



## Incorporating Acknowledge, Introduce, Duration, Explanation, and Thank You (AIDET) Framework and Patient Satisfaction in the Primary Care Setting

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### Abstract

Communication is an important paradigm in primary care settings that influences collaboration among the healthcare provider and the patient experience. The primary healthcare setting where this quality improvement project was implemented is experiencing communication-related challenges such as lack of consistent protocol and unclear roles and responsibilities, which has adversely affected patient outcomes. The project involves the implementation of the Acknowledge, Introduce, Duration, Explanation, and Thank You (AIDET) framework in the project setting, with the aim of improving communication and patient satisfaction. The quality improvement project involves different stakeholders including healthcare providers and medical staff members in the primary care setting. A sample of 48 patients was used for collection of data on patient satisfaction. A pre-test and post-test CAHPS survey was administered among patients. Data analysis occurred using descriptive and inferential statistics to establish the impact of AIDET framework on provider-patient communication and patient satisfaction. Ethical considerations such as participant confidentiality remained during the data collection process.

**Keywords:** Communication Challenges; AIDET Framework; Provider-Patient Communication; Patient Satisfaction

### Introduction Purpose

The healthcare setting where the project was implemented is characterized by problems such as unclear roles and responsibilities, which has adversely affected patient outcomes. The purpose of this project was to implement the Acknowledge, Introduce, Duration, Explanation, and Thank You (AIDET) communication framework in the organization to solve current communication challenges. The selected primary care institution was selected based on current community needs in Fort. Lauderdale, FL.

### Background and Significance

A nonprobability convenience-sampling plan was used to recruit participants from a suburban area of South Florida. A sample of 42 total participants was included in the study. Inclusion criteria consisted of participants who (a) currently resided in South Florida, (b) were above the age of 18, and (c) had the ability to read, write or understand English. Of the 42 total participants, 13 completed the CAHPS assessment prior to the implementation of the intervention while 29 completed the assessment after the intervention. Several questionnaires were dropped from the analysis due to missing data, resulting in a total sample size of 38.

### Materials and Methods

The Statistical Package for the Social Sciences (SPSS) version 25 computer software was used to analyze the data from this study. In

order to maintain the accuracy of data entered, the data was cross-checked for range value errors, missing data, and outliers.

### Findings Descriptive statistics

Descriptive statistics were generated to look for any violations of the assumptions of the t-test, namely, skewness and kurtosis. Results of the descriptive analysis are below in Table 1. The overall CAHPS subscale score are included in the table.

Descriptive Statistics			
	N	Mean	Std. Deviation
Getting needed care	38	4.92	.912
Getting care quickly	35	6.29	1.447
How well doctors and staff communicate	35	10.06	2.400
Healthcare rating	34	11.79	5.640
Valid N (listwise)	32		

Table 1

### Inferential statistics

The question explored in this DNP project was "Among providers and medical staff in primary care settings (P), does the implementation of the AIDET framework (I) improve communication and patient satisfaction (O) compared to current practice (C) in 8 weeks (T)?" Given that the project collected pre and post-interven-

tion data for two different groups of participants, an independent samples t-test was the appropriate data analysis technique. Independent t-tests were run on the 4 subscales of the CAHPS: (1) getting needed care, (2) Getting care quickly, (3) how well do doctors and staff communicate and (4) overall satisfaction with healthcare.

### Discussion

- Getting needed care: The first subscale of the CAHPS analyzed in this study looked at responses to questions related to access to needed care. Specifically, the survey asked enrollees how often it was easy for them to get appointments

Pre- and post-AIDNET ratings					
Pre or post intervention group		Getting needed care	Getting care quickly	How well doctors and staff communicate	Healthcare rating
Pre test	Mean	4.38	5.33	8.25	10.73
	N	13	12	12	11
	Std. Deviation	.870	1.670	2.927	5.833
Post test	Mean	5.20	6.78	11.00	12.30
	N	25	23	23	23
	Std. Deviation	.816	1.043	1.382	5.604
Total	Mean	4.92	6.29	10.06	11.79
	N	38	35	35	34
	Std. Deviation	.912	1.447	2.400	5.640

Table 2

with specialists and get the care, tests, or treatment they needed through their health plan. Independent t-test results indicated that patients rated their access to care higher following the AIDET intervention higher than patients receiving services prior to the AIDET intervention, (pre-test CAHPS needed care, N= 13, M = 4.38, SD = .87; post-test N = 25, M= 5.2, SD = .816),  $t(36) = -2.86, p < .05$ ).

- Getting care quickly: The second subscale of the CAHPS analyzed in this study looked at responses to questions related to the speed at which care was provided. Specifically, the survey asked enrollees how often they got care as soon as needed when sick or injured and got non-urgent appointments as soon as needed. Independent t-test results indicated that patients rated their speed of care higher following the AIDET intervention higher than patients receiving services prior to the AIDNET intervention, (pre-test CAHPS speed of care, N= 12, M = 5.33, SD = 1.67; post-test N = 23, M= 6.78, SD = 1.04),  $t(33) = -3.16, p < .05$ ).
- Doctor’s and staff communication: The third subscale of the CAHPS analyzed in this project looked at responses to questions related to the perceived quality of communication from doctors and office staff. Specifically, the survey asked enrollees how often their personal doctor and office staff explained things clearly, listened carefully, showed respect, and spent enough time with them. Independent t-test results indicated that patients rated their doctor’s and staff communication quality higher following the AIDET intervention higher than patients receiving services prior to the AIDNET intervention, (pre-test CAHPS doctors communication, N= 12, M = 8.25, SD = 2.92; post-test N = 23, M= 11.00, SD = 1.38),  $t(33) = -3.80, p < .05$ ).

- Healthcare system rating: The final subscale of the CAHPS analyzed in this project looked at patients’ responses to questions regarding their overall rating of their healthcare system. The survey asked enrollees for several ratings on a scale of 0 to 10, with 0 being the worst and 10 being the best for 2 different questions. Independent t-test results indicated that patients’ ratings of the overall healthcare system quality were not significantly different following the AIDET intervention, (pre-test healthcare system rating, N= 11, M = 10.73, SD = 5.83; post-test N = 23, M= 12.30, SD = 5.60),  $t(32) = -.758, p = .45$ .

### Objectives and Aims of the Project

Patient satisfaction is one of the key metrics of quality care in the healthcare environment. Patient satisfaction is measured based on the patient’s reported experiences and captures their attitudes towards the delivered healthcare services or aspects of care [1]. Healthcare institutions are emphasizing patient-centered care, highlighting the importance of patient satisfaction [1]. Ofili [2] emphasizes that patient satisfaction is significant to different healthcare environments including medical care providers, patients, and third-party stakeholders in the industry. Healthcare organization are particularly under pressure by regulators, consumers, and third-party stakeholders to improve the quality of care and patient satisfaction [1].

Patient satisfaction is influenced by different factors including wait times, caring reliability, responsiveness, and empathy. Moreover, the construct is influenced by service availability, continuity, efficiency outcomes, and communication. According to Mulder, Lokhorst, Rutten, and Woerkum [3], provider-patient communica-

tion has direct implications on patients' health and behavior. In addition, provider-patient communication can authenticate patients' perception of the healthcare services. Communication can also comfort patients, reduce their anxiety, improve their self-efficacy and empowerment, as well as improve their self-management capabilities.

The aim of the DNP project is to evaluate the impact of AIDET framework on communication and patient satisfaction in a primary care office. In order to attain this, the following objectives have been identified, which will guide the DNP student during implementation of the project:

1. To determine the effect of the AIDET framework on staff-patient communication in a primary care setting based on CAHPS survey.
2. To determine the effect of the AIDET framework on provider-patient communication in a primary care setting based on CAHPS survey.
3. To evaluate the effect of the AIDET framework on patient satisfaction in a primary care setting based on CAHPS survey.

### Summary of Methods and Procedures

Quantitative methods were applied in this DNP project to evaluate the impact of AIDET framework on communication and patient satisfaction in a healthcare organization. The quantitative methods involve operationalization of variables and collecting numerical data. In addition, statistical procedures are implemented to carry out data analysis process which is guided by formulating hypotheses (Castellan, 2010). The mission of this DNP project was to implement AIDET framework to overcome the challenges of patient satisfaction in a primary care office.

The project was carried out in eight weeks whereas the implementation of the AIDET framework occurred in weeks one through four. The project sample was derived from healthcare professionals in a primary care office setting in Broward County, Florida. The participants in the project were recruited via random sampling which is considered appropriate as it provides each individual a chance of being included in the sample. In addition, simple random sampling was utilized as it allows generalization of findings (Banerjee and Chaudhury, 2010). A pre and post CAHPS survey was adopted to evaluate the outcomes of implementation of the AIDET framework. The participants were exposed to an educational intervention on communicating with patients as guided by the AIDET framework. The outcome evaluation was achieved by conducting measurements before and after the intervention (Marsden and Torgerson, 2012).

Before the AIDET intervention was implemented, a pre-intervention survey was conducted using the CAHPS to obtain the baseline data to capture the patient satisfaction rates. The imple-

mentation of the AIDET framework involved conducting educational training pertaining acknowledging people, introducing oneself, keeping in touch to ease wait times, offering explanations, and thanking them to foster an attitude of gratitude. The training sessions for providers and medical assistants were carried out on weekdays where each session lasted between 15 and 60 minutes depending on the office staff availability and workload. Meetings were held two times a week to accommodate providers various schedules and patient needs.

After the completion of the AIDET framework training, the participants completed and administered a post-intervention CAHPS survey to determine if there was an increase in patient satisfaction. The pre-post analysis of the CAHPS including both descriptive statistics and results of the dependent sample t-test. The reliability of the CAHPS survey instrument was assessed by carrying out a Cronbach Alpha test. The data analysis portion was achieved by conducting descriptive and inferential statistics. The descriptive statistics involved computing the mean, standard deviations, and the confidence intervals. The inferential statistics was achieved by conducting an independent t-test. The independent t-test was selected as it involves testing the differences in two related observations (Derrick, Toher and White, 2017). Independent t-tests were run on the 4 subscales of the CAHPS: (1) getting needed care, (2) Getting care quickly, (3) how well do doctors communicate and (4) overall satisfaction with healthcare.

The methods and procedures of this project were attained by testing the projects questions using statistical approaches. The purpose of this project was to evaluate the effect of the AIDET framework on communication and patient satisfaction. The patient satisfaction rates and communication were the dependent variables which were run on the four subscales of the CAHPS: (1) getting needed care, (2) Getting care quickly, (3) how well do doctors and staff communicate and (4) overall satisfaction with healthcare. The variables addressing patient satisfaction and communication were attained by computing and concatenating associated items.

The effectiveness of the AIDET framework in improving the practitioner communications and patient satisfaction was assessed by conducting an independent t-test. The four metrics in measuring practitioner communication and patient satisfaction were analyzed independently. The pre-intervention and post-intervention data were compared to assess the effectiveness. The independent samples t-test was the appropriate data analysis technique. Inferential statistics was applied to explore and answer the projects question.

Participants of the project were responsible of collecting CAHPS survey from patients after each visit. Medical assistants and providers provided education and project details to patients regarding completion of the CAHPS survey. The Survey consisted of 15

questions. The survey asked participants for several ratings on a scale of 0 to 10, with 0 being the worst and 10 being the best for two different questions. The participants were asked to rate their overall healthcare and their personal doctor as well. Patients were asked to complete the survey using pen and paper. Collection of surveys were conducted by the medical staff and the DNP student. The DNP student collected all samples and information was placed in a spreadsheet. Data storage took place using a USB drive.

Survey questions analyzed patient getting the care needed, getting care quickly, doctor and staff communication, and healthcare system ratings. Completion of the survey were on a voluntary basis and no consents were required. Random sampling of the surveys occurred. No demographical information was provided.

The Statistical Package for the Social Sciences (SPSS) version 25 computer software was used to analyze the data from this study. In order to maintain the accuracy of data entered, the data was crosschecked for range value errors, missing data, and outliers. Descriptive statistics were generated to look for any violations of the assumptions of the t-test, namely, skewness and kurtosis. Results of the descriptive analysis show an increase in patient satisfaction post implementation of the AIDET framework. The overall CAHPS subscale score are included and results of the independent sample t-test demonstrate a higher rate of patient satisfaction upon completion of the AIDET framework in the primary care office.

## Conclusions

This DNP project evaluated whether implementing the Acknowledge, Introduce, Duration, Explanation, and Thank You (AIDET) framework can improve patient satisfaction and communication among providers and medical assistants. The findings revealed that implementing the AIDET framework significantly improves patient satisfaction with healthcare providers, how well providers and medical assistant communicate with patients, and the access to the medical care. The DNP project demonstrated that training and education provides medical assistant and healthcare providers the required knowledge to ensure efficient care delivery. The role of the education and training was to ensure translation of knowledge to evidence-based practice. Adoption of AIDET framework improves provider-patient communication; thereby leading to enhanced quality of care and patient satisfaction levels.

The DNP project has demonstrated that it is the role of leaders in healthcare to initiate education and training programs to equip healthcare practitioners and medical assistants with relevant knowledge in providing quality care. The leaders play a significant role in change management and providing support to providers and medical assistants by administering materials that contribute to improvement in knowledge on healthcare provision. Therefore, the healthcare providers and medical assistants are expected to be

the first stakeholders in gaining knowledge pertaining to communicating effectively with patient.

## Implications for nursing practice

Nurses are solely responsible for ensuring patient safety and quality improvement which greatly depends on improvements in working conditions, working environment for nurses, and patient-centered care [4]. There is a great concern about the gap in quality and patient safety and the need for improvement of such concerns [4]. Nurses are given the mandate of ensuring patient safety and quality of care as they are closer to patients than other clinicians and spend most of their time in patient care departments [5]. Nurses are solely responsible for having adequate and up to date information pertaining to the patient health progress in the primary care setting.

The project findings demonstrate the significance of nurses in ensuring patient care quality and communication, which in turn leads to increase patient satisfaction. In addition to nurses being closer to the patients than other clinicians, they are expected to conduct follow up appointments to ensure effective healthcare delivery and improve patient outcomes. The project findings demonstrate the importance of effective practitioner-patient communication as the foundation of quality healthcare services. Healthcare organizations should implement AIDET framework as a means of embracing evidence-based practice towards improving practitioner-patient communication as well as staff communication and increase patient satisfaction.

Additionally, the project findings demonstrate the relevance of education and training staff members in improving their communication skills to ensure effectiveness in healthcare service delivery. According to Rustgi and Hecht [6], evidence demonstrates that implementation of training and education programs in the primary care environment leads to improved patient outcomes, especially patient satisfaction. In addition, training and mentorship guidelines provide nurses and medical staff with clear description of roles and ensuring productive and collaborative care delivery [7].

## Recommendations

The findings of this project revealed that the implementation of the AIDET framework significantly led to the improvement of patients getting the needed care, facilitating how doctors and staff communicate with patients, and patient satisfaction. The project demonstrated that conducting training and education programs on the medical assistants and practitioners significantly reveal positive outcomes in overall medical care and service delivery. Healthcare practitioners and medical assistants are required to empower patients with effective communication skills by leveraging evidence-based models such as the AIDET framework. Effective provider-patient communication enhances the speed at which patients

access care, the quality of care, as well as patient satisfaction. In addition, effective communication in healthcare settings is associated with other positive outcomes such as reduction of medical errors.

Providers play a significant role in patient care delivery and are encouraged to involve patients in the care delivery process [8]. Patient-centered care calls for involvement of patients and their family members in mutual decision making towards improving quality of care and patient satisfaction. This goal cannot be achieved without effective patient communication. Implementation of the AIDET framework can facilitate the achievement of patient-centered care by ensuring that providers and staff members listen, understand, and empathize with their patients and family members.

The project results demonstrated that the implementation of the AIDET intervention positively influenced the process of access to medical care and improved patient outcomes. This demonstrates that effective communication can minimize any existing gaps between patients receiving medical care. Providing patient satisfaction during medical care significantly leads to patient compliance and positive outcomes [9-45].

### Conflict of Interest

No conflict of interest exists.

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