Patient Perception of Physician’s Compassion, Communication Skills, and Professionalism During an Outpatient Palliative Care Visit: A Randomized Controlled Trial

Short title: EHR Study

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INDEX

OBJECTIVES AND HYPOTHESIS 2

BACKGROUND AND RATIONALE 3

ELIGIBILITY 4

RESEARCH PLAN AND METHODS 5

CONCEPTUAL MODEL 6

INTERVENTIONS 7

RANDOMIZATION AND BLINDING 9

STUDY OUTCOMES AND MEASURES 9

STATISTICAL CONSIDERATIONS 14

DATA CONFIDENTIALITY AND PROTECTION 15

REFERENCES 16
1. **OBJECTIVES AND HYPOTHESIS**

This study aims to compare patient’s perception of physician compassion, communication skills, and professionalism along with overall physician preference after viewing a traditional face to face clinic visit compared to a visit where an examination room computer is used by the physician to access and document patient information.

**Primary objectives**

1. To compare patient’s perception of physician **compassion** during an interaction with and without an examination room computer.
   
   **Hypothesis:** We hypothesize that patients will perceive physicians who communicate face to face without using examination room computers during outpatient palliative care visits as more compassionate.

**Secondary Objective**

1. To compare patient’s perception of physician **communication skills** during an interaction with or without examination room computer.
   
   **Hypothesis:** Patients will perceive physicians who communicate face to face without using an examination room computer during outpatient palliative care visits as having better communication skills.

2. To compare patient’s perception of physician **professionalism** during interaction with and without examination room computer.
   
   **Hypothesis:** Patients will perceive physicians who communicate face to face without using an examination room computer during outpatient palliative care visits as more professional.

3. To compare which type of physician the patients would **prefer** after watching the two videos.

   **Hypothesis:** Patients will prefer the physician who communicates face-to-face with the patients.
**Exploratory objectives**
To establish demographic and clinical predictors of patients’ physician preferences.

**Hypothesis:**

a. Patients who are elderly will prefer the physician who communicated face to face without the use of an examination room computer.

b. Patients who are anxious and depressed will prefer the physician who communicated face to face without the use of an examination room computer.

c. Patients who are hopeful and have higher trust in the medical profession may not have any physician preference.

d. Patients with higher satisfaction of health information technology may prefer the physician who used an examination room computer.

2. **BACKGROUND AND RATIONALE:**

The use of electronic health records (EHR) continues to rise in hospital settings due to its positive effect on management of patient data, billing processes, and record keeping. By the end of 2014, 8 in 10 office based physicians have adopted some form of EHR and rates of adoption have nearly doubled from 42% to 83%[1]. However, the full effects of EHR on physician-patient interactions remain unclear in a palliative care setting where more human factors are critical for appropriate care. In such situations implementation of EHR may require optimization so as to minimize its negative affect on the physician patient relationship.

The rapid growth and adaptation of EHR technology has left open a large gap where the optimal positioning of EHR equipment, effective management of time for data-entry while maintaining patient-physician interaction, and proper training for providers to use the EHR technology as an ally needs to be established. A study conducted by Street et al in 2014 demonstrated that patient’s perception of the provider’s patient centeredness was inversely related to the length of time the provider gazed at the computer screen and the length of mutual silence between provider and patient[2]. In our experience, this problem is amplified in a hospice and palliative care setting where measures such as spirituality, compassion, and personhood are important aspects that are heavily influenced by the presence of a third party in the room, namely the EHR computer.
Solutions to these problems are dependent on clinical settings and the patient demographic. For example, one proposed solution to improve the triadic patient-doctor-computer interaction is to share the computer screen with the patient and point at the screen to make the patient feel engaged[3]. However, the patient demographic in a palliative care clinic skews towards a much sicker population with higher physical and psychosocial symptoms who may not be comfortable with the use of technology. These patients may feel intimidated or further alienated if a provider shares the computer screen while discussing their care plan. There is a lack of literature on the effects of EHR use on patient-centered communication among patients with advanced diseases like cancer. Such examples demonstrate the need for a study of EHR use and its effect on patient’s perception and overall satisfaction in a palliative care setting.

Presence of EHR technology in the room significantly reduced face to face interactions and eye-contact between physician and patients [4]. This is an important finding for palliative care and hospice physicians who carefully monitor physical cues such as frowning, tearfulness, animation, and posture to gain knowledge about patients’ wellbeing. If use of EHR technology in the room impedes non-verbal communication between the patient and provider, it will be necessary to develop training programs and establish protocols to incorporate the computer in the patient interview while ensuring enough face-to-face communication to obtain necessary non-verbal cues for a proper diagnosis.

3. **ELIGIBILITY:**

All adult patients seen at the Supportive Care Clinic who meet the below eligibility criteria will be eligible for the study. This randomized controlled trial will not interfere with routine clinical practice of the clinic. Study participants will be offered a $25 gift card.

**INCLUSION CRITERIA:**

1. Patients with a diagnosis of advanced cancer defined as locally advanced, recurrent or metastatic disease.
2. Outpatients (either new referrals or follow ups) seen in the Supportive Care Clinic.
3. Age >/= 18 years-old
4. English speaking.
5. Patients with normal cognitive status (Memorial Delirium Assessment Scale (MDAS) </= 6/30) who are able to understand the nature and purpose of the study and have the ability to complete the consent process.

**EXCLUSION CRITERIA:**

1. Patients who are experiencing severe symptom distress, including severe emotional distress and cognitive dysfunction, which may interfere with study participation. This
will be determined by the principle investigator and/or attending physician who is caring for the patient during that visit.

MDAS will be used to screen cognitive status[5]. MDAS is routinely performed on all new and follow up patients and administered by trained staff. MDAS is highly correlated with existing measures of delirium and cognitive impairment[5]. MDAS score of 7/30 yields the highest sensitivity 98% and specificity 97% for delirium diagnosis[6]; hence patients with a score of ≥7 will be excluded.

Edmonton Symptom Assessment Scale (ESAS) will be used to assess patient symptom burden[7]. ESAS is a 12-item symptom assessment scale, scores from 0-10 with 10 being the worst. Patients with scores of ≥7 are considered to be in severe distress. Eligible patients who will score ≥7 will be discussed with the attending physician who is caring for the patient during that visit.

4. **RESEARCH PLAN AND METHODS**

**CONCEPTUAL MODEL**
We have identified four components in the communication process: the physician, the patient, the contents of the communication, and the environment (figure 1). In order to correctly analyze the relationship between the effect of computer use (environment) and patient perception of physicians, we will standardize the other aspects of the communication process like physician factors, communication skills, and the message contents.
Figure 1: Conceptual model

**Demographic factors**
- Specialty
- Psychological factors
- Communication training
- Personal experiences
- Computer skills

**Psychological factors**
- Anxiety and depression (HADS)
- Understanding of current health status (Q)*
- Acceptance of illness (PEACE)
- Hope (Herth Hope Index)
- Trust in medical profession (Q)*

**Demographic factors:**
- Age
- Gender
- Race
- Education

**Cancer related factors:**
- Cancer type
- Stage
- Treatment
- Prognosis
- Performance Status (ECOG)
- Symptoms (ESAS)

---

* Q = Questionnaire
**INTERVENTION:**

After appropriate patient screening and randomization, each patient will see two videos. These videos will be produced exclusively for this study and will deliver standardized information. Each video will be approximately 4 minutes long.

Physician video #1: Physician will make notes on the paper while communicating with the patients.

Physician video #2: Physician will use examination room computer to access and enter information while communicating with the patient.

**Actors:**

*Physician:*  
A Caucasian male will play the physician role, 40-50 years old. In order to control the actor’s characteristics we will have two different actors with similar physical characteristics (e.g. age, sex, and race) record each scenario. To minimize bias both actors will use the same number of empathic statements, hand gestures, and facial expressions.

*Patient:*  
The same person in each video will play the patient role: a Caucasian women around 50-60 years old with advance cancer and poor performance status. Patients in each video will hear the same numbers of empathic statement from the physician.

**Script:**  
The script in each video will be the same and it will reflect a physician with average communication skills and will have neutral emotions. (Appendix M: Script)

We wanted the physicians with similar communication skills and emotions who are delivering the same content with equal amount of empathic statements so that we can better assess the influence of the examination room computer use on the patient’s perception of the physician.

The principal investigator and the collaborators developed the script. Dr. Bruera and Dr. Tanco have extensive research experience and have done a number of studies where a script was used to videotape the patient-physician encounter [20-23]. These studies and scripts have previously been approved by the IRB at MDACC. We have a written script to show a routine discussion done in our daily encounters regarding symptoms assessment and medication prescriptions which are compiled with recommendations by Hillen and van Vliet [24-25].
**Video recording:**
University of Texas Television (UTTV) will develop the videos after hiring professional actors. Principal investigator and/or collaborators will be present during each recording session and will direct the actors.

**Recording venue:**
Recordings will be done either at UTTV studio or at the Supportive Care Clinic on the weekends so that patient’s schedules are not disrupted.

**Duration of eye contact:**
We aim to minimize the difference of eye contact during each scenario. Physician who is using computer will make notes in the computer and at times will simultaneously look at the patient while typing. Similarly the physician who is using paper and pencil will make notes on the paper. A timer will be used during recording sessions to minimize the difference of amount of eye contact during each scenario. Each recording will be reviewed by the principal investigator and the collaborators to ensure the difference of eye contact during each scenario is minimum.

**Placement of computer, patient and physician:**
We will utilize the stationary computers in each scenario. These computers are already present in all supportive care outpatient examination rooms. These will be placed in such a way that neither the patient in the video nor the patient watching the video can see the computer screen. We will also make sure that the patient is not facing the back of the physician while working on the computer. In each scenario patient will be sitting the same distance away from the physician.

We aim to control the delivery of empathic statements within each of these four recording scenarios. We will ask 5 volunteer faculty members in the Palliative Care department who are not participating in the study to review the quality and emotional quotient of each voice recording to ensure that each recording has the same empathic tone and statements as the others. Each faculty member has extensive experience in managing patients with emotional distress and thus providing supportive expressive counseling by utilizing empathic statements. If a bias is found by the faculty members, then the video will be recorded again or edited to eliminate such bias.

**SCREENING AND RECRUITMENT:**
Research staff will screen adult patients with advanced cancer scheduled to be seen in the outpatient Supportive Care Clinic as a consult or follow-up. Patients’ EHR will be screened for eligibility. Patients meeting the eligibility criteria will be approached and written informed consent will be obtained.
5. RANDOMIZATION AND BLINDING

Using CORe, patients will be randomized equally (1:1:1:1) into one of the four sequence arms. The objective of this randomization strategy is to first, control the order in which the videos are seen, and second to control the physician’s personal characteristics. In previous studies, we have seen that the sequence in which patients watched a video had an impact on their perception of physician compassion. These studies suggest that patients generally prefer the doctor they see in the second video [8-10]. Therefore, a randomization of the order sequence will help us minimize bias. As our goal is to assess patient’s perception of physician compassion, communication skills, and professionalism related to the use of an examination room computer, we need to control personal characteristics of the actors that will play the role of the doctor and the contents of the message. To do this, we will randomize each patient to one of the four study groups and within these groups there is a set order of 2 videos to control the possible confounder. With this randomization strategy we will have four possible groups (Figure 2).

The research coordinator will be blinded to the allocation sequence throughout the study. Actors and patients will be blinded to the specific hypothesis of the study. In the consent process, patients will be told that they will be asked to: “watch two videos and complete 3 sets of surveys one before the first video and one survey after each video”. Although we are using survey questionnaires, this study is an experimental design.

Regarding patients’ caregivers, we will ask them to leave the room while the videos are played. In case they decide to stay, we will ask them to keep silent.

6. STUDY OUTCOMES MEASURES

We will ask the patients to complete 3 sets of surveys. One set will be handed to the patient before showing the first video and one set of surveys after each video is played. In the first set, we will assess patient’s current psychological factors that could influence patient’s preferences: presence of psychiatric illness, hope, disease acceptance and general trust in the medical profession. After each video, we will ask the patient to evaluate the physicians. In the third set of surveys, we will add a question to ask the patient to choose which physician the patient would prefer as a primary physician and the satisfaction with health information technology use in their care.

The primary outcome will be patient’s rating of physician’s compassion by using a 5-item tool consisting of five 0-10 numerical rating scales assessing five dimensions: warm-cold, pleasant-unpleasant, compassionate distant, sensitive insensitive, caring-uncaring. The sum of the five scales will give a final score representing physician’s compassion with a 0 to 50 scale.
The secondary outcome will be patient’s rating of physician communication skills by using a 14-item tool consisting of 1 to 4 numerical rating scales assessing communication skills. The sum of these 14 scales will give a final score representing physician’s communication skills with a 14 to 70 scale.

The secondary outcome will also be patients rating of physician’s professionalism by using a 4-item tool assessing politeness, listening, explaining the condition and treatment to the patient and patient’s involvement in treatment decisions. Patient will rate from poor to very good.

Table 1 summarizes all the assessments that will be done during the study.

**Baseline assessment:**

At the beginning of this randomized control trial, we will collect:

1. Patient demographics, baseline - gender, date of birth, ethnicity, marital status, education, religion, type of cancer, date of cancer diagnosis, treatments received, current cancer treatments, performance status (Appendix A). This information will be obtained from reviewing the patients’ medical record in electronic patient chart.

2. Signs and symptoms - Edmonton Symptom Assessment Scale (ESAS) (Appendix B)[7].

3. Depression and Anxiety - Hospital Anxiety Depression Scale (HADS) (Appendix C)[11]. The HADS depression subscale scores range from 0-21. Patients with scores between 8 and 10 indicate mild depression, scores between 11 and 14 indicate moderate depression, and scores between 15 and 21 indicate severe depression. Similar scores will be considered for anxiety subscale. Patients with moderate to severe depression and anxiety will be referred to the Supportive Care nurse or physician for further evaluation. All supportive care patients with moderate to severe depression and anxiety are offered counseling services and if found necessary, will be referred to a psychiatrist for urgent or routine consultation.

4. Current health status and disease acceptance: Peace, equanimity and acceptance in the cancer experience (PEACE) scale (Appendix D)[12]. We will use the Peace subscale, which includes only five of the twelve questions.

5. Trust in Medical Profession questionnaire (Appendix E)[13].

6. Hope: Herth Hope Index (Appendix F)[14, 15].

The patients will watch the two short videos. The PI will complete a preliminary review of the videos before they are administered to the patients. This review will be completed as preparatory work in advance of the study.
After first video: After the first video all patients will be asked to rate physician’s characteristics related to different domains:

1. Physician compassion assessment (Appendix G) [8, 16]: Physician compassion will be assessed by using a tool that consists of five 0-10 numerical rating scales assessing five dimensions: warm-cold, pleasant-unpleasant, compassionate-distant, sensitive insensitive, and caring-uncaring. The sum of the five scales will give a final score representing physician’s compassion with a 0 to 50 scale.

2. Physician communication assessment survey (Appendix H): Physician communication skills will be assessed using a validated communication assessment tool (CAT) consisting of fourteen 0-5 numerical rating scales. [17]. Although this is a copyrighted tool, the owner (Dr. Gregory Makoul) has given us permission to use for research purposes, although he does not have an active role on this study. He has asked that de-identified CAT responses be sent to him once the study has been completed and published. A material transfer agreement will be established to transfer the data.

3. Physician professionalism assessment survey (Appendix I) [18] Physicin professionalism, adapted from the General Medical Council Questionnaire, will be assessed for professional performance. This questionnaire includes items on physician’s trustworthiness and ability to provide patient care.

After second video: After the second video all patients will be asked to complete the same 3 assessments completed after the 1st video: Physician compassion assessment (Appendix G), Physician communication assessment survey (Appendix H), and Physician professionalism assessment survey (Appendix I).

After completion of the second video and assessments, all patients will undergo the last set of assessments:

4. Physician Preference and Final Assessment (Appendices J and K): After completing the assessments, patients will be asked to choose which physician they preferred (EHR, no EHR, or no preference) and then to rate physician overall impression and compassion perception. We will also ask the patient to describe the reasons for their preference.

5. Health information technology survey (HIT) (Appendix L)[19]: We will ask the patient their opinions of health information technology.

It should take about 38 minutes to watch the videos and complete all of the questionnaires.

Distress Plan: In case of severe symptom distress, including emotional distress or cognitive
dysfunction, research staff will immediately contact the patient’s nurse, counselor and/or attending physician who are caring for that patient for evaluation. After the attending physician and the counselor have evaluated patient, they will decide if patient needs to be referred to a psychiatrist for urgent or routine evaluation.

**TABLE 1: Summary of patient’s assessments**

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Baseline</th>
<th>After First Video</th>
<th>After Second Video</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographics (Appendix A)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cancer status and performance status (Appendix A)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Edmonton Symptom Assessment Scale (Appendix B)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital Anxiety Depression Scale (Appendix C)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEACE (Appendix D)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust in medical profession (Appendix E)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Herth Hope Index (Appendix F)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physician’s compassion (G)</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Physician’s communication skills (Appendix H)</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Physician’s professionalism (Appendix I)</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Preference of the physician (Appendix J)</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Reasons for preference (Appendix K)</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Health information technology survey (Appendix L)</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

**TABLE 2: Required time to fulfill the different assessments**

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Estimated time (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edmonton Symptom Assessment Scale (Appendix B)*</td>
<td>3 minutes</td>
</tr>
<tr>
<td>Hospital Anxiety Depression Scale (Appendix C)</td>
<td>5 minutes</td>
</tr>
<tr>
<td>PEACE (Appendix D)</td>
<td>3 minutes</td>
</tr>
<tr>
<td>Trust in medical profession (Appendix E)</td>
<td>3 minutes</td>
</tr>
<tr>
<td>Herth Hope Index (Appendix F)</td>
<td>3 minutes</td>
</tr>
<tr>
<td>Video #1</td>
<td>4 minutes</td>
</tr>
<tr>
<td>Physician’s Compassion(G)</td>
<td>1 minute</td>
</tr>
<tr>
<td>Physician’s Communication skills (Appendix H)</td>
<td>2 minutes</td>
</tr>
<tr>
<td>Physician’s Professionalism (Appendix I)</td>
<td>2 minutes</td>
</tr>
<tr>
<td>Video #2</td>
<td>4 minutes</td>
</tr>
<tr>
<td>Physician’s Compassion</td>
<td>1 minute</td>
</tr>
<tr>
<td>Physician’s Communication Skills (Appendix H)</td>
<td>2 minutes</td>
</tr>
<tr>
<td>Physician’s Professionalism (Appendix I)</td>
<td>2 minutes</td>
</tr>
<tr>
<td>Preference of the physician (Appendix J)</td>
<td>1 minute</td>
</tr>
<tr>
<td>Reasons for preference (Appendix K)</td>
<td>1 minute</td>
</tr>
<tr>
<td>Health information technology survey (Appendix L)</td>
<td>1 minute</td>
</tr>
</tbody>
</table>

**TOTAL TIME** 38 Minutes

*Edmonton Symptom Assessment Scale is routinely done during each clinic visit*
Figure 2: Study Design

Patient Information and Consent

Survey #1: Assessment of patient psychological factors
Chart: Demographics, cancer related factors

Randomization

Video 1:
No EHR
Physician A

Video 1:
No EHR
Physician B

Video 2:
With EHR
Physician A

Video 2:
With EHR
Physician B

SURVEY #2: Assessment of physician’s compassion, communication skills and professionalism

Video 2:
With EHR
Physician B

Video 2:
With EHR
Physician A

Video 1:
No EHR
Physician B

Video 1:
No EHR
Physician A

SURVEY #3: Assessment of physician’s compassion, communication skills and professionalism

SURVEY #4: Overall physician preference and health Information technology satisfaction
7. STATISTICAL CONSIDERATIONS

Sample Size Justification
A total of 120 patients will be randomized 1:1:1:1:1 to the four groups. The primary outcome is patient’s rating of physician’s compassion after the first video, the sum of five 0-10 numerical rating scales from a 5-item tool. With 30 patients per group, and 60 in each of “EHR” and “No EHR” groups, we will have an 80% power to detect an effect size of 0.516 on physician’s compassion using a two-sample t-test with a two-sided significance level of 5%.

We will test whether the proportion of patients preferring the use of EHR differs by video sequence using a chi-square test.

STATISTICAL ANALYSIS PLAN
We will perform data analysis using crossover experiment setting, therefore we will have more than 80% power to detect the same effect size as stated in the current sample size justification, and meanwhile we will be able to evaluate any carryover effect.

Standard descriptive statistics including mean, standard deviation, median, range, frequency and percentage will be summarized for all variables of interest such as patients’ demographics, clinical characteristics, ESAS, HADS, trust in medical profession at baseline, physician’s compassion, communication skills and professionalism after each video. Physician’s compassion, communication skills and professionalism will be estimated and compared between EHR vs No EHR groups at the end of each video using two-sample t-test or Wilcoxon rank-sum test, whichever appropriate. Proportion of patients preferring the use of EHR will be estimated with 95% confidence interval. Chi-squared test or Fisher’s exact test, whichever appropriate, will be used to test for associations between each of the categorical variables including the sequence orders and physician preference. Spearman rank correlation will be used to test for associations between each of continuous variables and health information technology satisfaction. Kruskal-Wallis test will be used to test for differences of continuous variables between physician preferences groups (EHR, no EHR, or no preference). Mixed model techniques will be used to further explore the patterns of physician’s compassion, communication skills and professionalism assessments from both videos. Univariate/multicovariate logistic regression will be used to explore the effect of patients’ demographic /clinical characteristics and the video on physician preference. General linear model will be employed to explore patients’ demographic and clinical predictors of health information technology satisfaction.
Other statistical methods, when appropriate, may be applied.

Since this study is of minimal risk to the patient, we will not conduct an intermediate analysis. In the case of patient withdrawal or lost to follow-up, leading to patient inevaluability, such patients will be replaced.

8. **DATA CONFIDENTIALITY AND PROTECTION**

Because of the extremely low risk of adverse events we will obtain a waiver for DSMB review. Written consent will be obtained for enrollment.

We will obtain authorization for use and disclosure of Protected Health Information (PHI) from patients. The Research Staff involved in the protocol will obtain informed consent from patients. The informed consent will be done according to the MD Anderson Policies and Standards.

Health information will be protected and we will maintain the confidentiality of the data obtained from the patient's chart to the best of our ability.

Collection of identifiers: We will collect and securely store patients' identifiers (including name, medical record number). Each patient will be assigned a study number that will be the only identifier to figure in the analytical file and personal data will not be disclosed in any form. The key linking these numbers will be retained in a securely locked file by the investigator.

Data Storage: Protection of electronic and paper records will be protected to the best of our ability. All electronic records will be stored on password-protected institution computers behind the institutional firewall. Any paper records will be classified and stored in locked files inside a locked office.

Training of personnel: Only MDACC personnel trained in maintaining confidentiality (the principal investigator, collaborators, and research staff) will have access to study records.

Data sharing: De-identified CAT responses will be shared with Dr. Gregory Makoul after study completion and publication to be stored in the CAT database, which is not under an IRB protocol. CAT responses include fourteen 0-5 numerical rating scales about how the participant feels about the way the physician communicated with the patient in the video. Participant demographics, clinical characteristics, and identifiers will not be sent to Dr. Makoul. The data will be kept by the principal investigator in a locked file cabinet and locked office.

Final disposition of study records: These data will be used only for this research study. Data files will be destroyed within 5 years after publication of the findings.
9. REFERENCES


APPENDIX A: PATIENT DEMOGRAPHICS & BASELINE CHARACTERISTICS

DATE: ______________________

GENDER: ☐ Female ☐ Male

DATE OF BIRTH: ______________________

ETHNICITY:
☐ American Indian/Native American ☐ Asian/Pacific Islander ☐ Black (African American)
☐ Hispanic ☐ White ☐ Other __________

MARITAL STATUS:
☐ Single ☐ Married ☐ Widowed ☐ Divorced ☐ Separated ☐ Other: __________

HIGHEST LEVEL OF EDUCATION COMPLETED:
☐ Less than High School
☐ High School/Tech School
☐ Incomplete College or Junior College
☐ Complete College
☐ Incomplete Masters/Doctoral degree
☐ Complete Masters/Doctoral degree

RELIGION
☐ Buddhist ☐ Catholic ☐ Christian/Protestant ☐ Jewish ☐ Hindu ☐ Muslim ☐ Other ☐ Not answered

CANCER DIAGNOSIS (Histology): ____________________________

DATE OF DIAGNOSIS: ____________________________

CURRENT STAGE: ☐ Locally-advanced ☐ Metastatic ☐ Recurrent ☐ Other: __________

CURRENT CANCER TREATMENTS:
☐ Chemotherapy ☐ Radiation ☐ Targeted therapy or Phase 1 ☐ No treatments

PREVIOUS CANCER TREATMENTS:
☐ 1 or 2 different types of Chemotherapy
☐ More than two types of Chemotherapy
☐ Targeted therapy or phase 1 treatment
☐ Radiation therapy
☐ Surgery for cancer
☐ Other therapies

ECOG PERFORMANCE STATUS: ☐ 1 ☐ 2 ☐ 3 ☐ 4
### APPENDIX B: EDMONTON SYMPTOM ASSESSMENT SCALE (ESAS)

Please circle the number that best describes how you feel within the past 24 hours:

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Score Range</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>No pain</td>
<td>0 to 10</td>
<td>Worst possible pain</td>
</tr>
<tr>
<td>No fatigue</td>
<td>0 to 10</td>
<td>Worst possible fatigue</td>
</tr>
<tr>
<td>No nausea</td>
<td>0 to 10</td>
<td>Worst possible nausea</td>
</tr>
<tr>
<td>Not depressed depression</td>
<td>0 to 10</td>
<td>Worst possible depression</td>
</tr>
<tr>
<td>No anxiety</td>
<td>0 to 10</td>
<td>Worst possible anxiety</td>
</tr>
<tr>
<td>Not drowsy</td>
<td>0 to 10</td>
<td>Worst possible drowsiness</td>
</tr>
<tr>
<td>Best appetite</td>
<td>0 to 10</td>
<td>Worst possible appetite</td>
</tr>
<tr>
<td>Best feeling of well-being</td>
<td>0 to 10</td>
<td>Worst possible feeling of well-being</td>
</tr>
<tr>
<td>No shortness of breath</td>
<td>0 to 10</td>
<td>Worst possible shortness of breath</td>
</tr>
<tr>
<td>Best sleep</td>
<td>0 to 10</td>
<td>Worst possible sleep</td>
</tr>
</tbody>
</table>
APPENDIX C: THE HOSPITAL ANXIETY AND DEPRESSION SCALE

(Please check the answer which comes closest to how you have been feeling in the past week).

1. I feel tense or ‘wound up’:
   - Most of the time
   - A lot of the time
   - From time to time, occasionally
   - Not at all

2. I still enjoy the things I used to enjoy:
   - Definitely as much
   - Not quite so much
   - Only a little
   - Hardly at all

3. I get sort of frightened feeling as if something awful is about to happen:
   - Very definitely and quite badly
   - Yes, but not too badly
   - A little, but it doesn’t worry me
   - Not at all

4. I can laugh and see the funny side of things:
   - As much as I always could
   - Not quite so much now
   - Definitely not so much now
   - Not at all

5. Worrying thoughts to go through my mind:
   - A great deal of the time
   - A lot of the time
   - From time to time but not too often
   - Only occasionally

6. I feel cheerful:
   - Not at all
   - Not often
   - Sometimes
   - Most of the time

7. I can sit at ease and feel relaxed:
   - Definitely
   - Usually
   - Not often
   - Not at all
8. **I feel as if I am slowed down:**
   - Nearly all the time
   - Very often
   - Sometimes
   - Not at all

9. **I get a sort of frightened feeling like ‘butterflies’ in the stomach:**
   - Not at all
   - Occasionally
   - Quite often
   - Very often

10. **I have lost interest in my appearance:**
    - Definitely
    - I don’t take so much care as I should
    - I may not take quite as much care
    - I take just as much care as ever

11. **I feel restless as if I have to be on the move:**
    - Very much indeed
    - Quite a lot
    - Not very much
    - Not at all

12. **I look forward with enjoyment to things:**
    - As much as ever I did
    - Rather less than I used to
    - Definitely less than I used to
    - Hardly at all

13. **I get sudden feelings of panic:**
    - Very often indeed
    - Quite often
    - Not very often
    - Not at all

14. **I can enjoy a good book or radio or TV program:**
    - Often
    - Sometimes
    - Not often
    - Very seldom
APPENDIX D: CURRENT HEALTH STATUS AND DISEASE ACCEPTANCE

Describe your current health status:
☐ Relatively healthy ☐ Serious but not terminally ill ☐ Serious and terminally ill

Peace, Equanimity and Acceptance in the Cancer Experience (PEACE) scale

Peaceful acceptance of illness subscale:

1. To what extent are you able to accept your diagnosis of cancer?
   ☐ Not at all
   ☐ To a slight extent
   ☐ To some extent
   ☐ To a large extent

2. To what extent would you say you have a sense of inner peace and harmony?
   ☐ Not at all
   ☐ To a slight extent
   ☐ To some extent
   ☐ To a large extent

3. To what extent do you feel that you have made peace with your illness?
   ☐ Not at all
   ☐ To a slight extent
   ☐ To some extent
   ☐ To a large extent

4. Do you feel well loved now?
   ☐ Not at all
   ☐ To a slight extent
   ☐ To some extent
   ☐ To a large extent

5. To what extent do you feel a sense of inner calm and tranquility?
   ☐ Not at all
   ☐ To a slight extent
   ☐ To some extent
   ☐ To a large extent
APPENDIX E: TRUST IN MEDICAL PROFESSION

Patient trust in the medical profession

1. Sometimes doctors care more about what is convenient for them than about their patients' medical needs.
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree

2. Doctors are extremely thorough and careful.
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree

3. You completely trust doctors' decisions about which medical treatments are best.
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree

4. A doctor would never mislead you about anything.
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree

5. All in all, you trust doctors completely.
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree
APPENDIX F: PATIENT’S HOPEFULNESS

HERTH HOPE INDEX

1. I have a positive outlook toward life.
   □ Strongly Disagree □ Disagree □ Agree □ Strongly Agree

2. I have specific possible short, intermediate or long range goals.
   □ Strongly Disagree □ Disagree □ Agree □ Strongly Agree

3. I feel all alone.
   □ Strongly Disagree □ Disagree □ Agree □ Strongly Agree

4. I can see possibilities in the midst of difficulties.
   □ Strongly Disagree □ Disagree □ Agree □ Strongly Agree

5. I have a faith that gives me comfort.
   □ Strongly Disagree □ Disagree □ Agree □ Strongly Agree

6. I feel scared about my future.
   □ Strongly Disagree □ Disagree □ Agree □ Strongly Agree

7. I can recall happy/joyful times.
   □ Strongly Disagree □ Disagree □ Agree □ Strongly Agree

8. I have deep inner strength.
   □ Strongly Disagree □ Disagree □ Agree □ Strongly Agree

9. I am able to give and receive caring/love.
   □ Strongly Disagree □ Disagree □ Agree □ Strongly Agree
10. I have a sense of direction.
☐ Strongly Disagree ☐ Disagree ☐ Agree ☐ Strongly Agree

11. I believe that each day has potential.
☐ Strongly Disagree ☐ Disagree ☐ Agree ☐ Strongly Agree

12. I feel my life has value and worth.
☐ Strongly Disagree ☐ Disagree ☐ Agree ☐ Strongly Agree
APPENDIX G: PHYSICIAN COMPASSION ASSESSMENT

Please circle the numbers that most accurately describe your perception of the physician you just watched.

<table>
<thead>
<tr>
<th>Warm</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pleasant</td>
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<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Compassionate</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<td>6</td>
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<tr>
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<td>6</td>
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<tr>
<td>Caring</td>
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<td>4</td>
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<td>6</td>
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<td>10</td>
</tr>
</tbody>
</table>

Cold

Unpleasant

Distant

Insensitive

Uncaring
APPENDIX H: COMMUNICATION ASSESSMENT TOOL
Communication with patients is a very important part of quality medical care. We would like to know how you feel about the way physician communicated with the patient in this video.

1. Greeted in a way that made patient feel comfortable

<table>
<thead>
<tr>
<th>Poor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Excellent</th>
</tr>
</thead>
</table>

2. Treated with respect

<table>
<thead>
<tr>
<th>Poor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Excellent</th>
</tr>
</thead>
</table>

3. Showed interest in ideas about patient health

<table>
<thead>
<tr>
<th>Poor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Excellent</th>
</tr>
</thead>
</table>

4. Understood main health concerns

<table>
<thead>
<tr>
<th>Poor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Excellent</th>
</tr>
</thead>
</table>

5. Paid attention to the patient (looked at the patient, listened carefully)

<table>
<thead>
<tr>
<th>Poor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Excellent</th>
</tr>
</thead>
</table>

6. Let patient talk without interruptions

<table>
<thead>
<tr>
<th>Poor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Excellent</th>
</tr>
</thead>
</table>

7. Gave patient as much information as I wanted
<table>
<thead>
<tr>
<th></th>
<th>Poor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.</td>
<td>Talked in terms patient could understand</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>9.</td>
<td>Checked to be sure patient understood everything</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>10.</td>
<td>Encouraged patient to ask questions</td>
<td></td>
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</tr>
<tr>
<td>11.</td>
<td>Involved patient in decisions as much as patient wanted</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>12.</td>
<td>Discussed next steps, including any follow-up plans</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>Showed care and concern</td>
<td></td>
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</tr>
<tr>
<td>14.</td>
<td>Spent the right amount of time with the patient</td>
<td></td>
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</tbody>
</table>
APPENDIX I: PHYSICIAN PROFESSIONALISM ASSESSMENT

Adapted from the General Medical Council Patient Questionnaire (to assess professional performance)

Please rate how good the physician in the video was at each of the following by ticking one box at each line.

<table>
<thead>
<tr>
<th></th>
<th>Poor</th>
<th>Less than Satisfactory</th>
<th>Satisfactory</th>
<th>Good</th>
<th>Very Good</th>
<th>Does not apply</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being polite</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Listening</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Explaining the condition and treatment to the patient</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Involving the patient in treatment decisions</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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</tbody>
</table>
APPENDIX J: PHYSICIAN PREFERANCE AND FINAL ASSESSMENT

Finally,

Which of the two physicians you saw in the two video sequences would you rather have as your doctor?

☐ I prefer the first physician (Video #1)

☐ I prefer the second physician (Video #2)

☐ I don’t have any preference, both are the same

If NOT THE SAME, please rate again the PREFERRED PHYSICIAN:

Please circle the number that most accurately describes your impression of the physician you preferred.

<table>
<thead>
<tr>
<th>Worst Possible Impression</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>Best Possible Impression</th>
</tr>
</thead>
</table>

Please circle the numbers that most accurately describe your perception of the physician you PREFERRED.

<table>
<thead>
<tr>
<th>Warm</th>
<th>0</th>
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<th>5</th>
<th>6</th>
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<td>Pleasant</td>
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<td>Unpleasant</td>
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<tr>
<td>Compassionate</td>
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<td>10</td>
<td>Distant</td>
</tr>
<tr>
<td>Sensitive</td>
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<td>4</td>
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<td>6</td>
<td>7</td>
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<td>9</td>
<td>10</td>
<td>Insensitive</td>
</tr>
</tbody>
</table>
APPENDIX K: REASONS FOR PREFERENCE

Briefly, explain why you preferred that particular physician.
Dear Patient or Family Member,

As part of our continuous quality improvement efforts, we recently adopted new computer systems to help our staff carry out their duties to provide the best possible health care services for you. We would like to know what you think!

1. My provider explained his or her use of the computer to me.
   ☐ Yes
   ☐ No
   ☐ Not Sure

2. I believe the computer will help the clinic be efficient.
   ☐ Yes
   ☐ No
   ☐ Not Sure

3. I believe the computer will help ensure the quality of my care.
   ☐ Yes
   ☐ No
   ☐ Not Sure

4. I believe personal information is safe in the computer.
   ☐ Yes
   ☐ No
   ☐ Not Sure

5. I would like information about how I can use the computer to access my health care record.*
   ☐ Yes
   ☐ No
   ☐ Not Sure

6. I have questions or concerns about the new computer system.*
   ☐ Yes
   ☐ No
   ☐ Not Sure

7. Do you have any negative experience with the computer use?
   ☐ Yes
   ☐ No
   ☐ Not Sure

*If answer to question # 5 and/or #6 is “Yes” please refer patient to front desk for further information.
APPENDIX M: SCRIPT

Oncologist: (Knock) May I come in?
Patient: Yes please

Oncologist: Good morning Mrs. Smith. It’s good to see you today. How are you doing since the last cycle of chemotherapy?
Patient: I’m actually doing a little bit worse. I felt nauseous most of the day and vomited a couple of times yesterday.

Oncologist: I can see that you are not feeling well right now.
Patient: Yes doctor, I am still nauseous and it has caused me to feel very tired and to lose my appetite. A week after the chemotherapy, my symptoms are the worst and it has been very challenging. My family is a little bit concerned about that too.

Oncologist: This appears to be very tough for you. Let us see what we can do to help you.
Patient: That is right. Any sort of relief would help.

Oncologist: I would like to prescribe you a medicine to help with the nausea, which I will send as a prescription to the pharmacy. I would like you to take this every 4 hours as needed for nausea and vomiting. I will also take a look at your current pre-chemotherapy regimen and add medications to minimize this from happening in the next cycle.
Patient: Thank you. I really hope that it works and I would feel better in time for my next cycle of chemotherapy.

Oncologist: I am hopeful that you would feel better soon. Looks like your last scans have showed that the tumor is not doing as well as we wanted.
Patient: This is not what I was hoping for doctor, what are we going to do about it?

Oncologist: At this point, we have 2 options. One option is that we may need to increase the dose of your current chemotherapy or another option is to add another medication.
Patient: [Patient sighs] that sounds tough. But I guess I have to do what’s needed to fight this thing. What do you think we should do?

Oncologist: I understand your concern and I wish we can do better fighting this. I believe we can add another medication to your regimen and we can start this on the next cycle but before we do this, I scheduled some additional blood test. (Physician starts tying and mouse clicks)
Patient: Ok. This sounds good

Oncologist: Thank you Mrs. Smith we will continue fighting this together.
Patient: Thank you doctor.