SERVICE DISTINCTION TRACK, CARVER COLLEGE OF MEDICINE

CAPSTONE PROJECT FINAL PAPER

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SDT CAPSTONE PROJECT

DETAILS

Project: Interpretation at the Iowa City Free Medical and Dental Clinic ("FMC")

Project purpose: To stabilize and standardize the interpretation services provided by FMC so as to more effectively overcome barriers related to eliciting, communicating, and treating the healthcare needs of its Spanish-speaking patient population.

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Organization: Iowa City Free Medical and Dental Clinic

2440 Towncrest Drive, Iowa City, Iowa, 52246

319-337-4459

Approving party: Jennie Schmidt, Executive Director (Approved July 21, 2023, via electronic mail)

Population/Community: Spanish-speaking patients in Johnson County who are underinsured

Final Timeline:

INTRODUCTION

When I began high school twelve years ago, I did not know but for a few words in Spanish. That would quickly change. After enrolling in a foreign language course for the first time, I realized that I enjoyed grappling with unfamiliar grammatical structures and memorizing hundreds of new words. Learning to navigate a new tongue was more than just punctuation and vocabulary lists, however—it was a new way of seeing the world, a new way of perceiving and thinking. Long story short, I continued to push myself in Spanish throughout high school and college, becoming sufficiently fluent so as to work as a translator and interpreter for various organizations, including the Iowa City Free Medical and Dental Clinic.

I once reflected that "[t]he only job of an interpreter is to provide the listeners in the target language a glimpse into the mind of someone who is different from them but shares a moment of existence." Such words may come across as an unconvincing attempt at profundity. To me, they come across as true on paper as they do in life. These words are especially true in healthcare, in which interpretation involves the exchange of vulnerabilities that can be both physical and mental. High blood sugars. Low CD4 counts. Chest palpitations. Sudden surges of paralyzing anxiety. These are not just words limited to the confines of a clinical suite or the scribbles of a medical file. They are the things that visit the patient often, affecting his ability to live life to the fullest extent of joy and meaning.

The Iowa City Free Medical and Dental Clinic ("FMC") is a non-profit organization established in 1971 that functions as a source of healthcare for those in Johnson County who have barriers related to income and insurance. FMC relies on volunteer physicians, dentists, nurses, interpreters, and receptionists to carry out its functions. The mission of FMC rests on its belief that access to healthcare is a basic human right, "striv[ing] to provide the widest range of medical and dental services possible to people in the Iowa City and surrounding community who would not otherwise have access to care."[1] Many FMC patients speak only Spanish, while most of FMC providers speak only English. This language discordance is bridged by volunteer interpreters. Volunteer interpreters typically a) have connection to the healthcare system through work, school, or research and either b) speak Spanish as a native/heritage language or c) have extensive foreign language training through prior studies, jobs, or lived experiences abroad. While volunteer interpreters are assessed for competency at their initial interview, most volunteer interpreters hold no formal certification from a national accrediting body, such as the Certification Commission for Healthcare Interpreters ("CCHI") or National Board of Certification for Medical Interpreters (NBCMI). *

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*I do not portend to hold certification from either of these bodies.

Though no formal data yet exists in the literature, it seems that more and more hospitals across the United States do not require formal certification to work as an in-house interpreter. For reasons I will explain, this is a double-edged sword. On one end, lowering the bar for qualification ensures that unreasonable, arbitrary barriers do not prevent qualified interpreters from providing services. On the other, quality standards for interpretation are becoming ever-the-more reliant on in-house training and competency assessment rather than national governing authorities. With the absence of standardized training, there is a greater risk for improper interpretation practices. This issue is particularly acute when considering that monolingual healthcare providers, who rely on interpreters to communicate with limited-English-proficient ("LEP") patients, at baseline, often have limited training in proper use of an interpreter. Effective and clear in-house interpretation procedures are thus inextricably linked to successful delivery of such services in the modern day. This delivery is important to me both as an FMC volunteer interpreter and future healthcare provider.

I believe it possible to further strengthen FMC's already stellar interpretation services as they relate to its Spanish-speaking patient population. Herein, I suggest ways to streamline the interactions that are necessary for effective interpretation. These suggestions are deliberately focused on the interactions between the interpreter and provider because such areas were identified as needs by FMC Director Jennie Schmidt. Concisely, **this project's purpose is to stabilize and standardize the interpretation services provided by FMC so as to more effectively overcome barriers related to eliciting, communicating, and treating the healthcare needs of its Spanish-speaking patient population**. I will **stabilize** by creating a formal assessment of incoming interpreters and by providing interpreters with more tools to use in and outside of clinical visits. I will **standardize** by demonstrating the proper consecutive interpretation technique and outlining professional expectations for FMC volunteer interpreters.

LITERATURE REVIEW

Interpretation involves two key components: a) the act of transferring spoken utterances in a source language to spoken utterances in a target language with negligible forfeiture of meaning and b) the simultaneous or consecutive conveyance of meaning from one language to another.[2] Simultaneous interpretation is language conversion that occurs while the speaker is contemporaneously providing source utterances. A classic example of simultaneous interpretation is a global conference in which audience members utilize headphones to understand a language-discordant conversation occurring on stage. In healthcare, the interpretation method is almost exclusively consecutive. That is, the interpreter transfers the source language into the target language only *after* the patient or provider has finished speaking.

In either approach, interpretation is differentiated from translation in that it deals with *spoken* source language, whereas translation deals with *written* source language.

Despite prevailing public perception, interpretation requires more than bilingualism in the two languages in need of source-to-target conversions. Beyond language proficiency, interpreters should be familiar with the environment in which they provide services as it relates to standards of professionalism, ethics, knowledge, and culture.[3] This reality has led some experts to observe it necessary to separately assess bilingual proficiency and professional skill in order to fully appreciate the dexterity of an interpreter.[4-6] As it relates to healthcare, a bilingual person who lacks an appreciation for the importance of confidentiality or the point of knowing whether a pain is sharp or dull, new or old, or hot or cold would likely not be as effective as a bilingual person who does. For this reason, an interpreter may be qualified to practice in one context but not another; a highly trained medical interpreter may stumble on his words in a court of law, and vice versa.

Title VI of The Civil Rights Act of 1964 precludes any agency within the United States receiving federal funding from discriminating "on the ground of race, color, or national origin." While this statute does not expressly mention interpretation services, precedents stemming from the federal judiciary have interpreted Title VI's language to require that federally funded institutions provide interpretation services for LEP persons.[7] In *Lau v. Nichols*, 414 U.S. 563 (1974), the United States Supreme Court ruled unanimously against San Francisco Unified School District by invoking Title VI, holding that the district failed to provide its LEP students of Chinese ancestry "meaningful opportunity to participate in the educational program" when the district declined to provide such students supplemental instruction in the English language. With one half century now in the rearview mirror, it is clear that *Lau* does not have the teeth to fulfill the complete vision of LEP activists.[8] It has been estimated that up to a staggering 31% of United States hospitals receiving federal funding are still not compliant with this Title VI interpretation.[9] Even more, neither federal statutes nor *Lau*'s progeny have ever established specific qualifications for interpreters.[10] The Affordable Care Act ("ACA"), one of the more recent monumental changes in United States healthcare legislation, fairs no better. Section 1557 § 92.201 of the ACA, adopted by the Department of Health and Human Services in 2016, reads as follows: A qualified interpreter is one who…

"via remote interpreting service or an on-site appearance

1. adheres to generally accepted interpreter ethics principles, including client confidentiality;

2. has demonstrated proficiency in speaking and understanding both spoken English and at least one other spoken language; and

3. is able to interpret effectively, accurately, and impartially, both receptively and expressly, to and from such language(s) and English, using any necessary specialized vocabulary and phraseology."[11]

The statutory language is sufficiently broad so as to not require any formal healthcare certification. Congress has punted this question to individual hospitals, letting them decide whom to hire and whom not. Stated differently, the United States has no federal law that expresses a firm view on the hiring of non-certified interpreters.* University of Iowa Health Care thus complies with Title VI despite not requiring certification for its employed interpreters.[12] Some renown hospitals similarly do not either, such as Massachusetts General Hospital and University of Michigan.[13-14] Others do require.[15-17]**

While certification provides quality assurance, hospitals that require such a competency showing have not been exempt from criticism that certification programs are too expensive and not essential to demonstrating interpretation competency. The Office for Civil Rights ("OCR"), a creature of the Department of Health and Human Services, is well aware of this criticism; in 2016, it expressly rejected efforts for formal certification requirements, asserting that "licensure and certification are neither necessary nor sufficient evidence of qualification" and that, by requiring such qualification, the OCR may "unduly narrow the pool of qualified interpreters available to covered entity."[18] While I will not go into the details of the certification process for the purpose of this project's foundation, certification, either through CCHI or NBCMI, can take as long as one year (or longer) and north of one-thousand dollars, not including the costs of exam re-takes or renewals every few years. And even more problematic, these two entities have limited languages for which healthcare interpretation certification even exists. CCHI offers full certification only in Arabic, Cantonese, and Spanish; NBCMI offers a slightly broader selection with Cantonese,

*The National Council on Interpreting in Health Care (NCIHC) openly maintains that certification is not the only way to ensure the quality of an interpreter.[16]

**Such examples include hospitals of the Mayo Clinic, University of Pennsylvania, and Stanford University. Curiously, the posted requirements of the latter two hospitals are ambiguous as to whether or not a completion certificate of an NCIHC-approved course is sufficient. A completion certificate is different than a formal certification, as Mayo Clinic clearly acknowledges. In other words, it is possible that University of Pennsylvania and Stanford University employ non-certified interpreters as well.

Korean, Mandarin, Russian, Spanish, and Vietnamese. Putting it all together, nationally recognized certification bodies in the United States offer approval only in limited languages, approval which carries with it a substantial investment of both time and money. For the time being, this is the state of healthcare interpretation in the United States of America. This may change in the coming years as the United States continues to diversify its spoken languages and dialects, especially considering that LEP patients are considered to be the most vulnerable patients to interact with the healthcare system.[19] How our federal legislators will continue to grapple with this complex concern is yet to be seen. There are no simple answers.

With all this background information in hand, I make two key points. One, FMC is hardly an outlier in allowing internally verified but non-certified interpreters to carry out its compliance with federal law. Two, it logically follows that LEP patients who seek care at FMC (or any organization that employs non-certified interpreters) rely on proper *internal* vetting procedures and training more than they do on external authorities. Internal integrity is thus essential. In informal interviews with FMC personnel as I was going through the project proposal process, they shared with me the procedures in place before allowing a volunteer interpreter to practice independently with FMC patients and providers. These procedures can include but are not limited to a) a volunteer interview (or an analogous activity) that occurs in Spanish b) clinical role-playing exercises with FMC personnel and c) on-the-job direction as to workflow and expectations. Given this importance of internal procedures, my goal was to not only improve the assessment and training that FMC uses in its services but to also create helpful resources for both the interpreter and provider during clinical interactions. At the time of this project's inception, FMC did not have formalized interpreter qualification requirements nor resources that were readily available in clinic for interpreters to reference as far as vocabulary or technique improvement went.

In proposing and executing this project, my methods were influenced heavily by the National Standards for Healthcare Interpreter Training Programs, which were produced in 2011 by the NCIHC after extensive research review and expert consultation.[20] While these standards were originally designed for a formal training course, I found them applicable to my and FMC's goals. These standards were admittedly too broad to tackle in one project. Instead, I primarily concerned myself with NCIHC Knowledge and Interpreting Skills Standards, specifically Standard I. A., Sections 3a.-c. and Standard I. B., Sections 1a.-g., and 3a.-i. These sections stress important components regarding **professional practice** (ethical principles, self-care, etc.), **accurate message conversion** (active listening, target language equivalence, memory skills, self-assessment, etc.) and **interpreting protocols** (use of first person, positioning, monitoring comprehension among listeners, etc.). To achieve these ends, the NCIHC recommends several training techniques that FMC did not employ, including development of glossaries, videos modeling effective practice, readings/visual aids, and a code of interpreter ethics. I intended to

execute such techniques to better align FMC with the NCIHC recommendations. As I explained in the introduction, effectuating the forthcoming methods was intended to stabilize and standardize FMC's interpretation services.

METHODS

In July 2023, I obtained approval from FMC to pursue interventions directed at the training and education of FMC volunteer interpreters as they related to NCIHC Knowledge and Interpreting Skills Standards, Standard I. A., Sections 3a.-c. and Standard I. B., Sections 1a.-g., and 3a.-i. The interventions proposed below were adaptable to the preferences of FMC agents and were collaboratively developed to best target the needs of the clinic. FMC agents were free to suggest and amend as the interventions were implemented in a rolling phase. Given this flexibility, this limited the concreteness of some details at the time of project proposal in September 2023.

The methods described below represent the proposals that were approved by the Service Distinction Track Council in November 2023. Throughout the Methods section, I have highlighted parts to indicate where methods were altered from the original proposal; an explanation is provided at the end of the Methods section (see Post-Approval Method Changes section).

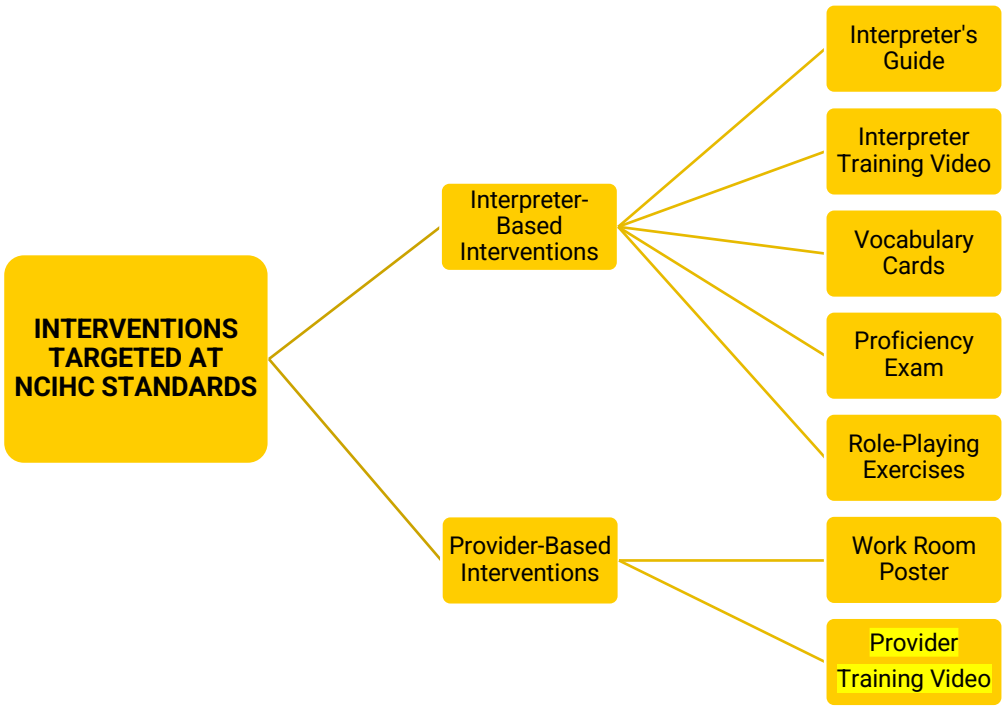

FIGURE 1: PROPOSED INTERVENTIONS

INTERPRETER-BASED INTERVENTIONS

Interventions

At the time of proposal, I planned to:

- Create a pamphlet-based **interpreter's guide** that conveys expectations of FMC volunteer interpreters (language competency, ethics, confidentiality, proper interactions with patient, etc.). Targeted NCIHC reference: Standard I. A., Sections 3a.-c
- Design an **interpreter training video** that depicts proper consecutive interpretation technique and interactions with the patient and provider. Targeted NCIHC reference: Standard I. B., Sections 1a.-g. and 3a.-i.
- Provide laminated **vocabulary cards** in the clinical suites that provide common medical terms (translated from English to Spanish), tailored to FMC medical services offered at specific clinics (acute/chronic, prenatal, dermatologic, etc.). Targeted NCIHC reference: Standard I. B., Sections 1c. and 1f.
- Create a **proficiency exercises/assessments**, both written and oral, for incoming volunteer interpreters to provide FMC a baseline of interpretation ability. Targeted NCIHC reference: Standard I. B., Section 1g.
- Create **role-playing exercises** for incoming volunteer interpreters to both assess and prepare for realistic clinical scenarios. Targeted NCIHC reference: Standard I. B., Sections 3a.-i.

Approach

At the time of proposal, I approached these interventions individually:

- Interpreter's Guide/Pamphlet: I planned to schedule meetings with the FMC Volunteer Coordinator, Stanzy Scheetz, and FMC Head Interpreter, Peter Rohrbough, to establish written guidelines for FMC volunteer interpreters related to ethics, level of language competency, confidentiality, and proper interactions with patients. The ethics component was to mirror the NCIHC standards related to interpreting exactly what the patient and provider convey, without altering the language exchange. The language competency was to expand on FMC's expectation that volunteer interpreters be "fluent" by describing this competency in more objective ways. The confidentiality and proper interactions with patients were to relate more to general healthcare standards and laws, as not all volunteer interpreters are necessarily familiar with such expectations if they do not otherwise have contact with clinics and hospitals.
- Interpreter Training Video: I planned to recruit a volunteer interpreter and provider to simulate a brief clinical scenario that demonstrates effective consecutive interpretation

among the patient, provider, and interpreter. The video was to be 5 minutes or less and likely utilize one of the below-mentioned role-playing exercises as its script.

- Vocabulary Cards: FMC has dedicated clinics that primarily relate to one of the following: acute care, chronic care, prenatal care, dermatologic care, women's health, ophthalmologic care, and dental care (among others). I envisioned creating lists of vocabulary words that are helpful for volunteer interpreters to have on hand during clinical interactions in each of these specialties. To generate the list, I planned to elicit suggestions from FMC personnel and volunteer interpreters in person or via email. Additional sources that were to be used to craft the list with accuracy/integrity included *La Real Academia Española* (world-renown Spanish language dictionary), *Cosnautas* (transnational and transcultural tool used to discern accurate Spanish medical terminology), and *Spanish and the Medical Interview* by Pilar Ortega (current ACGME Vice President for Diversity, Equity, and Inclusion and internationally recognized expert in linguistic and cultural cares for Spanish-speaking populations).[23-25]
- Proficiency Exam: I planned to create and validate the oral and written assessments with the help of FMC Volunteer Coordinator, Stanzy Scheetz, and FMC Head Interpreter, Peter Rohrbough. Rohrbough has extensive graduate-level language training and was to validate the exam's accuracy. Scheetz was to validate that it conforms with the expectations that FMC requires of its volunteer interpreters. I envisioned the written components of the assessment asking questions related to the FMC volunteer interpreter expectations (as outlined in the above-mentioned interpreter's guide) as well as assessing level of medical Spanish vocabulary. The oral component of the exam/assessment was to consist of role-playing exercises (mentioned below). In conversation with FMC personnel, it had seemed to me at the time of the proposal that they would use this assessment as one of several other tools to help them determine if a volunteer interpreter is sufficiently proficient, rather than as a tool employing scoring with hard and fast cut-offs.
- Role-playing exercises: FMC already had several role-playing exercises that relate to various clinical scenarios at the time of the proposal. FMC had asked me to create more of these written exercises to broaden the coverage of their practice resources. I planned to create scenarios that parallel the format and style of the existing exercises by considering realistic scenarios based on my own experiences as a volunteer interpreter.

PROVIDER-BASED INTERVENTIONS

At the time of the proposal, I had also been encouraged by FMC to pursue interventions directed at the provider, albeit in a more limited way. While the following interventions do not directly relate to the NCIHC standards, education of providers as to the role of the interpreter was to facilitate

effective interpretation services and, at minimum, be in line with AAMC's guidelines for use of a medical interpreter.[21]

Interventions

At the time of proposal, I planned to:

- Display a **work room poster** in the healthcare team work room to better prepare providers to interact with FMC volunteer interpreters and elicit the health care needs of their patients.
    - Directions that illustrate proper communication with the volunteer interpreter prior to entering the clinical suite (patient's name, chief complaint, etc.).
    - Directions that signpost the role of the volunteer interpreter after entering the clinical suite but prior to obtaining the history of present illness (introducing the provider and the volunteer interpreter, etc.).
    - Suggestions that enhance the interpretation experience for the patient (speaking clearly and directly to the patient, pausing after a couple sentences, avoiding unnecessary jargon that burdens the volunteer interpreter, avoiding side conversation that excludes the patient, etc.).
    - Behaviors that improperly involve volunteer interpreters in the care of the patient (asking the volunteer interpreter to perform physical exam skills on the patient, directing the interpreter to independently communicate health information to the patient outside of the presence of the provider, etc.).

Approach

At the time of proposal, I approached this intervention accordingly:

- Work Room Poster: I planned to create posters using an appropriate software to concisely and pictorially explain to providers the points mentioned above, namely proper introductions, speaking in small phrases, and proper involvement of the volunteer interpreter in patient care.

INTERVENTION TEAM

I planned to be the primary person carrying out the interventions. At the time of the proposal, I planned to frequently consult with Stanzy Scheetz, FMC Volunteer and Clinic Coordinator, and

FMC volunteer interpreters to assess the optimal course as concrete details materialized (content for the interpreter training video, guide, vocabulary cards, etc.).

MEASURING INTERVENTION OUTCOME

The focus of the intervention measurements was to be the interpreter's guide, interpreter training video, and vocabulary cards. To measure these interventions' impact, material usage frequency and subjective utility were to be assessed via check-out tracking and anonymous Qualtrics surveys. Specifically, for the interpreter's guide, the delivery of this item was to be tracked with a one-time sign-out form to assess what percent of FMC interpreters received a copy of the written guidelines. With respect to the interpreter training video, the subjective utility of the resource was to be monitored by an anonymous survey provided via a scannable barcode at the conclusion of the training video. Volunteer interpreters were to rate it in terms of its utility in modeling the behaviors described in the interpreter's guide and have the ability to provide comments for improvement. In terms of the vocabulary cards, the frequency of usage was to be assessed by a check-out form that monitored the number of patient interactions per clinic in which a particular card was used. I planned to have such data analyzed before presenting this project in May 2025.

In deciding this measurement approach, I understood the importance of obtaining information from FMC personnel and volunteer interpreters, the individuals for whom the materials were created. As far as the perspective of FMC patients went, after discussion with FMC leadership, it was determined that the project outcome analysis be limited to the FMC personnel and volunteer interpreters, opting not involve FMC patients in the data collection phase. To measure FMC patient perspectives and direct intervention impact on interpretation quality, a highly sophisticated data collection process (controlling for countless variables, including the complexity of sampled clinical encounters, the patient's vocabulary level, the baseline skills of the volunteer interpreter, frequency which interpreters utilized the resources prior to entering the encounters, among other things) would have to be created. Such a sophisticated design was deemed to be beyond the scope of this service project given its complexity, impracticality, and burden on patients. This decision aligned with the project's expectation that data be measured in a culturally sensitive, non-intrusive way.

BUDGET

I anticipated the financial cost of these interventions to be less than $250.

PROJECT MONITORING AND SUSTAINABILITY

I planned to provide FMC and the SDT Council with a summary (this Capstone report) of all the interventions completed by June 2024. Such summary was to include scans of the printed materials and links to the videoed materials as evidence of successful completion. As for sustainability, the intended interventions were to be recyclable in that the printed materials and videoed materials could continue to be used following the conclusion of the project.

PROPOSAL REVISION COMMENTS

This proposal was revised in response to feedback from the Service Track Distinction Council provided on October 12, 2023. All feedback was implemented. The feedback from the Council entailed concerns related to measuring the impact of the interventions, details of intervention planning/execution, and the project's breadth. To address each of those concerns, the revised submission submitted on November 5, 2023, included sub-sections devoted to measuring intervention outcomes and more details as to the intervention approach. With respect to the concern of the project's ambition, I reconciled the breadth of this project by beginning the project in my third year of medical school to provide a time cushion, if needed, in lieu of my fourth year. Given the SDT Council's concerns, however, I narrowed the focus of the project to the interpreter's guide, training video, and vocabulary cards. These interventions were then the sole aspects of the project that were to be monitored with data collection.

The other components (proficiency exam, work room poster, role-playing exercises, etc.) were to be completed if and only if I completed these three main interventions. In other words, they were not essential to the project's completion, as the SDT Council's feedback commanded. I hesitated to discard these interventions completely, as I had already promised such help to FMC. Moreover, the purpose of this distinction track, I observed, was to "work *extensively* with medically underserved, marginalized, and rural populations during [my] medical school [career]" (emphasis added).[22] Being capable of completing the interventions effectively and timely, I believed that this project challenged me in a way consistent with the SDT mission. Such interventions were to also

afford the opportunity of engaging FMC for a longer time than the planned completion date (June 2024), which honored the track's expectation of continuity of service.

POST-APPROVAL METHOD CHANGES

Five minor changes to the proposed methods occurred during the execution of the project (for context, see above highlights).

- I added an additional provider-based intervention, which involved creating a 15-minute provider training video to orient new providers to general clinic functions, including interpretation services. This change occurred as a request of FMC personnel.
- Two staff contacts for the project, Stanzy Scheetz and Peter Rohrbrough, left the clinic during summer 2024. A smooth transition regarding this project occurred between them and the new clinic coordinator, Yaneli Canales. Jennie Schmidt, the FMC Director and approving party of this project, was involved in this transition.
- The interpreter training video turned out to be approximately 15 minutes, not 5 minutes.
- I added specific sources that were used to ensure translation quality/accuracy of the vocabulary cards.
- The proposed check-out tracking approach for the interpreter's guide and vocabulary cards was determined by me to be too burdensome on volunteer interpreters (possibly a deterrent from utilizing the resources). Post proposal approval, this approach was abandoned, and frequency was instead assessed primarily through survey responses.
- The project took longer than the originally planned completion date (in part due to the additional interventions that were performed, as I describe below). It was completed in February 2025, not June 2024.

INTERVENTION RESULTS

All the interventions outlined in the original proposal (depicted in Table 1) were successfully completed. The interventions were implemented in a rolling phase, meaning that some were introduced into clinic functions prior to others. Below, each intervention is described in terms of its purpose, development, and date of implementation. The interventions are accessible in the Appendix accompanying this Capstone report.

TABLE 1: COMPLETED INTERVENTIONS

Intervention	Purpose	Development	Date of Implementation
Interpreter's Guide	To establish qualifications of an FMC volunteer interpreter; to provide background on interpretation; to emphasize patient confidentiality. Distributed to current and prospective volunteer interpreters and made available in volunteer lounge.	Developed based on FMC's guidance during a meeting on August 7, 2024, and subsequent editing via e-mail correspondence. Canva was used as the design software.	September 2024
Interpreter Training Video	To review FMC volunteer interpreter qualifications, proper interpretation practices, HIPAA expectations, and a mock clinical encounter for new FMC volunteer interpreters.	Developed slides and script through email correspondence; mock encounter filmed on September 30, 2024. iMovie was used as the filming software.	October 2024
Vocabulary Cards	To provide FMC volunteer interpreters a robust source of Spanish medical terminology; to be made available in volunteer lounge area for review prior/during clinic.	Generated lists of vocabulary throughout January to August 2024 by referencing *La Real Academia Española*[23], Cosnautas[24], *Spanish and the Medical Interview*[25], and informally polling FMC personnel and volunteer interpreters about commonly encountered vocabulary and jargon. Words were categorized based on a clinic type (acute, chronic, dermatologic, etc.). Lists were edited and approved during a meeting with FMC	September 2024

		on August 7, 2024. Canva was used as the design software.	
Proficiency Exam	To provide FMC staff with baseline ability of a prospective volunteer FMC interpreter in the areas of interpreter ethics, medical vocabulary, and reading comprehension.	Developed based on meeting with FMC on November 22, 2024. Editing occurred via email. Validated by Yaneli Canales.	January 2025
Role-Playing Exercises	To provide FMC personnel with exercises designed to assess ability of a prospective volunteer in performing effective consecutive Spanish interpretation in realistic mock patient encounters.	Developed based on meeting with FMC on November 22, 2024. Editing occurred via email. Validated by Yaneli Canales.	January 2025
Work Room Poster	To pictorially depict proper use of a volunteer interpreter for FMC providers.	Designed based on meeting with FMC on November 22, 2024. Canva was used as the design software.	January 2025
Provider Training Video	To orient FMC providers to the workflow of the clinic, including the involvement of a volunteer interpreter in the clinical encounter.	Created after request by FMC's medical director, Cecilia Norris, and a meeting on May 19, 2024. Filmed on June 17, 2024. Editing occurred via email after soliciting feedback from a wide range of FMC personnel. iMovie was used as the filming software.	September 2024

OUTCOME ANALYSIS

As discussed in the Methods section, the outcome analysis was limited to the vocabulary cards, interpreter's guide, and interpreter training video. These interventions were assessed qualitatively through informal conversations with FMC personnel/volunteer interpreters as well as a formal Qualtrics survey.

INFORMAL CONVERSATIONS

Informal conversations with FMC staff and volunteer interpreters were largely positive. Such conversations occurred in the context of scheduled meetings as well as during clinics in which the interventions, particularly the vocabulary cards, were being used by volunteer interpreters. Most volunteer interpreters stated that they used the vocabulary cards in the anticipated manner, reviewing the vocabulary cards most relevant to the clinic in question (acute/chronic, dermatology, etc.). FMC personnel (the executive directors, coordinators, nurses, etc.) conveyed during meetings that they often observed the cards being reviewed by volunteer interpreters. Constructive criticism of the cards manifested both narrowly as the identification of minor grammatical errors (e.g. one volunteer interpreter informed me that a term had accentuation on the wrong vowel, incorrectly written as parpádo instead of párpado, the Spanish word for eyelid), and broadly, with occasional disputes of the most common translation for a particular vocabulary term or phrase. The latter criticism was renewed through several free-text responses within the Qualtrics survey, which I address below.

QUALTRICS SURVEY

After informal conversations and completion of all interventions, a formal Qualtrics survey was sent via email to all FMC volunteer interpreters (using the official volunteer list as available as of January 2025, provided by Yaneli Canales). The survey was also advertised in the volunteer lounge as a scannable barcode to increase awareness and accessibility. The survey functioned to elicit a) the collective professional interpretation experience of the FMC volunteer Spanish interpreter base and b) the collective impression of the quality of the vocabulary cards, interpreter's guide, and interpreter training video. The entire survey is provided in the Appendix, but in the process of analyzing the survey results in this section, I will briefly describe the language employed to qualify the survey questions and answer choices.

Overview

The Qualtrics survey was distributed on Tuesday, January 21, 2025, and closed on Friday, February 14, 2025. Of the 45 active FMC volunteer Spanish interpreters, the survey was completed by 19 (42% completion rate). The survey consisted of four sections, one dedicated to volunteer interpreter demographics and three others respectively dedicated to the quality of the vocabulary cards, interpreter's guide, and interpreter training video. In the demographics section, volunteer interpreters were posed questions regarding their volunteering frequency, manner in which they learned to speak Spanish, prior interpretation experience, and whether they hold certification from the NBCMI and/or the CCHI. In the intervention sections, volunteer interpreters were posed questions related to their subjective perceptions of intervention quality by considering usage frequency, intervention utility, and free-response feedback. The survey was in total 13 questions. The survey was anonymous to minimize response bias.

Part 1: Interpreter Demographics

Part 1 of the survey sought to understand the FMC volunteer Spanish interpreter base by the frequency of their volunteering, ability in Spanish, prior interpretation experience, and certification by either the NBCMI or CCHI. The purpose of such questions related back to the literature review portion of this project, which identifies that the majority of professional interpreters in the United States practice with real-world experience that is often not buttressed by formal credentials.

Based on survey responses, 79% of volunteer interpreters reported attending clinics frequently or consistently, which were defined as 1-2 times/month and 3+ times/month, respectively. It was also observed that approximately one half of volunteer interpreters identifies as native/heritage Spanish speakers (58%), while the other half identifies as having learned Spanish through other means, like studies or living abroad (42%). Approximately two thirds of the FMC volunteer Spanish interpreter base endorsed prior professional interpretation experiences (68%), while the remaining volunteer interpreters relayed that FMC is the only organization for which they have interpreted (32%). However, in terms of formal CCHI/NBCMI certification, an overwhelming majority denied holding or having previously held such qualifications (95%). Figure 2 graphically depicts the results.

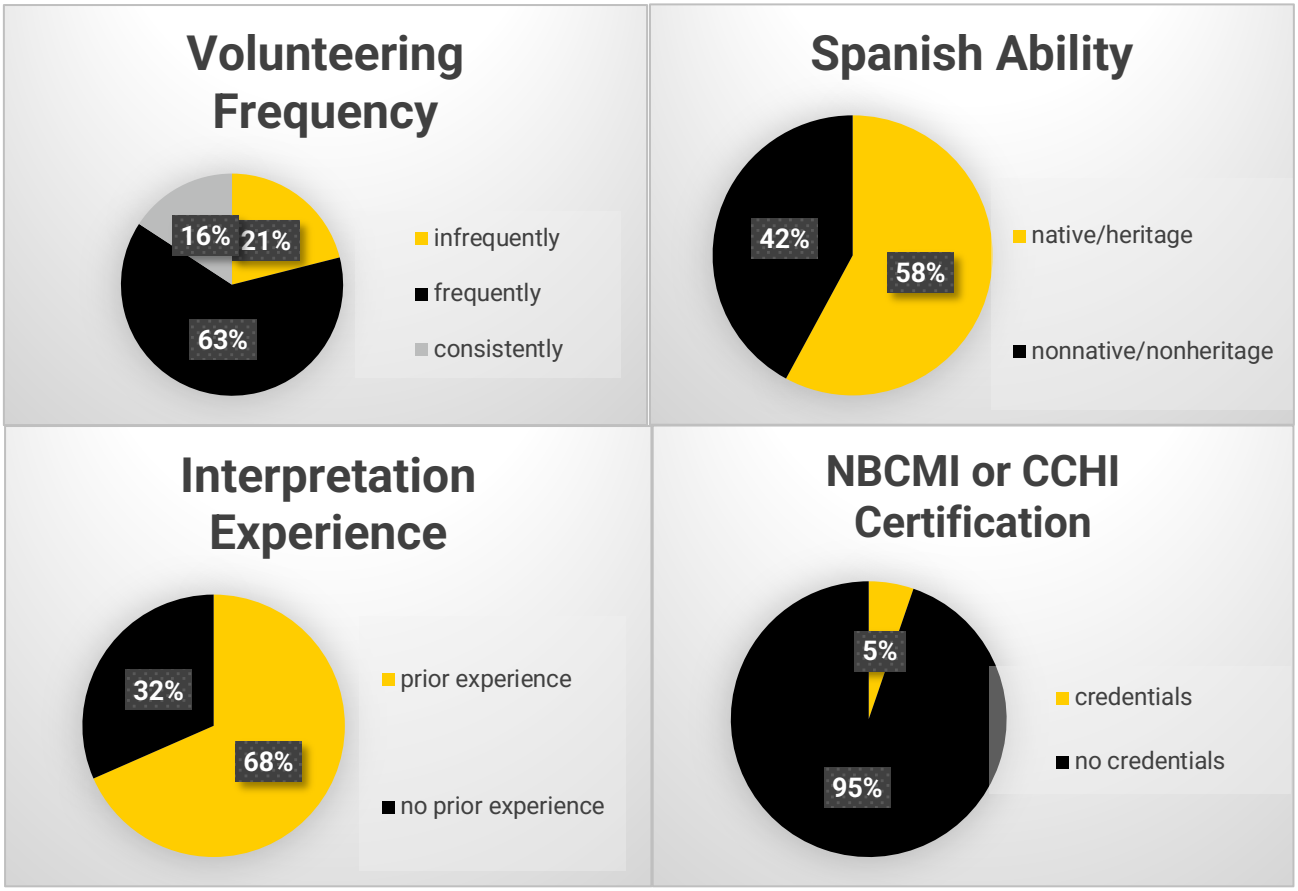

FIGURE 2: SURVEY RESULTS RELATED TO VOLUNTEER INTERPRETER DEMOGRAPHICS

Part 2: Vocabulary Cards

Part 2 of the survey pertained to the intervention quality of the vocabulary cards, both in terms of usage frequency and overall utility. Respondents were posed questions related to usage frequency and subjective perception of the intervention's utility. The answer choices were accompanied with descriptive language to help respondents make an appropriate selection; frequency was described as rare (meaning that the vocabulary cards were used by the volunteer interpreter in <25% of attended clinics), infrequent (25-50% of attended clinics), frequent (50-75% of attended clinics), and consistent (>75% of attended clinics); utility was assessed by providing options to denote the intervention as not useful, moderately useful, or highly useful. Several guiding statements were provided as examples to best capture the respondent's perceptions, which are available in the Appendix. Figure 3 graphically depicts the results, which show that only 35% of volunteer interpreters reported frequent or consistent usage frequency of the vocabulary cards despite 94% them reporting the intervention to be of moderate or high utility.

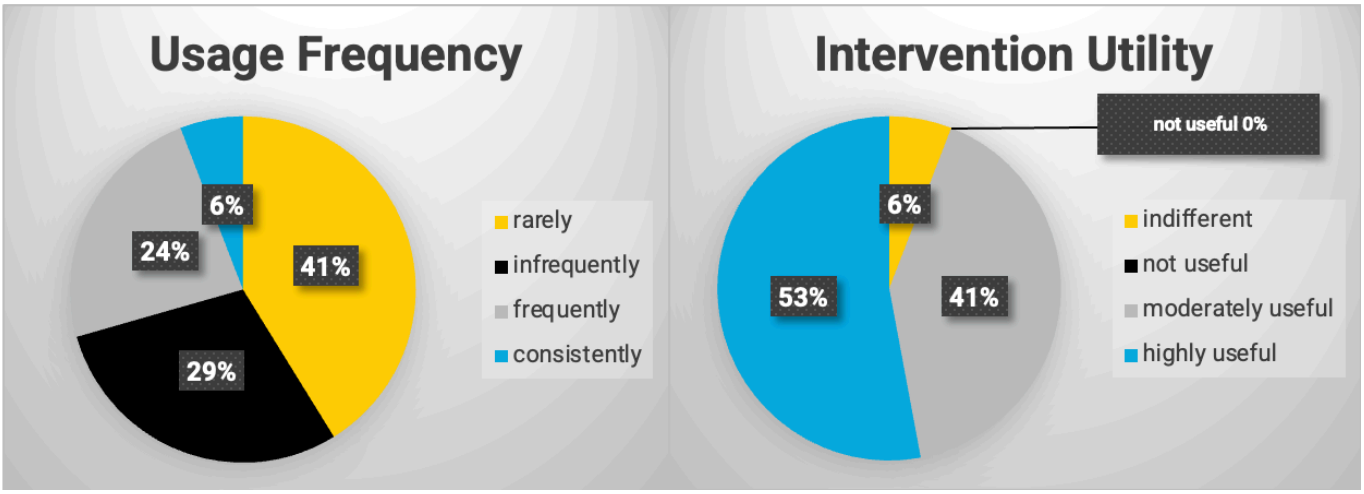

FIGURE 3: SURVEY RESULTS RELATED TO INTEVENTION QUALITY OF THE VOCABULARY CARDS

Part 2 garnered several free-text responses. Several respondents expressed positive sentiments, including that the vocabulary cards have "sparked various interesting conversations about the variations in vocabulary across regions & social classes." Some respondents expressed concerns over need for further "cultural interpretation" and "doubts" over the provided translations of certain "English-Spanish cognates" while agreeing that the majority of the provided translations is "generally accurate."

Part 3: Interpreter's Guide

Part 3 of the survey pertained to the quality of the interpreter's guide based on overall intervention utility. Utility was described as not useful, moderately useful, or highly useful. Several guiding statements were provided as examples to best capture the respondent's perceptions. They are available in the Appendix. Importantly, usage frequency was not assessed because the function of this intervention was not to provide recurring education (see Method section), but rather to provide foundation for proper FMC volunteer interpreter behavior related to ethics, technique, professionalism, etc. Stated differently, volunteer interpreters were not expected to frequently reference this resource during shifts. Figure 4 graphically depicts the results, which show that 86% of volunteer interpreters reported the interpreter's guide to be of moderate or high utility.

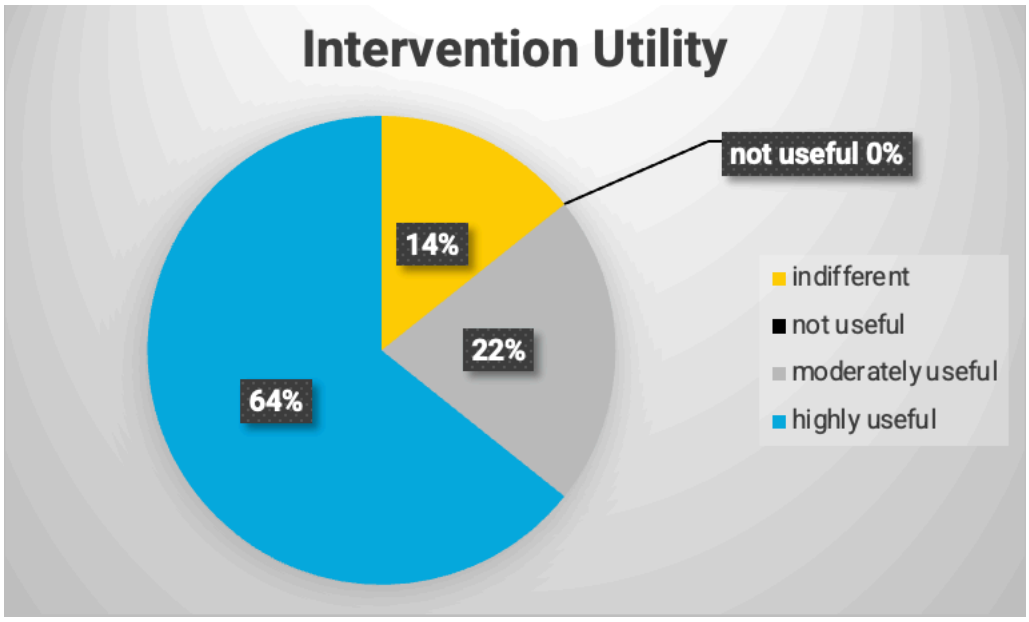

FIGURE 4: SURVEY RESULTS RELATED TO INTEVENTION QUALITY OF THE INTERPRETER'S GUIDE

Part 4: Interpreter Training Video

Part 4 of the survey pertained to the quality of the interpreter training video in terms of overall utility. Utility was again described as not useful, moderately useful, or highly useful. Several guiding statements were provided as examples to best capture the respondent's perceptions. They are available in the Appendix. Importantly, usage frequency was not assessed because the function of this intervention was not to provide recurrent reinforcement but rather to assist in the orientation process of new volunteer interpreters (see Methods section). Stated differently, volunteer interpreters were not expected to frequently reference this resource during shifts. Figure 5 graphically depicts the results, which show that 100% of volunteer interpreters reported the intervention to be of high or moderate quality.

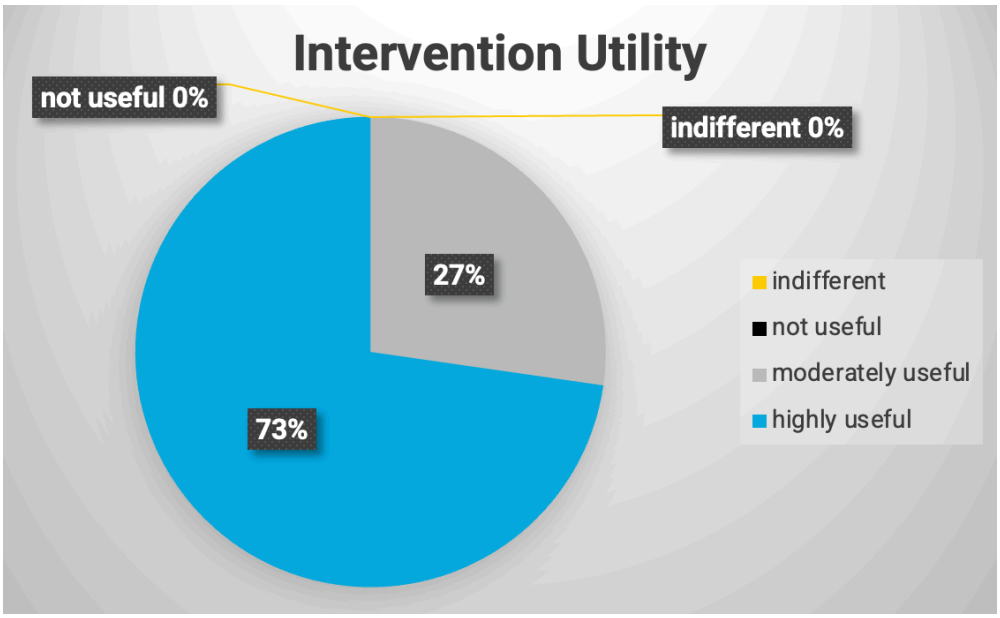

FIGURE 5: SURVEY RESULTS RELATED TO INTEVENTION QUALITY OF THE INTERPRTER TRAINING VIDEO

DATA SYNTHESIS AND DISCUSSION

The data evidences a successful implementation and reception of three key project interventions: the vocabulary cards, interpreter's guide, and interpreter training video. Each intervention received a quality assessment reflecting either moderate or high utility from 80% of volunteer interpreter respondents, among whom more than 50% denoted high utility, the highest evaluation available. As observed in the Appendix, high utility reflects an intervention that respondents believed to be associated with helpful information, accuracy, diversity in afforded knowledge, realistic features, and substantial relevance, among other things. No volunteer interpreters indicated that they believed any intervention to be of no utility, but a minority (6-14%) did endorse indifference toward the utility of some interventions, namely the vocabulary cards and interpreter's guide.

Perhaps less reassuring in isolation is the finding that only one third of the volunteer interpreters (35%) endorsed frequent or consistent usage frequency of the vocabulary cards, with 41% reporting rare usage frequency (meaning that they reviewed vocabulary cards in less than 25% of shifts). I found this data point to be surprising because it conflicted with the informal reporting of usage frequency that was relayed to me by FMC personnel. It is important to clarify, however, that all respondents endorsed that they had reviewed the vocabulary cards, which means that the suboptimal usage frequency results of this particular intervention should not threaten the

reassuring utility results, which reflect that 94% of volunteer interpreters considered the vocabulary cards to be of moderate or high utility.

A potential explanation of this suboptimal usage frequency is that, because the Qualtrics survey was administered only a few months after the intervention's implementation, experienced FMC volunteer interpreters were perhaps less likely to frequently review the vocabulary cards given that they had already established competence in their roles. Since experienced volunteer interpreters surely outnumbered new volunteer interpreters during this three-month period of intervention assessment, the latter group perhaps consisted of the 35% respondents who reported higher usage frequency. Because this question of being a new or experienced FMC volunteer interpreter was not directly posed in the survey, I cannot assess if this potential explanation holds water. Another explanation, albeit less consoling, is that this particular intervention had a blunted impact relative to its goal. Although a frequency goal was not formally stated in the original proposal, it surely would have been greater than 35% of respondents denoting frequent or consistent use of the vocabulary cards.

This datapoint notwithstanding, the collected data supports the project's purpose to "stabilize and standardize the interpretation services provided by FMC so as to more effectively overcome barriers related to eliciting, communicating, and treating the healthcare needs of its Spanish-speaking patient population." Stabilization and standardization have primarily occurred by the creation of formal in-house resources: the interpreter's guide and training video, which outline volunteer interpreter qualifications and expectations as well as provide an example clinical encounter that fosters a correct approach to consecutive interpretation in the clinic. These interventions were deemed to be of high quality by the majority of respondent volunteer interpreters. These interventions are further supported by the provider-based interventions that were carried out, namely the provider training video and work room poster.

Given that only indirect measurements of intervention quality (assessed by FMC personnel/volunteer interpreters, not by patient satisfaction or clinical encounters) were analyzed, this is one limitation of the outcome analysis. Obviously, it would have been ideal to measure the impact of the interventions on a large sample of clinical encounters. For reasons previously discussed in the Method section, this approach was not feasible.

All of these interventions, having been successfully implemented and received, are likely to help FMC, where 95% of its volunteer Spanish interpreters do not hold credentials from either the CCHI or NBCMI. As discussed in the Literature Review section, FMC's lack of certified interpreters is highly typical and in line with the majority of clinical ecosystems within the United States,

including University of Iowa Health Care, which does not consider such credentials to be a hard and fast requirement for employment. Resultingly, the assertion in my original SDT proposal that "[i]t logically follows that LEP patients who seek care at [FMC] (or any organization that employs non-certified interpreters) rely on proper *internal* vetting procedures and training more than they do on external authorities" is underscored by this project's findings.

CHALLENGES

I am relieved to report that the execution of this project did not involve any substantial challenges. The only main deviation from the intended course is that the duration of the project took longer than anticipated. I was planning to complete the interventions by June 2024, and I ultimately was delayed by about six months, completing all interventions by January 2025. This delay occurred because I became more saturated by USMLE preparation and advanced clerkships than I suspected I would be. This self-accountable delay, in my view, was justified because a) I anticipated such a delay could occur and thus submitted my proposal well in advance of the July 15, 2024, deadline, b) I went beyond the minimum proposal expectations as set by the SDT Committee in denying my original proposal, and c) I today submit the completed project in compliance with the March 15, 2025, deadline.

In expand further on b), the SDT committee initially denied approval of the proposal based, at least in part, on its belief that "the project [was] way too ambitious. Any one of these projects could be a full project by itself[.]" In response, I agreed to narrow the project to the interpreter's guide, interpreter training video, and vocabulary cards with the expectation the I would go beyond these minimum expectations if time permitted, responding that "[b]eing capable of completing the interventions effectively and timely, I believe that this project challenges me in a way consistent with [the SDT mission]. Such interventions also afford the opportunity of engaging the FMC community for a longer time than the planned completion date (June 2024), which honors the track's expectation of continuity of service." That is exactly what happened. For this reason, I include the other interventions in the Intervention Results section.

A potential threat to the project that did not end up becoming a hinderance was the departure of two of my primary contacts for the project, Stanzy Scheetz and Peter Rohrbrough. Such departures were not entirely unexpected, as the turnover at free clinics can be high. Scheetz, with the help of Jennie Schmidt, transitioned the project to Yaneli Canales (the new clinic coordinator) without turbulence.

SUSTAINABILITY PLAN AND FUTURE RECOMMENDATIONS

It is important for the project to be effective in my absence. By design, this project is self-sustainable. PDF copies of relevant interventions (interpreter's guide, vocabulary cards, proficiency exam, role-playing exercises, and the work room poster) were provided to FMC for future printing/usage. The training videos persist as accessible YouTube links, and I have informed FMC personnel that they may contact me for the original iMovie file if they would like the original copy to edit for reupload. Of note, the printed interpreter resources that were placed in the volunteer lounge have generated additional sustainability by the fact that other volunteer interpreters have brought in their own resources for review. This further evidences that this project has worked as intended because it has not only stabilized the interpretation services by its own execution but is now buttressed by other volunteer interpreters who are inspired to further contribute to its strength. In terms of future recommendations, I recommend continuing to create more role-playing exercises and finding ways to make the vocabulary cards more interactive and educational. Such could perhaps be a Capstone project proposal for future Carver SDT students.

PERSONAL REFLECTION

This Capstone project has been a source of great joy throughout the back half of my medical education at the Carver College of Medicine. It represents a combination of drive to give back to the community and a passion for language—not only just words and phrases, but the cultural elements that give rise to diverse frameworks through which to see and understand the world. The project has impressed on me the importance of medical interpretation in the field of health equity. Barriers to healthcare often are discussed in terms of geographic or financial burdens, such as not having a subspecialist in a rural area, or a patient not having health insurance for an expensive treatment. And while these barriers are needing of continued redressal, clearing the hurdle of language discordance should not be forgotten. In many ways, a denial of standard of care simply because one does not have the ability to comprehend his physician's words, because one does not have the ability to voice his fears in his physician's tongue, feels more personal, more damaging to the self-image than a denial based on insurance or other reasons.

In a meeting with a community partner affiliated with my health equity lab group (an extraneous meeting to this project), I heard the story of an LEP patient who had a wrong-site surgery occur after being denied a Spanish interpreter in a hospital that an employee described to the patient as "English-speaking only." These occurrences are deeply offensive; beyond legally spurious, they highlight the need for further refinement of interpretation services, including general awareness, at every clinic and hospital in the United States. I hope that this project has played a small role in that as it pertains to the Iowa City Free Medical and Dental Clinic. In its personal impact, the

project has caused me to examine how helpless I would feel if I were not able to communicate with my physician during a hospitalization. I hope to one day obtain either CCHI or NBCMI interpretation in Spanish to better understand and attend to language discordance of my future community. In the meantime, I will advocate for patients to receive medical interpretation services in their preferred language during residency and beyond. In ten years from now, I aspire to be an internal medicine physician who treats not only the needs of patients in the clinic and hospital but the needs that persist as inequities outside of the same.

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APPENDIX

The Appendix contains the following components:

- Link to Google Drive with complete intervention materials
- Samples of each intervention
    - Interpreter's Guide
    - Interpreter Training Video
    - Vocabulary Cards
    - Proficiency Exam
    - Role-Playing Exercises
    - Provider Training Video
    - Work Room Poster
- Photos of selected interventions in FMC spaces
- Qualtrics Survey
    - Pre-Survey Welcome
    - Part 1: Demographics
    - Part 2: Vocabulary Cards
    - Part 3: Interpreter's Guide
    - Part 4: Interpreter Training Video
    - Post-Survey Completion

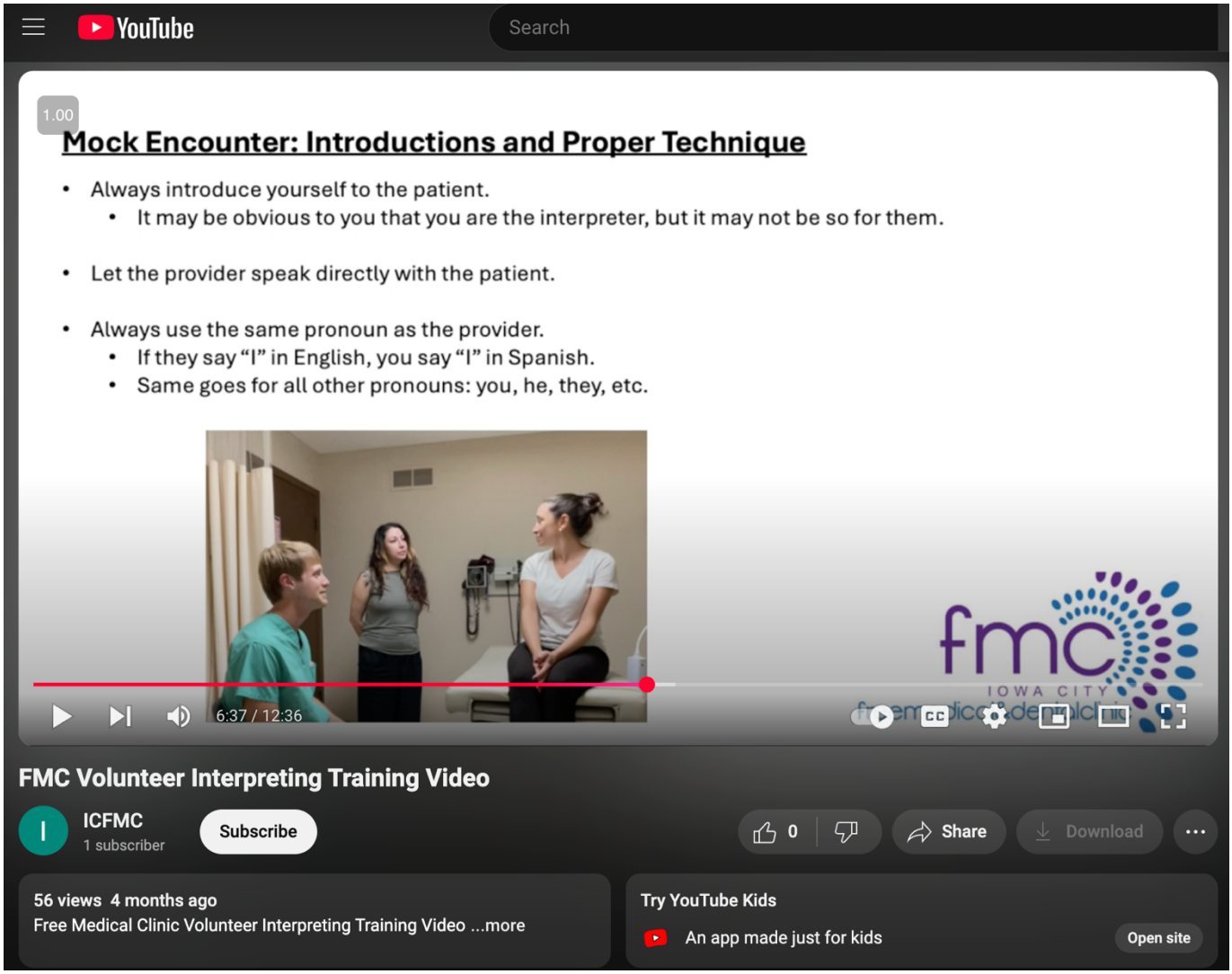
LINK TO GOOGLE DRIVE WITH COMPLETE INTERVENTION MATERIALS

Full versions of the completed interventions can be accessed through via this Google Drive: **https://drive.google.com/drive/folders/1sD9x61Ijo06QRcniyH_uZf8RSEz2vj9V**

SAMPLES OF EACH INTERVENTION

Interpreter's Guide

Interpreter Training Video



The full video is available for viewing on FMC's YouTube channel:
https://www.youtube.com/watch?v=ZTzxNyWE7y4&t=14s

Vocabulary Cards

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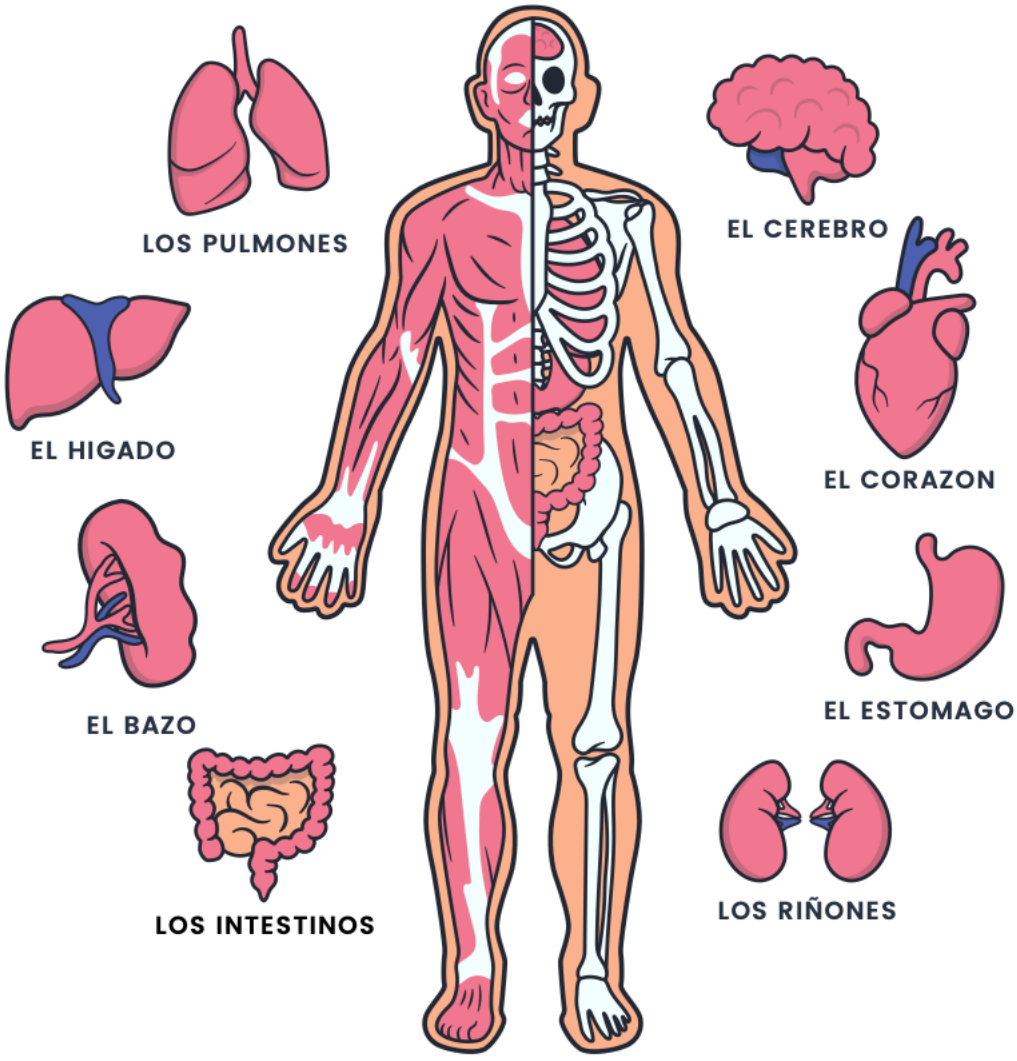
MEDICAL SPANISH REVIEW

ANATOMY



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ACUTE & CHRONIC COMPLAINTS

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SYMPTOMS

cough..... tos
sore throat..... dolor de garganta
blurry vision.... visión borrosa
stomachache.. dolor de estómago, gastritis**
headache..... dolor de cabeza
bleeding..... sangrado
constipation.... estreñimiento
diarrhea..... diarrea
stuffy nose..... constipación de la nariz, nariz tapada
ear ringing..... zumbidos en el oído
secretion..... secreción, flujo

itching..... comezón, picazón
numb..... estar dormido
burning..... ardiente
sharp..... agudo
dull..... sordo
radiating..... que se extiende, que corre
swelling..... hinchazón
dizziness..... mareos
vomiting..... vómitos
shortness of breath..... falta de aire
hard to breath..... dificultad al respirar

EXAMINATION

blood pressure..... presión arterial
pulse..... pulso, frecuencia cardiaca
blood test..... análisis de sangre
blood glucose level ..... nivel de glucosa en la sangre
blood lipid level..... nivel de lípidos en la sangre
finger poke..... pinchazo en el dedo
urine sampe..... muestra de orina
get onto exam table..... suba a la mesa/camilla de examen
put on gown..... pongáse la bata
hold your breath..... aguante la respiración

DIAGNOSIS

hypothyroidism..... hipotiroidismo
diabetes..... diabetes
chronic kidney disease... enfermedad renal crónica
hypertension..... hipertensión
ingrown toenail..... uña encarnada
pinched nerve..... nervio pinzado
muscle strain..... distensión muscular
urinary tract infection.... infección urinaria
STD..... infección sexual
fungal infection..... infección fungosa

TREATMENT

pill..... pastilla
ointment..... ünguento, crema
prescription..... receta
over-the-counter... sin receta
puff..... soplo
lancet..... lanceta
nasal spray..... spray nasal
steroid..... esteroide
antibiotic..... antibiotíco
refill..... relleno, refill
injection..... inyección
vaccine..... vacuna

**COMMONLY USED WHEN DESCRIBING STOMACH PAIN, NOT NECESSARILY A TRUE DIAGNOSIS OF CLINICAL GASTRITIS

B) Medical Terminology

Please provide a translation for each vocabulary term on the line provided.

Example:

TERM	TRANSLATION
ARM	El brazo

1. BLOOD TEST _____
2. NURSE _____
3. KIDNEY _____
4. ANKLE _____
5. IRON (*THE VITAMIN*) _____
6. PRESCRIPTION _____
7. BLOOD PRESSURE _____
8. JOINT PAIN _____
9. INTRAUTERINE DEVICE (IUD) _____
10. VACCINE _____
11. EL HIGADO _____
12. EL ESTEÑIMIENTO _____
13. LA REGLA (*PIENSE EN LAS MUJERES*) _____
14. LA GARGANTA _____

B) Medical Terminology

Please provide a translation for each vocabulary term on the line provided.

Example:

TERM	TRANSLATION
ARM	El brazo

1. BLOOD TEST	El análisis (la prueba) de sangre
2. NURSE	El enfermero
3. KIDNEY	El riñón
4. ANKLE	El tobillo
5. IRON (*THE VITAMIN*)	El hierro
6. PRESCRIPTION	La receta (la prescripción)
7. BLOOD PRESSURE	La presión arterial
8. JOINT PAIN	El dolor en las coyunturas
9. INTRAUTERINE DEVICE (IUD)	El aparato intrauterino
10. VACCINE	La vacuna
11. EL HIGADO	Liver
12. EL ESTEÑIMIENTO	Constipation
13. LA REGLA (*PIENSE EN LAS MUJERES*)	Period (Menstrual cycle)
14. LA GARGANTA	Throat

Iowa City Free Medical and Dental Clinic
Volunteer Interpreter Oral Exercises
Spanish Version

Read before beginning: As a volunteer interpreter, these oral exercises are designed to practice realistic clinical encounters. To best utilize these exercises, practice in a group of three, where one person plays the patient, another plays the provider, and another plays the interpreter (the interpreter should practice without the script). Try to closely convey to the patient the spoken words of the provider by employing consecutive interpretation. The interpretations provided below are accurate, but they are not necessarily the only correct way to perform the exercise. Discuss with an FMC staff member if you have any questions.

A) Exercise 1: New Diagnosis of Diabetes

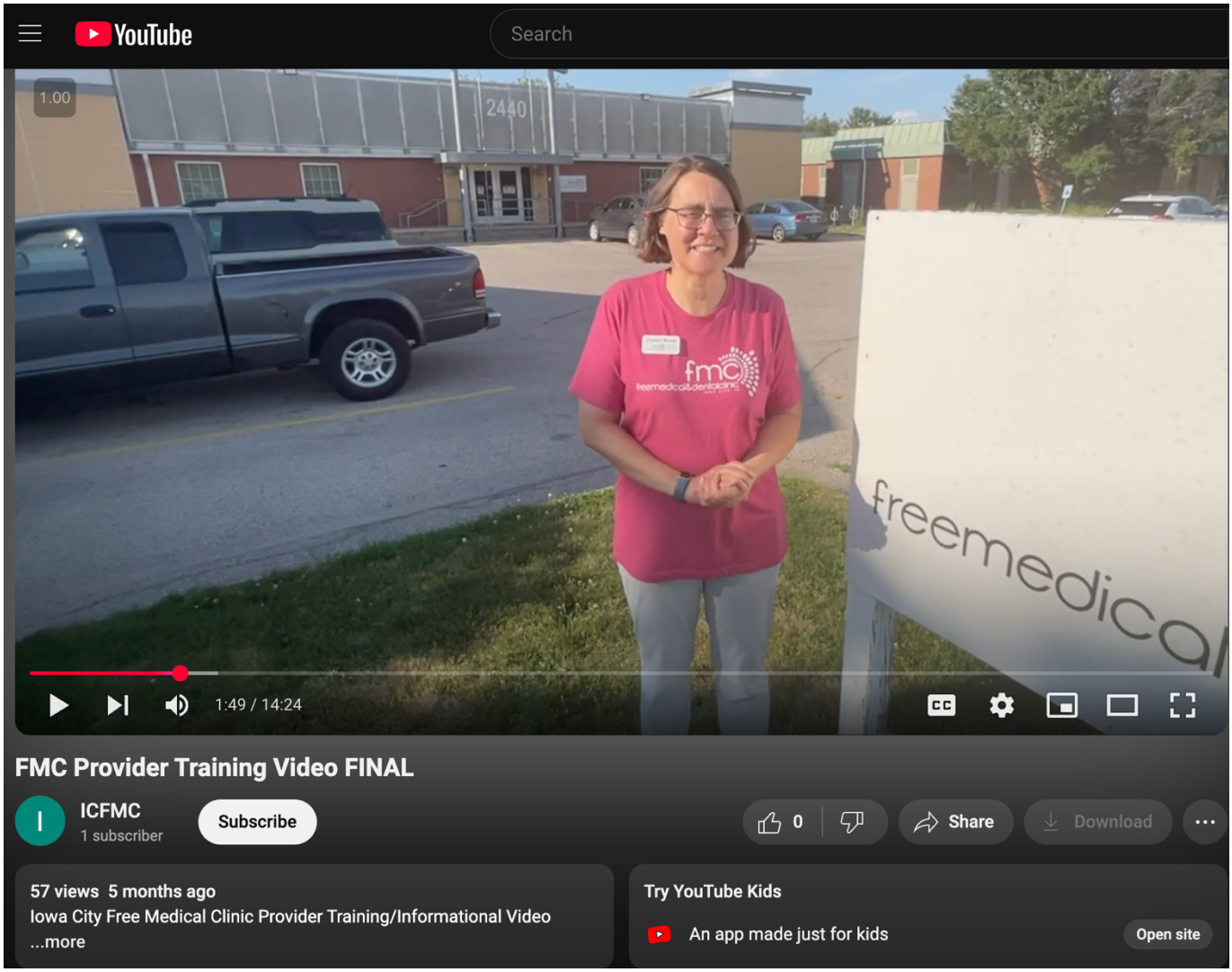
Doctor	Good morning, Pablo. It is great to see you.
Interpreter	Buenos días, Pablo. Un placer verlo.
Patient	Igualmente, gracias.
Interpreter	Same to you, thanks.
Doctor	Today's appointment is going to focus on your blood tests that we ordered last visit. Do you remember what we talked about?
Interpreter	La cita de hoy vamos a hablar de los análisis de sangre que pedimos la última visita. ¿Se acuerda de lo que hablamos?

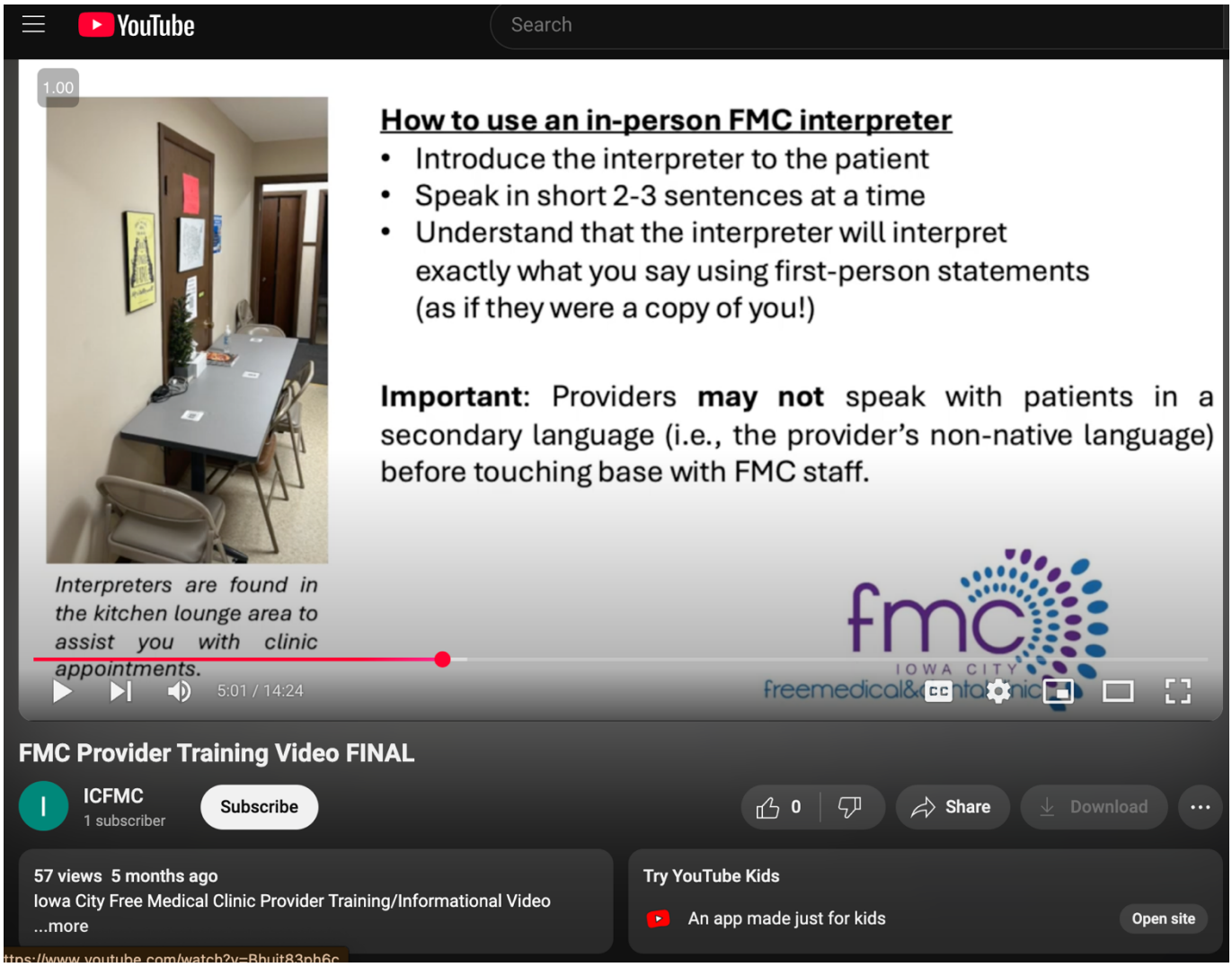
Patient	¿Verrugas? No puede ser. ¿Qué sería la causa de éstas?
Interpreter	Warts? It can't be. What would be the cause of these?
Doctor	They can be caused by a virus that infects the skin on your foot, or another part of the body. The virus is called HPV.
Interpreter	Pueden ser causadas por un virus que infecta la piel del pie, u otra parte del cuerpo. El virus se llama VPH.***

***CAUTION: It is important to pronounce HPV (*VPH* in Spanish, or *virus del papiloma humano*) very carefully, so as to make sure that the patient not confuse it with HIV (*VIH* in Spanish, or *virus de inmunodeficiencia humana*). State the entire virus name if you are concerned there may be an educational barrier. These viral infections are treated differently and have substantially different prognoses (a medical forecast of how a disease will affect a patient's life over time) if left untreated. An interpretation error here can cause great harm.

Patient	Yo veo. Bueno, ¿cómo se tratan entonces?
Interpreter	I see. Well, how are they treated then?
Doctor	I can offer you two treatment options. The first is to do nothing. These warts are not dangerous with respect to your health.
Interpreter	Le puedo ofrecer dos opciones de tratamiento. La primera es no hacer nada. Estas verrugas no son peligrosas con respecto a la salud.
Patient	Entiendo. ¿Y la segunda opción?
Interpreter	I understand. And the second option?
Doctor	We can administer cryotherapy, which is a cold spray that we apply on your skin. The therapy is effective, but it does cause burning and can permanently discolor the skin.
Interpreter	Podemos hacer crioterapia, la cual es un espray frío que se aplica en la piel. La terapia es eficaz, pero sí causa un dolor ardiente y puede causar descoloración permanente de la piel.

Provider Training Video





The full video is available for viewing on FMC's YouTube channel:

https://www.youtube.com/watch?v=hGgPkuPhLbw&t=103s

Work Room Poster

HOW TO USE AN INTERPRETER

DO:

- **SHARE** THE CHIEF COMPLAINT PRIOR TO ENTERING THE ROOM
- **LOOK** AT THE PATIENT, NOT THE INTERPRETER
- **SPEAK** AT A NORMAL PACE
- **PAUSE** AFTER 3 SENTENCES

DO NOT:

- **USE** THIRD-PERSON LANGUAGE (“CAN YOU ASK THE PATIENT IF SHE HAS A HEADACHE?”)
- **LIMIT** THE INTERPRETER TO ONE-WAY COMMUNICATION (“I CAN UNDERSTAND THE PATIENT. I ONLY NEED YOU TO INTERPRET WHAT I SAY.”)

IT IS FMC POLICY THAT A NON-NATIVE SPEAKING PROVIDER WHO WISHES TO CONDUCT A CLINICAL VISIT WITHOUT AN INTERPRETER OBTAIN CLEARANCE FROM FMC PERSONNEL.

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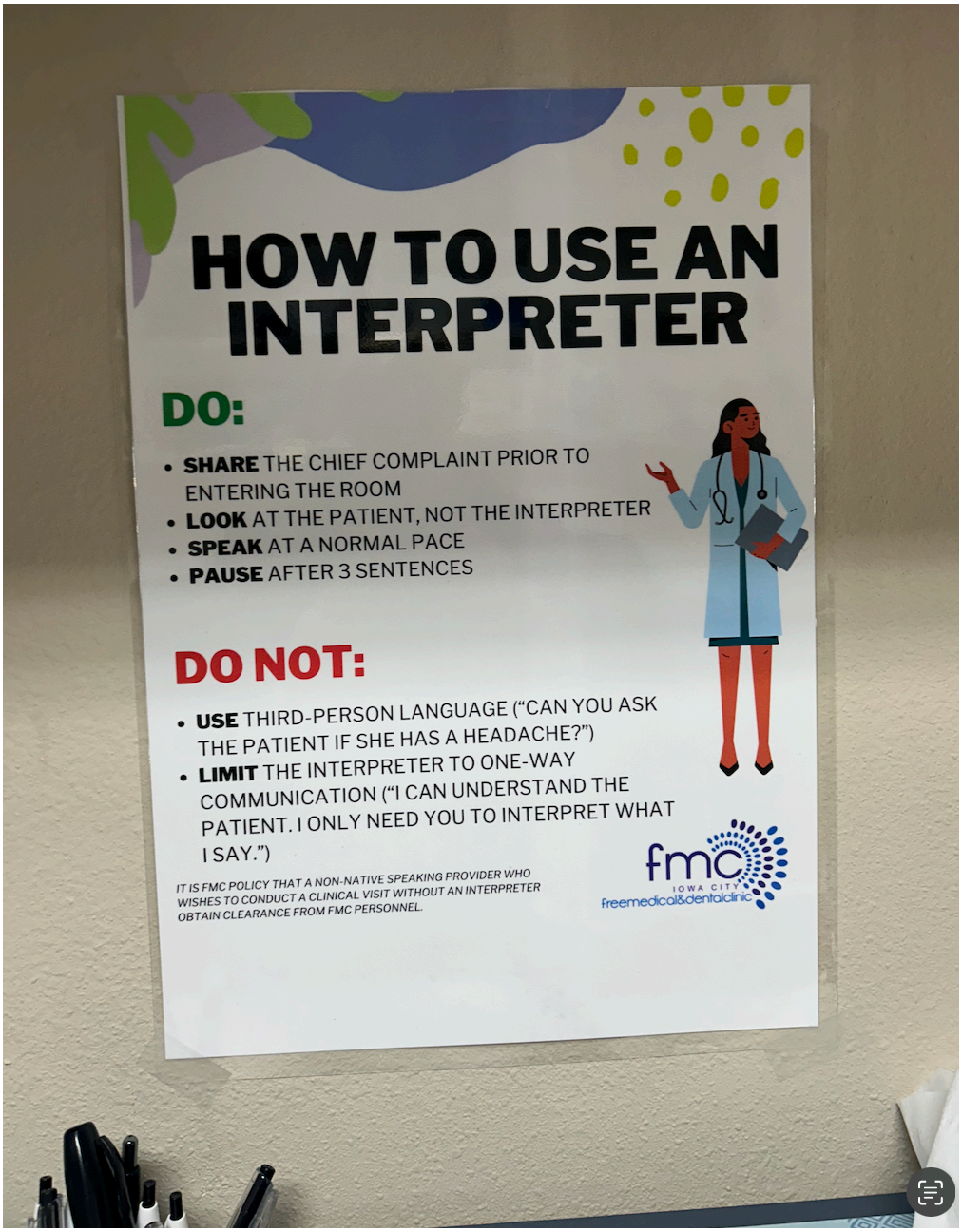
PHOTOS OF SELECTED INTERVENTIONS IN FMC SPACES

The interpreter's guide and vocabulary cards are located in the volunteer lounge, available for interpreters to reference during clinics.



The work room poster is hung in the team room, visible to volunteer providers.

QUALTRICS SURVEY

Pre-Survey Welcome

Welcome to the FMC Interpretation Services Survey!

The survey consists of 13 questions and should take less than 10 minutes to complete.

This survey is entirely anonymous.

→

Powered by Qualtrics

Part 1: Demographics

IOWA

Have you volunteered at the Free Medical Clinic (FMC) as a **Spanish interpreter** at least once since September 2024?

If you have not volunteered at least one time since September 2024, or you are not a Spanish interpreter, please close out of this survey.

- ◯ No
- ◯ Yes

Approximately **how often do you volunteer** at FMC as a Spanish interpreter?

- ◯ Infrequently: Less than 1 time per month
- ◯ Frequently: 1-2 times per month
- ◯ Consistently: 3+ times per month

What description best explains **your ability** to speak Spanish?

- ◯ Native or heritage speaker: learned as a child through direct language and cultural exposure
- ◯ Non-native or non-heritage speaker: learned later in life through studies, romantic partners, living abroad, work, etc.

What description best reflects your **previous experiences in interpretation**?

Only consider experiences where you were formally associated with an entity or group as a volunteer or professionally hired interpreter.

- ○ FMC is the only group/entity for which I have ever acted a volunteer or professional intepreter.
- ○ In addition to my experience at FMC, I currently or have previously acted as a volunteer or professional interpreter for other groups/entities.

Do you currently hold (or have you previously held) a **formal certification in medical interpretation** from either the National Certification Commission for Healthcare (CCHI) or the National Board of Certification for Medical Interpreters (NBCMI)?

- ○ No
- ○ Yes

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Part 2: Vocabulary Cards

Spanish Medical Terminology Vocabulary Cards: What description best reflects your **approximate usage frequency** of the vocabulary cards in the volunteer lounge that were introduced in Fall 2024?

Example: If Jill interpreted at 10 clinics and used the cards to review vocabulary during 7 of the 10 clinics, she would say that she used the cards frequently.

- ○ I rarely use the medical terminology vocabulary cards (used during less than <25% of shifts).
- ○ I infrequently use the medical terminology vocabulary cards (used during less than <50% of shifts).
- ○ I frequently use the medical terminology vocabulary cards (used during 50-75% of shifts).
- ○ I consistently use the medical terminology vocabulary cards (used during >75% of volunteer shifts).

Spanish Medical Terminology Vocabulary Cards: What description best reflects your impression of the **usefulness of this intervention**?

You should click the subjective answer that best describes your impression. If you need clarity on which description best conveys your impression, some example statements are provided to help guide.

- ◯ Not useful: I find the cards to be difficult to review; I do not learn new vocabulary from the cards; I think the translations are inaccurate; I think the vocabulary does not reflect terminology used in real clinical encounters.
- ◯ Moderately useful: I find the cards to be somewhat helpful; I learn some new words but not too many; I think the translations are more or less accurate; I think that the vocabulary more or less reflects terminology used in real clinical encounters.
- ◯ Highly useful: I find the cards to be helpful in reviewing vocabulary; I learn new vocabulary words from the cards; I think the translations are very accurate; I think that there is a diverse range of vocabulary to review that is applicable to real clinical encounters.
- ◯ Indifferent: I am aware of the cards but I have no impression of them.

Spanish Medical Terminology Vocabulary Cards: Do you have any feedback that you would like to share regarding this intervention?

- ◯ No
- ◯ Yes

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Part 3: Interpreter's Guide

Interpretation Guide Pamphlet: Have you reviewed the FMC Interpreter Guide?

If you have not, please click here and do so.

- ○ No
- ○ Yes

Interpretation Guide Pamphlet: What description best reflects your impression of the **usefulness of this intervention?**

You should click the subjective answer that best describes your impression. If you need clarity on which description best conveys your impression, some example statements are provided to help guide.

- ○ Not useful: I find the pamphlet to provide no helpful information on interpretation; I do not think it conveys true or accurate information regarding how to interpret at FMC; I do not think it accurately describes interpretation approaches nor expectations related to patient confidentiality or professionalism.
- ○ Moderately useful: I find the pamphlet to provide some helpful information on interpretation; I think it conveys some true and accurate information regarding how to interpret at FMC but not all relevant items; I think it more or less describes interpretation approaches and expectations related to patient confidentiality or professionalism.
- ○ Highly useful: I find the pamphlet to provide much helpful information on interpretation; I think it conveys true and accurate information regarding how to interpret at FMC; I think it effectively describes interpretation approaches and expectations related to patient confidentiality and professionalism.
- ○ Indifferent: I am aware of the interpreter guide but have no impression of it.

Interpretation Guide Pamphlet: Do you have any feedback that you would like to share regarding this intervention?

- ○ No
- ○ Yes

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Part 4: Interpreter Training Video

IOWA

Interpreter Training Video: Have you reviewed the FMC Volunteer Interpreter training video?

If you have not, please click here and do so.

- ○ No
- ○ Yes

Interpreter Training Video: What description best reflects your impression of the usefulness of this intervention?

You should click the subjective answer that best describes your impression. If you need clarity on which description best conveys your impression, some example statements are provided to help guide.

- ○ Not useful: I find the information to be vague, wrong, or poorly presented; I find the mock encounter to be unrealistic; I perceive the practice questions to be of little relevance to FMC interpretation services.
- ○ Moderately useful: I find the information to be more or less clear, correct, and accessible; I find the mock encounter to be more or less realistic; I perceive the practice questions to be of some relevance to FMC interpretation services.
- ○ Highly useful: I find the information to be clear, correct, and accessible; I find the mock encounter to be realistic; I perceive the practice questions to be of substantial relevance to FMC interpretation services.
- ○ Indifferent: I am aware of the interpreter training video but have no impression of it.

Interpreter Training Video: Do you have any feedback that you would like to share regarding this intervention?

- ○ No
- ○ Yes

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Post-Survey Completion

We thank you for your time spent taking this survey.
Your response has been recorded.