Utilizing a Decision Aid in Acute Inpatients to Increase Patient Satisfaction in Communication with the Provider

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Utilizing a Decision Aid in Acute Inpatients to Increase Patient Satisfaction in Communication with the Provider

BY

Elizabeth Fiedler

A paper submitted in partial fulfillment of the requirements for the degree

Doctor of Nursing Practice

South Dakota State University

2019
DECISION AID TOOL AND PATIENT SATISFACTION

Utilizing a Decision Aid in Acute Inpatients to Increase Patient Satisfaction in Communication with the Provider

This Doctor of Nursing Practice (DNP) Project is approved as a credible and independent investigation by a candidate for the DNP degree and is acceptable for meeting the project requirements for this degree. Acceptance of this DNP Project does not imply that the conclusions reached by the candidate are necessarily the conclusions of the major department.

________________________________________
Robin Arends, DNP, CNP, ARNP, FNP-BC, CNE, FAANP
DNP Project Advisor

________________________________________
Mary Minton, PhD, RN, CN, CHPN®
Associate Dean for Graduate Nursing
I wish to acknowledge the support of my husband and mother. Without their encouraging words, I would not have even had the courage to apply graduate school. I wish to thank my DNP Project Chair, Dr. Robin Arends, for her patience, understanding, and assistance. I appreciate my DNP Project Committee for all feedback and helping this project succeed. I also wish to thank Dave & Judy, The Crevers, Mandy & Stu, my siblings, and father for all of their different ways of encouraging my success. I wish to thank all of my preceptors, especially Dr. Tammy Meyerhofer and Dr. Heidi Hansen, for serving as mentors, role models, and friends. Finally, I wish to thank Vidalia and Merle for being the constant reminder of why I have worked so hard.
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Abstract

**Introduction.** If communication between patients and providers is improved, patients have better outcomes because of adhering to medications and treatments.

**Evidence Summary.** Poor communication can lead to unnecessary readmissions and decreased quality of care. Decision aid tools assist patients in compiling thoughts and questions for providers, lead to a higher understanding of the plan of care, and can help patients to clarify confusing components of the treatment plan. Tools that improve communication between patients and providers lead to an increase in patient satisfaction. The HCAHPS survey is a measurement of patient satisfaction.

**Gaps in Literature.** There were no articles found that explored the relationship of decision aid tools and the specific aspect of patient satisfaction scores with communication. Although decision aids improve patient and provider communication, exploring the impact on HCAHPS patient satisfaction with communication with the provider has not been explored.

**Recommendations for Practice.** Decision aid tools encourage patients to participate in their own care, which leads to better outcomes, especially in management of chronic conditions. The Dear Provider tool is an easy to use, cost-effective way to improve communication and increase patient satisfaction.

**Keywords:** decision aid, patient satisfaction, inpatient, provider, and communication
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Introduction

A patient’s ability to communicate effectively with his or her provider is crucial to building trust (Tarver et al., 2018). When patients and providers communicate ineffectively, there is a decrease in adherence to prescribed medications, and an increased risk of decreasing the patient’s quality of care (Tarver et al., 2018). Hospital readmissions can be the result of patients lacking the understanding of instructions regarding their health care plan (Haley, Zhao, & Spaulding, 2016). This review of the literature will describe and define decision aid tools that can be utilized by patients and providers, common measurements of patient satisfaction, and the benefits of improving communication between patients and providers. Additionally, the effect of using decision aids and the impact on patient satisfaction in communication with providers will be explored.

Clinical question. The relationship of tools that can impact patient and provider communication is a topic that warrants further exploration. The PICOT Question which guided the evidence search was: In inpatient adults on a medical-surgical acute care unit (P), what impact does giving the patient a decision aid tool with hospital-related topics to write questions to their provider at admission (I) compared to current practice of no decision aid on admission (C) have on the patient HCAHPS score (O) in a three month timeframe (T)?

Literature search. A literature search that focused on ways to improve patient engagement, factors that impact inpatient patient satisfaction, and decision aid tools that can be utilized as interventions was conducted to answer the PICOT question. Databases utilized for the search included South Dakota State University Briggs Library,
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EBSCOhost, Alt HealthWatch, Health Source, and CINAHL. The search terms included: *patient satisfaction and interventions, inpatient and patient satisfaction, decision aid and patient satisfaction, electronic and provider communication, and patient activation and decision aids.*

Search results were filtered to include only those articles available in ‘Full Text’ and publish dates between 2012 and 2018. As the DNP Project will take place on a medical surgical unit, the articles needed to focus on inpatient interventions or results. Results that were not readily available in full text were excluded. Papers written in a language other than English were excluded.

After the initial search, articles were chosen for inclusion into the DNP Project based on their relevance to the PICOT question. The evidence was scored based on The Johns Hopkins Nursing EBP *Evidence Level and Quality Guide*. There were ten articles that met the search criteria of the DNP Project to support the PICOT question. Three studies were IA, one study was IC, two studies were IIA, one study was IIC, one study was 3C, and two studies were IVB (Appendix A).

The seven levels are in order from highest evidence to lowest evidence. Level I includes meta-analysis of all randomized controlled trials or a systemic review. Level II includes evidence from a minimum of one randomized controlled trial. Level III has evidence from controlled trials without randomization. Level IV consists of evidence from cohort and case-control studies. Level V is evidence from systematic reviews made up of qualitative studies. Level VI is a single qualitative study. Level VII is expert opinion (Dang & Dearholt, 2017).
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The quality levels of A, B, and C are in ranking order from best to most flawed. Level A shows the highest level of expertise, and includes consistent results, a sample size that is sufficient, definitive conclusions, consistent recommendations. Level B shows credible expertise, mostly consistent results, a sufficient sample size, somewhat definitive conclusions, and mostly consistent recommendations. Level C has inefficient sample sizes, inconsistent results, or cannot draw conclusions (Dang & Dearholt, 2017).

Evidence Summary

The three evidence terms to be defined and described are the following: decision aids, the Dear Provider tool, and patient satisfaction. The Dear Provider tool is an example of a decision aid tool. The impact and benefits of improving patient satisfaction will be explored.

Decision aids. Decision aid tools are used to inform patients and family members about treatment options, benefits, risks, and other healthcare options (Davis, McCaffery, Mullan, & Juraskova, 2015). A decision aid tool assists patients to compile questions and thoughts for providers, which leads to a greater understanding of the care plan (Farberg, Lin, Kuhn, Flanders, & Kim, 2013). When patients are engaged in their care, the decisions they make are informed and that allows the patient to choose the option that best meets the needs of the individual (Prey et al., 2016). Patients and their family members use the knowledge from the decision aid tool to further understand provider recommendations (Prey et al., 2016). The intent of a decision aid is to increase patient participation in healthcare decisions that may include comparing risks versus benefits for treatment options and plan of care (Stacey et al., 2014). The purpose of a decision aid tool is not to force strict compliance to provider orders, but is instead designed to help
patients and providers together to develop a care or treatment plan that includes cultural and personal factors unique to the patient (Tiedje et al., 2013).

Patients often verbalize visiting with providers is overwhelming, which results in confusion regarding their treatment plan and condition (Tarver et al., 2018). Multiple levels of communication are needed to assist in exchanging information between patients and providers to strengthen relationships (Tarver et al., 2018). A decision aid tool that improves communication between patients and providers can clarify confusing components of the treatment plan (Farberg et al., 2013). A patients’ ability to communicate effectively with his or her provider is crucial to building trust. When patients and providers communicate ineffectively, there is a decrease in adherence to prescribed medications, and the risk of compromising the quality of health care the patient receives is compromised (Tarver et al., 2018).

There are other tools that can allow patients to communicate with providers such as MyChart Bedside (Epic©, 2018). Patients are able to review lab results and send messages to nurses and providers (Epic©, 2018). Although the patients that do use electronic communication tools find them beneficial, there are many patients that do not feel comfortable or have the experience with electronic devices to utilize this format (Tarver et al., 2018). Utilizing one tool does not mean that another cannot also be used.

The internet has changed the way patients and providers communicate and exchange information. Access to online communication tools, including portal through the patients’ chart or access with internet on mobile phones is creating a new health care disparity in relation to communication for patients who may not know how to use the electronic tools (Tarver et al., 2018).
Dear Doctor Tool Use of the original Dear Doctor tool led to an increase of over 40% in patient satisfaction related to communicating with the physician or provider in inpatients on the unit where it was implemented (Farberg et al., 2013). The Dear Doctor tool has four general sections for patients and family members to write questions in, relating to diagnosis, treatment, medications, and other categories (Farberg et al., 2013). It will attach to the hourly rounding white board that orients the patient to the unit and nursing staff.

Farberg et al. (2013) created the Dear Doctor notepad and used it in an inpatient setting. It was concluded that this tool assisted patients to compile questions or concerns for providers, and resulted in an increased knowledge of the care plan. The patients and staff stated that the tool was easy to use and required minimal instructions from staff to the patients in its use. Using the tool starting at admission allows the patient to have it for the entire hospitalization. Farberg et al. did not provide specific instructions to patients or family members on how to use the tool, and did not find that patients found it difficult to utilize the tool during the stay (Farberg et al., 2013).

Patient Satisfaction. Patients are more satisfied with their care when involved in the treatment plan (Farberg et al., 2013). In inpatients, there is no correlation in patient satisfaction with medical comorbidities or severity of illness (Specht, Kjaersgaard-Andersen, Kehlet, Wedderkopp, & Pedersen, 2015). In comparing genders, male patients are more likely to complain about providers that communicate poorly than female patients (Mehra, 2018). Older patients tend to have higher patient satisfaction, as do patients with a shorter length of stay (Specht et al., 2015). When patients have multiple providers caring for them, these patients have higher satisfaction if the providers
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have a consistent approach to rounding and include the patient in the treatment plan (Monash et al., 2017).

When patients understand the treatment plan that is communicated by the provider, clinical outcomes such as influencing levels and perceptions of pain can be impacted. The majority of patients want the provider to communicate with them when creating treatment plans. The biggest factor in overall patient satisfaction is the provider involving the patient in the treatment plan, ranging from discussing the diagnosis to developing the treatment plan (Glowacki, 2015).

Health Care entities and providers can benefit financially from improving patient satisfaction. Improving patient satisfaction financially benefits healthcare entities. The patient satisfaction survey used in the DNP Project, Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS), is a part of the Hospital Value-Based Purchasing (HVBP) program. This program incentivizes hospitals to meet numerous standards, including better HCAHPS scores, by giving bonuses to the hospitals that meet these goals (Haley et al., 2016).

Consequences of non-communication. Poor communication between patients and providers can lead to nonadherence (Iuga & McGuire, 2014). When providers involve the patient in their care, a plan can be developed for what a patient is able to afford and comply with (Iuga & McGuire, 2014). Nearly 80% of patients over 80 have hearing loss, and being able to use a tool to write questions improves patient satisfaction in this population (Cohen et al., 2017). When providers round in a systematic way and consistently address patient questions, satisfaction is improved (Cohen et al., 2017). Providers serve as a link between patients and external factors that prevent achieving
optimal healthcare, and communication is the key to solidifying that link (Iuga & McGuire, 2014).

**Gaps in the Literature**

There was evidence of the correlation between decision aid tools and the increase of patient satisfaction in patients and providers. One article was found in overall patient satisfaction with hospitalization, not specifically communication with the provider. This article explored inpatients in various demographics such as comorbidities, age, and length of stay, and determined if patient satisfaction was higher or lower in those groups. However, there were not articles that explored the relationship of decision aid tools and the specific aspect of patient satisfaction with communication. Although decision aids improve patient and provider communication, exploring the impact on HCAHPS surveys patient satisfaction with communication with the provider has not been explored. There were no articles exploring the relationship between language barriers and decision aids.

**Recommendations for Practice**

Interventions that improve patient satisfaction financially benefit healthcare organizations through the HVBP program (Haley et al., 2016). Decision aid tools encourage patients to participate and become more involved in their own care, which leads to better outcomes, especially in the management of chronic conditions (Prey et al., 2016). Decision aid tools should be used as a way to enhance communication between providers and patients, and assist patients to choose a plan of care that meets both the recommendation of the provider and the patient’s preference. When used effectively, the tool is used to enhance patient choices rather than force compliance to the provider’s plan (Tiedje et al., 2013).
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Improving provider communication leads to better patient education. Inefficient communication can lead to a lack of understanding of healthcare instructions, resulting in increased hospitalizations (Haley et al., 2016). Patient and provider trust is based on effective communication (Tarver et al., 2018).

Conclusion

The literature supports the use of a decision aid tool to improve communication between patients and providers, and these tools assist patients in forming the plan of care in collaboration with their provider (Tiedje et al., 2013). Health Care organizations benefit financially when patient satisfaction is improved (Haley et al., 2016), and the Dear Provider tool is one decision aid tool that is easy to use for staff and patients, inexpensive, and effective (Farberg et al., 2013). The impact of patients being satisfied with communication with providers is immense, and leads to improved adherence to prescribed medications, and the quality of care received is improved (Tarver et al., 2018). The Dear Provider tool is an easy to use, cost-effective way to improve communication and increase patient satisfaction (Farberg et al., 2013).
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References


### Appendix A

#### Evidence Table

<table>
<thead>
<tr>
<th>Author, Year</th>
<th>Study objective/intervention or exposures compared</th>
<th>Design</th>
<th>Sample (N)</th>
<th>Outcomes studied (how measured)</th>
<th>Results</th>
<th>Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohen, Blustein, Weinstein, Dischinger, Sherman, Grudzen, &amp; Chodosh, 2017</td>
<td>To determine how often hearing loss is considered between physician and provider communication in older patients.</td>
<td>Systematic review</td>
<td>N=67 articles</td>
<td>If articles mentioned hearing loss as a factor in communication between providers and patients</td>
<td>27% of articles that teach providers effective communication techniques mention older adults and hearing loss</td>
<td>IA</td>
</tr>
<tr>
<td>Farberg, Lin, Kuhn, Flanders, &amp; Kim, 2013</td>
<td>To provide DD notes as a bedside tool to facilitate patient communication and improve patient encounters with physicians in the hospital.</td>
<td>Cross-sectional survey</td>
<td>N=440 in the intervention group and N=224 control</td>
<td>5 point Likert scale</td>
<td>65% in intervention group 22% in control group reported increased patient satisfaction with physician communication</td>
<td>IIIC</td>
</tr>
<tr>
<td>Iuga &amp; McGuire, 2014</td>
<td>To determine the most recent developments in adherence research and the impact on health care costs in the US health system</td>
<td>Systematic review</td>
<td>Amout of articles reviewed not listed</td>
<td>Analyzed retrospective cohort studies of common illnesses, and listed factors that influence nonadherence</td>
<td>Physicians must understand why patients fail to take medications as prescribed</td>
<td>IC</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Study Objective</td>
<td>Study Design</td>
<td>N</td>
<td>Statistical Model</td>
<td>Findings</td>
<td></td>
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<tr>
<td>Mehra, 2018</td>
<td>To determine the impact that provider consultation time has on patient perception of provider communication style, patient satisfaction, and word of mouth recommendation.</td>
<td>Cross-sectional study</td>
<td>501</td>
<td>Baron and Kenny's model of mediation analysis</td>
<td>Communication of providers directly impacts patient satisfaction. The longer the provider and patient visit, the more effective the patient rates the communication.</td>
<td></td>
</tr>
<tr>
<td>Monash, Najafi, Mourad, Rajkomar, Ranji, Fang … &amp; Harrison, 2017</td>
<td>Assess provider adherence to attending rounds and survey patients in patient satisfaction following the rounds</td>
<td>Cluster randomized controlled trial</td>
<td>241 control and 264 attending rounds</td>
<td>5-point likert scale</td>
<td>Standardized rounds that are patient-centered save time and increase patient satisfaction. Utilizing practices such as pre-round huddles, bedside rounds, inclusion of nurses, real-time order entry, and white boards increased satisfaction</td>
<td></td>
</tr>
<tr>
<td>Specht, Kjaersgaard-Ander sen, Kehlet, Wedder kopp, &amp; Pedersen, 2015</td>
<td>Measure patient satisfaction in surgical patients based on 1) how satisfied they are with treatment 2) factors related to overall satisfaction 3) the relationship of patient satisfaction and length of stay</td>
<td>Cohort study</td>
<td>445 patients</td>
<td>Questionnaire on a numerical rating scale</td>
<td>Older patients have higher overall patient satisfaction scores. No association was found between overall satisfaction of knee replacement, or length of stay and patient satisfaction.</td>
<td></td>
</tr>
<tr>
<td><strong>Stacey, Légaré, Col, Bennet, Barry, Eden, … Wu (2014)</strong></td>
<td>Compare 105 studies that utilized a decision aid to help patients with decision making compared to usual care</td>
<td>Systematic review</td>
<td>N=105 studies</td>
<td>Reviewed studies that used a decision aid for either preparing for a visit with a clinician or during a visit with a clinician</td>
<td>Patients that use decision aids feel more knowledgeable, better informed, and clearer about their values.</td>
<td>IA</td>
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<tr>
<td><strong>Tarver, Menser, Hesse, Johnson, Beckjord, Ford, &amp; Huerta, 2018</strong></td>
<td>Examine the current state of online patient-provider communication, explore trends over time in the use of online patient-provider communication tools</td>
<td>Systematic review</td>
<td>2003 N=398 2005 N=324 2008 N=507 2011 N=291 2013 N=228</td>
<td>Measured the percentage of patients that communicated with providers using internet in the last 12 months from 2003 to 2013. Also, demographics that affected this usage.</td>
<td>In the last 12 months of the following years, the resulting percentage of patients communicated with a provider using internet: 2003 – 7% 2005 – 10% 2008 – 14% 2011- 19% 2013 – 30%</td>
<td>IA</td>
</tr>
<tr>
<td><strong>Tiedje et al., 2013</strong></td>
<td>Examine how patients and clinicians understand and experience decision aids in primary care visits</td>
<td>Randomized controlled trial</td>
<td>N=22 patients N=19 primary care clinicians N=44 videorecorded consultations</td>
<td>Patient response to likelihood of asking questions to providers after session using decision aid</td>
<td>Decision aids provide flexible use during consultations to provide space for discussion</td>
<td>IIC</td>
</tr>
</tbody>
</table>
### DECISION AID TOOL AND PATIENT SATISFACTION

| Van Scoy, Green, Dimmock, Bascom, Boehmer, Hensel, & Levi, 2016 | Explore how patients with exacerbation-prone disease trajectories experience advance care planning using an online discussion aid and to compare with different types of exacerbation-prone illnesses had varied experiences using the tool | Qualitative questionnaires | N=24 CHF patients | N=25 COPD patients | Qualitative questionnaires measured advanced care-planning measures pre-intervention knowledge and post-intervention knowledge | 90% of participants reported being “satisfied” or “highly satisfied” | No difference between CHF and COPD patients | IVB |
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Abstract

Background/Purpose. The purpose of this DNP Project was to determine the impact that an intervention has on HCAHPS scores in the category of patient satisfaction with provider communication. The intervention is Dear Provider decision aid tool that assists patients to ask questions to providers, and better understand the treatment plan. Patient satisfaction is increased by tools that strengthen communication between providers and patients.

Methods. A Dear Provider decision aid tool was placed in each patient room on an adult medical-surgical inpatient unit. The HCAHPS score of patient satisfaction in communication with providers during the intervention period was compared to previous quarterly data without the intervention. Additional surveys were administered to a self selected sample of patients on the benefits of the tool.

Conclusions. Patient satisfaction in communication for providers improved during the intervention period, but not enough to be determined statistically significant. However, 67% of patients surveyed stated the tool was beneficial to guide communication and organization questions of care that need clarification. Patients utilized the tool to become more involved in their care, received answers to questions that needed clarification, and enhanced the communication between patients and providers.

Implications for Practice. The Dear Provider decision aid tool is an effective, inexpensive intervention that should be utilized in inpatient units to improve patient satisfaction in communication with providers.

Keywords: patient satisfaction, provider communication, decision aid
Utilizing a Decision Aid in Acute Inpatients to Increase Patient Satisfaction in Communication with the Provider

Patients need to be able to communicate effectively with providers, as ineffective communication leads to diminished adherence to taking medications as prescribed (Tarver et al., 2018). When patients do not understand healthcare instructions caused by inefficient communication, recurrent hospitalizations can occur (Haley, Zhao, & Spaulding, 2016). This DNP Project utilized an intervention to improve patient satisfaction in communication with providers.

**Significance.** Nearly 50% of patients in the United States take at least one prescription drug daily, but half of those patients do not take them as prescribed, and an estimated 10% of all hospitalizations are caused by medication nonadherence. Providers can improve medication adherence with effective communication (Iuga & McGuire, 2014). When treatment plans are effectively communicated, educating patients to follow the plan, readmission rates are lower (Brunetti et al., 2018). Facilities that do not lower readmission rates experience financial repercussions by not receiving Hospital Value Based Purchasing (HVBP) bonuses (Haley et al., 2016). Improving patient satisfaction in provider communication equips patients with the necessary skills to engage in self-care (Stacey et al., 2014; Haley et al., 2016). Facilities are required to improve care quality, incorporate practices that are evidence-based, and focus on specific outcomes. The Centers for Medicare and Medicaid recommend that hospitals focus on interventions to educate patients about the plan of care and treatment (Glowacki, 2015).

Decision aid tools are used to learn about treatment options to improve health status and work with the provider to guide the plan of care options (Davis, McCaffery, Mullan, & Juraskova, 2015). Tools that improve communication between patients and
providers lead to an increase in patient satisfaction (Farberg, Lin, Kuhn, Flanders, & Kim, 2013). Nonadherence to healthcare plans exceeds an estimated $100 billion annually in the United States through hospitalizations, acute exacerbations of chronic illnesses, and preventable worsening of conditions (Iuga & McGuire, 2014).

At the time of implementation, the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey current Top Box percentile fell to the 89th percentile. The Top Box is the percentage of time that patients answer “Always”, and the percentile rankings compare this organization to other organizations. Of the 139 patients surveyed pre-implementation, 14.9% did not rank the communication with doctors as high as possible (C. DeVos, personal communication, October 19, 2018).

Clinical Question. The PICOT framework that guided the DNP Project was: In inpatient adults on a medical-surgical acute care unit (P), what impact does giving the patient a decision aid tool with hospital-related topics to write questions to their provider at admission (I) compared to current practice of no decision aid on admission (C) have on the patient HCAHP scores in communication with providers (O) in a three month timeframe (T)?

Summary of Evidence

Decision aid tools are best utilized when used to understand healthcare recommendations, rather than just write down instructions from providers (Farberg et al., 2013). Patient and provider trust is strengthened when there is better communication (Tarver et al., 2018). Misunderstanding healthcare instructions leads to readmissions (Haley et al., 2016), and lower patient satisfaction (Tarver et al., 2018).
Farberg et al. (2013) developed the Dear Doctor notepad to assist patients in compiling questions for physicians, which led to improved understanding of the plan of care. The tool was utilized to strengthen patient satisfaction in communication with providers. After implementation of the tool, a Likert scale compared patient satisfaction with provider communication, which demonstrated an increase of over 40% in patient satisfaction related to communicating with the provider (Farberg et al., 2013).

**Gaps.** There was limited evidence on interventions that improve patient and provider communication in inpatient settings. Information was lacking on rural and elderly patients using non-electronic communication tools. Access to online communication tools such as the patients’ e-chart or via smartphones creates a new healthcare disparity in relation to communication (Tarver et al., 2018).

**Recommendations for Practice.** When patients and providers use decision aid tools, patients are more involved in their care (Prey et al., 2016). Using a decision aid tool helps guide healthcare choices (Tiedje et al., 2013). Improving provider communication leads to better patient education. Inefficient communication can lead to a lack of understanding of healthcare instructions, resulting in increased hospitalizations (Haley, et al., 2016). Patient and provider trust is based on effective communication (Tarver et al., 2018).

**Methods**

**Setting.** The DNP Project took place at an urban Midwest Magnet Nursing Hospital that is divided into 17 inpatient specialty units. The unit utilizes team nursing with each patient assigned a Registered Nurse (RN), Licensed Practical Nurse (LPN), and Nursing Assistant (NA), with each team caring for five to eight patients. The unit’s 38-
bed capacity is usually full (C. DeVos, personal communication, October 19, 2018).

Prior to intervention, there was not a place to write questions for providers, nor was there a reminder for providers to inquire about patient questions.

Sample. The sample for the DNP Project was adult inpatients in an acute setting on a medical-surgical unit. The patients are treated primarily by Hospitalists and specialists, including General Surgery and Urology. Patients on this unit are 18 years or older, and the majority are between the 50th and 70th decades of life, with an average length of stay of 3.21 days. The unit patients are primarily Caucasian and some Somali. Patients have many chronic comorbidities, including diabetes, hypertension, and COPD, and approximately 50% of the patients have had a surgical procedure, either emergent or elective (C. DeVos, personal communication, October 19, 2018). Fifty six patients were surveyed in the qualitative sample. Of the 56, 24 (42.8%) were female and 32 (57.2%) were male. Of the 56, 55 (98%) were Caucasian. The age of patients surveyed ranged from 42 to 91, with the average being 68.

EBP Tool. The tool utilized was a decision aid tool in the form of a Dear Provider tool (Farberg et al., 2013). The DNP Project coordinator obtained permission to reprint the tool by the author, and to change the title to Dear Provider from Dear Doctor for inclusiveness for all providers. The tool has four general categories to write questions, including: “Diagnosis and Treatment”, “Tests and Procedures”, “Medications”, and “Other”. See Appendix C for visual reference of the Dear Provider tool.

The HCAHPS survey is a requirement of Centers for Medicare and Medicaid Services in every hospital in the United States and is standardized to measure and compare patient perceptions of a hospital where they are a patient. The survey is divided
into sections that measure levels of patient satisfaction including: “Care from Doctors”, “Care from Nurses”, “The Hospital Environment”, “Experiences in the Hospital”, “The Hospital”, “After the Hospital”, and “Overall Rating of the Hospital” (HCAHPS, 2019). See Appendix D for visual reference of the HCAHPS survey.

**Project Procedure.** This project utilized the Iowa Model of Evidence Based Practice to Promote Quality Care (Titler et al., 2001), the Theory of Cherokee Self-Reliance (Lowe, 2002), and Lippitt’s Theory of Change (Lippitt, Watson, & Westley, 1958). Pre-intervention data was collected by responses from the most recently available HCAHPS scores, which was between April 1, 2018 and June 30, 2018. A random sample of patients received this survey between 48 hours and six weeks after discharge (HCAHPS, 2019). Patients were not paired with data, and all data was secured. The DNP Project coordinator completed a Health Insurance Portability and Accountability Act (HIPAA) Authorization form, received approval from the facility’s Nursing Research Review Board, and completed the Human Subjects Approval Request for the Human Subjects Committee at the academic institution.

Pre-intervention steps included educating staff on the tool. See Appendix E for nursing education content. The Dear Provider tool was placed in the patient rooms. No specific instructions were given to patients on how to use the tool, as consistent with the original use of the tool in Farberg et al.’s (2013) study. This was to decrease variables of staff giving different instructions, as well as minimizing the time staff would spend educating the patients on the tool (Farberg et al., 2013). The tool was attached to the Care Board that includes information such as diet, activity, and anticipated discharge date.
Additional surveys were administered to a convenience sample of patients during the intervention phase in face-to-face interviews on the morning of discharge. See Appendix F for additional survey questions. See Appendix H for details of pre-intervention, intervention, and post-intervention steps.

Post-intervention steps included comparing HCAHPS scores of a previous quarter to the period during which the intervention took place. The HCAHPS score of “Satisfaction of Communication with Doctors” of patients without the Dear Provider intervention from April 1, 2018 to June 30, 2018 was compared to the scores after the intervention from January 1, 2019 to March 31, 2019. These dates were chosen for comparison based on when the facility determined a need to improve on the category of provider and patient communication and when the phrasing of the questions changed.

**Implications for Practice**

The post-intervention responses were N=137, with 85.9% answering “Always”, resulting in the 93rd percentile. This increase is not statistically significant to determine any change in scores as the $p$ value was 1.0. Of note, after the intervention there was a 0.8% increase from ‘Usually’ to ‘Always’, and an approximately 2% increase from ‘Sometimes’ to ‘Usually’ in all responses between the two groups, which suggests a change other than the measured top box. See Appendix I for statistical data, and Appendix J for HCAHPS results pre- and post-intervention.

The additional surveys reflect a sample percentage of patients that used the tool, indicates if the tool was actually used, and if they found it beneficial. Fifty-six patients were surveyed out of an attempted 65 on five self-selected dates over three weeks. Nine who were unable to be surveyed were either not physically available in the room, were
incapable of answering questions on their own and did not have a family member present, or did not speak English and did not have an interpreter readily available.

Forty (71.4%) patients said a nurse or other staff did not explain the Dear Provider tool to them. Staff were instructed to not give any specific prompting so this was expected. Forty-five patients stated that they or their family members used the tool, and 12.5% said the provider specifically addressed the tool. Thirty-eight patients stated the tool was beneficial to guide communication and organize questions. Although not defined as statistically successful, giving patients a conversation starter to address questions and can lead to more questions being answered. See Appendix K for additional quotes and themes of surveys.

**Impact.** HCAHPS is a part of the HVBP program, which incentivizes hospitals to meet performance standards by giving bonuses to hospitals that meet goals (Haley et al., 2016). Improving patient satisfaction can financially impact the organization because the HVBP bonuses are funded by the 1% withholding from hospitals that underperform and do not meet requirements (Haley et al., 2016).

The facility serves many patients from rural areas, and care was enhanced for this population by this intervention. Improving HCAHPS is a measurement tool for achieving improved patient satisfaction and care, rather than the specific goal itself. Increasing the percentage of patients that are ‘Always’ happy with the communication demonstrates improving patient care, and not just increasing a score.

**Sustainability.** This DNP Project was a pilot to determine if the impact the tool had on patient satisfaction in communication with providers is positive within this unit. The continued use of the Dear Provider tool has been determined by staff to be
beneficial to continue. The Dear Provider tool may be utilized in all adult inpatient units in the facility. The Nursing Practice committees for each individual unit will determine if use will continue.

**Future recommendations.** If the facility wishes, further studies of patient satisfaction with other forms of communication could be measured. “Communications about Medicines” is a category in the HCAHP Survey that could be focused on to improve as well (C. DeVos, personal communication, October 19, 2018). No specific instructions on how to use the tool were used in this DNP Project or in Farberg et al.’s (2013) project, raising the question of effectiveness if more instructions were given. Based on the results, the increase in patient satisfaction was much less in this DNP Project than Farber et al.’s 2013 study. Comparing the tool attached to a care board to a bedside notepad, as Farberg et al. (2013)’s study utilized, would be beneficial information.

**Barriers and limitations.** Barriers for the DNP Project included lack of provider buy-in and new staff during the intervention period. Providers and nurses were educated to show the benefits to both patients and providers. The tool was only given in English, and therefore was not self-explanatory for non-English speaking patients. Another limitation was that the intervention took place on one unit, resulting in unpredictable variables influenced by staff experience, patient conditions, and interdisciplinary teams; patients were not randomized throughout the entire facility. Comparing percentile rank to other facilities can limit results because while the scores may improve for one facility, the percentile rank also depends on how other facilities perform as one organization may improve but not change in percentile because all organizations may be improving.
Additionally, this global survey is multi-factorial and other variables about the hospitalization may skew the patient’s perception. HCAHPS is a measurement that should be used in conjunction with other quantitative and qualitative data gathered by a facility, including advisor councils, complaints, and rounding (HCAHPS, 2019).

**Conclusion**

This DNP Project helped fill the gap in evidence of interventions that improve patient and provider communication in inpatient settings. Additionally, utilizing a non-electronic communication tool is not studied as much as electronic communication tools in the last five years. The impact of a decision aid tool was measured by the HCAHPS survey in the section of patient satisfaction with provider communication, and with a supplemental survey. Although the change in Top Box scores was not statistically significant, the majority of patients found the tool beneficial based on the additional survey. Improving communication between patients and providers helps patients make informed decisions regarding their care and exploring ways to increase patient satisfaction should be a focus for healthcare organizations.
References


https://doi.org/10.2196/jmir.7851


Appendix A

University IRB Approval
Appendix B

Facility Approval

December 21, 2018

Elizabeth Fiedler
Elizabeth.Fiedler@centracare.com
South Dakota State University
St. Cloud Hospital/Surgical Care Unit q
1406 6th Avenue N
St. Cloud, MN 56303

Dear Elizabeth,

Thank you for submitting the QI Project “Using a Decision Aid in Acute Inpatients to Increase Patient Satisfaction in Communication with the Provider.” The Nursing Research Review Board has reviewed and approved your project. This does not require IRB approval, but will be placed on the IRB Consent Agenda which does not require your attendance.

Since you are using St. Cloud Hospital data and resources in your project, we request an abstract of your completed work and an annual update if not completed within one year. You will need additional NRRB approval if findings are shared beyond your educational setting.

Thank you for doing this project and for bringing the best evidence to patient care.

Sincerely,

Jennifer Burris, APRN, ACNS-BC
Chair, Nursing Research Review Board

JB ab

CentraCare
St. Cloud Hospital
1406 6th Ave North | St. Cloud, MN 56301-1901
(320) 251-2700 phone | (320) 251-5711 fax
www.centricare.com
Appendix C

DNP Project Tools

*dear provider...*

Write questions for your healthcare provider [here](#)

**Diagnostics & Treatment:**

(Example: What is the reason for my hospitalization?)

**Tests & Procedures:**

(Example: What tests are planned for today?)

**Medications:**

(Example: What medications will I be on?)

**Other questions:**
Appendix D

HCAHPS Questions

YOUR CARE FROM DOCTORS

5. During this hospital stay, how often did doctors treat you with courtesy and respect?
   1 □ Never
   2 □ Sometimes
   3 □ Usually
   4 □ Always

6. During this hospital stay, how often did doctors listen carefully to you?
   1 □ Never
   2 □ Sometimes
   3 □ Usually
   4 □ Always

7. During this hospital stay, how often did doctors explain things in a way you could understand?
   1 □ Never
   2 □ Sometimes
   3 □ Usually
   4 □ Always

(HCAHPS, 2019)
Appendix E

‘Dear Provider’ Frequently Asked Questions:

What is the Dear Provider tool?

The Dear Provider tool will be laminated and attached to the Care Board, and allow patients to clarify questions that arise throughout the hospitalization. This will serve as a prompt to remind patients to ask the questions when the providers round, improving communication between patients and providers.

How is the tool measured?

The HCAHPS survey that patients are already filling out has a section on communication with providers. The survey results from the quarter that the project is implemented will be compared to previous quarters.

What is the nurse’s role in the project?

When you are welcoming the patient and explaining the Care Board, you can point out the Dear Provider tool. If a patient asks a question that should be directed toward the provider, you can encourage them to write it on the tool. When you see providers rounding on the patients, remind them to address the patients’ questions. Family members can also use the tool.

When will this be implemented?

January 1, 2019 to March 31, 2019

If you have further questions, please contact Liz Fiedler via email.

The Dear Provider tool will be attached to the FAQ poster.
Appendix F

Additional Survey Questions:

1. Did the nurse or any other staff explain the Dear Provider tool to you?
2. Did you or any family members use the Dear Provider tool?
3. Did the rounding providers address the questions on the tool independently, or did you have to initiate the use?
4. Do you find the tool beneficial? Why or why not?
Appendix G

Permission to Use Dear Provider Tool

Re: Fw: Dr. Farberg (niko)

Aaron S. Farberg <aaron.farberg@gmail.com>
Wed, 6/11/2018, 5:41 PM
Fedora, Elizabeth Louise - SDSU Student

You replied on 7/23/2018 10:48 AM.

Hi Liz,

Thank you for the kind note. I’m happy to hear about your interest in the Dear Doctor notes and that they were a success at Michigan.

Please feel free to reprint and help as many patients as possible.

Good luck with your study!

Best regards,

Aaron

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Aaron S. Farberg, MD
Department of Dermatology
Icahn School of Medicine at Mount Sinai
817.721.3725

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AF
Mon, 2/12/2018, 10:08 PM
Fedora, Elizabeth Louise - SDSU Student

Sounds good - best of luck!

---

Aaron S. Farberg, MD
Department of Dermatology
Icahn School of Medicine at Mount Sinai
817.721.3725

On Sat, Jul 28, 2018 at 11:48 AM, Fedor, Elizabeth Louise - SDSU Student <afarber@postgraduate.org> wrote to Dr. Farberg,

I would like permission to change Dear Doctor to Dear Provider to encompass other PCPs (PAs and NPs) involved in the care of the patient. I would like to change it for inclusiveness but no other changes will be made.

Thank you,

Liz Fedor
Appendix H

Methodology

Pre-Intervention

The DNP Project coordinator attended a General Surgery staff meeting to inform the providers that would most frequently use the tool, and inform the Hospitalists and Urologists via their group leader. It was recommended to use the tool at the beginning of the visit. To educate nursing staff, a “Frequently Asked Questions and Answers” poster about the project was displayed in the unit break room. The facility EBP Coordinator served as the liaison between the DNP Project coordinator and the facility. The unit Director, Nursing Educator, floor nurses and nursing staff, and providers were key stakeholders for the project. See Appendix E for nursing education content.

Pre-intervention data was collected by responses from the most recently available HCAHPS scores. This data was scored between April 1, 2018 and June 30, 2018. A random sample of patients currently receives this survey between 48 hours and six weeks after discharge (HCAHPS, 2019).

During Intervention

The Dear Provider tool was laminated and attached to a dry erase board with a magnet, and patients used the dry erase marker to write on the tool. Unit patients who did not speak English usually had an in-person interpreter, although at times video teleconference can be utilized. In those examples, the nurse needed to take the initiative to assist the patient. Nurses were able to summarize patient inquiries and write them on the tool if the patient was physically or mentally unable to write. Additionally, family members were able to write questions. Nursing staff were able to remind patients to
write down the questions that need clarification beyond the bedside nurses’ ability to answer, including specific treatment plans.

When providers rounded, the Dear Provider tool was on display in the room with patient questions, if they had any, written on it. The provider was able to use this tool to guide the conversation with patients on rounds, based on the topics the patient identified as needing to clarify.

**Post-Intervention**

The primary outcome that was measured was patient satisfaction in communication with the healthcare provider. Results were available on July 1, 2019. As multiple factors influence patient satisfaction, the tool alone cannot be credited as the sole cause of any impact.

The additional surveys served as supplemental results. Over a three week period during the middle of the intervention, on five self-selected weekdays, the DNP Project coordinator interviewed patients that were discharged on those days. A total of 65 patients were discharged on those dates, and 56 were interviewed. The 9 that were not interviewed were either physically unavailable due to a therapy session or other appointment, were not proficient in English and did not have an interpreter readily available, or were not cognitively able to answer questions. Of the 56 surveyed, 14 of those were answered by family members instead of the patient.
## Appendix I

### Statistics

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<tr>
<td>85.1 Test Mean</td>
<td>85.5</td>
</tr>
<tr>
<td>85.9 Confidence</td>
<td>0.95</td>
</tr>
</tbody>
</table>

- **n**: 2
- **Average**: 85.5
- **StDev**: 0.565685
- **SE Mean**: 0.4
- **Tinv**: 12.7062
- **p - One sided**: 0.5
  - **Cannot Reject Null Hypothesis because p > 0.05** (Means are the same)
- **p - two sided**: 1
  - **Cannot Reject Null Hypothesis because p > 0.05** (Means are the same)

| Upper Confidence Interval | 90.58248 |
| Lower Confidence Interval | 80.41752 |
## Appendix J

### Pre-Intervention HCAHPS Scores

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<tr>
<th>Global DOMAIN</th>
<th>Question</th>
<th>n %</th>
<th>All DB</th>
<th>All PG DB</th>
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### Post-Intervention HCAHPS Scores
Appendix K

The 56 patients surveyed, 31 of the 38 patients that stated the tool was beneficial were female. Of the 11 patients that responded to the surveyor that they or their family members did not use, six of those responded that it was not necessary because “questions were already being addressed”, or “communication was already great”. A common theme was that all six of those patients that did not use the tool because of verbalizing a lack of need, all of those patients were male.