

### KAISER PERMANENTE BERNARD J. TYSON SCHOOL OF MEDICINE

Konexión Paciente: Redefining Medical Spanish Education for Spanish-Speaking Medical Students Through Patient-Based Simulation

Michael Langevin, James Abele, Wilkin Muñoz Orozco, Kristian Diaz, Candace Pau MD, Victor Escobedo

## **Disclosures & Conflicts of Interest**

The presenters and authors have no disclosures nor conflicts of interest.

Coconut-Filled Hawaiian Malasadas

### Ingredients for the Coconut Filling (aka Haupia Filling)

4 egg yolks, room temperature <sup>1</sup>/<sub>4</sub> cup granulated sugar 1 <sup>1</sup>/<sub>4</sub> cups coconut milk, full fat 1/3 cup heavy cream 1 tsp vanilla extract 1 tbsp cornstarch

### Ingredients for the Hawaiian Malasadas

3 <sup>1</sup>/<sub>2</sub> cups all-purpose flour, sifted + extra for rolling 1/3 cup granulated sugar
3 tsp dry yeast
<sup>1</sup>/<sub>2</sub> tsp salt
3 large eggs, room temperature
2 tbsps butter, melted and warm
<sup>3</sup>/<sub>4</sub> cup warm milk
3-4 cups vegetable oil

**Ingredients for the Malasadas Coating** <sup>1</sup>/<sub>2</sub> cup granulated sugar <sup>1</sup>/<sub>4</sub> cup butter, melted



### Making Your Malasadas:

- 1. Preparing the Filling
- 2. Rolling the Dough
- 3. Baking the Doughnuts
- 4. Coating the Malasadas
- 5. Filling the Malasadas





### You're done!

Total Time: 10 hours 45 minutes

Yield: 8-10 Malasadas!

# Learning a language is like baking

Ingredients = Vocabulary

Recipe = Grammar

Well-made dessert = An enriching conversation

**¡PRACTICE!** 



# Why is this important?

- In the U.S., <u>13.3%</u> of the U.S. population speaks Spanish at home
- Proportion of physicians who identify as Spanishspeaking is less than <u>6%</u>
- In a 2021 survey:
  - **78%** of participant medical schools (98/125) offered Medical Spanish programming
  - Of those, 21% (21/98) met all basic standards
  - Out of all participating schools, **16.8%** offer Medical Spanish programming that met all basic standards

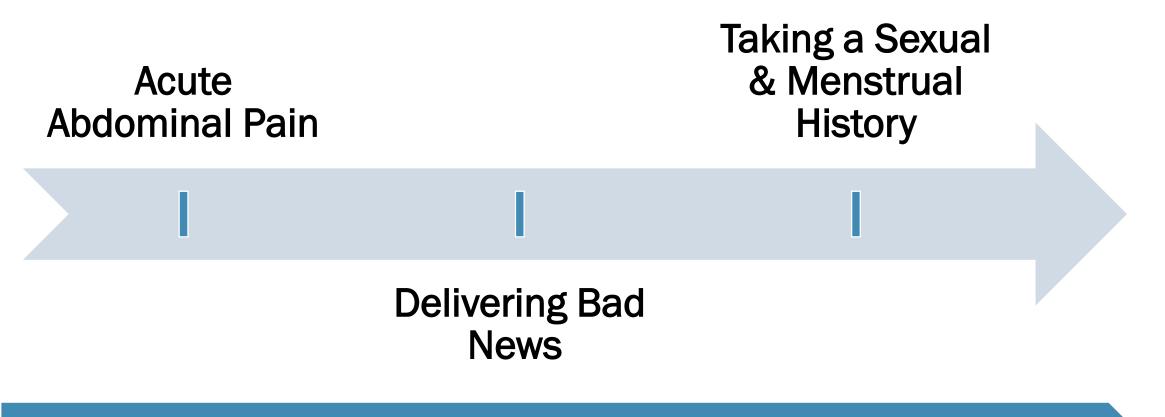


# Konexión Paciente: A Student-Run Organization for Students

Over 15 active members (roughly 10% of the student body)

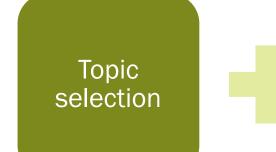
Our mission is to actively develop advanced communication and clinical/diagnostic abilities in the Spanish language in the interest of providing accurate, accessible, and equitable healthcare to patients in both English <u>and</u> in Spanish.

## **Program Development**



### Formal Clinical Skills Curriculum

## **Case Development Overview**



### Case writing

 Patient narrative

• Patient script

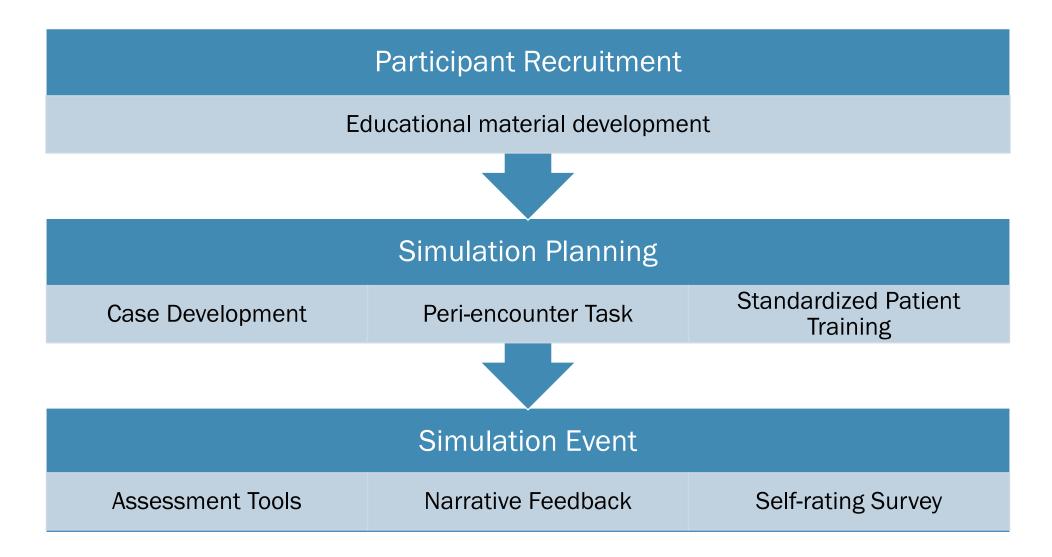
Patient

presentation

Assessment metrics

 Peri-encounter tasks Successful Clinical Case

# **Program Development**



## Methods & Outcomes

- 1. Institutionally-Validated Core Communication & Interpersonal Skills Checklist (SP)
- 2. Spanish Language-Specific Communication Competencies (SP)
- 3. Narrative Feedback (Clinical Faculty)
- 4. Self-Rating Survey (Student Participant)

# Methods & Outcomes (1, 2)

### <u>Communication & Interpersonal</u> <u>Skills Checklist</u> (done/somewhat done/not done)

### Habit 1: Invest in the Beginning

- A. Create initial rapport
- B. Elicit the patient's concern
- C. Plan the visit (set the agenda) with the patient before taking the history

### Habit 2: Elicit the patient's perspective

- A. Ask for the patient's ideas
- B. Explore the impact on the patient's life

### Habit 3: Demonstrate empathy

- A. Make an empathic statement
- B. Convey empathy nonverbally

### Habit 4: Invest in the end

- A. Deliver diagnostic information
- B. Provide education
- C. Involve patients in making decisions
- D. Complete the visit

### <u>Spanish-Language Specific</u> <u>Competencies</u>

(done/somewhat done/not done)

- 1. Use linguistically accurate and appropriate patientcentered communication
- 2. Demonstrate comprehension
- 3. Utilize linguistically accurate medical terminology for patient level
- 4. Identify and acknowledge limitations

## Methods & Outcomes

- 1. Institutionally-Validated Core Communication & Interpersonal Skills Checklist (SP)
- 2. Spanish Language-Specific Communication Competencies (SP)
- 3. Narrative Feedback (Clinical Faculty)
- 4. Self-Rating Survey (Student Participant)

## Methods & Outcomes (3)

"Your wording when expressing regret delivering bad news could be considered inconsiderate by some Spanish-speaking patients. Consider using more formal expressions such as ... to convey your sympathy."

## Methods & Outcomes

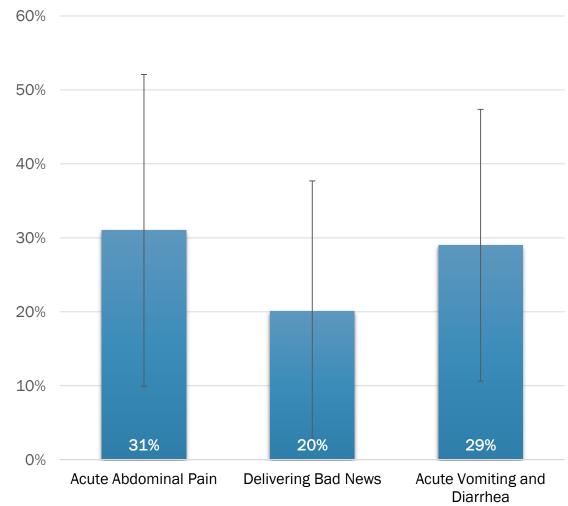
- 1. Institutionally-Validated Core Communication & Interpersonal Skills Checklist (SP)
- 2. Spanish Language-Specific Communication Competencies (SP)
- 3. Narrative Feedback (Clinical Faculty)
- 4. Self-Rating Survey (Student Participant)

# Methods & Outcomes (4)

Pre-Event & Post-Event:

On a scale of 1 to 10,

"How confident do you feel in your Medical Spanish abilities?" Mean Percent Change in Confidence in Medical Spanish Abilities Before and After the Event



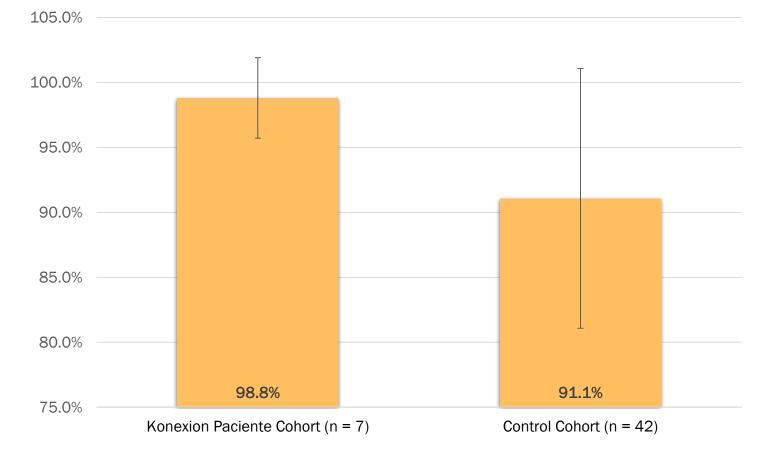
## Methods & Outcomes

- 1. Institutionally-Validated Core Communication & Interpersonal Skills Checklist (SP)
- 2. Spanish Language-Specific Communication Competencies (SP)
- 3. Narrative Feedback (Clinical Faculty)
- 4. Self-Rating Survey (Student Participant)

### Methods & Outcomes

### Mean Performance on CIS on Curricular English-Language OSCE

P-value for two-tailed T-test = 0.000408



# **Participant Feedback**

"It was a ton of fun. A great opportunity to step outside my comfort zone with speaking Spanish"

"I really enjoyed the event and feel like I learned skills and gained feedback that I would not have in clinic (even with my Spanish speaking patients)."

"It was incredible to actually get feedback on my Spanish skills since this is not something that my LIC patients share with me, and it also improved my confidence"

## **Future Directions**

- Integrating fully into Formal Clinical Skills curriculum
- Designing a longitudinal curriculum for comprehensive Medical Spanish training
- Tracking participant progress over time
- Establishing a baseline competency level for completion of the program
- Extending framework beyond Spanish-speaking students

### **Implementation Challenges**

### Resources

### Infrastructure

Student Interest

# Summary

- Spanish-speaking physicians are not prevalent, and the proportion we have does not match the number of patients who need them
- Our program looks to increase robustness of asset-based Medical Spanish education through simulated patient encounters
- Early evidence has shown that learners have an increase in confidence and in language use capabilities
- Although there are some limitations, this program is transferable to other US medical schools



### References

- 1. Cheung, M. (2020, February 1). Coconut Filled Hawaiian Malasadas Recipe. Hawaii Travel With Kids. Retrieved April 1, 2023, from https://hawaiitravelwithkids.com/coconut-filled-malasadas-recipe/
- 2. Dragan, A. The Importance of Addressing Linguistic Ethno-cultural Diversity in the Delivery of Public Health Services: a Literature Review. 2009 Dec; Region of Peel Public Health. Accessed Oct 28, 2022. https://tinyurl.com/53hc9mhx.
- 3. Flores-Rodarte J, Topmiller M, Jabbarpour Y. Distribution of Spanish-Speaking Family Physicians, 2013-2019. Am Fam Physician. 2022 Jun;105(6):654-655. PMID: 35713629.
- 4. Marrast LM, Zallman L, Woolhandler S, Bor DH, McCormick D. Minority Physicians' Role in the Care of Underserved Patients: Diversifying the Physician Workforce May Be Key in Addressing Health Disparities. JAMA Intern Med. 2014;174(2):289–291. doi:10.1001/jamainternmed.2013.12756
- 5. Ortega P, Francone NO, Santos MP, Girotti JA, Shin TM, Varjavand N, Park YS. Medical Spanish in US Medical Schools: a National Survey to Examine Existing Programs. J Gen Intern Med. 2021 Sep;36(9):2724-2730. doi: 10.1007/s11606-021-06735-3. Epub 2021 Mar 29. PMID: 33782890; PMCID: PMC8390604.
- 6. Ortega P, Pérez N, Robles B, Turmelle Y, Acosta D. Strategies for Teaching Linguistic Preparedness for Physicians: Medical Spanish and Global Linguistic Competence in Undergraduate Medical Education. Health Equity. 2019 Jul 1;3(1):312-318. doi: 10.1089/heq.2019.0029. PMID: 31294243; PMCID: PMC6615346.
- Ortega P, Pérez N, Robles B, Turmelle Y, Acosta D. Teaching Medical Spanish to Improve Population Health: Evidence for Incorporating Language Education and Assessment in U.S. Medical Schools. Health Equity. 2019 Nov 1;3(1):557-566. doi: 10.1089/heq.2019.0028. PMID: 31701080; PMCID: PMC6830530.

# Appendix 1A: KPSOM Communication & Interpersonal Skills Checklist

Revision date: July 2021

#### KPSOM Communication & Interpersonal Skills Checklist v2.0

#### Habit 1: Invest in the Beginning

#### A. Create initial rapport (done/not done)

- 1. Introduced self using first name, last name, and title
- 2. Confirmed patient's first and last name
- 3. Asked patient how they would like to be addressed
- 4. Made a social comment or asked nonmedical question to put patient at ease
- 5. Conveyed familiarity by commenting on prior visit or problem
- 6. Considered the patient's cultural background and use appropriate gestures, eye contact, and body language

#### B. Elicit the patient's concern (done/not done)

- 7. Started with at least two rounds of open-ended questions
- 8. Summarized the patient's concerns to check for accuracy
- C. Plan the visit (set the agenda) with the patient before taking the history (done/not done)
  - 9. Let the patient know what to expect
  - 10. Asked patient for input on what to focus on and/or what their goals are for the visit

#### Habit 2: Elicit the patient's perspective

A. Ask for the patient's ideas (done/not done)

11. Assessed the patient's point of view

- B. Explore the impact on the patient's life (done/not done)
  - 12. Asked about the impact of symptoms on the patient's life: "How have your symptoms affected your life/daily activities/work/family?"

#### Habit 3: Demonstrate empathy

- A. Be open to patient's emotions (done/somewhat/not done)
  - 13. Responded in a culturally appropriate manner to changes in body language and voice tone
- B. Make an empathic statement (done/somewhat/not done)
  - 14. Offered comments to validate or acknowledge the patient's feelings and concerns
- C. Convey empathy nonverbally (done/somewhat/not done)
  - 15. Conveyed empathy through appropriate facial expressions, tone of voice, gestures, and body language
  - 16. Maintained presence with the patient during critical junctures

#### Habit 4: Invest in the end

#### A. Deliver diagnostic information (done/not done)

17. Framed the diagnosis in terms of patient's original concerns

#### B. Provide education (done/not done)

- 18. Used plain language throughout the visit
- 19. Explained rationale for tests and treatments
- 20. Reviewed possible side effects of treatments and expected course of recovery
- 21. Discussed options that are consistent with the patient's lifestyle, cultural values, and beliefs

#### C. Involve patients in making decisions (done/not done)

- 22. Discussed treatment goals to ensure mutual understanding and agreement
- 23. Assessed the patient's ability and motivation to carry out the plan

# Appendix 1B: Spanish Language-Based Objectives

### Spanish Language-Based Objectives

- 1. Use linguistically accurate and appropriate patient-centered communication (done/somewhat done/not done)
- The student motivates patient trust and plan adherence by providing linguistically sensitive arrangements for treatment
  options, informational resources, and follow-up care. Examples of this might include: use of language such as "Me explique
  bien?" (Did I explain myself well?) rather than "Me entiendes?" (Do you understand me?).
- 2. Demonstrate comprehension (done/somewhat done/not done)
- With accurate responses and appropriate questioning, the student demonstrates comprehension of the patient's direct and implied language. Examples of not achieving this could include: requesting excessive repetition (3-4x) or responding with a illogical statement/question.
- 3. Utilize linguistically accurate medical terminology for patient level (done/somewhat done/not done)
- The student utilizes accurate medical terminology in Spanish in the register appropriate for the individual patient interaction. Examples of not achieving this could include: using inaccurate terminology such as "intoxicado" to mean "borracho"; or using excessive medical jargon such as "Una hemorragia subaracnoidea entre la piamadre y la aracnoides del las meninges" to say "Una hemorragia cerebral".
- 4. Identify and acknowledge limitations (if applicable: done/somewhat done/not done)
- The student, if appropriate, identifies the limitations of their Spanish/Medical Spanish knowledge and acknowledges it to the patient and/or team. Examples of proper achievement of this objective could include: making note of an unknown word to revisit, inquiring more about the word to decipher meaning, or calling on team members (interpreters, experienced bilingual clinicians, etc.) to step in when the student is unable to properly and safely conduct the visit.

# **Appendix 2A: OSCE Comparison Data CIS**

	Points (out of 12)	Percent score
CIS Konexion Paciente	11.86 ± 0.38	98.8 ± 3.1%
CIS Control Cohort	10.93 ± 1.2	91.1 ± 10%
t-Test: Two-Sample Assuming Unequal Varia	ances	
	Variable 1	Variable 2
Mean	11.85714	10.92857
Variance	0.142857	1.433798
Observations	7	42
Hypothesized Mean Difference	C	
df	30	
t Stat	3.975878	3
P(T<=t) one-tail	0.000204	
t Critical one-tail	1.697261	
P(T<=t) two-tail	0.000408	3
t Critical two-tail	2.042272	

# **Appendix 3: Other Konexión Paciente Work**

- Bi-monthly online synchronous meetings covering Medical Spanish topics like those in simulation to reinforce content and practice
- Semesterly dialect dinners to gain exposure to different Spanish dialects and practice
- Yearly Clinician Cultural and Linguistic Assessment (CCLA) workshop to review the standard for Medical Spanish within Kaiser Permanente and promote members to take the examination

# **Appendix 4: Sample Peri-Encounter Task**

Your patient calls the office when you're away to ask if there are any side effects to be expected from the medication you just prescribed. In the space below, write an email response to your patient explaining the possible side effects and instruct them to call the office if they have any further questions.