IMPROVING PATIENT SATISFACTION THROUGH IMPLEMENTING AIDET

by

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Abstract

Hospital Consumer Assessment of Health- care Provider and System (HCAHPS) scores are key metrics that evaluate quality patient care within health- care system. Many studies reveal that an effective communication strategy promotes positive relationship with patients and nurses, however utilizing the use of a communication tool AIDET (Acknowledge-Introduce-Duration-Explanation-Thank you) and its relationship with patient satisfaction is yet to be known. To understand the use of AIDET by nurses, a gap analysis project was conducted with a convenience sample of 61 nurses, nurse technicians and patient care servicers in an outpatient clinic. The focus of this project is to improve communication through implementing AIDET among the health- care workers and thereby increasing patient satisfaction. AIDET training was given to staff and patient satisfaction scores were measured. The findings included that nurses were using AIDET consistently after the training resulted in overall improvement in patient satisfaction after the training. However, results suggest that more intentional use of AIDET will help to maximize the benefit of this tool and could improve patient satisfactions.

Keywords: AIDET, patient satisfaction, nurse-patient communication, quality of health-care, quantitative methods

Statement of Original Work and Signature

I have read, understood, and abided by Capella University's Academic Honesty Policy (3.01.01) and Research Misconduct Policy (3.03.06), including the Policy Statements, Rationale, and Definitions.

I attest that this dissertation or capstone project is my own work. Where I have used the ideas or words of others, I have paraphrased, summarized, or used direct quotes following the guidelines set forth in the APA *Publication Manual*.

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Introduction

Within any organization, the priority concern is patient satisfaction. In today's competitive health- care industry, Hospital Consumer Assessment of Health- care Provider and System (HCAHPS) patient surveys determine the quality of care. According to HCAHPS Fact sheet (2014), "While many hospitals collect information on patient satisfaction...HCAHPS enables valid comparisons to be made across all hospitals to support consumer choice" (p.1) and one of the measures of care in HCAHPS survey is nurse communication (HCAHPS, 2014, p.6). The main element of care for patients by their health- care provider is communication. Improper diagnosis, medical errors and delayed medical treatment are a result of ineffective communication. Therefore, quality care depends upon effective communication between patients and the health- care system.

Repeated studies have shown lack of quality services within the nation are due to many factors and the main focus is communication. Quality of service that can be provided to the patient could be limited with ineffective communication. This could be due to a health- care system design issue or any inappropriate services provided to patients. When patients enter the hospital, they communicate with health- care team members and they receive treatment options from their doctors and nurses. It is often observed that problems could come across quality communication or what is assumed by the patient (O'Daniel & Rosenstein, 2008). They may not understand and may be confused about their medical diagnosis. They leave hospitals not knowing the meaning of diagnostic tests, unclear about their prognosis and management plan of treatment. Additionally, studies show that, "the ability to communicate effectively with patients can contribute significantly to improved patient outcomes" (Berman & Chutka, 2016, p. 243). Overall, limitations towards quality communication often make the patients' visits unsatisfying

and unfriendly thus effecting the patient's satisfaction. The project is focused to improve communication through implementing AIDET among the health- care workers and thereby increase patient satisfaction.

Problem Description

Guam is a territory with a multicultural base. In a health- care clinic in Guam, there are eight ethnic groups of employees within the organization. The organization identified that there is no standardized communication between nurses and patients to build trust and rapport with patients from different cultures. The HCAHPS scores have been consistently low in the past three years in the areas of patient satisfaction and safety due to poor communication techniques among the health- care employees towards patients (B. Sana & R. Grino, personal communication, January 26, 2014).

Today, Center for Medicare and Medicaid (CMS) quality metrics like HCAHPS and Value -Based Purchase (VBP) are tied to incentives and reimbursement because it is mandated. Therefore, the organization is developing a culture to deliver outstanding patient services. To ensure that the quality metrics are in line with CMS standards, organization is pressured to act upon standards of patient safety and patient satisfaction. Within this organization is that nurses and technicians do not use a standard communication technique while communicating and interacting with the patients. With the support of administration, a plan of implementing AIDET (Acknowledge-Introduce-Duration-Explanation-Thank you) communication system was proposed. It is an "evidenced-based" tool that is developed to improve patient satisfaction scores. "AIDET is a tool that provides dignity and respect through its fundamental principles. It is a framework to communicate with patients and their families as well as with each other. It is a

simple acronym that represents a very powerful way to communicate with people who are often nervous, anxious and feeling vulnerable" (AIDET, 2014, para.3).

In nursing, there are numerous communication models, and many of these models have been developed and promoted resulting in great success. Byrne (2009) reported, "One of the models for communication developed by the Studor Group is AIDET that guides the speaker through the critical elements of a conversation" (para.4). Therefore, it is imperative for the health- care providers to facilitate quality patient care through open communication although patient outcomes depend on successful communication models. American Congress of Obstetricians and Gynecologists reported, "One of the communication models used, AIDET is gaining popularity among a number of hospitals" (Effective Patient- Physician Communication, 2014, p.1). Since the organization was considering at cost-effective communication tools that enhance patient satisfaction, AIDET was highly recommended. Moreover quality care, patient compliance and patient satisfaction are enhanced through AIDET fundamental principles.

Today, the major issue for many health- care organizations is patient satisfaction. This is due to the governing principles and consequences that hospitals have to face if they fail to meet required quality measures in the HCAHPS survey. Hence, the organization recognized that this project could improve patient satisfaction and prevent loss of reimbursement. The organization mandated to create a culture in communication and implemented AIDET training to evaluate communication skills and identify its outcomes. Moreover, the organization believed that patient satisfaction will be accomplished by utilizing an efficient communication tool, AIDET.

Available Knowledge

Many factors affect the continuum of patient-provider communication in this diverse island of Guam. Ineffective communication between patients and health- care workers are the

root cause of major treatment issues, medical errors or even death. According to American Association of Colleges of Nursing (AACN), "effective communication and collaboration among health professionals is imperative to providing patient centered care" (American Association of Colleges of Nursing, 2008, p.22). Although effective communication is a part of health- care educational system, it is important to demonstrate the significance of communication and its impact on health- care outcomes. This is enhanced through inter-professional education that allows the nurses to be confident and work with standard competencies and communication skills that will promote quality patient care with better clinical outcomes and patient satisfaction.

The most essential skill for nursing is effective communication and a good trustworthy relationship starts the moment when a patient interacts with a nurse. However, patients convey more about how they feel through their nonverbal communication. Pullen (2010) stated, "although listening to what they have to say about how they feel is an essential aspect of communication, a smile more is certainly an important aspect of communicating with patients with different culture to put them at ease and gain their trust"(p.4). AIDET facilitates is a structured and effective communication. The AIDET acronym is

- A stands for to *acknowledge*, the attitude of greeting people with smile and using their names this creates a lasting impression.
- I stands for to *introduce* yourself to others politely and let them know who you are and what your role in their care.
- *D* stands for *duration*; patients value their time so keep in touch to ease their waiting times.
- E stands for to *explain* any procedures to the patients. They appreciate nurses who often explain things better and spend more time with them.
- *T* stands for to *thank* one's patients; it's a simple attitude of gratitude.

Although AIDET principles enhance effective communication, it is important to encourage patients to ask further questions. Moreover it is essential that the staff gets adequate training to use AIDET to address unique patient cultural, religious, and spiritual, mobility, or other needs.

Modern health- care is now fundamentally dependent on decisions that are based on the best evidence available. In this section, many relevant studies, shown in the Appendix A, were synthesized. Scott (2012) reported that in a clinical setting, with AIDET communication implementation, patient satisfaction scores rose by 2.4% and remained consistent. In terms of relationship factors, Roter (2010) reiterates that patient satisfaction increased with more information giving and communication. She stated that patient' preferences, experiences, expectations and opportunities to participate in their care enhance partnership and understanding with their health team members. Moreover, Dingley, Daugherty, Derieg & Persing, (2010) added, "because ineffective communication among health- care team members contributes to patient harm and adverse events, interventions and implementation methods become instrumental in preventing negative patient outcomes" (p.16).

A study conducted by Palombi, Nelson, Fierke and Bastianalli (2015) shows that the AIDET framework enhances a consistent process for patient-centered care delivery and highlights patient needs and expectations. When AIDET techniques were employed in a health-care setting, patients reported high levels of satisfaction with pharmacy services and said they felt "happy, comfortable, and trusting." Another study by Edwardson, Gregory and Gamm (2016) revealed that AIDET had proven a positive impact towards patient safety-oriented change initiatives.

According to Justice et.al., (2016), parent satisfaction and comprehension of goals among team members were improved by communicating through writing down and reading back daily goals and displaying it. In terms of communication styles, Vinall-Collier, Madill and Firth (2016) reported that patients engaged better with nurses and built relationship through socio-emotional activity. These styles used by nurse practitioners were highly respected by their patients thus benefits in an established trustworthy relationship and compliance. According to Moore, Vargas and Macchiavelo (2011), the most common patient complaint is the dysfunctional delivery of information by the physicians leading to patient dissatisfaction. Moreover, this has also been identified as an issue in many medical lawsuits. Another explanation by Manary, Boulding, Staelin, & Glickman (2013) shows that interpersonal care experiences, such as patient-provider communication reflects patient satisfaction and quality of care.

In another study by Elshamy and Ramzy (2011), nurses' communication with patients showed, "there was a significant increase in the percentage of patients (73.8 %) who rated the quality of information given by the nurses as good and very good after the implementation of the program compared to 11.9% before the implementation"(p.383). However, it has been shown in a study by Mullerova et al., (2016) that to poor adherence to treatment with poor health outcomes are directly related to patient satisfaction. In a study by Clever, Jin, Levinson, & Meltzer (2008), patient satisfaction was achieved when physician communicates with a positive effect and friendliness, discuss health options, and encourage patients to ask questions about their health-care.

A study conducted by Zamora, Patel, Doherty, Alperstein and Devito (2015) reported, "
Patient satisfaction scores then rose 2.4% and remained relatively consistent from that point
onward. After seeing this heightened patient satisfaction, the hospital administration went on to

implement AIDET throughout the entire organization" (p. 36). Thus AIDET enhanced in increased patient satisfaction and enabled a positive impact on delivery of care.

All these studies clearly describe that communication is essential to create a good interpersonal relationship and optimal medical decision making thus improve patient satisfaction. Although these studies were conducted with different design and sampling processes, they had a similar outcome that shows communication by health- care providers improves patient satisfaction. One among these studies failed to analyze physician-patient behaviors separately. Furthermore, there are some limitations in these studies towards patient's mood and impact on the process of communication and satisfaction rates.

Rationale

Melnyk and Fineout-Overholt (2011) defined evidence-based practice (EBP) as "the conscientious use of current best evidence in making decisions about patient care" (p. 3). The health and safety of patient's increases when EBP is used that further promotes cost-effective outcomes for both patients and health- care system. Nurses always engage in EBP practices and they need a framework for making decisions about day-today nursing practices. "When research is either unavailable or inconclusive, several additional sources of evidence such as theory, case reports, consensus of experts, and scientific principles can be used to guide practice" (Titler, Steelman, Buckwalter, Budreau & Goode, 2001, p. 501). Therefore, many theories, models and frameworks were developed to systematically implement EBP. One of the EBP models often used by nurses is Clinical Practice Guideline implementation model (CPG). "CPG implementation model is a systematic approach used to identify well-developed, evidenced-based clinical practice guidelines. It identifies the appropriate stakeholders and engages them" (White & Dudley-Brown 2012, p.26). This model assesses the environmental readiness and

evaluates the plan and process of implementation strategies and is developed by nurses as best practice guidelines. The CPG model describes there must be a readiness to change in behavior in individual and environment. The model explains that clinician's behavior change is expected and they can develop right interventions that encourage them to change from one stage to the next. This model assesses employee's stage of readiness to change that will help to disseminate and implement strategies. The organization valued this model as it fosters to implement their guidelines to all employees effectively. Moreover, the organization recognized that every employee must be ready for a change that will further enable the process of guideline dissemination and implementation of AIDET more effectively.

The CPG provides guidelines to clinicians for clinical decision-making to improve patient satisfaction cost effectively. The PICOT problem in this project is based on the reports from HCAHPS and HCAHPS scores over the past few years and has been identified by the organization. They realized that poor patient satisfaction was related to the attitude and communication techniques used by employees of the organization. Since this change project "Communication through AIDET" is one among the organizational priorities, use of CPG framework identified environmental readiness, implementation strategies, and engaging key stakeholders like nurses, nursing leaders, administrators, and physicians as well as the resources necessary to carry out the change in communication techniques. The clinic identified that there is no more effective approach than AIDET. Once AIDET is implemented, it becomes an organizational culture of communication by all health- care personnel.

Specific Aims

The aim of the project was to improve patient satisfaction through a standardized communication technique, AIDET. One of the six key characteristics of quality care is patient-

centeredness (Crossing the quality chasm, 2001). The organization understands that the first step towards patient satisfaction is patient centered care.

According to Maizes, Rakel, & Niemiec (2009):

Patient-centered care was defined as care that informs and involves patients in medical decision making and self-management; coordinates and integrates medical care; provides physical comfort and emotional support; understands the patients' concept of illness and their cultural beliefs; and understands and applies principles of disease prevention and behavioral change appropriate to diverse population.

(p. 3).

Using AIDET concepts, patient-centeredness includes respect (acknowledge, introduce and thank) patients, explain and educate (duration and evaluate) in clear terms. Moreover, being respectful and courteous to build a trusting relationship is a significant element of nursing professionalism.

Communication is the key for any health- care team member who interacts with thousands of patients on a day - today basis. The Joint Commission recommends an approach to communicating health information that encompasses language needs, individual understanding, and cultural and other communication issues (Patient Centered Communications, 2016). Today, quality of care in the health- care delivery is determined by patient satisfaction, mainly because industry of health- care is highly competitive. Thus the organization should concentrate on achieving excellent ranks in the highly competitive health- care industry so that it will distinguish them from others. Articles reveal that for satisfying patient outcomes, pay-for-performance provides financial incentives to hospitals (Pay-for-Performance, 2012). The hospitals are determined and motivated to better define and measure quality of health- care

because they are given incentives for quality care. When patients are unsatisfied, it will mean reduced revenue for organizations. Thus, it is highly important to have loyal patients who will always commit their health- care and recommend hospital to others so that the hospital survives in the competitive health industry. Therefore use of AIDET helps to anticipate, meet and exceed the expectations of the patient, reduce their anxiety, and improve their satisfaction (AIDET, 2014). Once the patients are satisfied, they become loyal repeat patients and recommend this clinic to the others on the island.

Methodology

In terms of quality, IOM views that health- care must be safe and patient must be satisfied. For improved quality care and optimal patient satisfaction, current practice of organization needs to change. To change practice within the organization, quality improvement

(QI) method was utilized. According to Bailey (2008), "Quality improvement (QI) methods enable them to make change in a systematic way, measuring and assessing the effects of a change, feeding the information back into the clinical setting, and making adjustments until they are satisfied with the results" (p. 147). Although QI projects are not research studies, scientific method may be used in QI projects and it carries no risk to the patient. The focus of QI method is to define and verify the process to be improved. A baseline data is collected and analyzed to identify root causes and determine possible solutions and based on the data, plan of action is developed. Further, these action plans are implemented and ongoing measuring and monitoring system to ensure success is applied (Methods of Quality Improvement, 2016).

Utilization frequency of AIDET technique by nurses in the clinical setting in two time points was assessed: first, prior to conduct of AIDET training to the nurses involved in the study and second, six weeks after these nurses were trained and practicing AIDET in their units.

Patient satisfaction was measured using the HCAHPS reports. HCAHPS (2014) survey measures patients' perspectives on hospital care and it is widely used within health- care system to determine the quality of services. This standardized survey is administered to a random sample of patients after discharge and it measures "how well nurses and doctors communicate with patients, how responsive hospital are to patients' needs, how well hospital help patients manage pain, how well the staff communicates with patients about medicines, and whether key information is provided at discharge" (HCAHPS,2012, p. 2). Each of these survey questions correspond to AIDET components. A pretest and posttest design was utilized in this project that collected baseline data from HCAHPS reports.

Interventions

AIDET communication system was implemented in August 2016. AIDET is an evidenced-based tool that is developed by Studor group and the focus is to improve patient satisfaction scores and safe patient care (AIDET, 2014). This project was conducted in a multispecialty clinic in Guam. The sample included registered nurses, licensed practical nurses, nurse technicians and other patient service technicians of the clinic. The utilization tool was given periodically based on their availability during their shift. AIDET training was conducted in the nurses training room.

AIDET was implemented to make a culture change within the clinic to improve patient's safety and satisfaction in the coming years. The project coordinator coordinated with all department managers and supervisors and scheduled the nurses for two hour AIDET training daily over a period of three weeks. The team supported the project coordinator with these trainings, role play, return demonstration and skills check offs. The project coordinator was the trainer for twenty-three training sessions. These training were held at the clinic's class rooms during week days and weekends. The purpose of this project was to standardize an effective patient-nurse communication technique. Therefore, a change in practice using AIDET was implemented within the organization that ultimately improved patient satisfaction.

Measures

Firstly, from the baseline HCAHPS report, a pre-intervention data was collected.

Duration for this phase was five days. Training was offered to nurses and they were given training at flexible hours, two hours per education session, six days per week for three weeks including weekends. AIDET concepts were demonstrated; AIDET video was presented, training was via role play, return demonstration, skills check offs and PowerPoint presentations. Before

the training, each nurse completed a pre-intervention survey to recognize their knowledge on the use of AIDET. Momentarily after the AIDET training, a post-intervention survey was completed by each nurse. A comparison to the pre and post survey was made to identify the nurses understanding of AIDET interventions. Additionally, HCAHPS survey scores and AIDET utilization survey (pre- and post-interventions) were collected and compared. The post-intervention phase was conducted for two weeks.

The tools used for this project are AIDET utilization frequency survey and HCAHPS survey. AIDET utilization tool developed by Studor Group and HCAHPS scores were received from Q-Mark research by the organization. Q-Mark research is a tool to find client perceptions of care. It provides HCAHPS scores in a timely manner (Q-Mark Research, 2016). The organization had baseline HCAHPS scores on patient satisfaction and these scores were compared to the scores after implementation of AIDET. The nurses were monitored on the use of AIDET and were given immediate feedback. The assigned champions and unit managers helped in reporting the use of AIDET among the nurses thus helping to re-evaluate use of AIDET. To recognize any significant changes in patient satisfaction, the pre- and post-intervention HCAHPS survey scores were measured and compared. The nurse's communication skill improved or not was the focus of intervention. Later to identify increase or decrease in patient satisfaction, a pre and post-intervention HCAHPS scores were compared.

Comparison of the results of the AIDET utilization frequency survey was conducted at two time points. Comparison included looking at change in frequency in utilization of each category of skills in AIDET as well as an overall change. Patient satisfaction was periodically assessed by the organization using the HCAHPS scores. The HCAHPS has various satisfaction questions like friendliness and courteousness of the provider, information and explanation of the

care provider about patient condition or medication, degree to that the care provider talks with patient using the words patient could understand, degree to that the care provider talked about the wait times. These are the similar standardized questions in AIDET. The organization provided HCAHPS scores prior to AIDET training and six weeks after AIDET training. Later, the two sets of data on patient satisfaction were compared. The project used AIDET tool developed by Studor Group, where the validity and reliability has already been tested and established. Patient satisfaction was measured using the HCAHPS quarterly reports.

Analysis

Descriptive statistics that includes "mean average, bar graphs and pie charts" are used to show comparisons of AIDET utilization frequency survey and patient satisfaction scores in two time points: pre- and post -AIDET Training. The Pearson r test was used to correlate and analyzed the relationship of AIDET Utilization frequency and Patient Satisfaction outcomes. Finally, the project coordinator determined if AIDET intervention resulted in change that has improved patient satisfaction, the degree of influence the use of AIDET had on patient satisfaction. This was done using a Multiple Regression Analysis Test utilizing the scores obtained from the AIDET utilization frequency survey and scores on Q-Mark research survey.

Results

By implementing AIDET, a culture was created within the organization that motivated on providing quality care that enhanced patient centred care. After implementing AIDET, there was a significant difference in the practice of AIDET. Although nurses had to be constantly reminded about using AIDET, having engaged nurses was critical in achieving satisfactory patient satisfaction goals.

Table 1 shows the "Acknowledge" score gain before and after AIDET training. During

pretest, 38.3% Staff "Acknowledge" very often and 30 % staff "Acknowledge" always. After the AIDET training, 18.3% staff "Acknowledge" very often and 76.7% staff "Acknowledge" always. The Extended Mcnemar Test value of [2=29.45 is highly significant at p=0.001 and it denoted that there was significant practice of "Acknowledge" among staff after AIDET training.

Table 2 shows the "Introduce" score gain before and after AIDET training. During pretest, 33.3% Staff "Introduce" very often and 33.3% staff "Introduce" always. After the AIDET training, 28.3% staff "Introduce" very often and 60 % staff "Introduce" always. The Extended Mcnemar Test vale of □2=11.14 is highly significant at p=0.001 and it denoted that there was significant practice of "Introduce" among staff after AIDET training.

Table 3 shows the "Duration" score gain before and after AIDET training. During pretest, 31.7% Staff responded that "Duration" is very often and 45% staff said "Duration" was always. After the AIDET training, 23.3 % staff stated that "Duration" was very often and 20 % staff quoted that "Duration" was always. The Extended Mcnemar Test vale of □2=11.14 is highly significant at p=0.001 and it denoted that there was significant practice of reducing the "Duration" (Wait time)' after AIDET training.

Table 4 shows the Explanation score gain before and after AIDET training. During pretest, 31.7% Staff "Explain" very often and 31.7% staff "Explain" always. After the AIDET training, 36.7 % staff "Explain" very often and 55% staff 'Explain' always. The Extended Mcnemar Test vale of □2=12.47 is highly significant at p=0.001 and it denoted that there was significant practice of "Explanation" to the clients by the staff after AIDET training.

Table 5 shows the "Thank You" score gain before and after AIDET training. During pretest, 48.3% Staff uses "Thank You" very often and 33.4% staff use "Thank You" always. After the AIDET training, 20 % staff use "Thank You" very often and 76.7 % staff uses "Thank You"

always. The Extended Mcnemar Test vale of $\square 2=31.59$ is highly significant at p=0.001 and it denoted that there was significant practice of using "Thank You" to the clients by the staff after AIDET training.

Table 6 shows the comparison of pretest and posttest AIDET score by the staff. In the posttest, there was a marked improvement in all the domains (Acknowledge, Introduce, Duration, Explanation & Thank you) .The overall mean in the pretest was 19.70 where as it was 22.17 in the posttest. The Paired t-test was used to prove the significance in all domains at $p \le 0.001***$.

Table 7 shows the effectiveness of AIDET training. There was a significant improvement in the percentage of gain score in all the Domains (Acknowledge, Introduce, Duration, Explanation and Thank you) during the posttest period.

Table 8 shows the comparison of pretest and posttest patient satisfaction score by the staff. In the posttest, there was a marked improvement in all the domains (Acknowledge, Introduce, Duration, Explanation and Thank you) .The overall mean in the pretest was 85.04 where as it was 87.22 in the posttest. The Paired t-test was used to prove the significance in all domains at $p \le 0.001***$.

Fig: 9 shows that there was the moderate correlation between pretest AIDET score and pretest Patient satisfaction score (r=0.32, p=0.01). Fig: 10 shows that there was a moderate correlation between posttest AIDET score and posttest patient satisfaction score (r=0.61, p=0.001).

Discussion

Above results show that AIDET training had a significant impact on nurse-patient communication within this organization. AIDET tool was utilized effectively; this could be due

to a Hawthorne factor, knowing their behaviour being evaluated, or a culture change mandated by the organization. However, the nurses embraced AIDET and the goal was met. Unfortunately, not all domains of AIDET showed statistical improvement. Perhaps organization could achieve a better statistical significance if we were able to obtain more frequent HCAHPS reports than accrued every quarter.

Ethical Considerations

Institutional Review Board exempted the project, as the project did not collect any personal identifiers. Since this was a QI project mandated by organization, the participants were nurses and the project used surveys assessing common communication skills like acknowledge, introduce, duration, education and thank you, the five fundamentals principles of AIDET.

Summary

In this outpatient setting, heightened use of AIDET tool by all nurses created a culture where patients feel safe, comfortable and satisfied. The project results showed that when nurses communicate well with their patients, patient satisfaction is improved. Since we are in the midst of a culture change in health- care industry, patients could choose their health- care. For organizations to receive incentives from the state and federal government regulatory bodies' patient-centred care will always remain a priority. Moreover, employees feel contented and honoured working in a quality preserved organization.

Limitations

One of the limitations of this study was that it was based only on nurses of an outpatient clinic in Guam. Secondly, the patient population could not be studied by the project coordinator due to strict organizational policies. The sample size was relatively small to find an accurate correlation. Moreover, this project was conducted for only three weeks. HCAHPS results for a

minimum of three months must be observed for accurate data to evaluate that AIDET has improved patient satisfaction.

Conclusion

The AIDET project assisted the organization to understand why patient satisfaction is low in the past few years and how that could be improved. The primary motivator for a change process is awareness, however, nurses' readiness to change highlighted that using AIDET had an impact towards better patient satisfaction outcomes. Overall, consistent use of AIDET as well as creating a cultural approach towards effective communication encouraged both individual and organizational accountability. Therefore, it is necessary to monitor continuously for factors that may be effecting patient satisfaction in the future.

Future studies

Future projects should continue to investigate the factors effecting patient satisfaction and patient safety. This study suggested that when patients feel safe, patient satisfaction levels increase. Further study is necessary to explore the possible relationship between patient safety and patient satisfaction. Additionally, organizations must systematically evaluate outcomes from quality improvement initiatives.

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Table 1					
Pretest and posttest 'Acknowledge					
score gain	_		_		
		retest		osttest	Extended McNemar test
Never	0	0.0%	0	0.0%	□2=29.45, p=0.001**
Rarely	0	0.0%	0	0.0%	
Sometimes	19	31.7%	3		
Very often	23	38.3%	11	18.3%	
	18	30.0%	46	76.7%	
Always	60	100.0	60	100.0%	
Not significant P>0.05,		%			
** Highly significant at P≤0.001	-				

Fig 1 Pretest and posttest 'Acknowledge' score gain

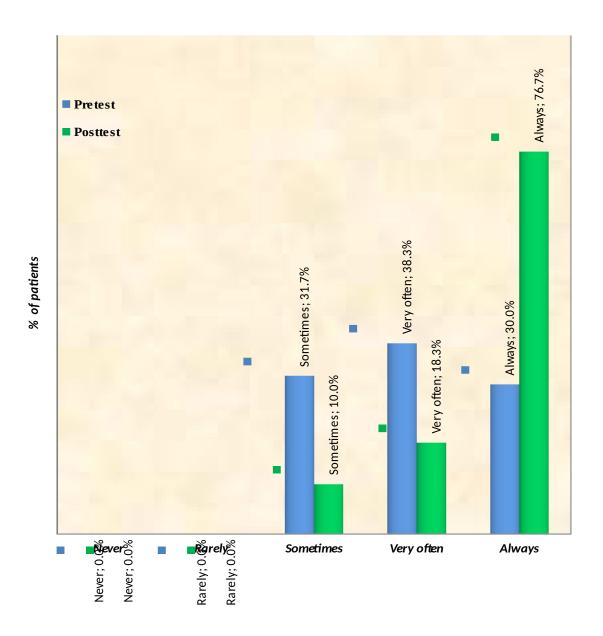


Table 2 Pretest and posttest 'Introduce'

score gain					
	I	Pretest	P	osttest	Extended McNemar test
Never Rarely	0 4 1	0.0% 6.7%	0 0	0.0% 0.0%	□2=11.14, p=0.001
		26.7%	7	11.7%	
Sometimes	6 2		1		
		33.3%		28.3%	
Very often	0 2		7 3		
		33.3%		60.0%	
Always	0 6	100.0	6 6	100.0	
Not significant P>0.05 ** Highly significant at P≤0.001	0	%	0	%	

Fig 2 Pretest and posttest 'Introduce' score gain

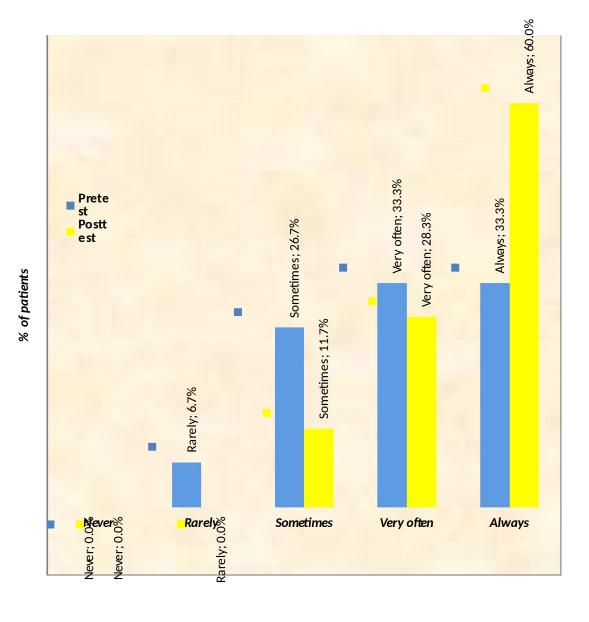


Table:3 Posttest and posttest 'Duration' score gain					_
	Pre	test	Pos	ttest	Extended McNemar test
Never Rarely	0 0 1	0.0%	0 0 3	0.0% 0.0%	□2=12.14, p=0.001
Sometimes	4 1	23.3%	4 1	56.7%	
Very often	9	31.7%	4 1	23.3%	
Always	7 6	45.0% 100.0	2 6	20.0%	
Not significant P>0.05	0	%	0	%	
** Highly significant at P≤0.001					

Fig 3 Pretest and posttest 'Duration' score gain

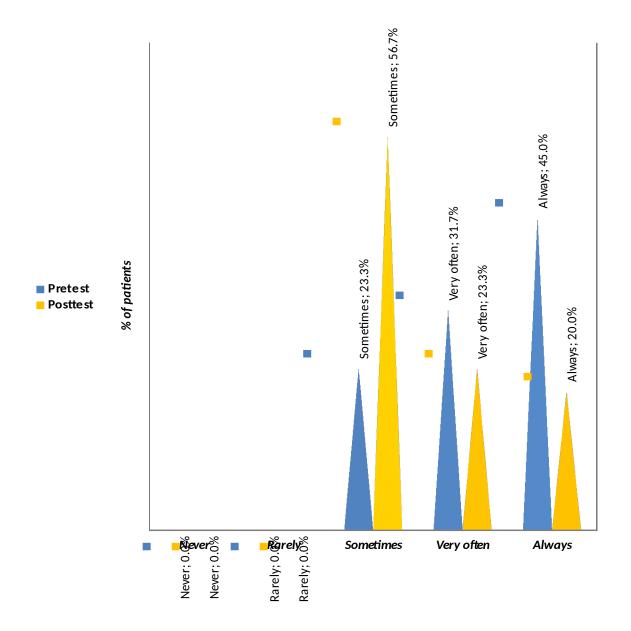


Table:4
Pretest and posttest 'Explanation' score gain

	Pretest		Posttest		Extended McNemar test
Never Rarely	0 8 1	0.0% 13.3%	0 0	0.0% 0.0%	□2=12.47, p=0.001
		23.3%	5	8.3%	
Sometimes	4 1		2		
		31.7%		36.7%	
Very often	9 1		2		
		31.7%		55.0%	
Always	9 6	100.0	3 6	100.0	
Not significant P>0.05 ** Highly significant at P≤0.001	0	%	0	%	

Fig 4 Pretest and posttest 'Explanation' score gain

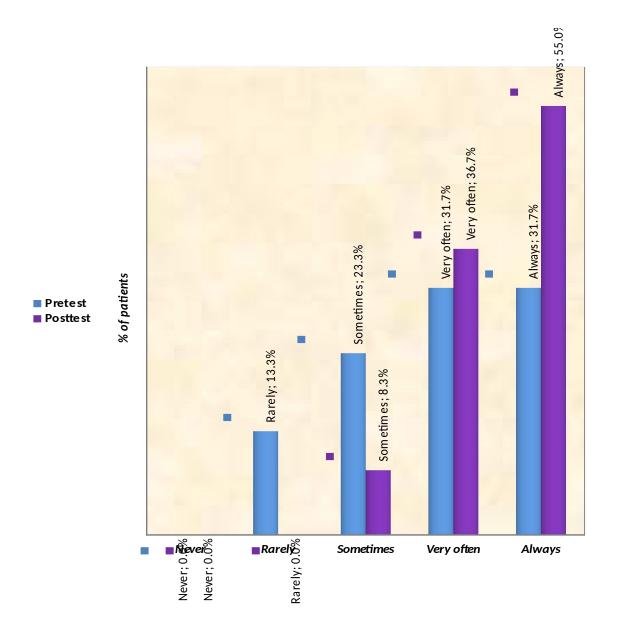


Table:5
Posttest and posttest 'Thank you' score gain

	Pretest		Posttest		Extended McNemar test
Never	0	0.0%	0	0.0%	□2=31.59, p=0.001
Rarely	0	0.0%	0	0.0%	_
Sometimes	11	18.3%	2	3.3%	
	2		1		
		48.3%		20.0%	
Very often	9		2		
	2		4		
		33.4%		76.7%	
Always	0		6		
	6	100.0	6	100.0	
Not significant P>0.05	0	%	0	%	
** Highly significant at P≤0.001					

Fig 5: Posttest and posttest 'Thank you' Score gain

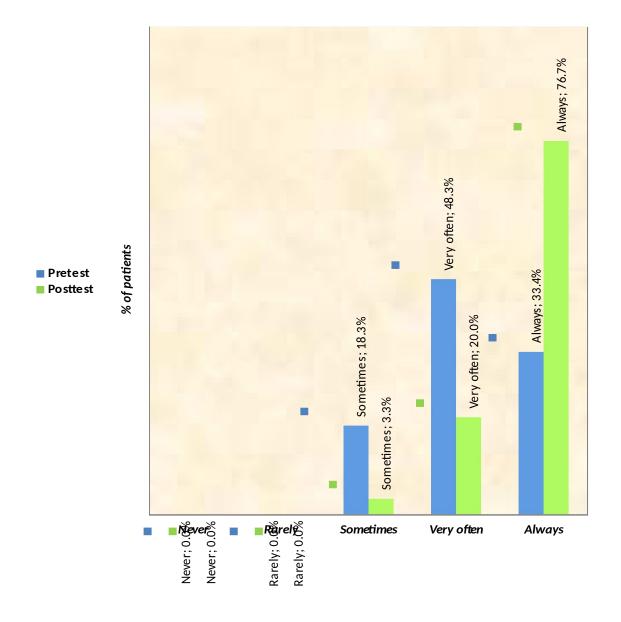


Table:6
Comparison of pretest and posttes
AIDET scores

	<u>Pretest</u>		Post	<u>test</u>	<u>difference</u>	Student paired t-test	
	Mea	SD	Mea	SD			
	_		_				
	n		n				
ACKNOWLEDGE	3.98	.79	4.82	.39	0.84	t=7.44 p=0.001	
INTRODUCE	3.93	.94	4.47	.75	0.54	t=3.62 p=0.001	
DURATION	4.12	.88	3.68	.68	-0.43	t=3.02 p=0.001	
EXPLANATION		1.0				t=3.62 p=0.001	
	3.82		4.47	.65		-	
		3			0.65		
THANKYOU	3.85	.90	4.73	.52	0.88	t=8.09 p=0.001	
TOTAL		2.3		1.5		t=7.64 p=0.001	
	19.70		22.17			-	
	_	8		2	2.47		

Not significant P>0.05

^{**} Highly significant at P≤0.001

Fig 6 BOX-PLOT compares the pretest and posttest AIDET score

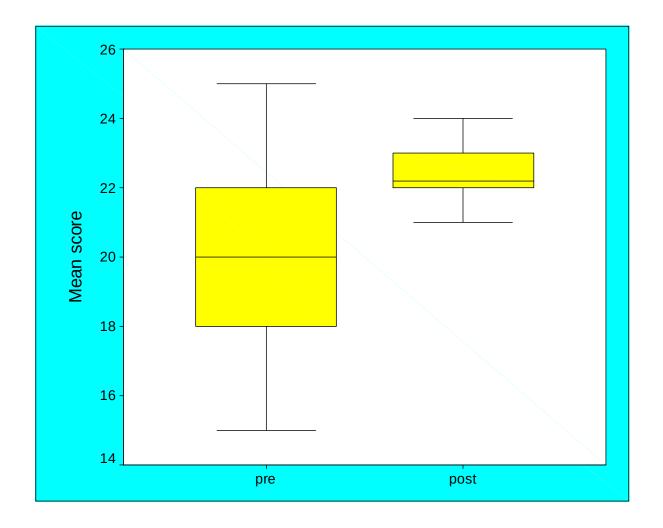


Table:7			
Effectiveness of the AIDET training			
	Maximum	Mean gain	% of gain
	score	score	score
ACKNOWLEDGE	5	0.84	16.8%
INTRODUCE	5	0.04	10.8%
		0.54	
DURATION	5	-0.43	-8.6%
EVALUATION	5	0.45	13.0%
	_	0.65	
THANKYOU	5	0.88	17.6%
TOTAL	25	3.00	9.9%
		2.47	

Fig 7 Effectiveness of project in terms of percentage of gain score.

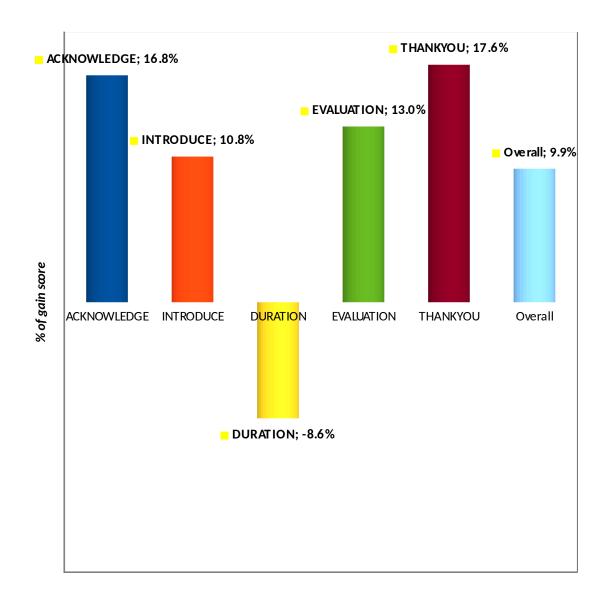


Fig: 8 Pretest and posttest AIDET scores

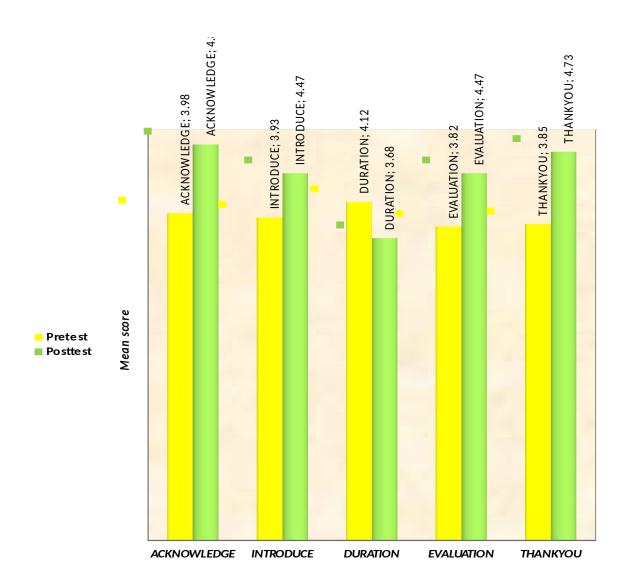


Table:8 Comparison of pretest and						
posttest on patient						
satisfaction scores						
	Dre	test	Pos	ttest	Difference	Student
	Mean	SD	Mean	SD	_ Billerence	Student
	1110011	32	1110011	32		paired t-test
Acknowledge, Introduce and						t=13.98
	88.38	2.37	90.33	2.42	1.95	
Thank you (Courtesy)						p=0.001***
Explanation and Evaluation	00.05	2.22	04.00	0.40	2.04	t=14.24
(Information)	89.07	2.23	91.08	2.42	2.01	0.001***
(Information) Duration (Wait times)						p=0.001*** t=4.80
Duration (wait times)	77.68	3.93	80.23	3.64	2.55	1-4.00
	77.00	3.33	00.25	5.0.	2.00	p=0.001***
Overall average						
Overall average						t=11.49
	85.04	2.03	87.22	1.97	2.17	
						p=0.001***
* Significant at P≤0.05						
** Highly significant at						
P≤0.01						
*** Very high significant at						
P≤0.001						
P>0.05 is not significant						

Fig 9 Scatter plot with regression estimate between Pretest AIDET score and Pretest Patient satisfaction score

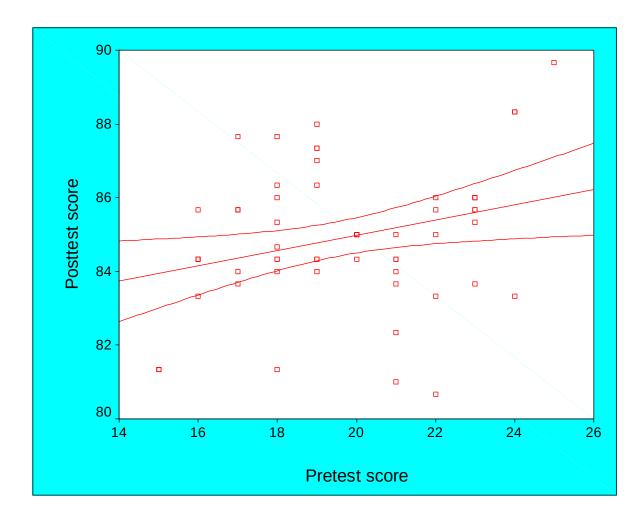
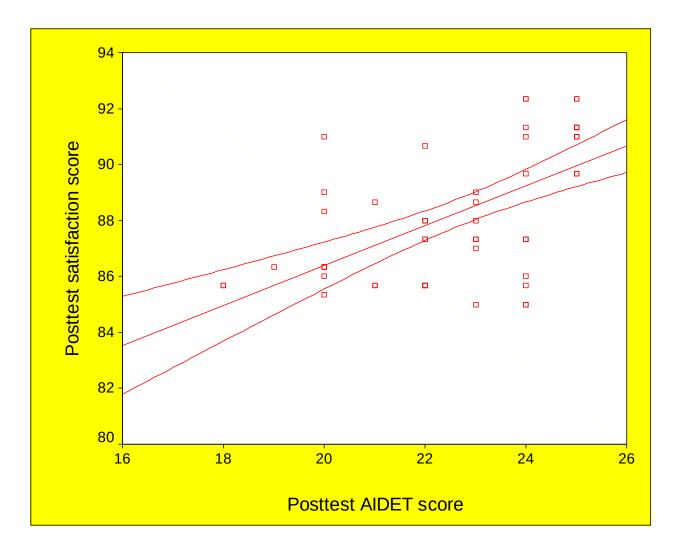


Fig 10 Scatter plot with regression estimate between Posttest AIDET score and Posttest Patient satisfaction score.



Pearson Correlation Coefficient

0.4 - 0.6 moderate correlation

0.6-0.8 substantial correlation

0.8 - 1.0 strong correlation