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The Significance of Implementing a Narrative Medicine Approach at the Knights Landing One Health Center (KLOHC)

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Abstract

The Knights Landing One Health Center (KLOHC) is a student-run clinic that provides "One Health" services (e.g., primary care services, dental services, veterinary services, and health education programs) to the rural and migrant residents in Knights Landing, California. As a continuum of community engagement, a narrative medicine approach was implemented into intake protocol and clinical interviewing. This narrative medicine approach primarily affects three individuals: the patient, the undergraduate volunteer, and the medical student. The undergraduate volunteers ask three narrative medicine questions that promote open-ended responses. The medical students are asked to rehearse a constructed narrative medicine introduction. Both the narrative medicine questions and the narrative medicine introduction are designed to give patients time to share their narratives. This approach was quantitatively evaluated using 5-point scale ratings designed to (1) determine if the narrative medicine questions were effective in alleviating patient anxiety (2) determine whether the narrative medicine questions revealed hidden social history (3) determine if implementation of the narrative medicine approach reduced patient waiting time. Qualitative results indicate that patients discussed the following: disabilities, family trauma, past medications, aging, health education, nutritional habits, mental health, and legal status. Similarly, patient interactions resulted in volunteers reflecting upon their own narratives. The volunteer reflections were reported on narrative medicine surveys. The narrative medicine approach characterized in this study may be helpful in facilitating more holistic patient interviews and better treatment outcomes.

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Introduction

Oftentimes, patients consider clinical visits to be impersonal. That is, patients feel as if their identities are simplified into featureless files rather than portraits from all walks of life. In some circumstances, medicine is mechanistic and pays little attention to elements that make patients human.[1] It is at the institutional level where medical advancements are designed to generate high returns and pay little regard to individual encounters that may impede on maximizing "efficiency."[2] According to this view, there is no reason to believe that patient narratives can provide objective evidence for diagnosis; instant orders of laboratory and imaging tests remain the industry's gold standard.[1, 2] Nonetheless, leading technology fails to gather and analyze "inner hurt, despair, hope, grief, and moral pain that frequently accompany, and often indeed constitute, the illnesses from which people suffer."[3]

Neglected patient narratives exacerbate the already-widening exchange between patients and providers. Consequently, many medical experts are advocating narrative medicine as a model to fill this gap. By definition, "Narrative Medicine fortifies clinical practice with the narrative competence to recognize, absorb, metabolize, interpret, and be moved by the stories of illness."[4] A focus on the *stories* of illness can provide context to what is being examined from the signs and symptoms of an illness alone.[2, 5] Narrative medicine should not be confused as a replacement for the traditional model of medicine however; instead, the patient narrative is to be used as another means to establishing the diagnosis.[6]

Narrative medicine involves self-reflection from providers and patients. Practicing narrative medicine effectively requires providers to "examine and undergo their own affective experiences."[7] Self-reflection is not limited to just storytelling; it can occur across many mediums including writing, art, and poetry. These outlets can help providers "reach and join their patients in illness, recognize their own personal journeys through medicine, acknowledge kinship with and duties toward other health care professionals, and inaugurate consequential discourse with the public about health care."[8] For patients, self-reflection may include acceptance and bravery in the face of illness, but also connection with networks that offer comfort. Narrative medicine, then, guides patients and providers to common ground where affiliation and understanding can occur.[5, 7]

Despite the narrative medicine grounds that seek to bring patients and providers together, some criticisms argue that it is deeply misguided. Specifically, "narrative medicine is spiritually arrogant and potentially harmful. It encourages doctors to stray from their core professional duties into uncharted waters, to take on roles such as spiritual adviser, social worker, life-coach, friend. Vulnerable patients may develop unrealistic expectations of doctors, hopes that will inevitably be disappointed."[4] With demands that might perhaps distract from a doctor's focus on diagnosis and treatment, one would premise role strain as a foreseeable outcome.

However, narrative medicine does not "encourage doctors to stray away from their core professional duties" at all.[4] Rather, narrative medicine upholds current practices in medicine and adds a stronger emphasis on patient stories. A focus on patient stories is often shared among doctors, spiritual advisers, social works, and life-coaches, but medical duties and treatment plans are not. Narrative medicine was created in part for *doctors* to highlight and honor the stories of illness to "reduce the risks of inappropriate exams and treatments."[9] In other words, doctors are encouraged to listen closely to patient stories without abandoning medical judgement or training. Evidently, Camille Abettan clarifies stories as "an instrument

suited to particular tasks, and its inability to meet hyperexaggerated expectations does not make it useless.[10] As a tool, it must be matched to the tasks it performs well."[10]

Narrative Medicine at the Knights Landing One Health Center The Knights Landing One Health Center (KLOHC) is one of eight student-run community clinics at the University of California, Davis. KLOHC is the only student-run clinic that provides "One Health" services to the rural and migrant residents in and around the Knights Landing area. The free clinic aims to provide culturally sensitive services by integrating primary care, veterinary care, and health education. As a continuum of community engagement, a narrative medicine approach was proposed to provide patients a platform to share their stories and help providers draw upon narratives to develop more personalized treatment plans.

The narrative medicine approach aims to mitigate the patient-provider power imbalance by honoring patient stories.[8] Traditional patient care models offer state-of-the-art treatment options, yet the latest medical advancements cannot resolve all illness and suffering.[8] Narrative medicine serves to strengthen the emotional components of illness where traditional models lack.[8] Through humility and empathy, a patient's story can be the foundational framework upon which providers practice thoughtful reflection.

The narrative medicine approach focuses on patient-led conversations as a complement to models using a signs-and-symptoms approach. This includes asking open-ended questions and restructuring how providers introduce themselves in an examination room. The primary aim of this study is to determine if a narrative medicine approach at a student-run clinic can help alleviate patient anxiety and call forth social history. By establishing rapport through a narrative medicine approach, sensitive conversations show that providers and volunteers are worthy of patient trust. The secondary aim of this study is to provide patients a platform to share their personal narratives as an effective use of wait time.

Methods

The narrative medicine approach, developed with Associate Professor Natalia Deeb-Sossa, affects three immediate beneficiaries: the patient, the undergraduate volunteer, and the medical student. Undergraduate volunteers and medical students are referred to as volunteers collectively. Through a workshop and various clinic trainings, volunteers were educated on narrative medicine, active listening skills, and their roles in the clinic. Clinic trainings were led by supporting investigators involved in the narrative medicine approach. Volunteers were given multiple mock scenarios and asked how to respond when patients shared their personal narratives. Volunteers were also asked to practice active listening skills.

The narrative medicine approach is introduced when the undergraduate volunteer enters the patient exam room. The volunteer assesses the patient's vitals, then proceeds to ask three narrative medicine questions (see **Forms 1-3**). The recordings from the narrative medicine questions are reported to a medical student prior to the medical student's first encounter with the patient.

The narrative medicine questions address the main purpose of this study: using a narrative medicine approach to alleviate patient anxiety and call forth social history. In line with Miriam Divinsky, the narrative medicine questions "avoid asking a question that begins with "Why"; it's almost always perceived as judgmental."[5] By, instead, asking open-ended questions, the study speculates that a stronger patient-provider relationship will be formed, and patients will have an opportunity to share their narrative.

The open-ended questions are asked in addition to traditional questions about signs and symptoms (see **Form 2**) and do *not* serve to replace them.

Once the narrative medicine questions have been reported to the medical student, the medical student enters the exam room. Upon this first encounter, the medical student enters the following narrative medicine introduction: "I will be your doctor. So I need to know a great deal about your health, body, mind, spirit, and life. What brings you in today?" This narrative medicine introduction is adapted from a statement used in Rita Charon's presentation at a Toronto conference in 2004.[5] In this study, medical students refer to themselves as "medical students" instead of "doctor" in the narrative medicine introduction. "Doctor" is used above to generalize the narrative medicine introduction in formal methods. Following the narrative medicine introduction, the medical student proceeds with the traditional clinical interview.

The clinical interviews were conducted in Spanish and English. Translators are assigned to patients at the beginning of the patient encounter. They accompany the patients through intake protocol, narrative medicine questions, and encounters with the medical student. Translators record responses to the narrative medicine questions on the narrative medicine intake form (see **Form 3**) and report the intake form to the medical students.

The narrative medicine approach was quantitatively evaluated using various 5-point scale ratings for patients, undergraduate volunteers, and medical students. To determine the relationship between gender identification and reading, writing, or storytelling preference, a chi-square test was performed. Patient, undergraduate volunteer, and medical student questions are shown in **Forms 3**, **4**, and **5** respectively.

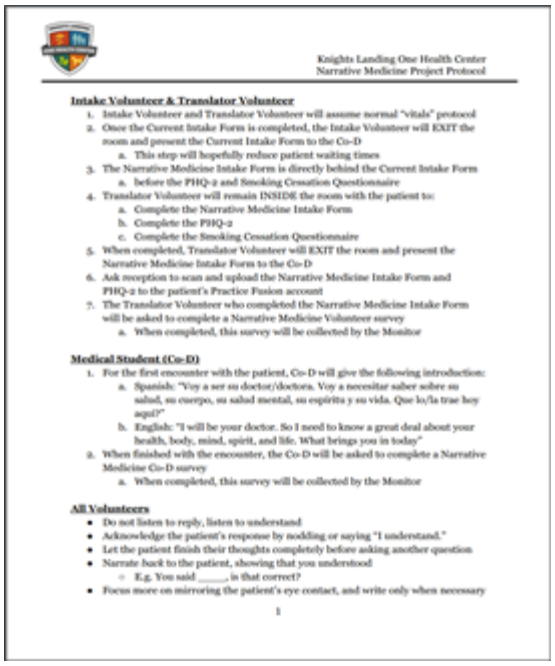
Qualitative results were gathered from two open-ended questions asked to patients, and one open-ended question asked to medical students and undergraduate volunteers (see **Forms 4-5**). Patient open-ended questions consisted of: (1) What has been going well in your life? (2) What is worrying you most in your life? and (3) What questions do you expect to get answered by coming into clinic today? The open-ended question for medical students and undergraduate volunteers was: What went through your mind as you listened closely with the patient? The question responses were categorized by participant type (i.e., patient, medical student, or undergraduate volunteer), and comparable responses were grouped into accounts retelling: medication history, disabilities, trauma, aging, nutritional habits, mental health, education, employment, and legal status.

The questions were designed to: (1) determine if the narrative medicine questions were effective in alleviating patient anxiety (2) determine whether the narrative medicine questions revealed hidden social history (3) determine if the implementation of the narrative medicine approach reduced patient waiting time.

All volunteers were asked to anonymously report demographic information and preference for reading, writing, or storytelling (see **Forms 4-5**). Volunteers were invited to share their thoughts as they listened closely with the patient on the same forms.

The UC Davis IRB Administration made a determination that this Quality Improvement project does not contribute to generalizable knowledge and is not research involving human subjects. Project results from this study are of quality improvement evaluation findings only.

The following forms are used during the narrative medicine approach:



Knights Landing One Health Center
Narrative Medicine Project Protocol

Intake Volunteer & Translator Volunteer

1. Intake Volunteer and Translator Volunteer will assume normal "vitals" protocol
2. Once the Current Intake Form is completed, the Intake Volunteer will EXIT the room and present the Current Intake Form to the Co-D
   a. This step will hopefully reduce patient waiting times
3. The Narrative Medicine Intake Form is directly behind the Current Intake Form
   a. before the PHQ-2 and Smoking Cessation Questionnaire
4. Translator Volunteer will remain INSIDE the room with the patient to:
   a. Complete the Narrative Medicine Intake Form
   b. Complete the PHQ-2
   c. Complete the Smoking Cessation Questionnaire
5. When completed, Translator Volunteer will EXIT the room and present the Narrative Medicine Intake Form to the Co-D
6. Ask reception to scan and upload the Narrative Medicine Intake Form and PHQ-2 to the patient's Practice Fusion account
7. The Translator Volunteer who completed the Narrative Medicine Intake Form will be asked to complete a Narrative Medicine Volunteer survey
   a. When completed, this survey will be collected by the Monitor

Medical Student (Co-D)

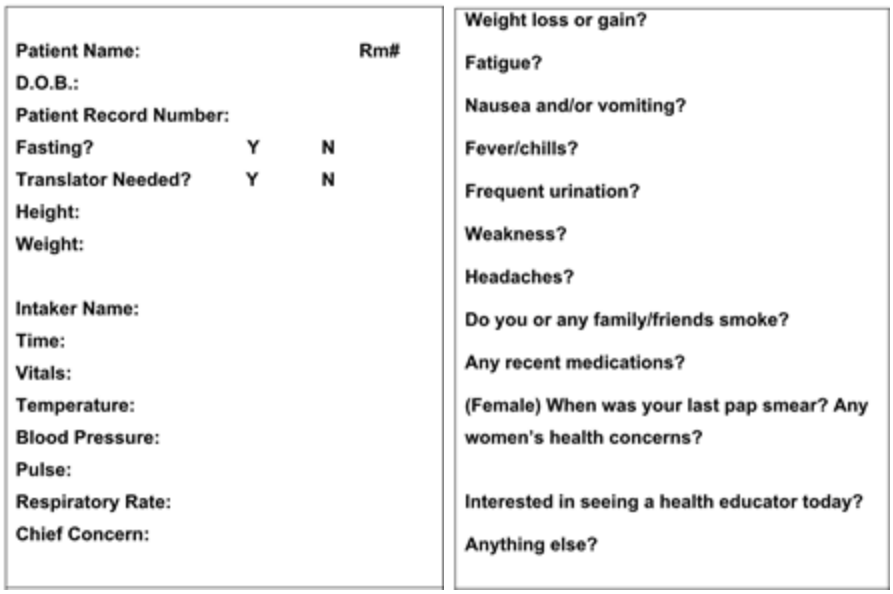
1. For the first encounter with the patient, Co-D will give the following introduction:
   a. Spanish: "Voy a ser su doctor/doctora. Voy a necesitar saber sobre su salud, su cuerpo, su salud mental, su espíritu y su vida. Que lo/la trae hoy aquí?"
   b. English: "I will be your doctor. So I need to know a great deal about your health, body, mind, spirit, and life. What brings you in today"
2. When finished with the encounter, the Co-D will be asked to complete a Narrative Medicine Co-D survey
   a. When completed, this survey will be collected by the Monitor

All Volunteers

- Do not listen to reply, listen to understand
- Acknowledge the patient's response by nodding or saying "I understand."
- Let the patient finish their thoughts completely before asking another question
- Narrate back to the patient, showing that you understood
  - E.g. You said _____, is that correct?
- Focus more on mirroring the patient's eye contact, and write only when necessary

1

Form 1: Outline of the various positions in the clinic related to the narrative medicine approach.



Patient Name: **Rm#**
D.O.B.:
Patient Record Number:
Fasting? **Y** **N**
Translator Needed? **Y** **N**
Height:
Weight:

Intaker Name:
Time:
Vitals:
Temperature:
Blood Pressure:
Pulse:
Respiratory Rate:
Chief Concern:

Weight loss or gain?
Fatigue?
Nausea and/or vomiting?
Fever/chills?
Frequent urination?
Weakness?
Headaches?
Do you or any family/friends smoke?
Any recent medications?
(Female) When was your last pap smear? Any women's health concerns?

Interested in seeing a health educator today?
Anything else?

Form 2: Traditional intake form used by volunteers to perform the primary assessment.

1. What has been going well in your life? Or is there anything you are excited about?	**1. ¿Qué está pasando bien en su vida? ¿O hay alguna cosa que le anima?**
2. What is worrying you most in your life?	**2. ¿Qué es lo que más le preocupa en su vida?**
3. What questions do you expect to get answered by coming to the clinic today?	**3. ¿Cuales preguntas espera que nosotros contestemos hoy en su visita a la clínica?**
4. We are honored to hear about your story. On a scale from 1 to 5, did you find that verbalizing your thoughts helped you cope with pain or worry? **1 2 3 4 5**	**4. Estamos honrados por oír su historia. De una escala del 1 a 5, ¿sintió que compartiendo sus pensamientos le quitó un peso de encima?** **1 2 3 4 5**

Form 3: Narrative medicine intake form (left in English, right in Spanish) used to record patient responses from the open-ended narrative medicine questions and the 5-point scale rating.

Narrative Medicine Survey: Undergraduate Volunteer

1. Are you of Hispanic, Latinx, or Spanish origin? (Y/N)
2. What is your gender? (Female, Male, Non-binary/Third gender, other, abstain)
3. Do you enjoy reading, writing, or storytelling? (if Yes, which do you prefer?)
4. What went through your mind as you listened closely with the patient?

5. How effective was the intake form in helping you know more about the patient's background? (1 = not very effective, 5 = very effective)	1	2	3	4	5
6. How effective was the clinic protocol in utilizing the patient's waiting time? (1 = not very effective, 5 = very effective)	1	2	3	4	5

Form 4: Narrative medicine Volunteer survey described in **Form 1**. Volunteers are asked to complete **Form 4** after every new patient encounter. Qualitative and quantitative results were collected from this form.

Narrative Medicine Survey: Medical Student

1. Are you of Hispanic, Latinx, or Spanish origin? (Y/N)
2. What is your gender? (Female, Male, Non-binary/Third gender, other, abstain)
3. Do you enjoy reading, writing, or storytelling? (if Yes, which do you prefer?)
4. What went through your mind as you listened closely with the patient?

5. How effective was this particular introduction in helping you know more about the patient's background? (1 = not very effective, 5 = very effective)	1	2	3	4	5
6. How likely are you to use this particular introduction in future encounters? (1 = not very likely, 5 = very likely)	1	2	3	4	5

Form 5: Narrative medicine Co-D survey described in **Form 1**. Medical students are asked to complete **Form 5** after every new patient encounter. Qualitative and quantitative results were collected from this form.

The patient, undergraduate volunteer, and medical student surveys use the following shorthand notations:

Patient Question - PQ

Undergraduate Question (1) - UVQ1

Undergraduate Question (2) - UVQ2

Medical Student Question (1) - MSQ1

Medical Student Question (2) - MSQ2

Results

Quantitative Findings A total of 99 participants were sampled. Of those sampled, 38 were patients, 42 were undergraduate students, and 19 were medical students. For 53 medical student and undergraduate volunteer respondents, 47 (88.7%) identified as Hispanic/Latinx/Spanish origin and 6 (11.3%) identified as non-Hispanic/Latinx/Spanish origin. Forty-eight (78.7%) of the respondents identified as female and

13 (21.3%) identified as male. Quantitative findings also include preference for reading, writing, or storytelling. For 61 respondents, 28 (45.9%) preferred storytelling, 23 (37.7%) preferred reading, and 10 (16.4%) preferred writing. The relation between gender identification and reading, writing, or storytelling is not significant at $p < 0.05$, $\chi^2 = 4.37$, $p = 0.11$.

Results from the PQ, MSQ1-2, and UVQ1-2 showed better approval for patient survey questions over undergraduate volunteer and medical student survey questions (see **Table 1**).

	Sample	Mean	Mode	S.D.	Variance
PQ	38	4.32	5	0.97	0.93
UVQ1	36	4.06	4	1.01	1.03
UVQ2	36	4.44	5	0.77	0.60
MSQ1	17	3.35	3	0.86	0.74
MSQ2	17	3.41	4	1.03	1.01

Table 1: The above table displays the statistical analysis on the 5-point scale rating scores. Scores from all 5 question types were used to calculate the mean, mode, standard deviation, and variance.

Qualitative Findings Patients who reflected a higher satisfaction rating at the clinic reported feelings of increased confidence when coping with illness.[12] Many patients spoke about difficulties in the work environment, and many others expressed worries for children and family members at home. Patients expressed that open-ended questions felt "new" and it allowed them to fully disclose for the first time. Patients also reported that verbalizing their thoughts helped alleviate pain and worry. All patients relayed their gratitude for the volunteers' presence and "willingness to listen." Contrastingly, some patients chose not to disclose for privacy reasons and expectations of a shorter appointment time.

Discussion

The majority of Knights Landing volunteers and patients self-identify as Hispanic/Latinx/Spanish origin. Knights Landing patients are primarily Spanish-speaking, and the undergraduate volunteers asking narrative medicine questions are assigned to translate and interpret. Previous studies have shown the clear benefits of racial and ethnic matching between patients and providers.[11] Specifically, the perceived ethnic similarity between patients and providers fosters higher ratings of trust and effective communication.[11] Findings in this study support the hypothesis that volunteers who identify as Hispanic/Latinx/Spanish origin have been more likely to engage in conversations with Hispanic/Latinx/Spanish origin patients.

Findings from the narrative medicine approach support relevant results in neuro-oncology, in which "symptoms [can] impact a patient's sense of self and quality of life. Thorough evaluation of these

symptoms is complex; therefore, Narrative Medicine can be incorporated to draw out the patient's own thoughts and improve overall patient care."[13]

Other results from the narrative medicine questions indicate that patients wanting shorter appointment times presumably report lower satisfaction ratings (ratings lesser than or equal to 2). Lower satisfaction ratings may explain why patients preferred not to elaborate further on responses to the narrative medicine questions. Alternatively, survey results may perhaps suggest that lower satisfaction ratings could be attributed to returning patients who were assigned the same volunteer during their last clinic visit.

Effects on Wait Times and Social History The majority of undergraduate volunteers found that implementing a narrative medicine approach effectively utilized waiting times. Although wait times were not recorded in the preliminary results of this study, volunteer subjective assessments reflected negligible differences in wait times and overall clinic flow.

When asked if the narrative medicine questions revealed patient social history, a majority of medical students and undergraduate volunteers reported high satisfaction ratings (ratings greater than or equal to 4). Volunteers suggested that the narrative medicine questions were vital to the "acknowledgement of the presence of disparate but concurrently valid viewpoints."[14] In fact, medical students reported that responses from the narrative medicine questions were directly relevant to chief complaints and how treatments options were discussed. Through active listening, volunteers amplified patient narratives and passive communication of allyship.[15]

Feedback from Medical Students When medical students were asked whether they would use the narrative medicine introduction in future encounters, some responded with low satisfaction ratings. Respondents describe how, unlike student-run clinic settings where encounters last well over one hour, time is a limiting factor in larger health care systems. Patient appointment times are shorter and providers "may feel that they risk being overwhelmed by patient complaints if they listen until the patient is finished."[16] As a result, narrative-based medicine is often dismissed and replaced for more efficient medical treatment models.[16]

Despite the common assertion that narrative medicine is impeded by time constraints, in reality, the time required to listen to patient narratives is not unreasonable.[16] Storytelling and thoughtful reflection can provide another route for providers to witness patient narratives and establish compassionate bonds.

Limitations To possibly improve narrative medicine implementation into typical clinic flow, some modifications can be considered. First, the sample size of medical students might be increased. Because medical students continue to transition out of the clinic annually, future directions could collect survey data for at least two additional cycles. Further, the narrative medicine approach may possibly be modified to incorporate non-Spanish-speaking volunteers. Finally, with potential early training exposure, medical students might become more gradually familiarized with the narrative medicine introduction and their roles in the study procedures.

Conclusion

The narrative approach serves in conjunction with evidence-based medicine to provide a comprehensive analysis of patient well-being.[17, 18] At the Knights Landing One Health Center, narrative medicine brought

volunteers closer to the patients, and it supported the clinic's commitment to community engagement. In detailed stories of illness, volunteers reassured patients through relief and profound loss. As an effect, patients felt less alone in their health, and volunteers joined closer with them and felt united in their thirst to share. Even in a healthcare system shaped by commerciality, the outcomes of this study show that narrative medicine is a method of practice, feasible in community-based clinics.

"Narratives are neither true nor false, just as great works of fiction are neither true nor false, but rich and meaningful."[14] Storytelling and listening are critical to understanding the patient perspective, and narratives are living reminders that health care discussions are rooted in humanism.

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