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LaKesha Hill

University of Missouri-St. Louis, llhb6m@umsystem.edu

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**Implementation of an Educational Teach-back Program for Patients with  
Hypertension**

LaKesha Hill

B. S. Nursing, Goldfarb School of Nursing at Barnes Jewish College, 2014

A Dissertation Submitted to The Graduate School at the University of Missouri-  
Saint Louis in partial fulfillment of the requirements for the degree Doctor of Nursing  
Practice with an emphasis in Adult-Geriatric Nurse Practitioner

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Advisory Committee

Susan Dean-Baar, PhD, RN, CENP, FARN, FAAN

Chairperson

Nancy Magnuson, DSN, APRN, PCNS, FNP-BC

Chaney Bell, MSN, APRN, FNP-C

## Abstract

*Problem:* To improve health literacy and provide adequate health care to patients and their family, clear and effective dialogue is essential. The teach-back method is a technique utilized to confirm a patient's level of understanding of care instructions done by relaying patient directions, and then confirming the patient understands by asking the patient to reiterate those directions. The purpose of this quality improvement project was to assess the effectiveness of using the teach-back method by health care professionals with their patients who have a diagnosis of hypertension or high blood pressure.

*Methods:* A descriptive design was used to evaluate the effectiveness of the teach-back method in an urban, midwestern primary care clinic setting. Education about the teach-back method was provided to staff over two sessions. Seven staff completed the entire Teach-Back Conviction and Confidence Scale before the education and six weeks after the education, completing the two items on conviction and confidence immediately after the education. Data from initial and follow-up visits for 42 patients with a diagnosis of hypertension was also collected.

*Results:* Staff report of how often they asked patients to explain in their own words increased significantly ( $p=.001$ ). A significant increase was seen in the five of the eleven teach-back elements. Results from the staff survey showed a significant increase in staff conviction ( $F(s,18)=4.44, p=.027$ ) and confidence ( $F(2,18)=7.21, p=.005$ ) in use of the teach-back method from pre-education to immediately after the education. Patient response to taking prescribed medications increased ( $p=.002$ ), and there was a significant decrease in reported symptoms related to hypertension from initial visit to follow up visit.

*Implications for Practice:* The use of teach-back to improve health literacy and patient's self-management of hypertension was supported by this project. Strategies to reinforce the use of teach-back by healthcare providers should be encouraged. The Agency for Health Care Policy and Research Teach-Back Toolkit is a resource that should be used by healthcare settings to support staff in using this technique.

## **Implementation of an Educational Teach-back Program for Patients with Hypertension**

Health literacy is defined as the degree to which an individual has the ability to obtain, interpret, and comprehend information and services needed to make appropriate health-related decisions and actions for themselves or others (U.S. Department of Health & Human Services, 2022). Patients rely on this same information in order to make informed decisions in an effort to properly manage or treat their medical conditions for optimal outcomes. Health information is usually provided through a means of direct verbal discussion, written format via discharge paperwork or pamphlets, or information via television, radio, newspaper, magazines, internet, or from other trusted family, friends, or healthcare professionals (Cutilli, 2010). However, even with these multiple avenues of health information, at least 88% of adults living in the United States have inadequate health literacy in order to navigate in the realm of healthcare, and properly promote self-wellness (Lopez et al., 2022).

Proficient health literacy levels indicate that one has the necessary competency skills in order to perform intricate literacy tasks such as consolidating and interpreting complex information (White et al., 2007). Of the U.S. population, over a third of Americans, approximately 77 million individuals nationwide, struggle with common health measures such as using medication as prescribed or following post hospital discharge instructions (U.S. Department of Health and Human Services, 2007). The United States Department of Education National Assessment of Adult Literacy (NAAL) has divided literacy levels into four categories: below basic, basic, intermediate, and proficient. NAAL reports 53% of adults in America have

intermediate health literacy while 22% have basic health literacy, and 14% have below basic health literacy. Multiple factors related to social determinants of health effect health literacy including employment status, housing instability, language, education, social cohesiveness, access to health care, environment, etc. (Lopez et al., 2022). All of these factors, along with other aspects, can impact a patient's knowledge and ability to have sufficient health literacy to manage their health conditions.

To improve health literacy and provide adequate health care to patients and their family, clear and effective dialogue is essential. However, aiding and supporting patients to understand, comprehend, and utilize health literacy skills has not been emphasized. Therefore, patients cannot effectively make sound health-related medical decisions (Institute of Medicine, 2004). The Agency for Healthcare Research and Quality (AHRQ) and the Institute for Healthcare Improvement (IHI) have devised an approach to improve health literacy known as the teach-back method. The *teach-back method* is a technique utilized to confirm a patient's level of understanding of care instructions by relaying patient directions and confirming the patient's understanding by instructing the patient to reiterate those same directions. Teach-back is a process where the health information provider (e.g. nurse, physician, or medical assistant) takes on the responsibility of ensuring effective communication by saying "I, as the provider, want to ensure I have explained everything clearly." The healthcare provider then asks the patient to repeat the information or advise they have been given by the provider, using their own words. At that time, the provider can then correct any misunderstandings or edit the reminders of important actions to take, if required. Health care professionals (HCPs) can utilize this tool to assess their patient's degree of

understanding or misunderstanding and alter or rephrase the instructions if comprehension is not displayed. Allowing for comprehension and understanding to take place then allows the patient to better navigate their role in their health. This, in turn, increases their ability to self-manage and care for themselves.

The purpose of this quality improvement project was to assess the effectiveness of using the teach-back method by HCPs with their patients who have a diagnosis of hypertension or high blood pressure to improve knowledge of health literacy.

Hypertension is a leading risk factor for death and disability worldwide. It is estimated that about 1 in 3 adults in the United States have high blood pressure (U.S. Department of Health and Human Services, 2018). Over time, uncontrolled high blood pressure can contribute to significant complications such as myocardial infarction, stroke, and kidney disease (U.S. Department of Health and Human Services, 2018). Improved health literacy can help individuals manage hypertension and prevent these complications.

The aim of this project was to improve health literacy among patients with hypertension by educating providers on effective utilization and implementation of the teach-back method. The primary outcome for this project is the teach-back skills of healthcare providers measured for this quality improvement project with a pre- and post-survey completed by the healthcare providers. The pre-survey allowed for baseline data to be established, and a post survey to determine providers confidence level and conviction following teach-back method utilization for patients with hypertension. If the teach-back method was effective once implemented, the desired secondary outcome for this project was to see a decrease in blood pressure readings, enhanced patient

medication adherence, and lifestyle modifications. These factors would indicate that the teach-back method was beneficial and seen to positively impact patient health outcome.

### **Review of Literature**

A search of current literature on the topic of implementing the teach-back method in clinical practice was conducted. The databases used were PubMed, CINAHL, and MEDLINE. The search terms used were *health literacy or teach-back or teach-back method or chronic disease* with the Boolean operator AND. Following the initial search, a total of 378 publications were generated between the databases. Of these publications, 207 results were from PubMed, 154 results were from CINAHL, and 17 results were from MEDLINE. The inclusion and exclusion criteria for the search were then applied. The inclusion criteria were nationwide studies published between 2016-2022. After the inclusion criteria was applied, the refined search generated a total of 267 publications, 128 results were from PubMed, 128 results were from CINAHL, and 11 results were from MEDLINE. Abstracts were reviewed to determine applicability. From these publications, 10 were selected for the literature review. These 10 articles were selected based on relevance to the subject of teach-back method and chronic illness. Studies that investigated the effectiveness of the implementation and utilization of the teach-back method will be described (Appendix A).

The literature is clear and consistent. Clinicians must first assess a patient's current knowledge level, or their level of health literacy, before implementing education to patients by way of the teach-back method. Educational material will have no purpose if the patient does not have functional health literacy as described by the Agency for Healthcare Research and Quality (AHRQ) (U.S. Department of Health and Human



Services, 2020). Furthermore, the provider should be equipped with the necessary tools to effectively utilize and implement the teach-back method during patient encounters. Of the literature reviewed, recommendations to increase patient health literacy and patient's ability to self-manage their chronic illnesses included educational training sessions for providers. Common themes were found in reviewing the literature. All of the studies in the literature review discuss that after an educational session with patients while implementing the use of the teach-back method, there was seen to be an increase in the use of the elements of teach-back. Specifically, an increase was observed in the area of re-explaining specific information when patients are unable to explain what was taught, while using their own words.

Four studies measured the effect of the treatment in comparison to “no treatment” or a different treatment and provide evidence of what happens if you opt to not have a particular treatment. These studies provide an understanding of the impact that teach-back can have on increasing patient's health literacy. These studies provide consistent results that with the implementation and utilization of the teach-back method, patients tend to have better health literacy (Farahaninia et al., 2020; Liu et al., 2018, Sotoudeh et al., 2022; Saadatian et al., 2022)

In a study conducted by Farahaninia et al., (2020) there were a total of 74 patients with a chronic illness involved in this study. Those 74 subjects were then assigned to a control group or an intervention group. The intervention group underwent 4 person-to-person training sessions by a nurse or doctor, for a duration time of 30-45 minutes, in addition to the usual departmental teaching method and educational manuals about their chronic illness. The control group received the routine program training

completed by a doctor or nurse accompanied by department posters. In contrast to the control group, self-efficacy was shown to be immensely greater in the intervention group following teaching with the use of the teach-back method than before teaching. This study concluded that increased knowledge enabled the patient to achieve better self-care and informed decision-making related to continuity of self-care, and over time resulted in a decline in physical complications.

This same theme is explored in a study by Liu et al. (2018). In this study, a total of 126 patients were assigned to the intervention group, and 134 patients assigned to the control group. Each individual patient underwent a one-on-one Health Literacy Questionnaire to determine a baseline health literacy level for each participant. Each participant was then issued the same health education; yet, the teach-back method was conducted with the intervention group to confirm the participants retained the given education. The participants were instructed to explain the material that was taught in their own words. If the answers were incorrect or inadequate, the educators would then re-explain the issue until all of the participants were able to answer each question correctly. The control group was given the same health education, presented by the same educators in the normal educational format. Post intervention, the teach-back method was seen to improve the health literacy level through educational intervention. Throughout the feedback process, the older adults who underwent the implementation of the teach-back method were completely involved in the health education methods, and displayed increased initiative and enthusiasm regarding their care. The use of the teach-back method was seen to increase the passive mode of knowledge acceptance, and inculcate correct health literacy concepts to the participants, in return promoting

disease prevention.

Similarly, in a study by Sotoudeh et al. (2022), the findings of this study indicated that education by way of the utilization of teach-back can aid in the improvement of health literacy and encourage behaviors that aid in preventative measures. These measures serve as evidence that the efficacy of the content is directly correlated to promoting health literacy. In this study, 200 participants were included, and divided into the same format as the previous studies, the control group and the intervention group. The findings concluded that pre-intervention, 54% of the control group had a health literacy level between good and very good, while 50% of the intervention group had health literacy level between good and very good. However, after the intervention, the control group (52%) and the intervention group (78%) displayed a good or very good health literacy level. The educational content of each session was taught face to face for a time duration of 45 minutes, alongside reliable training resources, 25 minutes was dedicated to relaying the education, and 20 minutes was teach-back. Again, if the content showed not to be correctly understood by the participant, the content was taught again.

Saadatian et al. (2022), studied patients with coronary artery disease (CAD). In this study, the Brief Illness Perception Questionnaire (Brief IPM) and the Cardiovascular Management Self-Efficacy Scale (CMSES) were used and completed by the patients. The patients were then separated into two groups. The first group completed the Brief IPM and CMSES before, and the second group completed one month after the intervention took place. In total, the study included 100 patients with a diagnosis of CAD that were hospitalized in coronary care units (CCUs). By way of

convenience sampling, the patients were separated into two, the intervention group and control group. This breakdown was done by utilizing simple randomization. The self-care training program was implemented on an individual basis. The intervention group was led by three sessions totaling 30-45 minutes in time duration. These were completed on three consecutive days following the patient's admission to the hospital. Consistent with other literature reviewed, the results of this study indicated that teach-back training improved self-efficacy and illness perception in patients with a diagnosis of CAD. The effectiveness of the teach-back training method continues to indicate improvement's in the patients' self-management capabilities.

Ahmadidarrehsima et al., (2016) used the teach-back method in a study of 50 breast cancer patients using an intervention and control group. The Oxford Happiness Inventory was used in the study. The intervention included an individualized self-management training program. The specific intervention was determined by the patient's ability to retain the information and took place on an individual basis. Conducted in two steps, the self-management training took place. The focus of the initial stage was geared towards medical management; content included surface knowledge of diet, breast cancer, drug use, physical activities, and limiting stress, and reducing anxiety. In the following stage, role management, which included maintaining behavior that promoted hygiene, alterations in life role's, and the ability to problem solve were taught. Training in each above stage was geared towards the teach-back method. The training included: pre- testing, scoping, training, decision-making and evaluating to repeat the above items basedon patient's learning capabilities. In the teach-back pre-survey, open-ended questions of each stage were utilized. In this study, the

effectiveness of teach-back training method in improving patients' capabilities to self-manage and their overall contentment was confirmed. According to Ahmadidarrehsima et al., (2016) teach-back method is regarded as an effective method in self-care training.

Teaching patient's health information in person, or by phone gives the provider a key advantage over only providing written materials. The provider can assess in real time if the patient understands the information being communicated, and then further explain it in a new way if they do not. Morony et al. (2018) evaluated the impact of teach-back on communication quality in a national telephone based telehealth service for callers of varying health literacy. In this study, the Pregnancy Birth and Baby (PBB) helpline offered information at no charge and advice on pregnancy and parenting. This information was supplied by qualified maternal and child health nurses. Training and skills for using teach-back was a two-hour Communications Skills Workshop. During the course of this workshop, trainers and nurses communicated with patients how to utilize teach-back for a wide variety of calls on the helpline. The impact of teach-back was measured by self-report measures of callers and nurses. In conclusion, the results of this study concluded that there was very strong evidence that teach-back improved nurse awareness. The study would then indicate that the nurse's communication was effective, and the patient understood the information the way it was given to them.

Mathew et al., (2018) concludes that measurement of the teach-back method is not gauged by the patient's level of understanding; yet, it is measured by the degree to how well the provider described the health information to the patient. By asking the patient to demonstrate back or explain, the healthcare provider can detect misunderstandings and thereby correct them. Hence, the teach-back aids in patient

understanding, and simultaneously has a positive influence on the perceptions of patients regarding the amount of time spent with their healthcare provider.

Nickles et al., (2020) utilized “Using the Teach-Back Toolkit” developed by the Agency for Healthcare Research and Quality (AHRQ). This toolkit included an “Interactive Teach-back Learning Module” and the “Teach-back Observation Tool” for intervention training. In this study, nursing students utilized and implemented the teach-back method in a quality improvement initiative to improve patients’ medication knowledge and improve HCAHPS satisfaction surveys. Intervention then took place at the clinical site, with the intention of teaching qualified patients the intent and consequently, the effects of their current medication regimen utilizing the teach-back method. During the implementation of the teach-back intervention, weekly intervention evaluations were utilized, using the Nursing Student Perception of Teach-back effectiveness Survey. The data examined from the Teach-Back Observation Tool indicated nursing student competence with 80% of nursing students confident in medication education using the teach-back method. Patients who received education were administered a one-minute evaluation survey, and results yielded 96.4% of participants were highly satisfied with the teach-back method used during their medication teaching.

Holman et al. (2019) used the Teach-back Conviction and Confidence Scale. A pre-survey Conviction and Confidence Scale was administered, education of the teach-back method was implemented, and a post-survey was then repeated a month following to determine if providers confidence was improved using the teach-back method. When asked about the importance of using teach-back, 78% of the post intervention

participants reported the highest level of conviction compared to the 75% of pre-survey responses. An even greater increase was noted in confidence with 78% post intervention respondents reporting the highest level of confidence in their ability, compared to the 50% of pre-survey participants.

Zabolypour et. al. (2020) compared teach-back effects, with that of motivational interviewing as it relates to the patient's plan of care. The findings of this study showed compliance to treatment plan was significantly greater in both experimental groups. The results did not find a meaningful difference in adherence to treatment between the motivational interviewing group and the teach-back method group.

In summary, repeatedly it has been shown that the implementation and utilization of the teach-back method was seen to have positive outcomes. Patients must be taught well to retain the education being provided and achieve a sufficient level of understanding. Regardless of a patient's health literacy level, it is imperative staff confirm the patient understands the information that is shared. While many educational teaching methods are used daily, the teach-back method creates an easy learning environment for the patient that is safe and free of shame by removing indistinct medical terms while substituting lexicon that can be interpreted by the patient. Studies throughout this assessment revealed enriched results in areas including ailment-specific knowledge, patient's self-management, and adherence. Each study included individuals of varying demographics, yet the groups that did receive the teach-back method did show significant improvements in their knowledge of the specific illness and memory retention, regardless of demographic background.

The framework of choice for this study is the Plan-Do-Study-Act (PDSA) model (Institute for Healthcare Improvement [IHI], 2023). The PDSA cycle is utilized to test changes in the work setting by utilizing the scientific method for action-oriented learning (IHI, 2021). In the planning phase, a study question is formed. In patients with a diagnosis of hypertension, how effective is the implementation of the teach-back method by healthcare providers in a primary care setting? It is anticipated that with the implementation and utilization of the teach-back method for patients with hypertension, patients will show improvement in blood pressure, medication and diet compliance, and improvement in signs and symptoms. Two surveys and a data tracking tool will be used for data collection and analysis. The “Do” phase of the model included a three-month period of implementing the teach-back method for patients with hypertension and surveying the caregivers. Data from the surveys and specific patient data will be analyzed during the “Study” phase in order to summarize, compare, and reflect on what was discovered from the implementation of the teach-back method (IHI, 2021). Implications for practice and improvements will be a critical element of study cycle. Findings from this study will then guide future patient teaching methods in the “Act” cycle.

## **Methods**

In this methods section, an overview of the project design, setting, sample, procedures, data collection, and approval process will be described.

### **Design**

This quality improvement project has a descriptive design. The project evaluated



the effectiveness of the use of the teach-back method by healthcare professionals in a primary care setting. The implementation of the teach-back method was designed for patients who have a diagnosis of hypertension or high blood pressure, in an effort to improve health literacy.

### **Setting**

The setting for this project was in an urban Midwestern primary care clinic. This clinic provides primary patient care, and serves patients of varying age groups, beginning at age 2 and older. The staff includes Nurse Practitioners, registered nurses, medical assistants, and a collaborating physician. This clinic serves approximately 1,200 patients. There are approximately 647 patients with an active diagnosis of hypertension that are being seen and followed by this primary care clinic. This clinic is located in a large metropolitan area with a city population of 18,000 (U.S. Census Bureau, 2021). The majority of the patient population at this clinic is of African American descent.

### **Sample**

This project utilized a convenience sample of nurse practitioners, registered nurses, physicians and medical assistants employed at this clinic. Inclusion criteria consisted of full-time and part-time staff in these categories who are currently employed at this primary care clinic. Exclusion criteria consisted of PRN, as needed, healthcare providers. The projected sample size was 7 staff members.

### **Procedures**

The implementation of this project consisted of two educational training seminars separated into two consecutive clinic days. The first phase of the training occurred on a Thursday afternoon in January of 2023 for an in-person learning seminar

at the primary care clinic. This training seminar took place during the clinic's scheduled lunch hour. The seven staff participants were invited to complete the pre-education Conviction and Confidence Scale (Appendix B) before education about and utilization or implementation of the teach-back method began. The Conviction and Confidence Scale is a 4-item questionnaire tool, that assesses provider's thoughts on the importance of the teach-back method, providers confidence in their ability to utilize the teach-back method, provider's inquiring about patient's level of understanding, and use of elements of effective teaching. Once the participants complete this pre-education survey they were instructed to place their completed forms in a folder that was located at the rear of the conference room where the teaching took place. The pre-education Conviction and Confidence Scale was used to establish baseline data of caregiver's knowledge of the teach-back method and their current patient teaching style they utilize during patient encounters.

Upon completion and submission of the pre-education survey, the staff completed the first educational module in a group to allow for open conversation amongst the participants following the modules. The education was delivered by the project director using the modules that are a part of the *Always Use Teach-Back! Toolkit* by the AHRQ (Agency for Healthcare Research and Quality, 2020). The AHRQ has devised this toolkit to describe elements of the use of plain language, utilization of teach-back, training, and structure changes that are necessary to encourage consistent use of teach-back. This educational module included a 45- minute Interactive Teach-Back Learning module to include key components of content, including videography and scenarios of HCPs using the teach-back method. The 45- minute Interactive

Learning Module was divided into two components: background information of the teach-back as it relates to health literacy to refine clinician communication, and the interactive self-analysis to confirm and reinforce one's ability to utilize and implement the teach-back method into clinical practice. The interactive learning modules identified the objectives, challenges, and how to better communicate by way of the teach-back method. The modules gave examples of how to incorporate plain language, in place of specific medical terminology. After the participants viewed the first educational module, a question and answer session took place regarding the Interactive Teach-Back module. This concluded day 1 of the 2-day learning seminar.

The second day of the educational learning seminar began on the following day, on Friday afternoon. The participants arrived for an in-person learning seminar at the primary care clinic, again during the clinic's scheduled lunch hour. The next educational learning module began, and ran approximately 23 minutes in time duration. This learning module included real examples of healthcare providers utilizing the teach-back method in their practice, with a focus on health literacy and patient safety. This video displayed real-life patient scenarios, their encounters with previous healthcare providers, and the struggles they dealt with as it relates to health literacy. The video further discussed the tools to improve provider and patient communications, patient understanding, and patient self-care and management, in an effort to remove barriers to better achieve optimized patient care. In this video, the author educates the viewer of what can be done in the healthcare setting to better aid in patient's compliance. These tools included a variety of teaching tools for the provider to utilize in clinical practice, such as medication compliance sheets where the provider will give the patient a list of

their medications, the rationale for using the medication, and indicating specific information about the medication such as the color, shape, etc. This video educated the providers about simple actions to improve their office, create a better shame-free environment, engaging the entire healthcare staff in the teach-back method, and conveying only the most important concepts.

Immediately following the second education session the 2-items about conviction and confidence were completed by the participants again. This questionnaire assessed the participants conviction about the importance of teach-back and confidence in using teach-back. (See Appendix C).

Implementation of the teach-back method began following completion of the education by staff. Implementation of the teach-back method took place January 30, 2023. The data tracking tool that was used for this project was placed at the front desk of the primary care clinic in a locked file cabinet. Inside the locked file cabinet, the completed data tracking tools was located in a blue colored folder marked "Teach-back". The placement of this data tracking tool was determined so all 7 of the staff who have office keys would be able to easily access the tool following patient appointments, but not easily accessible to visitors. This data tracking tool was used only for patients with a diagnosis of hypertension (Appendix D) who were seen by a healthcare provider who completed the teach-back method during patient education. This tracking tool was used for the staff to track patients with hypertension who received teach-back during their clinical encounter. Education for patients with hypertension in the primary care setting focuses on blood pressure management, medication compliance, and diet control.

This tracking tool included demographics such as age and race, the patient's blood pressure reading that visit, medication and diet compliance, any signs and symptoms the patient may be experiencing at time of visit, what topics teach-back was used for and the date of the patient's follow-up visit. Follow-up for patients with a diagnosis of hypertension typically occurs every 4-6 weeks. At time of follow-up visit, this same tracking tool was used to collect the same information. The two forms were stapled together and then the name portion of the form was removed from both forms and placed in the confidential, locked shred container located inside the clinic office.

The post-implementation Conviction and Confidence Scale was completed by staff 6 weeks after implementation of teach-back. A 6-week timeframe was determined, as follow-up for patients with a primary diagnosis of hypertension are between 4-6 week. A second in-person meeting took place at the primary care clinic, during the clinic's scheduled lunch hour, in the clinic's conference room. During this meeting, the staff was invited to complete the post-education Conviction and Confidence Scale. Once all participants turned in their post-education Conviction and Confidence Scale, there was a designated time to allow for staff to voice their experience with the implementation of the teach-back method within their specific clinical setting, including strengths, challenges, and concern. Upon leaving the conference room, participants were thanked for their time and participation by the project director.

### **Data Collection/Analysis**

Data collection for this project included the pre-education and post-education Conviction and Confidence Scale. The Conviction and Confidence Scale allowed for clinicians to self-assess their use of teach-back, and whether the clinician is convinced

that teach-back is important (Agency for Healthcare Research and Quality, 2020). The Conviction and Confidence Scale used in this quality improvement project consisted of four questions. Question 1 asked the participant to describe on a 1 to 10 scale how convinced they were of the importance of teach-back. Question 2 asked the participant to describe how confident they were in their own ability to use teach-back, also using a 1 to 10 scale. Question 3 asked how often the participant asks their patient to explain back in their own words what the provider taught during the patient appointment. This question was scored using a 5 data points: whether the participant has been using teach-back for 6 months or more, less than 6 months, whether the participant plans to utilize teach-back in the next month, in the next 2 to 6 months, or does not plan to use teach-back at all. Question 4 inquired about all the elements of effective teach-back, in which the participant responded with a yes or no, for each element. The fourth question gauged how the provider completed patient teaching during patient encounters. The elements of teach-back included in Question 4 were the following: using a caring tone of voice, displaying comfortable body language, plain language, asking the patient to explain in their own words, open-ended questions, avoiding closed-ended questions, taking responsibility for communication clarity, checking to ensure clarity, document use of teach-back, and including family members/caregivers. The 2-items assessing conviction and confidence were completed again immediately after the education. The same 4 item Conviction and Confidence Scale was completed by participants 6 weeks after the education sessions had taken place.

Clinicians were asked to provide data on patients seen with a primary diagnosis of hypertension for a total of 6 weeks. Data collected from clinicians after patient

encounters will include patient's age, race, the patient's blood pressure reading that visit, medication and diet compliance, any signs and symptoms the patient may be experiencing at time of visit, whether the teach-back method was implemented during visit, and if so, what topics were discussed during that patient encounter and the date of the patient's follow-up visit. The same data was collected at the follow up visit. A comparison of provider's pre- and post-survey results was performed using descriptive statistics and t-tests. Descriptive statistics and chi-square were used to analyze the data collected from clinicians about use of teach-back with specific patients.

### **Approval Process**

The project was reviewed by the institutional review board (IRB) of the organization where the project took place and the University of Missouri-St. Louis IRB before the start of the project. Both IRBs deemed the project quality improvement and not requiring IRB approval. Healthcare provider participation in the surveys was voluntary. Risks in this project were expected to be minimal as all the educational modules and surveys were components of previously used evidence-based programs used in clinical practice settings.

## **Results**

### **Staff**

There was a total of 7 healthcare professional participants who engaged in the educational training seminar in the primary care setting, 1 physician, 3 nurse practitioners, 1 registered nurse, and 2 medical assistants. These 7 participants participated in the Pre-Implementation Surveys and the Post-Implementation Survey.

### *Elements of Teach-Back*

The participant survey asked how often they asked patients to explain back, in their own words, what they need to know or to do to take care of themselves. Due to the small sample size, a Fischer exact test was used to evaluate changes in this question between the pre-and post-staff surveys. The results of the Fisher exact test were significant (Table 1).

**Table 1**

#### *Staff Use of Teach-back*

Patient Explanation	Pre-Education	Post-Education	Fischer Exact Test
I do not do it now and do not plan to do it	6 [3.00]	0 [3.00]	p=0.001*
I have been doing this for less than 6 months	0 [3.00]	6 [3.00]	
I have been doing this for 6 months or more	1 [1.00]	1 [1.00]	

Additional questions on the survey asked participants to identify the teach-back elements used more than half of the time in the past week including a caring tone, body language, plain language, patient using own words to explain, open-ended questions, avoiding closed-end questions, responsibility, checking patients teach-back, utilizing print materials, documentation, and inclusion of family members. Fisher's exact tests were conducted to examine changes in the use of elements of effective teach-back pre-and post-implementation. Table 2 shows the results. There were no significant differences for tone, body language, plain language, closed-ended questions, use of print materials, and including family members/caregivers. Significant differences were found



for patient using own words, open-ended question, responsibility, checking patients teach-back, and documenting teach-back.

**Table 2**

*Comparison of Elements of Teach-back Used Pre and Post Education Survey*

<i>Elements of Teach-back</i>	<i>Pre (n=7)</i>	<i>Post (n=7)</i>	<i>Fischer Exact</i>
Tone:			
Yes	4[5.00]	6[5.00]	.55
No	3[2.00]	1[2.00]	
Body Language:			
Yes	5[5.50]	6[5.50]	1.000
No	2[1.50]	1[1.50]	
Plain Language:			
Yes	4[5.50]	7[5.50]	.192
No	3[1.50]	0[1.50]	
Patient's Own Words:			
Yes	2[4.50]	7[4.50]	.021*
No	5[2.50]	0[2.50]	
Open-Ended Questions:			
Yes	2[4.50]	7[4.50]	.021*
No	5[2.50]	0[2.50]	
Closed-Ended Questions:			
Yes	1[2.50]	4[2.50]	.266
No	6[4.50]	3[4.50]	
Responsibility:			
Yes	1[3.50]	6[3.50]	.029*
No	6[3.50]	1[3.50]	
Check Patient's Teach-back:			
Yes	1[3.50]	6[3.50]	.029*
No	6[3.50]	1[3.50]	
Print Materials:			
Yes	4[4.50]	5[4.50]	1.000
No	3[2.50]	2[2.50]	
Document Patient's Response:			
Yes	1[4.00]	7[4.00]	.005*
No	6[3.00]	0[3.00]	
Include Family/Caregivers:			
Yes	6[6.50]	7[6.50]	1.000
No	1[0.50]	0[0.50]	

### ***Staff Conviction and Confidence***

Staff were asked to use a 10-point scale to rate their conviction that teach-back was important and confidence in using teach-back at three points: immediately before the staff education (time 1), immediately after the staff education (time 2) and six weeks later (time 3). The staff surveys were analyzed using an analysis of variance (ANOVA) to determine whether there were significant differences in whether the participant was convinced there was a beneficial value and had confidence in the implementation of a teach-back program. The results of the ANOVA for the conviction question were significant,  $F(2, 18) = 4.44, p = .027$ . Post-hoc analysis further examined the differences between each of the means and found a significant increase from time 1 ( $M = 5.00, SD = 2.52$ ) to time 2 ( $M = 7.71, SD = 1.38$ ),  $p = .036$ . No other significant effects were found.

The results of the ANOVA for confidence were significant,  $F(2, 18) = 7.21, p = .005$ , indicating there were significant differences in the level of confidence between pre- and post-implementation. Post-hoc analysis further examined the differences between the means and found a significant increase from time 1 ( $M = 4.00, SD = 3.00$ ) to time 2 ( $M = 8.57, SD = 0.98$ ),  $p = .004$ . No other significant effects were found.

### **Patient Encounters**

#### ***Demographics***

There was a total of 54 eligible patients who had a definitive diagnosis of hypertension. Of those participants, data from 42 patients were included in this project as staff completed information on their initial and follow up appointments. The sample of 42 patients, was predominantly African American ( $n = 29, 69.05\%$ ). Table 3 shows the

distribution of race in this sample. The patients ranged from 26 years of age to 73 years of age, with the mean age of 49 ( $SD = 11.21$ ).

**Table 3**

***Distribution of Race in Patients***

Patient Race	<i>n=42</i>	%
African-American	29	69.05
Caucasian	7	16.67
Hispanic	5	11.90
Asian American	1	2.38

***Patient Encounters***

At both the initial and follow up appointments, staff completed an assessment of whether patients took prescribed medications as ordered, followed a sodium restricted diet, experienced any symptoms in the past week or during this visit and to indicate if the provider used the teach-back method during the visit. Chi-square Tests of Independence were conducted to examine whether a patient took prescribed medications as ordered and whether they followed a sodium restricted diet. The results of patients taking prescribed medications as ordered was significant, while the results of patients following a sodium restricted diet was not significant (Table 4).

**Table 4.***Medication and Diet Restriction Follow Up*

<i>Variable</i>	<i>Initial Visit (n=42)</i>	<i>Follow Up Visit (n=42)</i>	<i>Chi -square</i>
Took prescribed medications as ordered:			$X^2 (1)=9.45, p=.002^*$
Yes	26 [32]	38 [32]	
No	16 [10]	4 [10]	
Followed restricted sodium diet:			$X^2 (1)=0.00, p=1.000$
Yes	29 [29]	29 [29]	
No	13 [13]	13 [13]	

Chi-square Tests of Independence were conducted to examine whether there were any changes in the headaches, flushing, dizziness, and visual change symptoms experienced in the past week between the initial visit and the follow up visit and if symptoms were present at this visit. All symptom questions were significant (Table 5) showing a decrease in symptoms present in the past week from initial to follow up appointment and a decrease in symptoms present at the follow up appointment.

**Table 5.***Symptoms Reported by Patient*

<i>Variable</i>	<i>Initial Visit (n=42)</i>	<i>Follow Up Visit (n=42)</i>	<i>Chi-Square</i>
Headache			
Yes	21 [13.50]	6 [13.50]	$\chi^2(1) = 12.28, p < .001$
No	21 [28.50]	36 [28.50]	
Facial Flushing			
Yes	8 [5.00]	2 [5.00]	$\chi^2(1) = 4.09, = .043$
No	34 [37.00]	40 [37.00]	
Dizziness			
Yes	17 [11.50]	6 [11.50]	$\chi^2(1) = 7.24, p = .007$
No	25 [30.50]	36 [30.50]	
Vision Changes			
Yes	25 [17.50]	10 [17.50]	$\chi^2(1) = 11.02, p < .001$
No	17 [24.50]	32 [24.50]	
Any Symptoms			
Yes	19 [12.00]	5 [12.00]	$\chi^2 = 11.43, p < .001$
No	23 [30.00]	37 [30.00]	

*Use of Teach-Back by Providers*

Chi-square Test of Independence and Fischer exact tests were used to evaluate whether a difference occurred in the overall use of teach-back at the initial and follow-up visits as well as the use of teach-back for the specific areas of home blood pressure monitoring, diet, exercise, and medications in the initial and follow-up appointments. No significance differences between initial and follow up visits were found (Table 6).

**Table 6***Use of Teach-Back by Content Focus*

<i>Content Focus</i>	<i>Initial Visit (n=42)</i>	<i>Follow Up Visit (n=42)</i>	<i>Chi-Square</i>
Overall Teach-Back Use			
Yes	34[33.00]	32[33.00]	$\chi^2(1) = 0.28, p = .595$
No	8[9.00]	10[9.00]	
Home blood pressure monitoring			
Yes	41[40.50]	40[40.50]	$\chi^2(1) = 0.35, p = .557$
No	1[1.50]	2[1.50]	
Diet			
Yes	41[40.50]	40[40.50]	$\chi^2(1) = 2.03, p = 1.000$
No	1[1.50]	2[1.50]	
Exercise:			
Yes	41[40.50]	40[40.50]	$\chi^2(1) = 0.35, p = .557$
No	1[1.50]	2[1.50]	
Medications:			
Yes	No change because all encounters reported that this was done		
No	done		

A further analysis was done of the patient's blood pressure at each visit. Based on systolic and diastolic value, the patient was placed in a particular category depending on the blood pressure reading at that visit. Each blood pressure was categorized according to the American Heart Association scheme (American Heart Association, 2023). More category 2 readings were noted in the follow up visits with less category 3 and 4 readings however there was not a statistical difference between the initial and follow up visit (Table 7).

**Table 7***Patient Blood Pressure by AHA Category at Initial and Follow Up Visit*

Blood Pressure Category	Initial Visit (n=42)	Follow-up Visit (n=42)	Chi-square
Category 1	9 [19.00]	19 [19.00]	
Category 2	5 [7.50]	10 [7.50]	$\chi^2(3) = 2.73, p = .435$
Category 3	8 [7.50]	7 [7.50]	
Category 4	10 [8.00]	6 [8.00]	

### Discussion

The results of this quality improvement project aimed at improving health literacy among patients with hypertension by educating providers on effective utilization and implementation of the teach-back method. This would suggest that the use of the teach-back approach aided in the improvement of hypertension management. Results from the staff survey showed a significant increase in staff conviction and confidence in use of the teach-back method from time 1, immediately before the education and time 2, immediately after the education. This evidence would suggest that after education was completed the staff were highly confident and convinced of the use of teach-back. The means did go down from Post-education (time 2) to Post- Implementation (time 3). This decrease could mean the staff may benefit from additional education about the use of teach-back in order to encourage consistent use of the teach-back strategy.

As expected staff responses to the question related to use of teach-back changed from the pre-survey to the post-survey with the number of staff reporting that they did not use and did not plan to use teach-back changing from 6 to 0 from the pre-survey to the

post-survey and the number reporting using it for less than six months changing from 0 to 6 from the pre-survey to the post-survey showing that all staff who had not used teach-back began to use it after participating in the education. Group discussion during the educational seminar, noted that the staff believed the utilization in teach-back could increase the time with patients, and could potentially have a negative impact on provider care as it was time consuming. During the educational videos in the seminar, the author indicated that although the use of teach-back may seem lengthy and time consuming, historically this was not the case as teaching should occur during patient encounters anyway, and this educational method should not add any additional time to patient encounters. During the post-implementation meeting, staff completed the post-implementation survey and a brief, open discussion took place. At that time, staff did disclose that the teach-back method was indeed not a time-consuming task and did not add any additional time to patient encounters, as the staff were simply incorporating this method into their practiced routine. The staff also reported that they saw benefits to this method and appeared to aid in better medication compliance and disease management.

In analyzing the data related to use of the elements of teach-back, no significant differences were found for elements of tone, body language, plain language, avoiding closed-ended questions, use of print materials, and including family members/caregivers. Differences were found in the elements of patient's own words, open-ended question, responsibility, checking patient teach-back, and documenting patient response. Although all of these elements are important to the teach-back method the ones that were not significant are common to general patient education principles. The ones that were seen



to have a significant difference was found from the pre to post staff survey are the items that are more unique to the teach-back strategy.

Results from the comparison of the initial and follow-up patient appointment data suggest that the implementation of a teach-back program may have contributed to a positive impact on the patient's overall hypertension disease management. The provider assessment inquired whether the patient took prescribed medications, followed a low sodium diet, and reported any symptoms that could indicate poor hypertension management. The results of the comparison of patients taking prescribed medications as ordered between the initial and follow-up visit was significant with more patient's reporting taking medications as ordered in the follow-up visit. No difference was found with patients following a sodium restricted diet. This data could indicate that the use of teach-back aided in patient medication compliance but did not improve patient's compliance with a low sodium diet consumption.

All symptom questions were significant showing a decrease in symptoms present in the past week from initial to follow up appointment and a decrease in symptoms present at the follow up appointment. This data could indicate that because of the implementation of teach-back, patients were following education provided that aided in a decrease of patient symptoms.

Patients' blood pressure categorization was completed based on the American Heart Associations' standards. Although there was no significant difference overall in the categorization of blood pressures from the initial to follow up visit it was noted that of the 42 patients, 23 patients remained in the same category, 14 patient's categories improved and 5 patient's categories was worse on the follow up visit. The data collected could

suggest that the patient's improvement of blood pressure from one category to an improved category may have been influenced by use of the teach-back method.

In summary, the findings of this quality improvement project supported the literature that has been shown that the implementation and utilization of the teach-back method was seen to have positive outcomes.

### **Limitations**

Although there are a number of positive changes that were seen in this project several limitations need to be noted including the limited focus on what data was collected during this project. The sample size for this project was small, including only 7 participants, and 42 patients. Limitations also include the reliance on providers assessment, and factors such as if a patient's medication regimen was changed was not noted in the data tracking instrument. The data collecting instrument did not include if a patient missed medication doses, or whether the provider added additional medications to patient's medication list to aid in blood pressure decrease.

### **Recommendations**

Recommendations following this quality improvement project could include adding a booster course to aid in enforcing the use of teach-back since the level of conviction and confidence did decrease from immediately after the education sessions to the time of the post-survey six weeks later. This booster could include another educational seminar to better convince the healthcare provider to use teach-back, and aid in building more confidence in the use of teach-back on a daily basis during patient encounters.

It is also recommended that future projects recruit a larger sample size, and to include individuals of varying disciplines, such as social workers, pharmacists, dietitians, and other disciplines in the healthcare system. Additionally, employing a longer timespan to apply the intervention of teach-back may steadily improve disease specific-knowledge, patient's self-management, and adherence. Because medication compliance and a restricted sodium diet are key elements in hypertension management, it is recommended that the manner in which diet compliance is taught needs to be evaluated. Ensuring the specifications of a low sodium diet are understood by the patient and suggesting salt substitutes can aid the patient's overall well-being.

### **Conclusion**

As health literacy remains a concerning issue in society, efforts to combat this alarming problem are necessary. The cause of health literacy can be mended with varied teaching methods and educational resources. This quality improvement project focused on the utilization of teach-back with patients with a diagnosis of hypertension in a primary care setting. In an effort to aid and support patients in their health, health care professionals must ensure the patients understand and comprehend the information being delivered to them, in order to achieve optimal health.

Overall, the objective of this quality improvement project was to assess the effectiveness of using the teach-back method by HCPs with their patients who have a diagnosis of hypertension or high blood pressure, to improve knowledge of health literacy. After participation in this project and the associated educational seminar, healthcare providers reported that this project was beneficial for the patient, and thus aided in the lessening of poor health literacy.

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## Appendix A

## Evidence Matrix

CITATION	Level of Evidence	PURPOSE / BACKGROUND	PARTICIPANTS / SETTING	METHODS / DESIGN	RESULTS / LIMITATIONS / RECOMMENDATIONS
Ahmadidarrehsima, S., Rahnama, M., Afshari, M., & Asadi Bidmeshki, E. (2016). Effectiveness of Teach-Back Self-Management Training Program on Happiness of Breast Cancer Patients. <i>Asian Pacific journal of cancer prevention: APJCP</i> , 17(10), 4555–4561. <a href="https://doi.org/10.22034/apjcp.2016.17.10.4555">https://doi.org/10.22034/apjcp.2016.17.10.4555</a>	III	Aim: Determine effects of a teach-back self-management training method	50 breast cancer patients	Quasi-experimental study	Limitations: Time limitations for sampling and long teach-back training process limited the possibility of conducting research with a larger sample size
Farahaninia, M., Hoseinabadi, T. S., Raznahan, R., & Haghani, S. (2020). The Teach-Back Effect on Self-Efficacy in Patients with Type 2 Diabetes. <i>The Review of Diabetic Studies : RDS</i> , 16, 46–50. <a href="https://doi-org.ezproxy.umsl.edu/10.1900/RDS.2020.1646">https://doi-org.ezproxy.umsl.edu/10.1900/RDS.2020.1646</a>	II	Purpose: investigate the impact of the teach-back method on the effectiveness of self-management in patients with Type 2 DM	74 patients with DM2	Convenience Sampling	Limitations: the educational levels of the participants were heterogeneous which may have led to an impact on the answers
Holman, C. K., Weed, L. D., & Kelley, S. P. (2019). Improving Provider Use of the Teach-Back Method. <i>Journal for nurses in professional development</i> , 35(1), 52–53. <a href="https://doi.org/10.1097/NND.0000000000000521">https://doi.org/10.1097/NND.0000000000000521</a>	III	High prevalence of admission and readmissions for uncontrolled chronic illnesses	300-bed inpatient facility  20 acute care nurses	Pilot Study	Strengths: Overall increase in nurse's conviction of the use of teach-back Limitations: Lack of finances contributed to low post intervention participation

CITATION	Level of Evidence	PURPOSE / BACKGROUND	PARTICIPANTS / SETTING	METHODS / DESIGN	RESULTS / LIMITATIONS / RECOMMENDATIONS
<p>Liu, Y. B., Li, Y. F., Liu, L., &amp; Chen, Y. L. (2018). Effectiveness of the teach-back method for improving the health literacy of senior citizens in nursing homes. <i>Japan journal of nursing science : JJNS</i>, 15(3), 195–202. <a href="https://doi.org.ezproxy.umsl.edu/10.1111/jjns.12192">https://doi.org.ezproxy.umsl.edu/10.1111/jjns.12192</a></p>	II	<p>Purpose: Explore the effectiveness of the teach-back method for improving the health literacy of older adults in nursing homes</p>	263 nursing home residents	Convenience Sampling	<p>Limitations: Self-reporting susceptible to patient recall bias</p> <p>Study was conducted in nursing home and might not be representative of all older adults</p> <p>Small sample size</p>
<p>Mathew, M. R., Mohan, L., Paul, M., Maideen, M., Jose, L., &amp; Ommanakuttan, M. (2018). Evaluating effectiveness of patient counseling, teach back versus standard method. <i>International Journal of Basic &amp; Clinical Pharmacology</i>, (1), 87. <a href="https://doi.org/10.18203/2319-2003.ijbcp20175680">https://doi.org/10.18203/2319-2003.ijbcp20175680</a></p>	I	<p>Aim: To assess memory retention of a new prescription education by comparing teach-back method and standard counseling method</p>	150 patients	Prospective experimental study	<p>Limitations: Time taken for patient education was not recorded</p>
<p>Morony, S., Weir, K. R., Bell, K. J. L., Biggs, J., Duncan, G., Nutbeam, D., &amp; McCaffery, K. J. (2018). A stepped wedge cluster randomized trial of nurse-delivered teach-back in a ENHANCING HEALTH LITERACY 44 consumer telehealth service. <i>PLoS ONE</i>, 13(10), 1–20. <a href="https://doi.org/10.1371/journal.pone.0206473">https://doi.org/10.1371/journal.pone.0206473</a></p>	I	<p>Purpose: to evaluate the impact of teach-back on communication quality in a national telephone based telehealth service</p>	400 callers	Cross-sectional stepped wedge cluster randomized trial	<p>Strengths: Step wedge design</p> <p>Limitations: Measurements were taken after nurses had commenced self-reflection</p>

CITATION	Level of Evidence	PURPOSE / BACKGROUND	PARTICIPANTS / SETTING	METHODS / DESIGN	RESULTS / LIMITATIONS / RECOMMENDATIONS
<p>Nickles, D., Dolansky, M., Marek, J., &amp; Burke, K. (2020). Nursing students use of teach-back to improve patients' knowledge and satisfaction: A quality improvement project. <i>Journal of professional nursing : official journal of the American Association of Colleges of Nursing</i>, 36(2), 70–76. <a href="https://doi.org/10.1016/j.profnurs.2019.08.005">https://doi.org/10.1016/j.profnurs.2019.08.005</a></p>	V	<p>Purpose: improve patient knowledge of medications and increase patient satisfaction</p>	700 Bed Facility	Model for Improvement and the Pan-Do- Study-Act method	<p>Strengths: increase in patient outcomes</p> <p>Limitations: Not having fun participation from each group of nursing students</p>
<p>Saadatian, M., Yoosefian, N., Saravi, F. K., &amp; Yaghiubinia, F. (2022). The Effect of the Teach-Back Method on Illness Perception and Self-efficacy in Patients with Coronary Artery Disease. <i>Medical-Surgical Nursing Journal</i>, 11(1), 1–9. <a href="https://doi-org.ezproxy.umsl.edu/10.5812/msnj-130535">https://doi-org.ezproxy.umsl.edu/10.5812/msnj-130535</a></p>	III	<p>Aim: To examine the effect of the teach- back method on illness perception and self- efficacy</p>	100 patients with CAD	Quasi-experimental study	<p>Limitations: Control and intervention groups had access to information from other information sources</p>
<p>Sotoudeh, A., Ardakani, M. F., Jadgal, M. S., Asadian, A., &amp; Zareipour, M. A. (2022). Promoting health literacy through the teach-back method among Iranian health ambassadors: A randomized controlled trial. <i>Investigacion y educacion en enfermeria</i>, 40(1), e17. <a href="https://doi.org/10.17533/udea.iee.v40n1e17">https://doi.org/10.17533/udea.iee.v40n1e17</a></p>	III	<p>Purpose: Describe the effect of the teach-back method on promoting health literacy</p>	200 persons over 14 years old	Quasi-experimental study	<p>Limitations: Possibility of obtaining information from other information sources while conducting research</p>
<p>Zabolypour, S., Alishapour, M., Behnammoghadam, M., Abbasi Larki, R., &amp; Zoladl, M. (2020). A Comparison of the Effects of</p>	I	<p>Aim: To compare the effects of</p>	81 patients	Randomized Control Trial	<p>Limitations: Errors in using the self-report questionnaire</p> <p>Effect of patients</p>

CITATION	Level of Evidence	PURPOSE / BACKGROUND	PARTICIPANTS / SETTING	METHODS / DESIGN	RESULTS / LIMITATIONS / RECOMMENDATIONS
Teach-Back and Motivational Interviewing on the Adherence to Medical Regimen in Patients with Hypertension. <i>Patient preference and adherence</i> , 14, 401–410. <a href="https://doi.org/10.2147/PPA.S231716">https://doi.org/10.2147/PPA.S231716</a>		motivational interviewing and teach-back on people with hypertension			mental and emotional condition during questionnaire completion  Impact of other communications

## Appendix B

### Pre-Education and Post-Implementation Survey:

#### *Conviction and Confidence Scale*

1. On a scale from 1 to 10, how **convinced** are you that it is important to use teach-back (ask patients to explain key information back in their own words)?

Not at all important Very Important

1 2 3 4 5 6 7 8 9 10

2. On a scale from 1 to 10, how **confident** are you in your ability to use teach-back (ask patients to explain key information back in their own words)?

Not at all important Very Important

1 2 3 4 5 6 7 8 9 10

3. How often do you ask patients to explain back, in their own words, what they need to know or do to take care of themselves?
  - I have been doing this for 6 months or more
  - I have been doing this for less than 6 months
  - I do not do it now, but plan to do this in the next month
  - I do not do it now, but plan to do this in the next 2 to 6 months
  - I do not do it now and do not plan to do this
4. Check all the elements of effective teach-back you have used **more than half the time in the past work week.**
  - Use a caring tone of voice and attitude.
  - Display comfortable body language, make eye contact, and sit down
  - Use plain language
  - Ask the patient to explain, in their own words, what they were told
  - Use non-shaming, open-ended questions
  - Avoid asking questions that can be answered with a yes or no
  - Take responsibility for making sure you were clear
  - Explain and check again if the patient is unable to teach-back
  - Use reader-friendly print materials to support learning
  - Document use of and patient's response to teach-back
  - Include family members/caregivers if they were present

Notes:

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## Appendix C

### Post-Education Survey

#### *Conviction and Confidence Scale*

1. On a scale from 1 to 10, how **convinced** are you that it is important to use teach-back (ask patients to explain key information back in their own words)?

Not at all important Very Important

1	2	3	4	5	6	7	8	9	10
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2. On a scale from 1 to 10, how **confident** are you in your ability to use teach-back (ask patients to explain key information back in their own words)?

Not at all important Very Important

1	2	3	4	5	6	7	8	9	10
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**Appendix D  
Data Tracking Tool**

**Patient Name:**  
**Date:**  
**Patient's Age:**  
**Patient's Race:**

*Write Y/N below.*

*Y=Yes N=No*

1. Does patient take prescribed medications as ordered?
2. Does patient follow a low sodium/restricted salt diet?
3. Has patient experienced any of the following symptoms in the past week?
  - **Frequent Headaches:**
  - **Facial Flushing:**
    - **Dizziness**
  - **Visual Changes:**
4. Does patient have any signs/symptoms present this visit?  
If yes, please indicate:
5. Did healthcare provider use the teach-back method during patient education this visit?

**If yes, please place a check mark by the topics that were covered this visit?**

- **Home blood pressure monitoring**
- **Diet**
- **Exercise**
- **Medication**

**Next Scheduled Clinic Appointment:** \_\_\_\_\_