

Experiences of Teach-Back in a Telephone Health Service

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ABSTRACT

Background: Asking patients to “Teach-Back” information during a health care consultation is widely recommended, yet little is known about patient and provider experiences using this method. Teach-Back has not previously been evaluated in a consumer telephone health service, a situation in which low health literacy can be especially difficult to identify. **Objective:** This study sought to explore telenurse experiences using Teach-Back at a maternal and child health helpline, supplemented with caller experiences. **Method:** After training maternal and child health nurses to use Teach-Back ($n = 15$), we interviewed nurses and callers to the helpline service. We used semi-structured guides to conduct focus groups and telephone interviews and analyzed transcripts of nurse and caller data using the Framework method. This qualitative study forms part of a randomized controlled trial of Teach-Back involving 637 callers. **Key Results:** Nurses ($n = 13$) reported Teach-Back was helpful to invite questions from callers, summarize information, review action plans, and close calls. Some found it helpful to empower and calm (anxious) callers. Nurses reported they did not always use Teach-Back, either because it was not appropriate or they felt uncomfortable with phrasing. Comfort with using Teach-Back tended to improve with practice. Perceived effect on call duration was mixed. We report sample Teach-Back strategies used by nurses, including the lead-in phrase “just before you go...,” which was considered helpful for initiating Teach-Back at close of a call. Caller reports of Teach-Back were limited ($n = 8$) but mostly positive. **Conclusions:** Teach-Back is a simple communication technique that can be used in a consumer telehealth service to confirm caller understanding and actions to take, and in some cases it may also reduce caller anxiety. Further research on caller experiences and objective impact on call duration is needed. [Health Literacy Research and Practice. 2017;1(4):e173-e181.]

Plain Language Summary: Low health literacy can be difficult to identify, especially over the telephone. Asking callers to summarize important information and agreed actions (known as Teach-Back) could help telehealth providers confirm understanding. We interviewed nurses operating a maternal and child health helpline and callers about their experiences with Teach-Back. Findings support Teach-Back for telehealth and suggest Teach-Back can also reduce caller anxiety.

For clinical encounters to be most effective, patients need to both understand and be able to execute instructions (Badaczewski et al., 2017). “Teach-Back” is a widely recommended communication technique designed to confirm patient understanding (Brega et al., 2015; Schillinger et al., 2003; Shekelle et al., 2013; Sudore & Schillinger, 2009; Volandes & Paasche-Orlow, 2007; Weiss, 2007). It involves iteratively asking the client to summarize or restate the important points in a consultation using their own words. Teach-Back has been shown to be effective in a variety of settings (Ha Dinh, Bonner, Clark, Ramsbotham, & Hines, 2016; Nouri & Rudd, 2015)

and is advocated as an important and reliable intervention (Banja, 2007; Kountz, 2009) that can help providers to evaluate whether learning has occurred (Tamura-Lis, 2013). It is recommended as a universal precautions approach to health care communication (Brega et al., 2015) in recognition that low health literacy can be situational and/or difficult to identify. Most Teach-Back evaluations have focused on the impact on the client, including rates of hospital readmission (Peter et al., 2015; White, Garbez, Carroll, Brinker, & Howie-Esquivel, 2013), medication adherence (Dantic, 2013), and informed consent (Fink et al., 2010; Wadey & Frank, 1997). Despite

widespread agreement on the benefits of Teach-Back, there are few studies of the provider experience of using Teach-Back or how clients experience Teach-Back.

Several studies have reported that clinicians and other health care providers find it difficult to use Teach-Back due to time constraints (Centrella-Nigro & Alexander, 2017; Jager & Wynia, 2012; Schlichting et al., 2007; Ting, Yong, Yin, & Mi, 2016). One study of pediatricians reported that limited time, volume and complexity of information, and divided attention of parents were barriers to using advanced communication techniques such as Teach-Back (Turner et al., 2009). Other studies in face-to-face clinical settings reported that health professionals found Teach-Back phrasing unnatural or discomfoting to use, making it difficult to implement (Badaczewski et al., 2017; Duncan et al., 2015). Managing these barriers will be important for any Teach-Back implementation.

The use of telehealth (in the context of digital health) is growing, and it can offer a convenient and lower-cost way to access care that may benefit from the addition of Teach-Back (Car & Sheikh, 2003). This is particularly the case for people with low health literacy, who may be unable to access written health information and are less likely to ask questions or state that they do not understand. Telehealth nurses have expressed a sense of professional vulnerability over potential legal or professional consequences when consulting with patients they cannot see (Purc-Stephenson & Thrasher, 2010).

Using Teach-Back may help providers to understand whether clients know what to do with the information they have been given and what further information or support they may need.

The Pregnancy Birth and Baby helpline, a service delivered by Healthdirect Australia, provides free guidance and reassurance on pregnancy and parenting of children younger than age 5 years. Calls to the helpline most commonly cover topics such as pregnancy, feeding, and sleep; and advice from nurses may involve longer-term solutions or behavioral strategies. Nurses are trained to keep calls focused on a single topic to limit call length to fewer than 10 minutes, including both “talk” time and after call work. The nurses encourage clients to call back to discuss other concerns/topics. Average call duration is reported as part of both nurse and helpline performance metrics. The variety in content and duration of calls requires a flexible approach to implementing Teach-Back, but may also provide rich insight into the use of Teach-Back for a range of telehealth encounters. In this study, we aimed to explore the experiences of nurses using Teach-Back techniques in a consumer telehealth helpline, supplemented with caller experiences.

METHOD

Design

This is a qualitative study exploring nurse and caller experiences with Teach-Back in a telehealth environment. It is

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part of a larger randomized, controlled trial involving 637 callers to the helpline.

Participants

We trained 15 maternal and child health nurses operating a national pregnancy and parenting helpline to use Teach-Back. Training in Teach-Back was a single 2-hour group session covering rationale for Teach-Back, videos of Teach-Back in practice, example Teach-Back phrases (adapted for the helpline from Always Use Teach-Back! [Teachback Training, 2016] and printed on handouts), and role-play. Nurses were encouraged to further adapt the phrasing for the helpline if required and to discover how to use Teach-Back for different call contexts. After using Teach-Back for 3 to 5 weeks, nurses and their team leader discussed their experiences in focus groups of three to five nurses (with S.M. and G.D.) and semi-structured telephone interviews (with K.W.). A semi-structured topic guide was used to explore the experience of using Teach-Back, including Teach-Back strategies used, perceived impact on callers, and perceived suitability for the telehealth setting. Detailed field notes were taken during focus groups (by S.M.) and all data were recorded on audio and transcribed verbatim.

Callers to the helpline were recruited to the study by the nurses using procedures adapted from routine caller satisfaction surveys to include reference to research and ensure consent was informed. Telephone surveys did not contain references to Teach-Back to maintain blinding of the study aims and intervention; however, the survey interviewers provided written comments on any aspects of the call they thought relevant. A purposively selected subsample of surveyed callers representing a range of experiences with the helpline were invited to participate in a follow-up telephone interview. Participants with inadequate health literacy and those from culturally and linguistically diverse backgrounds were oversampled because less is known about experiences with telehealth among these groups and because they could potentially benefit more from Teach-Back. Telephone qualitative interviews were conducted (by K.W. and C.H.) approximately 1 month after the initial helpline call. Interviewees were informed nurses had been trained in a “new communication technique” and were asked to comment on this (Table A).

Analysis

Transcripts of the nurse interviews and focus groups were analyzed using the five key steps of the Framework method (Ritchie, Spencer, & O'Connor, 2003). This is a matrix-based approach to thematic analysis, with participants in rows and themes in columns. Firstly, S.M. summarized and verified with G.D. field notes taken during the focus groups (familiariza-

tion) and developed an initial coding framework (identification) guided by the research questions. S.M. applied an iterative process of coding data using NVivo 11 (QSR International, Melbourne, Australia) and adding to the coding framework, identifying themes (indexing), and then summarizing in a thematic matrix (charting) using a combination of deductive and inductive methods. When all the data were coded, the framework was examined within and across themes and participants by S.M. and K.W. (mapping and interpretation). Rigor was addressed throughout this process by ensuring a detailed documentation of the analysis process, constant comparison of data, and continuous discussion of emerging and final themes.

Caller qualitative interviews were analyzed by S.M. and K.W. using the Framework method described above. The caller data reported here pertain only to questions specifically targeting experiences of Teach-Back (Table A). Written comments made by the survey interviewers were searched for reference to Teach-Back and added to the caller Framework where relevant.

Ethics

Ethics approval was obtained from the Royal District Nursing Service and The University of Sydney.

RESULTS

The health provider interviewees were 13 female maternal child and health nurses (including the team leader), age 37 to 61 years (mean, 55.1 years) who had been registered as nurses for 13 to 41 years (mean, 29.5 years) and working in maternal and child health for between 7 months and 33 years (mean, 14.2 years). Nurses participated in one of two focus groups ($n = 8$) held on the final day of the study; the team leader ($n = 1$) and nurses who were unable to attend ($n = 4$) were interviewed individually over the phone. Nurses in the study who did not participate in follow-up ($n = 3$) were either on extended leave or replied that they had only worked a small number of shifts during the entire trial period and did not feel they had much to say about using Teach-Back.

We report a small number of caller experiences from callers who could specifically identify the use of Teach-Back (ie, the nurse asked them to repeat the important points using their own words). This includes two callers from the telephone survey (unprompted comments from survey interviewers) and six callers who participated in qualitative interviews.

NURSE AND CALLER EXPERIENCES OF TEACH-BACK

We present nurse and caller impressions of Teach-Back in telehealth and the problems they encountered. Nurse quotes are denoted “N” and caller quotes “C,” and for clarity some personal pronouns are replaced with “nurse” or “caller” as

appropriate. We then explore nurse experiences with different approaches to using Teach-Back for varied objectives. Additional supporting (nurse) quotes are detailed in **Table 1**.

Perceived Benefits of Teach-Back for Telehealth

Overall, nurses agreed that Teach-Back is a good tool appropriate for telephone health services and could help callers cement their understanding. Some nurses remarked they sometimes wonder if callers understand or will implement the suggested changes and that using Teach-Back gave them (nurses) more confidence that callers would follow through. This was considered particularly important for callers who say little and those with limited English proficiency. Nurses remarked that using Teach-Back helps them assess caller engagement and removes the assumption that callers have understood.

I thought it was really good to know whether the person on the end of the phone really understood the information I was giving out ... Yeah, it just made me feel more confident that I was explaining things and that the person could understand it and then actually relay it back to me. I thought it was fantastic. (N4)

With respect to medicolegal safety, nurses felt that Teach-Back was extremely helpful both to minimize chances of client misunderstanding and for evaluating how well they conveyed information to callers: “So it does give you the opportunity to reinforce what you’ve said, because [caller] didn’t have it all right, but she got most of it right.” (N8)

Nurses reported that most callers were receptive to Teach-Back, with some teaching back spontaneously. Some nurses commented that the caller’s tone of voice indicated that they seemed pleased to be able to teach back and appreciated that the nurse wanted to ensure their understanding. At least two callers made unprompted comments during the larger (blinded) survey that the nurse had asked them to repeat the information back to confirm understanding; one mentioned she found it helpful and got off the phone feeling quite confident. Positive caller reports of Teach-Back from the interviews noted the importance of ensuring understanding: “I was actually very pleased it was something [nurse] had done I find that to be a very useful tactic generally.” (C1263)

Nurses considered Teach-Back would be suitable for a range of different call center environments, and could be particularly helpful for working with older people. They proposed it could be used in any call center and could be taught in the initial training, but noted it was important to consider the communication skills of call center operators before implementing. Some nurses mentioned they had brought their new Teach-Back skills to other areas of practice outside the helpline: “I still continue to use Teach-Back. I haven’t stopped

using it ... I think it’s added to my practice, I think it’s enhanced my practice.” (N13)

Challenges Using Teach-Back in Telehealth

Some nurses suggested Teach-Back may be more difficult to use on the phone due to lack of visual cues. A few nurses struggled with the wording, commenting that Teach-Back could sound demeaning to the client (as though you are testing them or putting them on the spot) or to self (making sure I didn’t forget something), and finding a natural way to phrase this was challenging for some. When Teach-Back did not work well, this was usually reported to be when the nurse was not yet comfortable using the technique and it sounded awkward. Nurses reported this sometimes resulted in the client being confused or defensive about what was being asked of them. One caller reported an encounter that may have been somewhat awkward:

No, other than the funny fact that [nurse] told me to repeat whatever she has told me and how I understand it or not. I found it pretty amusing because it was like a classroom I had to repeat the lecture to her and then [nurse] said all right now you’ve understood now you can disconnect the call which was pretty cute. (C907)

Nurse reports of awkward or uncomfortable calls were minor and they tended to be from the start of the Teach-Back implementation. Despite finding Teach-Back useful, some nurses were uncomfortable asking clients to teach back because of the inference that clients were being tested.

I think it was just that sense of testing [callers], in a way, that they haven’t really bought into that. That’s not why they’ve rung, they haven’t rung to be tested, they’ve rung for information and advice and support. (N7)

Time constraints were a recurring theme and potential barrier to using Teach-Back. Many nurses reported they would ask for Teach-Back if time permitted, but would not do so if the call risked going over time. Others mentioned that they deliberately limited the information they provided to ensure the call didn’t go over time.

I may not give them as much information or I may not do as much of the Teach-Back as I would like to ... because I felt I’ve given that much information I’ve got to review, we’ve recapped it and I’ve got to finish the call ... We’ve really got to manage our time. (N13)

Most nurses felt that Teach-Back did not increase call duration, but acknowledged it may have done so initially while they were getting used to it. Some nurses reported that using Teach-Back helped them to get to the point more quickly and signal to the caller that the call was over, and they reported this helped to focus, shorten, and close the call. The potential

TABLE 1

Additional Supporting Quotes from Nurses About Using Teach-Back

Theme	Subtheme	Quote
Perceived benefits of Teach-Back for telehealth	Potential to improve caller safety	"... if you've done it 50 times, it's quite possible that you have missed something. When [callers] give it back to you, you think - 'and don't forget to do that' (because I forgot to tell you that)." (N6)
Challenges using Teach-Back	Perceived impact on call duration	"... for me it does add time on the phone because you're not getting the visual feedback so you can't do the physical demonstration with your hands, you haven't got the face to face contact ..." (N13) "Shortened it, yeah, especially the revolving doors." (N2)
	Timing	"It's not always convenient to ask it at the end of the call. You sort of have to interrupt in sections and you've got to find that fine balance of when to stop the conversation and ask [callers] to repeat it back to you. I think that's a skill in itself and that took me a couple of shifts to do that." (N10)
	Phrasing	"When I've used it, I've always made sure to let [callers] know that I want to make sure I've explained it properly." (N1) "I did not feel comfortable saying to them, and 'can you repeat and tell me what I've just said to you.' So that, I just felt that was demeaning, and like I was testing them." (N11)
When (not) to use Teach-Back	Focusing (anxious) caller	"I think it's ideal, because it makes [a caller] stop, rather than just going on and on and on, oh - and then they have to sort of gather their thoughts." (N2)
	Teach-Back not always appropriate	"But on the bad note it feels like, sometimes it's not always appropriate to get the feedback from the caller in regards to, can you just repeat what I've said. It just depends on their situation, if they're really anxious or they just want a quick sort of information sent to them it just sort of tends to linger on a little bit." (N11)

for (small) increases in call duration was weighed against the value of Teach-Back: "The value is that you probably get much more value out of each phone call rather than just cross your fingers when you hang up, well I hope that hit the mark." (N9)

When (Not) to Use Teach-Back

The breadth of calls a nurse found Teach-Back suitable for was related to the level of comfort and skill she had established with using the technique. This did not appear to be related to experience as a nurse or experience on the helpline. All nurses noted that Teach-Back was not suitable for all calls, and some professional judgement is required. Nurses all agreed that Teach-Back was useful for

teaching and instructional calls, such as sleep and settling issues, and calls from new mothers. Nurses reported they tended not to use Teach-Back for calls where there was an unsettled baby or child in the background that the parent needed to attend to, when Teach-Back would add time to the call.

Several nurses reported Teach-Back was helpful for working with anxious and distressed callers, noting that clients frequently call the helpline when they are feeling overwhelmed by a situation they don't know how to manage. Using Teach-Back helped nurses slow these callers down and focus them on a plan of action and what to do next. Callers also reported that thinking practically and knowing the next steps to take was reassuring and helpful:

TABLE 1 (continued)

Additional Supporting Quotes from Nurses About Using Teach-Back

Theme	Subtheme	Quote
Experience with Teach-Back approaches	Summarize information (and close the call)	"It's time for you to go. Now we've covered a fair but, now just before you go... which doesn't give [caller] the next ... it just closes it. But I want to hear what you've got out of it, so it's a really nice way of doing it." (N6)
	Review action plan	"What are you going to do when you get off the phone this afternoon? 'I'm going to do this and this and this and this...' and then I can say to them, 'and don't forget that bit'. Then they go, 'oh yeah, that's right'. So it does really help, for those teaching situations." (N1) "It did put [callers] on the right track and I just felt it was concise and easier." (N4) "So ... the one that I use, 'we've shared a lot of information today, can you just recap for me what you're going to do when you get off the phone or how are you going to use this information?'" (N13)
	Inviting questions	"I love 'what questions do you have; I'm using that all the time.'" (N5) "We should have been saying to them, 'you know, we've talked about sleep and settling, what questions do you have for me on sleep and settling.'" (N1)
Other	Continue to use Teach-Back in other areas	"I've started using it in my maternal and child health work, definitely and I think I'd actually start using it with my family when I'm talking to my children." (N5)

I was ... crying, worried and [nurse] ask me to repeat that from then. I said oh yeah that's good because I know what to do afterward, when [nurse] is talking to me I was like worried and my mind is not, not in a one mind, because baby is crying and I don't know what to do. (C1490)

Other nurses said they would not use Teach-Back for any situation that involved counseling or client distress, commenting that anxious callers just want to hear a calm voice, and it can make them more anxious if they have to answer questions. Some nurses commented that Teach-Back interrupted the flow of thoughts or ideas and did not always permit them to tune into the emotional state of the client, which is important for identifying if there are other needs to be addressed.

Experience with Teach-Back Approaches

Nurses reported working with a range of Teach-Back phrases, and found them useful for confirming understanding, reviewing action plans, and inviting questions.

Summarizing information: Could you relay back to me what we have talked about? Several nurses reported an excellent way to close calls was to casually say "just before you go..." to clearly signal the end of the call, before asking the caller to summarize the key points (i.e., teach back). Use of this strategy helped to focus the information requested and get straight to the point: "Just before you go, I'd just like to make sure I've covered everything, so can you relay back to me..." (N6)

In calls involving significant information transfer, nurses sometimes found it difficult to keep to time when there was much to review, or to identify the right moments within a call to recap:

I was not always successful picking those moments. And that's where I think my downfall was. And if I did leave it at the end of the phone call there was just too much for them to tell me, to repeat it, so that's where I struggled a bit but I like it. (N10)

Reviewing action plans: What will you do when you get off the phone? One of the biggest reported advan-

tages to using Teach-Back was that the client left the call with a plan of action. A preferred technique for many nurses was to ask “what will you do when you get off the phone?” which they reported was particularly helpful for correcting misunderstandings and focusing on priorities. This question encouraged callers to think practically and to consolidate the information they had received. Nurses reported that caller responses to this question indicated clearly if they had understood all the information, and it also gave nurses an opportunity to add information they may not have mentioned or clarify any confusion.

In a way it sort of throws [callers] off because ‘oh what did you just say?’ Then they have to think about it and repeat it all back to you so in a way that’s great because they are using their memory and they are using everything that I’ve just sent to them to repeat it back. (N11)

Nurses commonly mentioned they felt asking for an action plan in this way was empowering for the client; many callers present with a problem that can’t be solved immediately but as they answer this question they leave with a plan for what to do next. Some nurses mentioned they could almost “see” the client putting the steps in their mind when they hesitated in response to this question. They reported that sometimes clients would respond with something quite different and they had to repeat the question, but it helped focus and check that they had conveyed the important information. Some nurses commented that when a caller teaches back they are taking ownership of the problem, and also have some equity in what they are going to do: “Yeah, so I feel that [callers] saying that back does do that so they do have to wear it a bit, nicely, wear it, but have ownership.” (N3)

Inviting questions: What questions do you have? Nurses reported mixed experiences asking this open question, expressing concern that it invited a broad response and could send calls over time, with one recalling a call that went for 27 minutes. Normally, clients would be invited to call back with additional concerns rather than try to address everything at once, and nurses felt this question was problematic in that regard. Nurses suggested it may need to be a more focused question, such as “what questions do you have about the things we have discussed today”: “I think that open-ended question, ‘what questions do you have’ that, to me, that was a real stumbling block, because I couldn’t work out how to reduce the call time with that question at the end.” (N3)

Others commented that the question could lead to a more holistic call, noting that the apparent reason for the call (the “presenting problem”) was not always the true reason for the call, and an invitation to ask questions helps to identify

other issues so the nurse could refer to (e.g., to a counselor) as appropriate.

DISCUSSION

This article provides insight into the experiences of maternal and child health nurses using Teach-Back for the first time on a pregnancy and parenting helpline, which has practical applications for future work in this area. We are not aware of any other studies empirically investigating Teach-Back in the context of telehealth. Teach-Back was found to be advantageous for confirming understanding, reviewing action plans, empowering callers, closing calls, and focusing callers on the most salient information. This latter point was reported by some nurses to help calm anxious callers and shorten call duration. Nurses felt that using Teach-Back invited callers to have a say in what happens next rather than just being told what to do. Time constraints, nurse discomfort, and parents’ divided attention were barriers to using Teach-Back. Caller reports of Teach-Back were limited but none were negative. A few callers expressed gratitude that the nurse confirmed understanding. Some nurses also reported that they have brought their new Teach-Back skills to other roles outside the helpline.

A universal precautions approach to using Teach-Back for consumers has been endorsed by international organizations (Brega et al., 2015; Shekelle et al., 2013) to improve health care communication, particularly for people with low health literacy. Nurses had mixed success finding their voice and implementing Teach-Back, but all agreed it was a valuable skill that could reduce their medicolegal risks. Nurses who really embraced Teach-Back used it for a wide range of calls, whereas some were more reluctant and felt they were imposing on clients by asking for Teach-Back. Using Teach-Back to close a call (for example, “just before you go...”) was reported to be a gentle and effective way both to confirm understanding and signal that the consultation was over. The impact on call duration was less clear: some nurses reported that it helped them to focus and shorten the call, whereas others expressed concern it could make longer than 15 minutes, and they reported only asking for Teach-Back if they had ample time to do so. The use of the open question “what questions do you have” was thought to be most problematic for call duration, and may need to be modified to be used effectively.

This study adds to existing research that Teach-Back enhances health care communication, yet the decision to use it is largely influenced by provider comfort with the technique (Duncan et al., 2015), complexity of the information conveyed (Turner et al., 2009), time available (Jager & Wynia,

2012), and (parents') divided attention (Badaczewski et al., 2017). There were no negative reports of Teach-Back among the eight callers that explicitly recalled it; positive reports are consistent with previous research with parents, who interpreted Teach-Back as demonstrating caring and did not find it demeaning or insulting (Badaczewski et al., 2017). This may be related to choice of wording and the informal way Teach-Back was often used in this study; other studies indicate patients may take offense if the rationale for using Teach-Back is not made clear (Samuels-Kalow, Hardy, Rhodes, & Mollen, 2016).

Overall, the evidence from this study supports the use of Teach-Back for telephone health consultations. Verbal communication with a health practitioner has been reported as the most preferred way of receiving health information (Gaglio, Glasgow, & Bull, 2012; Shaw, Ibrahim, Reid, Ussher, & Rowlands, 2009), and can affect patients' knowledge, motivation, decision-making, engagement and empowerment, and even health (Nouri & Rudd, 2015). Previous work suggests telehealth consultations are more likely to be dominated by the health care provider, with patients taking a more passive role (Agha, Roter, & Schapira, 2009), and Teach-Back may be one way to make the consultation more caller-focused. This is important for people with low health literacy, who tend to ask fewer questions (Gaglio et al., 2012; Kountz, 2009; Nouri & Rudd, 2015) and have lower access to written health information (Doak, Doak, & Root, 1996).

Strengths and Limitations

This is the first known study offering insight into the perspectives of both practitioners and consumers on using Teach-Back for telehealth. It adds to existing literature advocating Teach-Back to confirm understanding and review action plans, and suggests that Teach-Back can also help empower consumers and in some circumstances reduce their anxiety. Nurse reports of the impact of Teach-Back on call duration were mixed but objective impact was not examined. This was because data were collected over a short time period while nurses were learning Teach-Back skills, and may not accurately reflect Teach-Back use in routine practice. Further research examining Teach-Back and call duration over a longer period is warranted.

An important limitation of this study is the small number of caller perspectives of Teach-Back, which is also insufficient for understanding if Teach-Back may have been experienced differently by callers with lower health literacy or with lower English proficiency. It is interesting to

note that two of the caller comments (in the survey data) were incidental findings reported by third parties with no knowledge of the study aims. The time between caller contact with the helpline and the interview (approximately 1 month) may have contributed to callers' inability to explicitly recall Teach-Back. Alternately, Teach-Back may have been so subtly integrated into the conversation that it was not noticeable or not used at all. Real-time online assessments by nurses (Morony et al., 2016) suggest they used Teach-Back on approximately two-thirds of calls. Multiple attempts were frequently required to contact callers for surveys and interviews, which may have resulted in a selection bias. Despite the small number of caller participants, the mirroring of nurse perspectives in the caller data is an intriguing finding that highlights the need for future work to examine both practitioners' and consumers' experiences of Teach-Back.

The provision of health services by telephone is growing, and provider communication skills are key to ensure both service effectiveness and patient safety. Health professionals protect both themselves and their clients when they confirm that information has been understood and the client knows what to do. A service that routinely verifies client understanding could lead to better health outcomes and reduced waste in service utilization.

CONCLUSION

Results from this study suggest that Teach-Back is generally acceptable to both nurses and callers, and may be suitable for a range of telehealth contexts. The potential for enhanced safety may outweigh possible small increases in call duration, but further research is required. Notably, the lead-in phrase "just before you go" and its use to close calls came from the nurses operating the helpline, suggesting that practitioners may be the best placed to adapt the use of Teach-Back for their particular workplace.

REFERENCES

- Agha, Z., Roter, D. L., & Schapira, R. M. (2009). An evaluation of patient-physician communication style during telemedicine consultations. *Journal of Medical Internet Research*, 11(3), e36. doi:10.2196/jmir.1193
- Badaczewski, A., Bauman, L. J., Blank, A. E., Dreyer, B., Abrams, M. A., Stein, R. E. K., . . . Sharif, I. (2017). Relationship between teach-back and patient-centered communication in primary care pediatric encounters. *Patient Education and Counseling*, 100(7), 1345-1352. doi:10.1016/j.pec.2017.02.022
- Banja, J. D. (2007). My what? *The American Journal of Bioethics*, 7(11), 13-15. doi:10.1080/15265160701638546
- Brega, A. G., Barnard, J., Mabachi, N. M., Weiss, B. D., DeWalt, D. A., Brach, C., . . . West, D. R. (2015). *The AHRQ health literacy universal precautions toolkit* (2nd ed.). Retrieved from <http://www.ahrq.gov>

gov/professionals/quality-patient-safety/quality-resources/tools/literacy-toolkit/healthlittoolkit2.html

- Car, J., & Sheikh, A. (2003). Telephone consultations. *BMJ*, 326(7396), 966-969. doi:10.1136/bmj.326.7396.966
- Centrella-Nigro, A. M., & Alexander, C. (2017). Using the teach-back method in patient education to improve patient satisfaction. *The Journal of Continuing Education in Nursing*, 48(1), 47-52. doi:10.3928/00220124-20170110-10
- Dantic, D. E. (2013). A critical review of the effectiveness of 'teach-back' technique in teaching COPD patients self-management using respiratory inhalers. *Health Education Journal*, 73(1), 41-50. doi:10.1177/0017896912469575
- Doak, C. C., Doak, L. G., & Root, J. H. (1996). *Teaching patients with low health literacy* (2nd ed.). Philadelphia, PA: J. P. Lippincott Company.
- Duncan, G., Emmerton, L., Hussainy, S., McNamara, K., Stewart, K., Swinburne, G., . . . Suen, B. (2015). *HeLP: Health Literacy in Pharmacy project*. Retrieved from <http://6cpa.com.au/files/health-literacy-final-report/>
- Fink, A. S., Prochazka, A. V., Henderson, W. G., Bartenfeld, D., Nyirenda, C., Webb, A., . . . Parmelee, P. (2010). Enhancement of surgical informed consent by addition of repeat back: A multicenter, randomized controlled clinical trial. *Annals of Surgery*, 252(1), 27-36. doi:10.1097/SLA.0b013e3181e3ec61
- Gaglio, B., Glasgow, R. E., & Bull, S. S. (2012). Do patient preferences for health information vary by health literacy or numeracy? A qualitative assessment. *Journal of Health Communication*, 17(Suppl. 3), 109-121. doi:10.1080/10810730.2012.712616
- Ha Dinh, T. T., Bonner, A., Clark, R., Ramsbotham, J., & Hines, S. (2016). The effectiveness of the teach-back method on adherence and self-management in health education for people with chronic disease: A systematic review. *JBI Database of Systematic Reviews and Implementation Reports*, 14(1), 210-247. doi:10.11124/jbisrir-2016-2296
- Jager, A. J., & Wynia, M. K. (2012). Who gets a teach-back? Patient-reported incidence of experiencing a teach-back. *Journal of Health Communication*, 17(Suppl. 3), 294-302. doi:10.1080/10810730.2012.712624
- Kountz, D. S. (2009). Strategies for improving low health literacy. *Postgraduate Medicine*, 121(5), 171-177. doi:10.3810/pgm.2009.09.2065
- Morony, S., Weir, K., Biggs, J., Duncan, G., Zalitis, D., Azizi, L., McCaffery, K. (2016, October). *Using teachback for telehealth: Can it be done and how effective is it?* Paper presented at 8th Annual Health Literacy Research Conference, Bethesda, MD.
- Nouri, S. S., & Rudd, R. E. (2015). Health literacy in the "oral exchange": An important element of patient-provider communication. *Patient Education and Counseling*, 98(5), 565-571. doi:10.1016/j.pec.2014.12.002
- Peter, D., Robinson, P., Jordan, M., Lawrence, S., Casey, K., & Salas-Lopez, D. (2015). Reducing readmissions using teach-back: Enhancing patient and family education. *Journal of Nursing Administration*, 45(1), 35-42. doi:10.1097/nna.0000000000000155
- Purc-Stephenson, R. J., & Thrasher, C. (2010). Nurses' experiences with telephone triage and advice: A meta-ethnography. *Journal of Advanced Nursing*, 66(3), 482-494. doi:10.1111/j.1365-2648.2010.05275.x
- Ritchie J., Spencer L., & O'Connor W. (2003). Carrying out qualitative analysis. In J. Ritchie & L. Spencer, (Eds.). *Qualitative research practice: A guide for social science students and researchers* (pp. 76-79). London, UK: Sage Publications.
- Samuels-Kalow, M., Hardy, E., Rhodes, K., & Mollen, C. (2016). "Like a dialogue": Teach-back in the emergency department. *Patient Education and Counseling*, 99(4), 549-554. doi:10.1016/j.pec.2015.10.030
- Schillinger, D., Piette, J., Grumbach, K., Wang, F., Wilson, C., Daher, C., . . . Bindman, A. B. (2003). Closing the loop: Physician communication with diabetic patients who have low health literacy. *Archives of Internal Medicine*, 163(1), 83-90.
- Schlichting, J. A., Quinn, M. T., Heuer, L. J., Schaefer, C. T., Drum, M. L., & Chin, M. H. (2007). Provider perceptions of limited health literacy in community health centers. *Patient Education and Counseling*, 69(1-3), 114-120. doi:10.1016/j.pec.2007.08.003
- Shaw, A., Ibrahim, S., Reid, F., Ussher, M., & Rowlands, G. (2009). Patients' perspectives of the doctor-patient relationship and information giving across a range of literacy levels. *Patient Education and Counseling*, 75(1), 114-120. doi:10.1016/j.pec.2008.09.026
- Shekelle, P., Wachter, R., Pronovost, P., Schoelles, K., McDonald, K., Dy, S., . . . Winters, B. (2013). *Making health care safer II: An updated critical analysis of the evidence for patient safety practices. Comparative effectiveness review no. 211*. Retrieved from Agency for Healthcare Research and Quality website: www.ahrq.gov/research/findings/evidence-based-reports/ptsafetyuptp.html
- Sudore, R. L., & Schillinger, D. (2009). Interventions to improve care for patients with limited health literacy. *Journal of Clinical Outcomes Management*, 16(1), 20-29.
- Tamura-Lis, W. (2013). Teach-back for quality education and patient safety. *Urologic Nursing*, 33(6), 267.
- Teachback Training. (n.d.). *Always use teach-back!* Retrieved from <http://www.teachbacktraining.org/>
- Ting, X., Yong, B., Yin, L., & Mi, T. (2016). Patient perception and the barriers to practicing patient-centered communication: A survey and in-depth interview of Chinese patients and physicians. *Patient Education and Counseling*, 99(3), 364-369. doi:10.1016/j.pec.2015.07.019
- Turner, T., Cull, W. L., Bayldon, B., Klass, P., Sanders, L. M., Frintner, M. P., . . . Dreyer, B. (2009). Pediatricians and health literacy: Descriptive results from a national survey. *Pediatrics*, 124(Suppl. 3), S299-S305. doi:10.1542/peds.2009-1162F
- Volandes, A. E., & Paasche-Orlow, M. K. (2007). Health literacy, health inequality and a just healthcare system. *American Journal of Bioethics*, 7(11), 5-10. doi:10.1080/15265160701638520
- Wadey, V., & Frank, C. (1997). The effectiveness of patient verbalization on informed consent. *Canadian Journal of Surgery*, 40(2), 124-128.
- Weiss, B. D. (2007). *Help patients understand. Manual for clinicians*. Chicago, IL: AMA Foundation.
- White, M., Garbez, R., Carroll, M., Brinker, E., & Howie-Esquivel, J. (2013). Is teachback associated with knowledge retention and hospital readmission in hospitalized heart failure patients. *Journal of Cardiovascular Nursing*, 28(2), 137-146. doi:10.1097/JCN.0b013e31824987bd

TABLE A

Caller Interview Questions Related to Teach-Back

1. Can you describe any things the nurse did to help you understand the advice/information she gave?
2. Were you asked to repeat back what the nurse explained to you?
 - How did that feel?

Note. Study interviewers asked the nurses to try a new communication technique—they were interested in callers' experiences of this.