the CI including red flags. The student acknowledged the poor

communication skills that negatively impacted the clinical placement and patient care.

During the clinical experience, the DCE and the CI collaborated closely on a plan to foster improvement which included regular student meetings along with written and verbal feedback. Despite these efforts, there was minimal improvement reported on the final CPI. A key deficit noted focused on spontaneous patient discussion and response to unanticipated questions. While the student seemed fairly competent asking pre-determined questions of the patients, areas for improvement included responding to unanticipated questions, initiating follow-up questions on sensitive topics, patient education, and providing feedback during treatment.

Based on the grading criteria for this level of clinical experience, the deficits did not warrant a failing grade. However, the student's clinical performance clearly suggested deficits necessitating formal intervention prior to the next clinical experience. Thus, the DCE designed and implemented a focused, intensive, remediation plan utilizing simulated patient encounters aimed at providing the student an opportunity to improve communication skills. The remediation plan was developed based on available evidence[17] and focused on 1) identifying and targeting specific communication deficits and 2) providing the student with a realistic, supportive, low-stakes environment in which to practice communication skills, reflect on performance, and receive targeted feedback from multiple stakeholders (Table 1).

Remediation plan

A four-step action plan was implemented over a 2-week period that included student engagement in multiple simulated patient encounters. It is important to note that this remediation occurred during the Covid-19 pandemic. This limited opportunities for in-person contact, resulting in remote remediation.

Table 1. Model for remediation with a focus on communication

Objectives	Communication skills
A. Identify specific aspects of the student's communication deficits	**Deficient Skills** • Verbal communication • Nonverbal communication • Cultural competence • Active listening • Synthesizing patient responses • Patient engagement
B. Provide a structured environment to practice communication skills, reflect on performance, and receive feedback from multiple stakeholders	**Action Plan** 1. Pre-simulation tasks (asynchronous) 2. Simulated telehealth visits via Zoom 3. Post simulation tasks (asynchronous) 4. Post simulation debrief via Zoom

Pre-simulation self-study (Step 1)

Pre-simulation tasks were assigned 1 week in advance of the student's first patient simulation. Pre-simulation tasks included completing an online healthcare communication module, viewing an online presentation by a notable researcher discussing practical, evidence-based communications strategies, and reading peer-reviewed articles on the power of communication in healthcare.

Simulation (Step 2)

Two unique simulated cases were developed. The student was provided with instructions and expectations prior to engaging in a 30–45 min simulation with a standardized patient (SP). The case was a telehealth initial visit requiring a clinical interview and was specifically designed to challenge communication skills. Challenges included reluctance on the patient's part to reveal an embarrassing diagnosis or a patient who did not see the value in PT. The simulation was video recorded. The SP was trained in the case, informed of the learning objectives, and advised to only provide information requested by the student. The SP was also trained to hint at case details that might prompt further relevant questioning by the student.

Post-simulation tasks (Step 3)

After each simulation, the post-simulation tasks included reviewing the video recording of the simulation and completing a communication survey.

The student was instructed to conduct a self-analysis of the video recording noting communication deficits (failure to ask follow-up questions, lapses in verbal and non-verbal communication) and communication strengths. The student then reflected upon how the interview could have been improved and how missteps may have influenced the clinical assessment of the case.

In addition, the student and the faculty completed a 14-item survey designed to assess communication skills during a simulation activity. The communication survey was developed by a faculty member of this PT department. Each item is measured on a Likert scale (1 = not competent, 2 = slightly competent, 3 = moderately competent, 4 = very competent). The instrument was undergoing validity testing at the time of the remediation. Reliability data suggest good interrater reliability (intraclass correlation coefficient = 0.78, $P < 0.000$) (unpublished data). Based on preliminary findings as well as the applicability of the survey items to the simulation tasks, it was deemed suitable for use. The survey was completed by the student and two DPT faculty members after each had watched the video recording of the first simulation and the third simulation. All surveys and the student's self-analysis of the video were provided to the DCE in preparation for the post-simulation debriefing (Step 4).

Post-simulation debriefing (Step 4)

Debriefings were conducted by the DCE and the SP via Zoom. A debriefing is a standard step of the simulation experience with the goal of improving future performance. During the debrief, a learning conversation is had between the learner and the faculty when feedback is provided, gaps in performance are identified, and rationale for behaviors during the simulation is explored.[18] The impetus to include the SP in the debriefing process was to offer the student feedback from the perspective of the 'patient'. In preparation for this task, the SP received training in effective debriefing. Each debriefing ranged from 60 to 75 min. The debrief was structured to include a review of the student's self-assessment (Step 3), to challenge the student's decision-making skills based on the case details and concluded with a summary of lessons learned. All debriefings were video recorded for review by the student. After completing the post-simulation debriefings, the student was given the opportunity to repeat the same simulation case and implement the feedback provided. The student chose to repeat one of the simulations plus the associated debriefing, for a total of three simulations/debriefings.

Outcomes

To capture the full impact of the remediation outcome, both quantitative and qualitative data were synthesized. This included faculty and student communication surveys, student reflections, and transfer of skills to clinical practice.

Communication survey

Scores on the communication survey were used to compare student and faculty ratings and to measure change from the first to the third simulation. There was an improvement in student self-rating in all 14 categories. The faculty scoring indicated improvement in 13 out of 14 categories. All post-simulation ratings by the student and faculty were three or higher indicating moderate competency in all 14 items (Table 2). For both faculty and student ratings, the item with the greatest improvement was, 'Eliciting information from a patient who was reluctant to share', with an increase in two points each.

Student's reflection

Comments from the student's self-critique of the recorded simulations suggested an awareness of strengths and limitations in performance. After the remediation, the student reported that it became easier to engage in conversation with the patient and ask appropriate follow-up questions based on the patient's responses, rather than strictly follow a script. In addition, the student noted that during the third simulation, using a slower pace to interview the patient allowed for adequate time to address important

Table 2. Change in survey scores per question

Communication skills	Student 1st Sim	Student 3rd Sim	Δ Student	Average Faculty 1st Sim	Average Faculty 3rd Sim	Δ Faculty
Active Listening	3.00	4.00	1.00	3.00	4.00	1.00
Eye Contact	3.00	4.00	1.00	3.50	4.00	0.50
Empathy	3.00	4.00	1.00	2.00	3.00	1.00
Body Language	4.00	4.00	0.00	2.50	3.00	0.50
Facial Expressions	2.00	3.00	1.00	2.50	3.00	0.50
Perception of Patient Comprehension	3.00	4.00	1.00	2.50	4.00	1.50
Building Rapport	3.00	4.00	1.00	2.50	4.00	1.50
Engaging in Conversation	3.00	4.00	1.00	3.00	3.00	0.00
Eliciting Personal Information	3.00	4.00	1.00	1.50	3.50	2.00
Eliciting Info from a Patient Reluctant to Share	2.00	4.00	2.00	1.00	3.00	2.00
Making the Patient Feel at Ease	3.00	4.00	1.00	2.00	3.50	1.50
Facilitating Patient Comfort	3.00	4.00	1.00	2.50	3.50	1.00
Maintaining Composure	2.00	4.00	2.00	3.00	3.50	0.50
Engaging a Reluctant Patient	2.00	4.00	2.00	2.00	3.50	1.50
Average Scores	2.79	3.93	1.00	2.39	3.46	1.07

Abbreviations: Sim, Simulation; Δ, Change.
Shaded areas signify an increase in post score ≥ 0.50.
Likert scale scoring (1) not competent, (2) slightly competent, (3) moderately competent, (4) very competent.

information and develop rapport. The student perceived that this effort increased the patient's comfort during the clinical encounter, as compared with the initial encounter, which was validated by the SP who reported increased queries on awkward subject matters, attentiveness through nonverbal communication, and demonstrated ease of communication of medically complex issues. Finally, the student acknowledged that while addressing sensitive issues remained challenging, the student gained confidence in the ability to overcome that discomfort for the sake of patient safety.

To gauge the value of the remediation program in preparing for the third clinical experience, the student was asked to participate in a short interview with the DCE and the student agreed. The DCE sought feedback through open-ended reflective questions including:

- Did you sense that you needed this remediation before the faculty brought it to your attention?
- How has your professional communication changed because of the remediation?
- Do you have any other thoughts about this remediation experience?

The student perceived the remediation very positively. The opportunity to self-critique the video-recorded simulations and engage in DCE and SP debriefing was mentioned as integral to the student's improvement. Having the opportunity to repeat a simulation using the same case further enhanced skill development. The remediation brought to light a subconscious awareness that

communication skills were lacking prior to the first clinical experience and fostered a new appreciation for the importance of communication in the PT-patient encounter. Six weeks after the remediation, the student began the third clinical experience and reported a greater sense of ease and comfort in patient encounters. Overall, the student was grateful for the investment of time and resources by the department and found the remediation plan to be highly effective.

Transfer of skills to clinical practice as reflected in the CPI
While all assessments used were meaningful, perhaps one of the more meaningful outcomes were the CI's comments on the midterm CPI during the student's third clinical placement. By midterm the CI commended the student for meaningful communication with patients stating, '[The student] is personable and quick to earn patients' trust, compassionate in responses' and, 'Intuitively expresses concern for patients' well-being … answers questions confidently'. This was reinforced by the student's comment, 'I actively listen and understand what is being communicated to me. I engage in friendly conversations with everyone (both my patients and my CI's patients) to make them feel at ease'. While the CI did acknowledge some tentativeness in the student's communication style, it was attributed to lack of experience rather than as a skills deficit that was interfering with the PT-patient alliance or clinical competency. It is important to note that this CI was not aware of the student's struggle with communication in the previous clinical placement or the remediation that took place.

Discussion and conclusion

Communication between patient and provider is a critical element of clinical care and challenging to formally assess. It is in the best interest of health professions programs that they be able to identify and remediate poor communications skills before problems arise in the clinic. One such incident prompted the DCE and faculty at this PT education program to develop a communication remediation model utilizing optimal-fidelity simulations with challenging communication components, a communication survey to assess verbal and nonverbal communication, student self-reflection, and faculty debriefing (Fig. 1). Overall, the remediation achieved its intended purpose and readied the student for the next clinical experience.

Although the literature does not support any one approach to remediate deficits in communication skills, there is evidence to suggest successful remediation is comprised of early identification of the deficit, the development of an individualized plan, and providing opportunity for reassessment with feedback to the learner.[16] In this case, the student was identified as having poor communication early during academic training, yet there was no objective data to justify delayed clinical placement. When faced with the dynamic and stressful environment of the clinic, however, these deficits became prominent and posed a barrier to competent clinical performance. The faculty worked collaboratively, drawing on a range of experience and expertise to formulate this comprehensive, individualized remediation that targeted knowledge, skills, and behaviors necessary for effective communication. The overall goal was to prepare the student for the upcoming clinical experience and, ultimately, competent autonomous clinical practice. The most salient factors in this remediation seem to be development of cases tailored to the student's deficits, immediacy of the multi-perspective feedback, the iterative process of the simulations, and the integration of the student reflection on the overall process.

The challenge faced by the faculty was in executing a remediation plan during a global pandemic when in-person contact was limited. This obstacle became an opportunity to conduct the remediation remotely. The
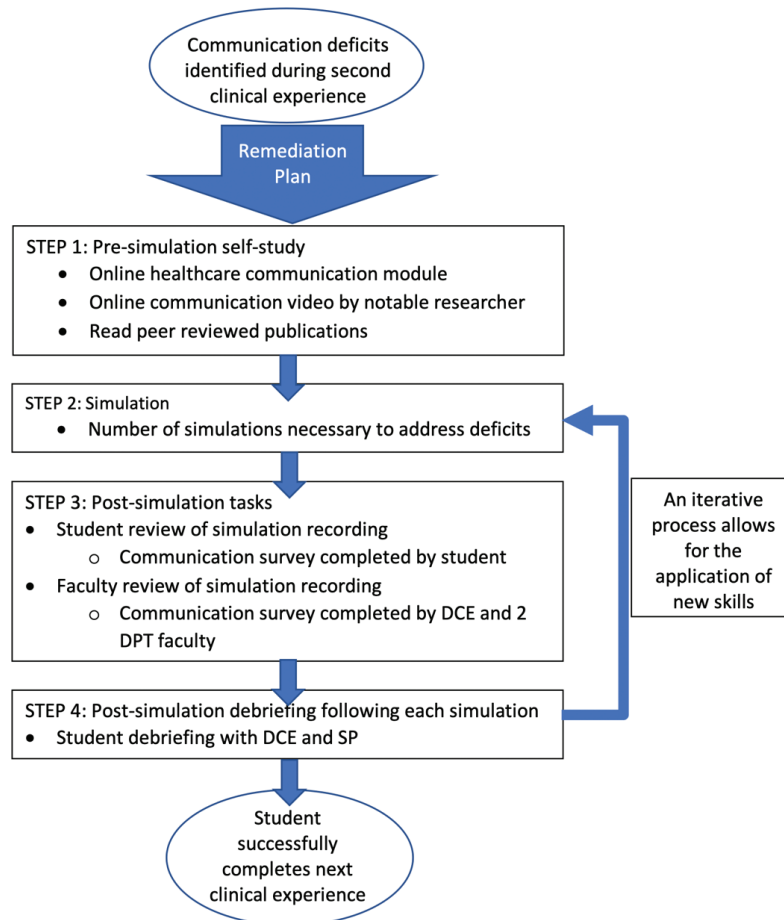

Fig. 1. A model of the remediation process.
DCE, Director of Clinical Education; SP, Standardized Patient.

remote format proved to be time efficient allowing the student to experience multiple simulated patient encounters with debriefing that may not have been possible if all stakeholders were required to be physically present. Faculty had concerns that the remote format may not be as effective as in-person remediation in providing a supportive and effective learning experience for the student. The favorable results of the remote remediation and positive feedback from the student, however, quelled those concerns.

Both faculty and student communication survey scores improved after the remediation, but the most telling outcome was the student's performance during the follow-up clinical experience. The student successfully transferred the skills gained in the remediation to practice. In addition, faculty noted an observable change in the way the student interacted in general, which echoed elements of transformative learning. Transformative learning encourages learners to question assumptions, actively engage in critical reflection and discourse, and apply new knowledge and perspectives resulting in a better version of themselves.[19,20] In this case, the student's poor performance during a clinical experience created an uncomfortable situation that challenged the student's own view of personal communication skills. This is known as a *disorienting dilemma*, or an event that causes a learner to question their assumptions which becomes a catalyst for change.[19] With guidance from the DCE, or remediation mentor, the student was encouraged to examine past experiences and assumptions, acquire new knowledge and skills related to effective communication, and put those skills into practice though simulated patient encounters. After the remediation, the transformation became evident during the next clinical experience. A reluctant student who demonstrated poor clinical communication developed into a competent communicator who utilized new skills to successfully meet the needs of the patients and the clinic.

In hindsight, the issues of culture may have played a role in the challenges the student faced in the clinic. As an urban institution, students come from a wide range of cultural backgrounds. This poses unique challenges in programmatic expectations as communication norms can vary significantly among cultural groups and may not align with professional standards. The idea that cultural norms can influence communication and clinical performance has been described in the literature and demands awareness and sensitivity by faculty when clashes between communication standards and student culture become apparent in clinical practice.[21]

The lack of a validated instrument to assess communication skills presented a challenge. The survey used was newly developed and limited in its ability to assess aspects of communication such as tone, pace, and timeliness of communication. Despite its shortcomings, the tool was the most applicable based on the objectives of the remediation. Student, SP, and CI feedback was used to augment the survey results and provide a more descriptive source of outcomes.

The described remote remediation proved highly successful as improved outcomes were demonstrated through qualitative and quantitative data. Careful planning ensured targeting all deficiencies using multiple teaching modalities. This remediation model is transferable to other soft skill deficits and may be implemented for formative or remedial training based on target skills, learning objectives and student needs.

Conflict of interests and funding
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Ethical statement
Touro College IRB Approval:2138E under exempt status.

References

1. Goehner D, Kandregula S, Birk H, Carroll CP, Guthikonda B, Kosty JA. Improving patient care in neurosurgery through post-operative telephone calls: a systematic review and lessons from all surgical specialties. Neurosurg Focus (2021) 51(5): E5. doi: 10.3171/2021.8.FOCUS21410
2. Lawford BJ, Delany C, Bennell KL, Hinman RS. "I Was Really Pleasantly Surprised": firsthand experience and shifts in physical therapist perceptions of telephone-delivered exercise therapy for knee osteoarthritis – a qualitative study. Arthritis Care Res (2019) 71(4): 545–57. doi: 10.1002/ACR.23618
3. Shindul-Rothschild J, Flanagan J, Stamp KD, Read CY. Beyond the pain scale: Provider communication and staffing predictive of patients' satisfaction with pain control. Pain Manage Nurs (2017) 18(6): 401–9. doi: 10.1016/j.pmn.2017.05.003
4. Khairat S, Gong Y. Understanding effective clinical communication in medical errors. Stud Health Technol Inform (2010) 160(Part 1): 704–8. doi: 10.3233/978-1-60750-588-4-704
5. Burgener AM. Enhancing communication to improve patient safety and to increase patient satisfaction. Health Care Manager (2017) 36(3): 238–43. doi: 10.1097/HCM.0000000000000165
6. Timmerberg JF, Dole R, Silberman N, et al. Physical therapist student readiness for entrance into the first full-time clinical experience: a Delphi study. Phys Ther (2019) 99(2): 131–46. doi: 10.1093/ptj/pzy134
7. Jette DU, Bertoni A, Coots R, Johnson H, Mclaughlin C, Weisbach C. Clinical instructors' perceptions of behaviors that compromise entry-level clinical performance in physical therapist student: a qualitative study. Phys Ther (2007) 87(7): 833–44.
8. Chipchase LS, Buttrum PJ, Dunwoodie R, Hill AE, Mandrusiak A, Moran M. Characteristics of student preparedness for clinical learning: clinical educator perspectives using the Delphi approach. BMC Med Educ (2012) 12(112). Available from: https://search.proquest.com/docview/1241212077/ADCC7BC2441E4A4EPQ/1?accountid=14375 [cited 04 October 2017].
9. Woodley S. Communication-an essential tool in extraordinary times. N Z J Physiother (2020) 48(1): 5–6.
10. Choudhary A, Gupta V. Teaching communications skills to medical students: Introducing the fine art of medical

practice. Int J Appl Basic Med Res (2015) 5(Suppl 1): S41–4. doi: 10.4103/2229-516X.162273

11. Dutton LL, Sellheim DO. The informal and hidden curriculum in physical therapist education. J Phys Ther Educ (2014) 28(3):50–63. doi: 10.1097/00001416-201407000-00008

12. Mendez MP, Patel H, Talan J, et al. Communication training in adult and pediatric critical care medicine. A systematic review. ATS Scholar (2020) 1(3): 316–30. doi: 10.34197/ATS-SCHOLAR.2019-0017RE

13. Silberman N, Lafay V, Lyons Hansen R, Fay P. Physical therapy student difficulty in clinical education settings: incidence and outcomes: erratum. J Phys Ther Educ (2018) 32(3): 309. doi: 10.1097/JTE.0000000000000068

14. McCallum C, Mosher P, Jacobson P, Gallivan S, Giuffre S. Quality in physical therapist clinical education: a systematic review. Phys Ther (2013) 93(10): 1298–1311.

15. Al-Sheikhly D, Östlundh L, Arayssi T. Remediation of learners struggling with communication skills: a systematic review. BMC Med Educ (2020) 20(1): 215. doi: 10.1186/S12909-020-02074-9

16. Tan XH, Foo MA, Lim SLH, et al. Teaching and assessing communication skills in the postgraduate medical setting: a systematic scoping review. BMC Med Educ (2021) 21(1): 1–19. doi: 10.1186/S12909-021-02892-5

17. Omura M, Maguire J, Levett-Jones T, Stone TE. The effectiveness of assertiveness communication training programs for healthcare professionals and students: A systematic review. Int J Nurs Stud (2017) 76: 120–8. doi: 10.1016/J.IJNURSTU.2017.09.001

18. INACSL Standards of Best Practice: Simulation[SM] Debriefing. Clin Simulat Nurs (2016) 12: S21–5. doi: 10.1016/j.ecns.2016.09.008

19. Vipler B, McCall-Hosenfeld J, Haidet P. Remediation through transformation: applying educational theory to the struggling resident. J Gen Intern Med (2020) 35(12): 3656–63. doi: 10.1007/S11606-020-06036-1

20. Tsimane TA, Downing C. Transformative learning in nursing education: a concept analysis. Int J Nurs Sci (2020) 7(1): 91–8. doi: 10.1016/j.ijnss.2019.12.006

21. Fernandez A, Wang F, Braveman M, Finkas L, Hauer K. Impact of student ethnicity and primary childhood language on communication skill assessment in a clinical performance examination. J Gen Intern Med (2007) 22(8): 1155–60.

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