

PROMOTING HEALTH AND CONFIDENCE:

DEVELOPMENT AND EVALUATION OF A LOTERÍA GAME TO IMPROVE PERCEPTION AND ACCESS TO SERVICES IN THE HISPANIC/LATINO COMMUNITY OF JOHNSON COUNTY, KS.

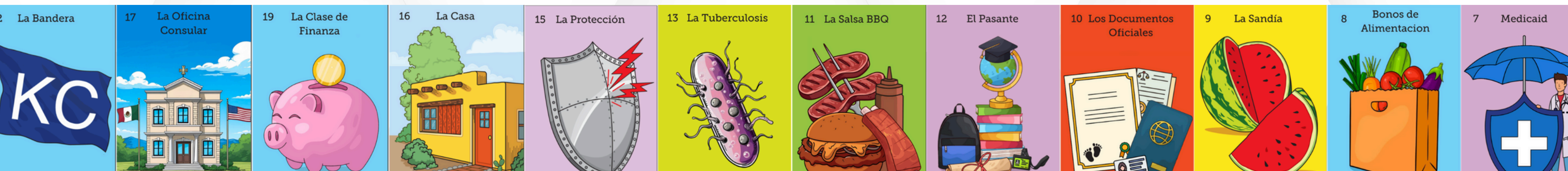
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Site: Johnson County Department of Health and Environment
Committee: Dr. Ellyn Mulcahy, Dr. Margaret Kincaid, Dr. Justin Kastner

SCHOLARSHIP ACKNOWLEDGEMENT

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INTRODUCTION & AGENDA

Using Data to Identify Barriers
& Leveraging Community
Partnerships to Overcome
Them

Demonstrate How a
Culturally-Responsive Tool
Can Build Trust

Historically Underserved
Hispanic and Latino Community

1. The Problem
& The Data

2. The Solution:
Health Lotería

3. Methodology &
Implementation

4. The Results:
The Community
Response

5. Discussion &
Future Directions

THE PUBLIC HEALTH PROBLEM: **A HISTORY OF MISTRUST**



Financial:

The uninsured rate for Hispanic & Latino immigrants is as high as 55% in Johnson County.

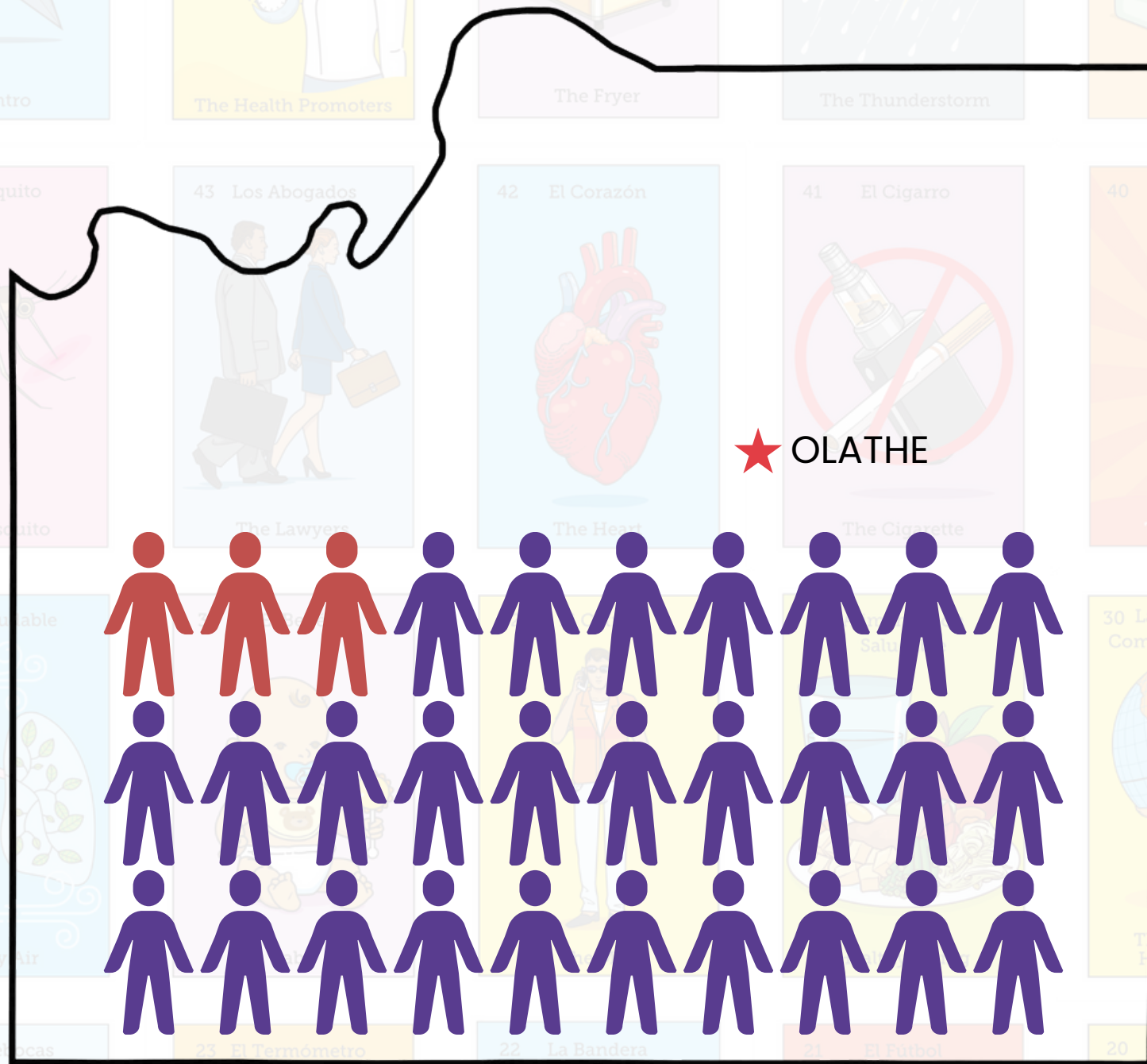
Mistrust:

Perpetuated by discrimination, poor communication, privacy concerns, & unequal treatment.

Linguistic:

Language barriers impact care quality, treatment adherence, & patient confidence.

THE PUBLIC HEALTH NEED: JOHNSON COUNTY



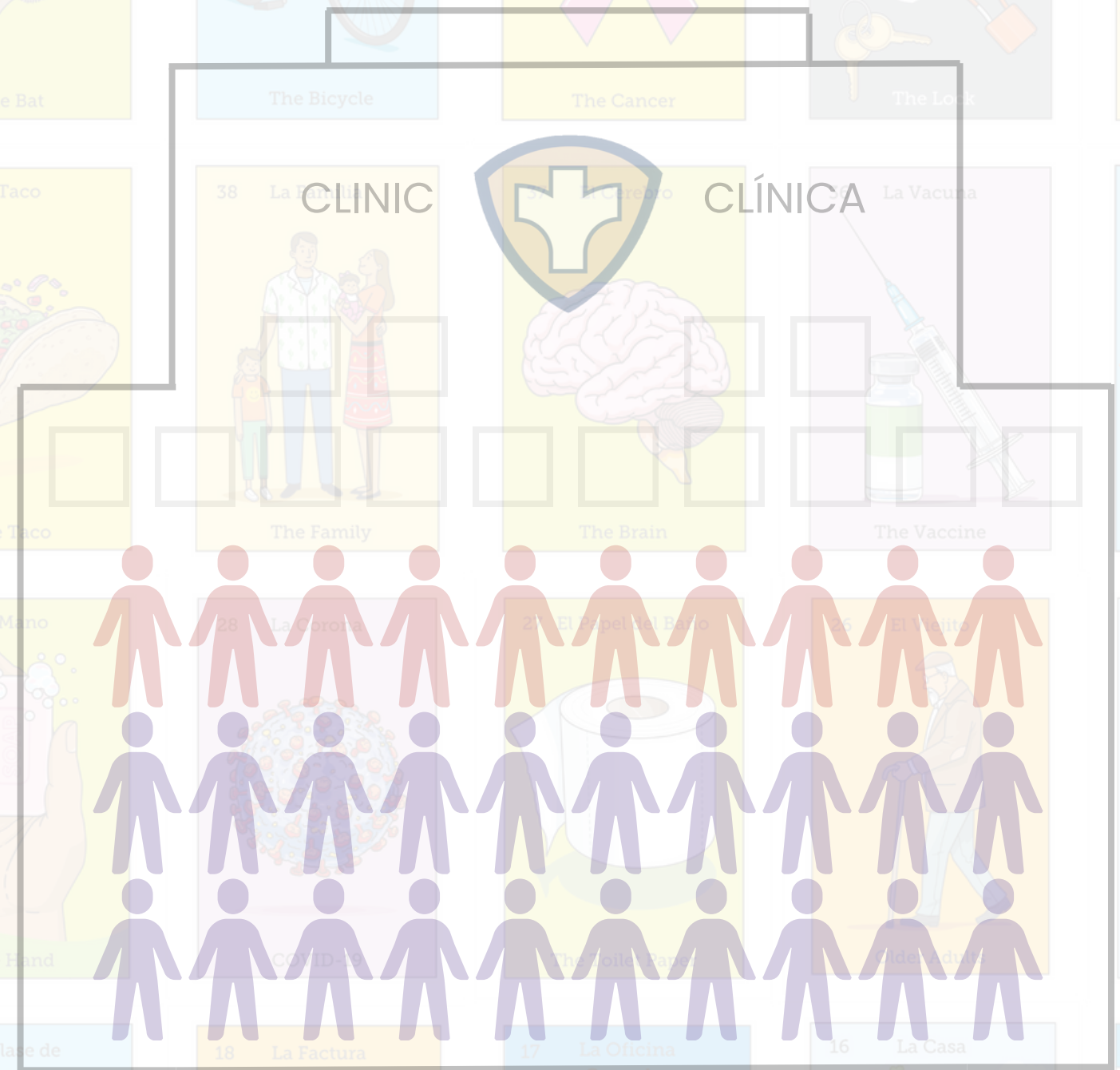
Approx. 10% of Johnson County's population identifies as Hispanic or Latino...



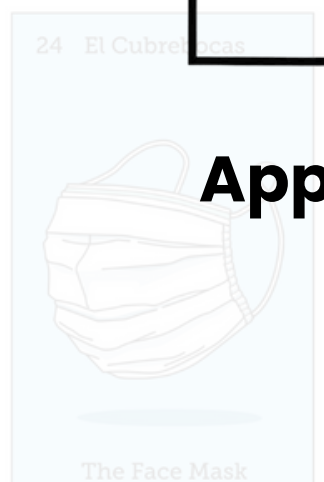
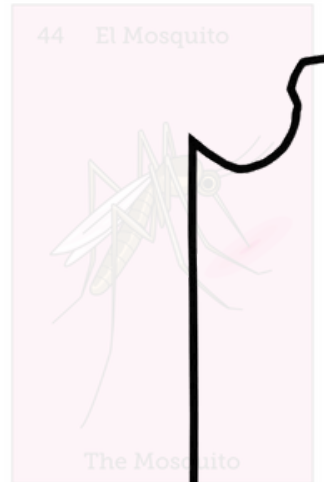
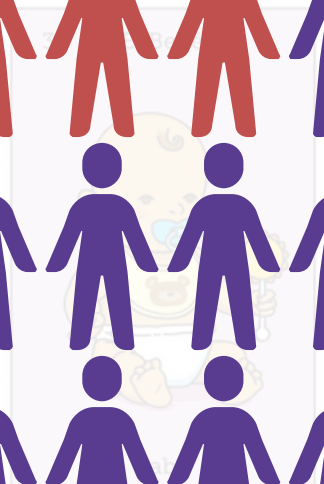
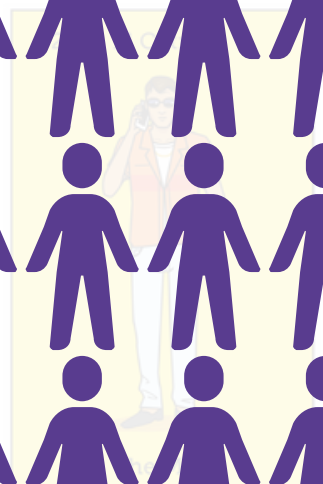
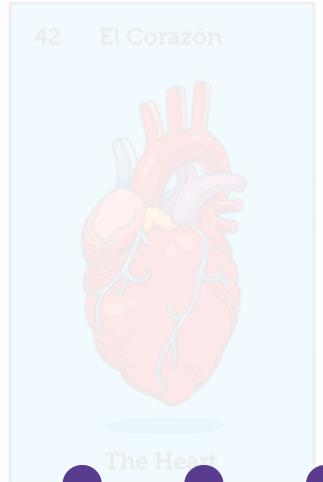
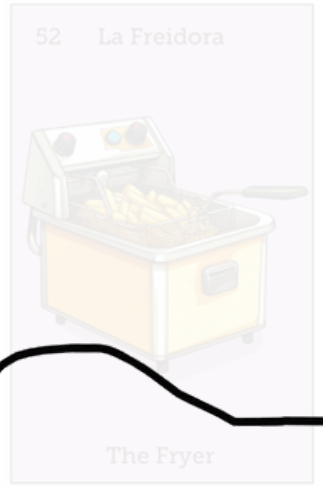
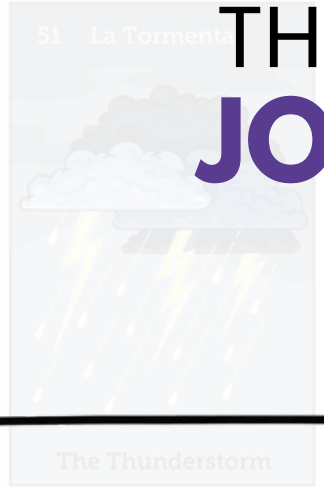
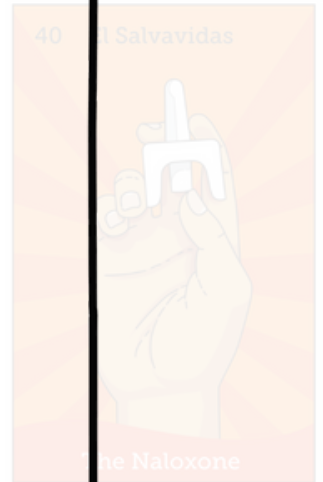
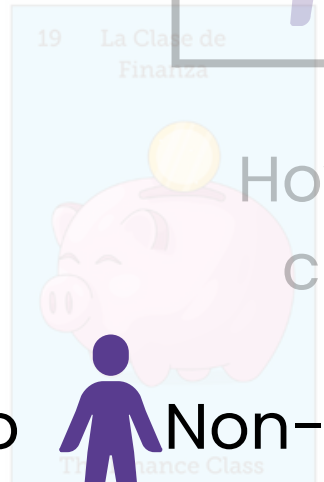
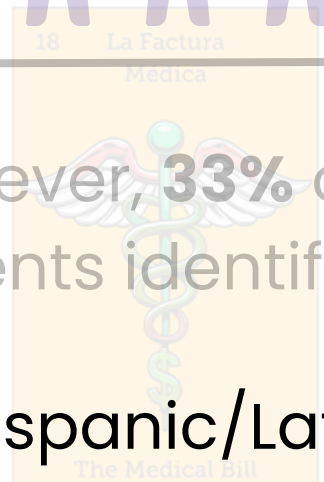
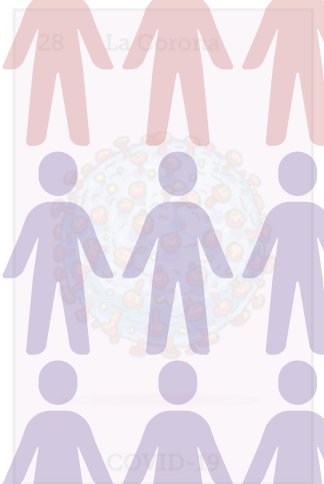
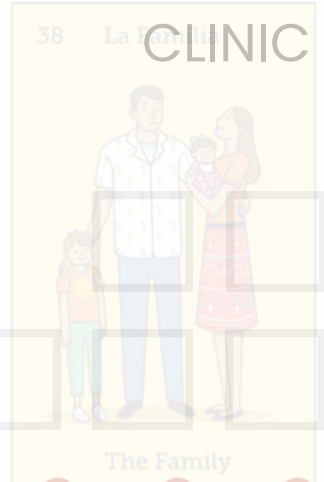
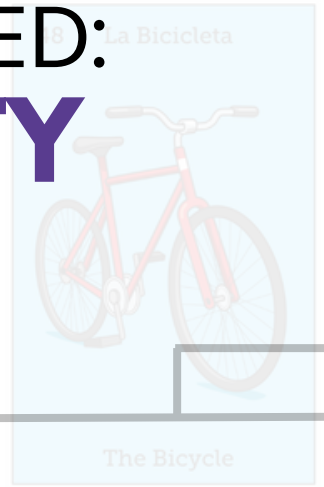
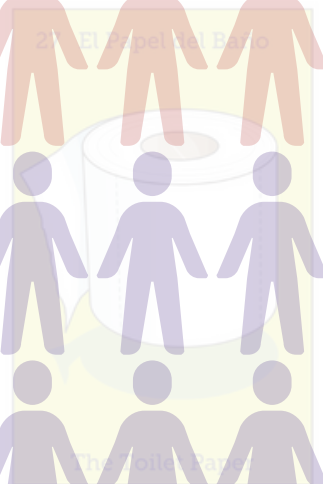
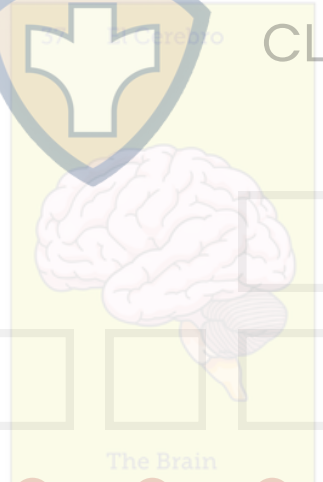
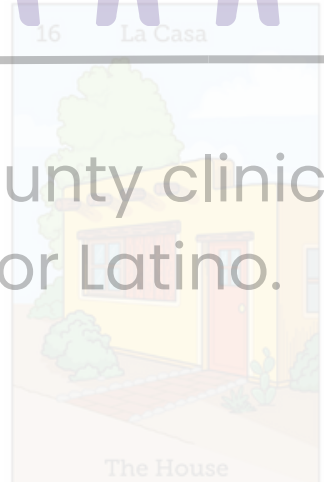
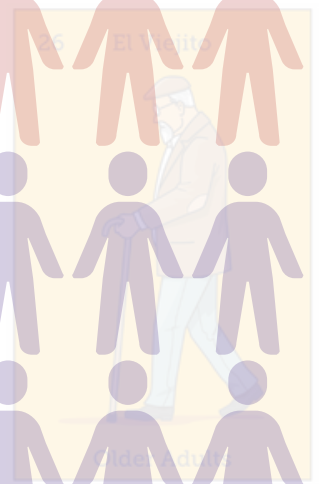
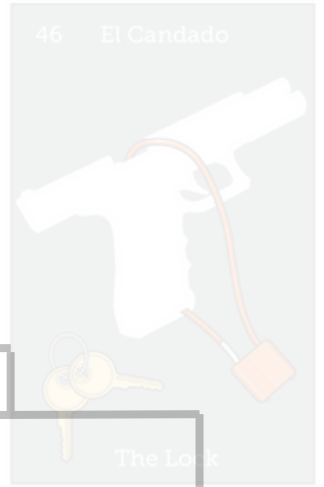
Hispanic/Latino



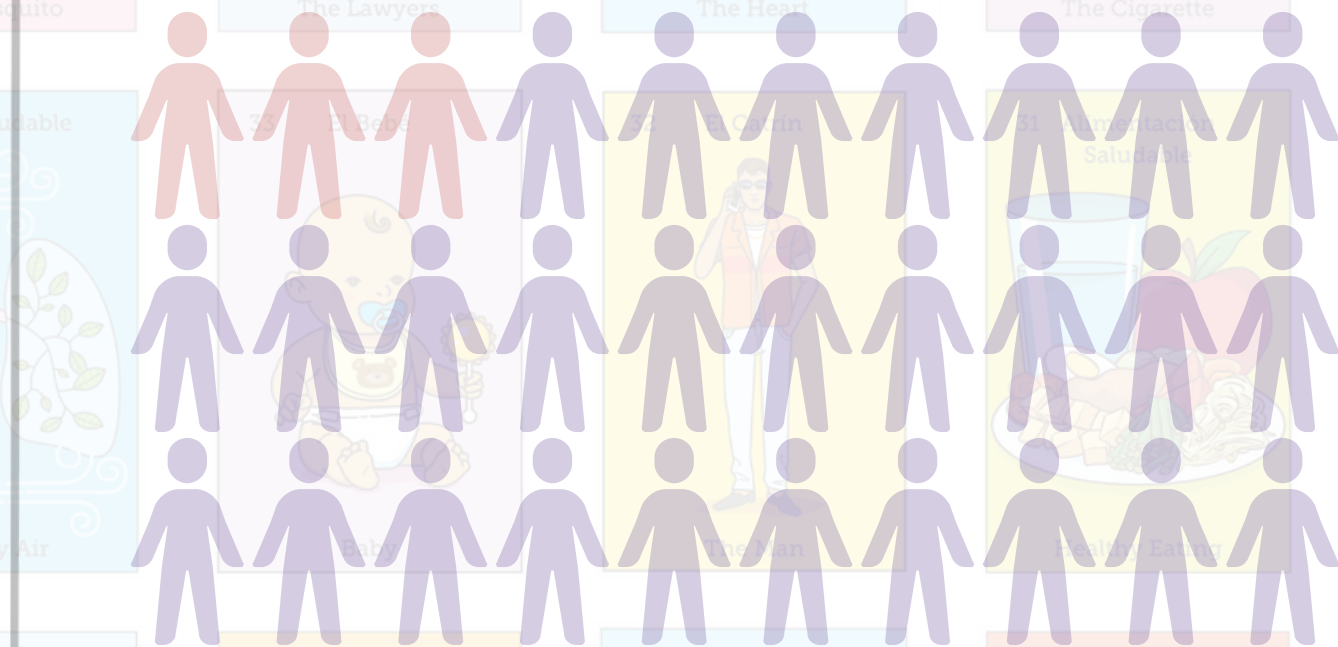
Non-Hispanic/Latino



However, **33%** of Johnson County clinic clients identify as Hispanic or Latino.



THE PUBLIC HEALTH NEED: JOHNSON COUNTY



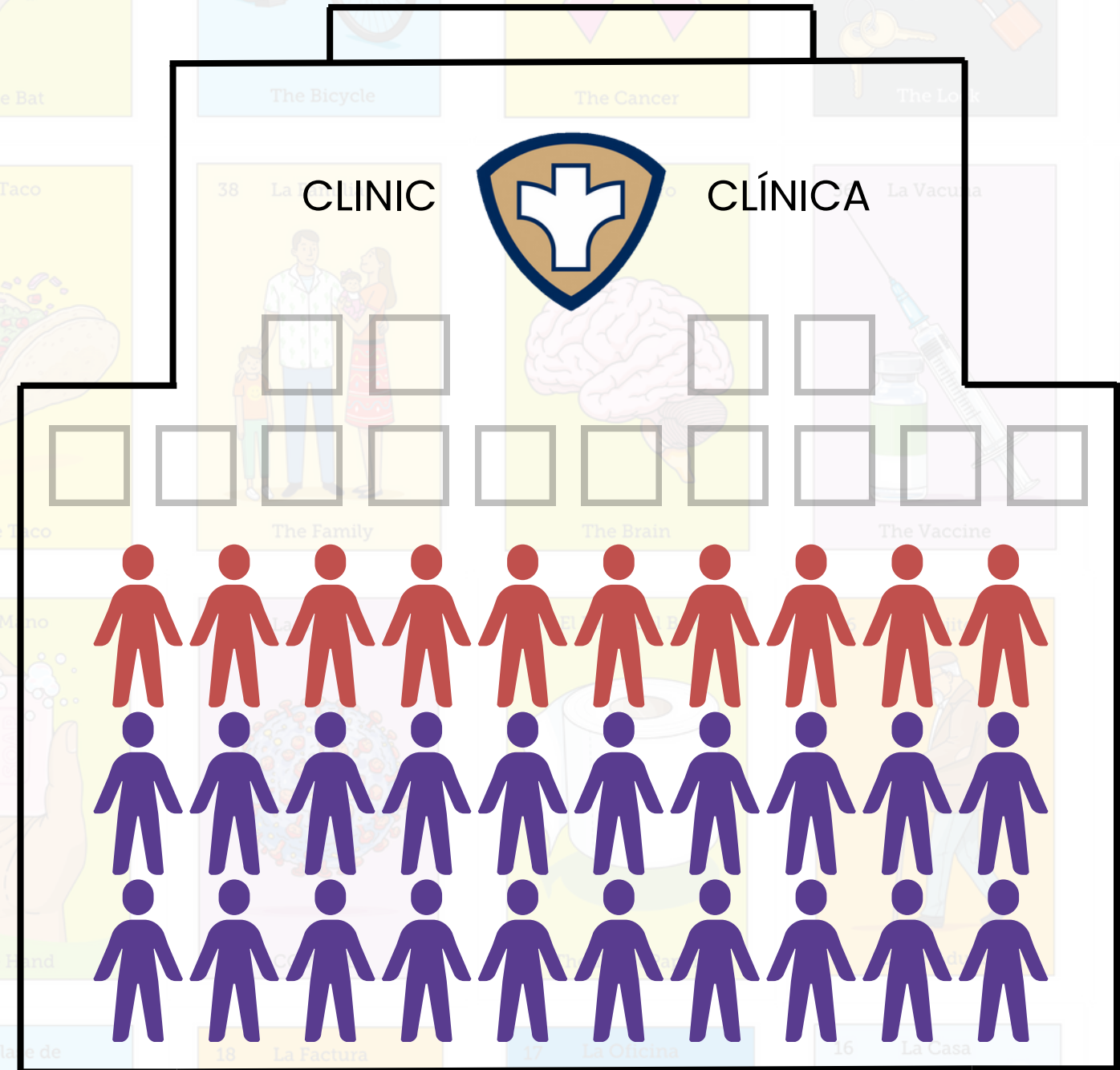
Approx. 10% of Johnson County's population identifies as Hispanic or Latino...



Hispanic/Latino



Non-Hispanic/Latino



However, 33% of Johnson County clinic clients identify as Hispanic or Latino.

THE PUBLIC HEALTH NEED: JOHNSON COUNTY

★ OLATHE

CLINIC



CLÍNICA

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However, **33%** of Johnson County clinic clients identify as Hispanic or Latino.

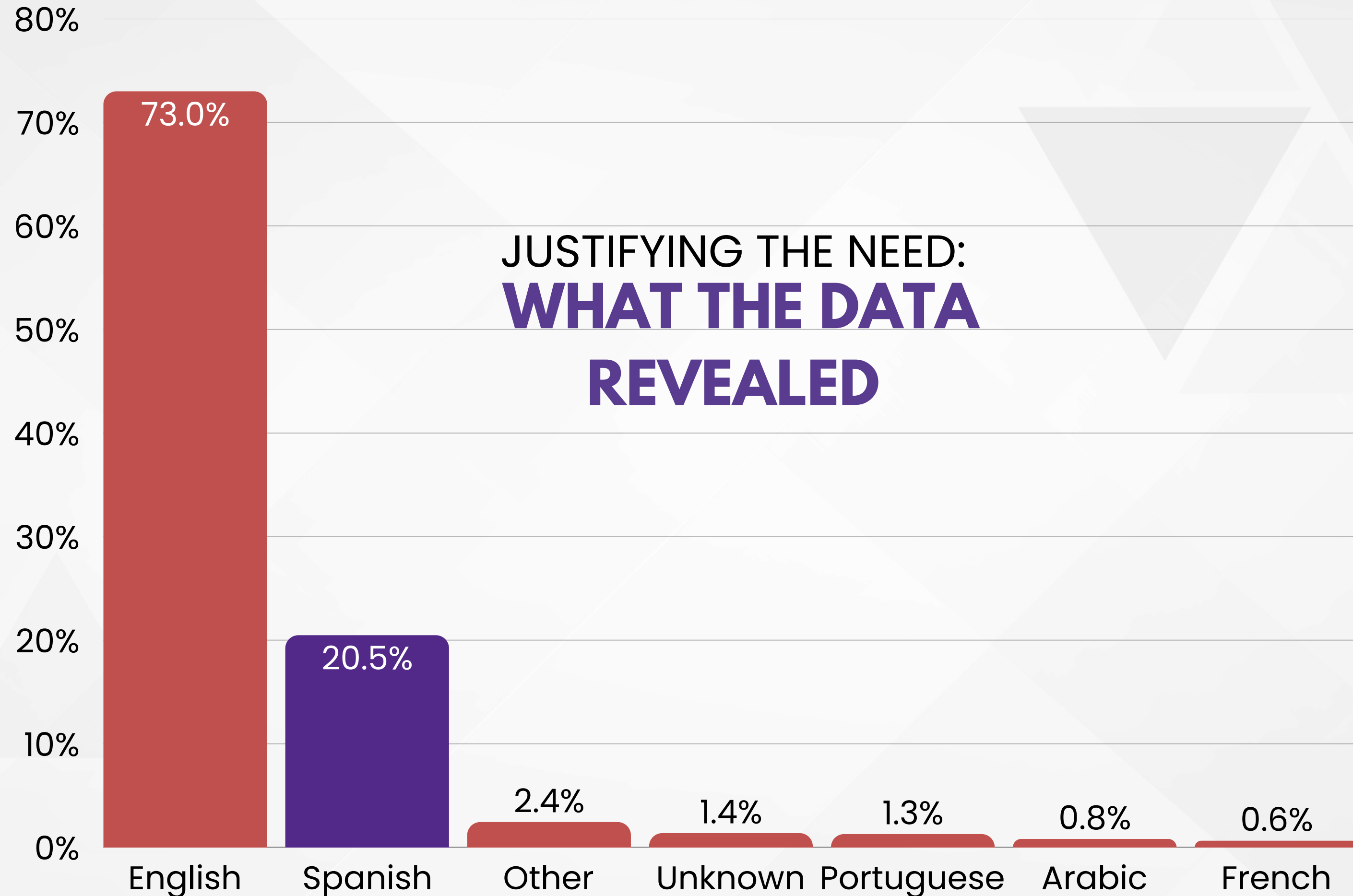


Hispanic/Latino



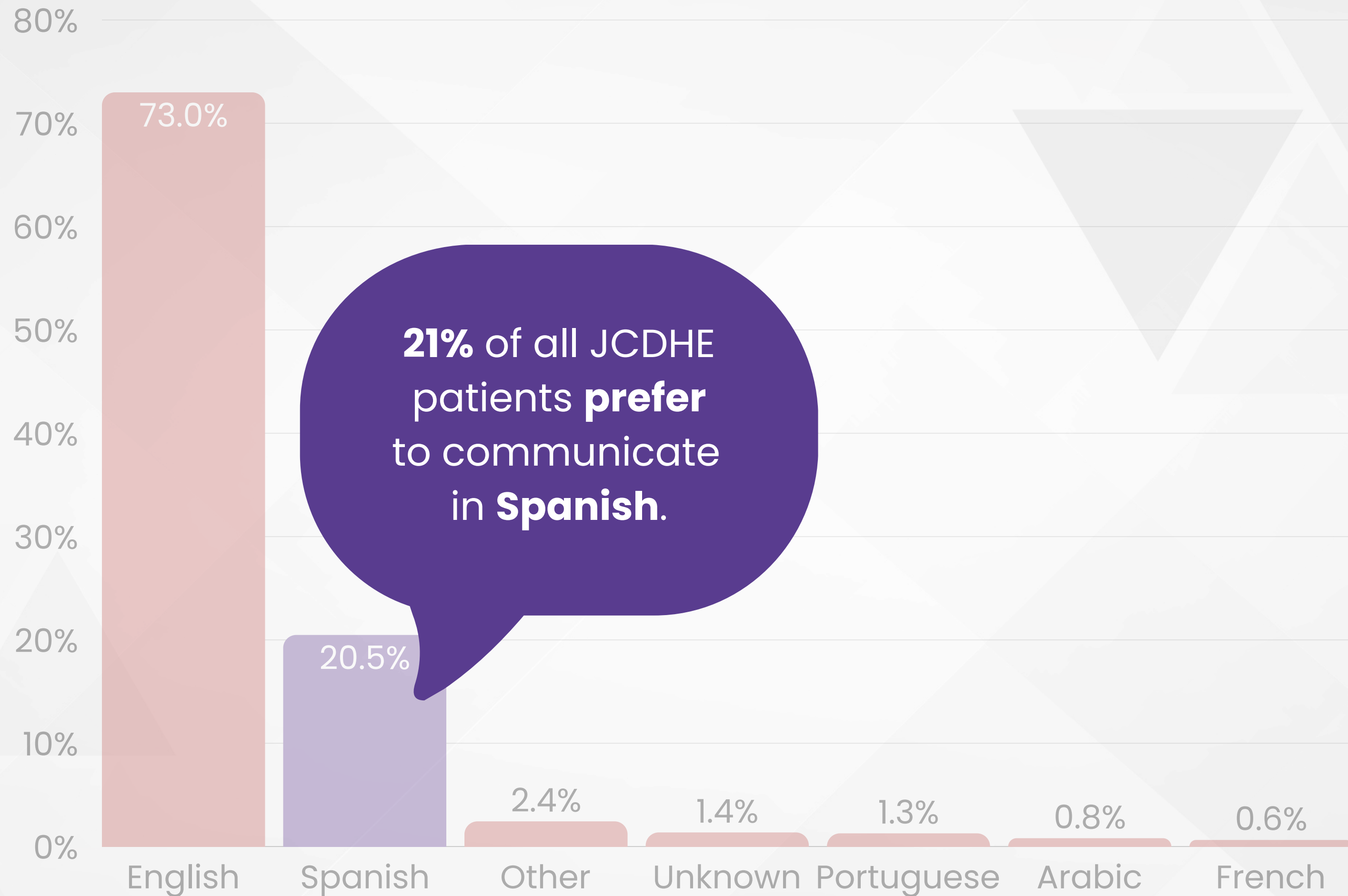
Non-Hispanic/Latino

JCDHE Patient Preferred Language

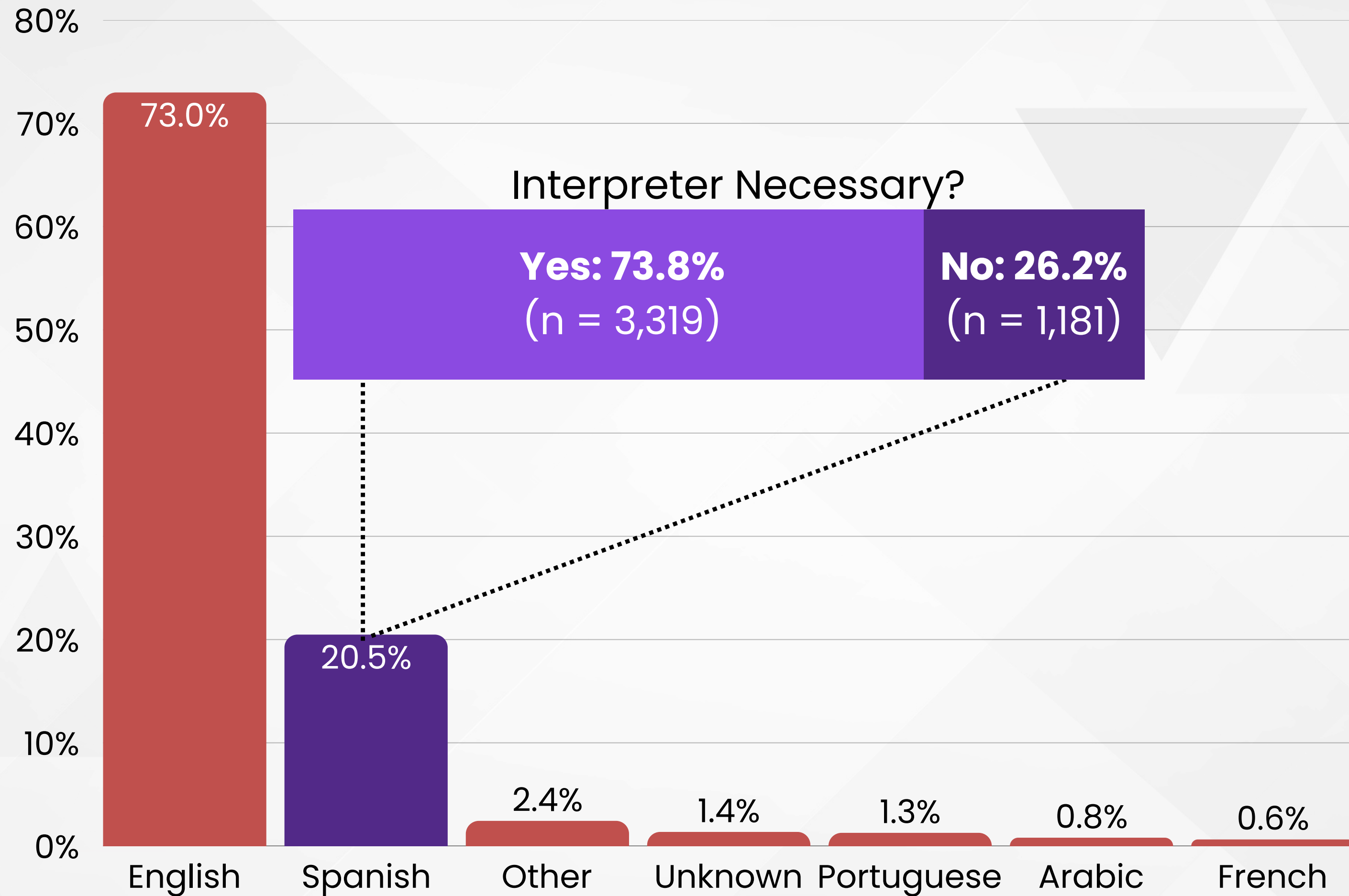


JUSTIFYING THE NEED:
**WHAT THE DATA
REVEALED**

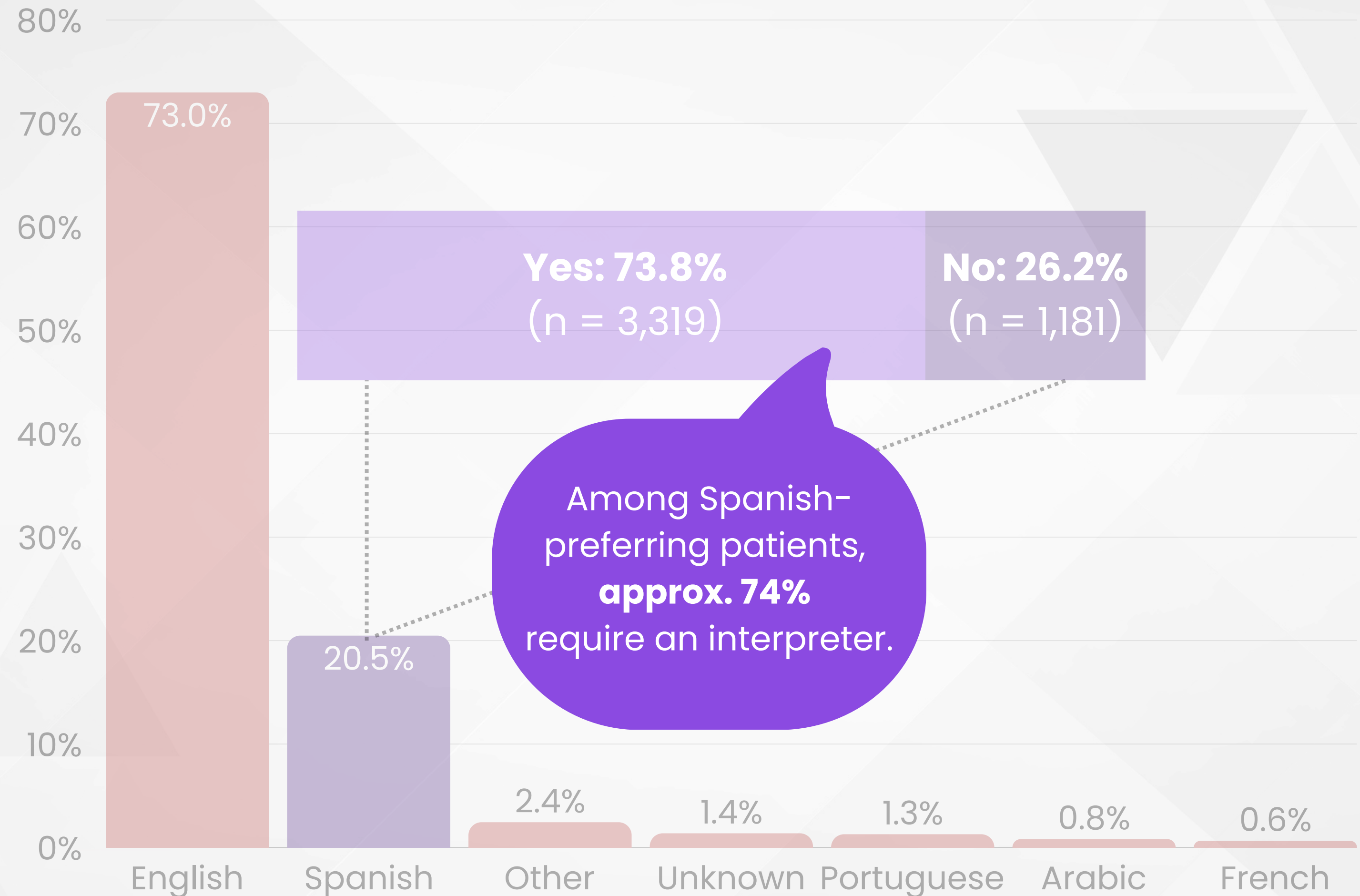
JCDHE Patient Preferred Language



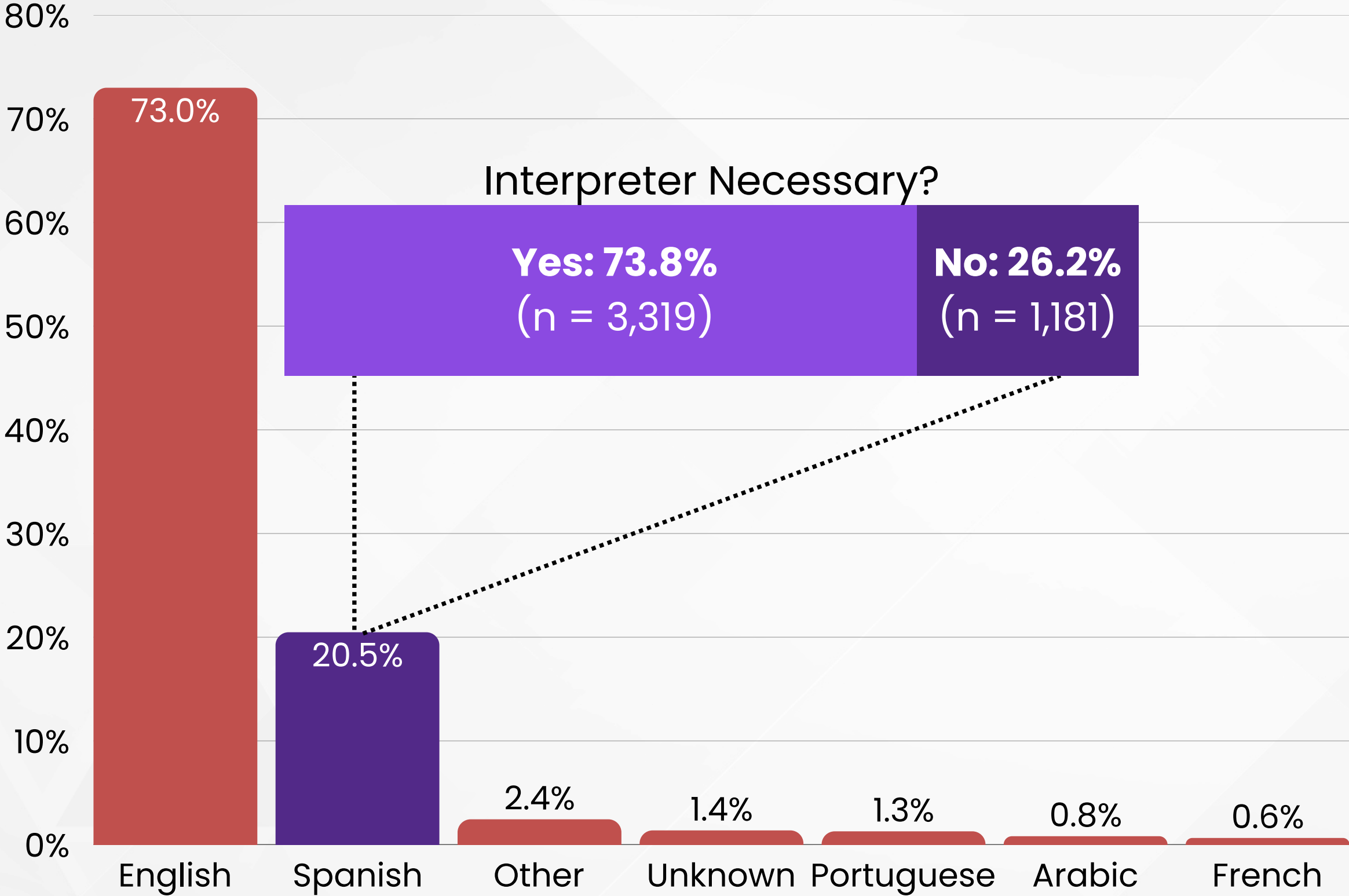
JCDHE Patient Preferred Language



JCDHE Patient Preferred Language

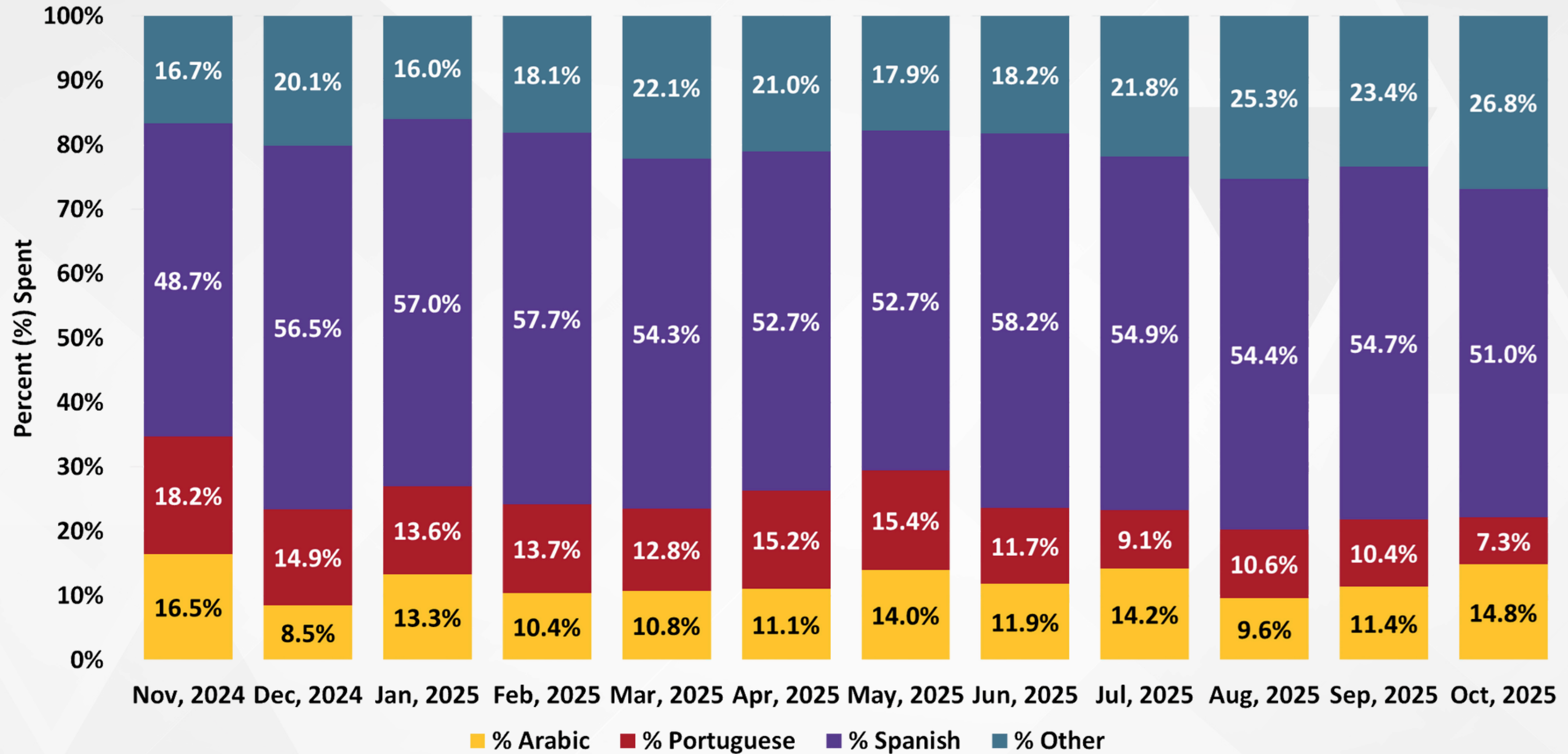


JCDHE Patient Preferred Language



There is a need for linguistically- and culturally- relevant resources and materials in Johnson County.

Percentage of Propio Translation Services Money Spent by Language and Month, Johnson County Department of Health and Environment, Last 12 Months



Operational interpreter data confirms Spanish accounts for **67%** of all interpreter utilization.

Spanish continues to be the **number one** interpreted language month after month.



A CULTURALLY MEANINGFUL SOLUTION

Why Lotería?



1. Gamification

Makes learning active, not passive.



2. Cultural Resonance

Builds immediate connection and trust.



3. Family Centered

Designed to be played by multiple generations.



4. CLAS Standards

Culturally and Linguistically Appropriate Services.

Concept: Inspired by similar work done in Pima County, Arizona

Solution: Adapt the traditional Lotería game into a public health tool.

54 El Centro



El Centro

41 El Cigarro



The Cigarette

30 Las Trabajadoras Comunitarias de Salud



The Community Health Workers

22 La Bandera



The Flag

A Bridge of Familiarity:

WHAT IS LOTERIA

Health Lotería

Board #7



Johnson County Health Lotería

Gather around with your friends and family to play and have fun.

How to play:

Players (2-11)

Each player gets 1 or more Lotería board(s) and their own markers (frijoles)! Beans (Frijoles) historically have been used as markers for Lotería!

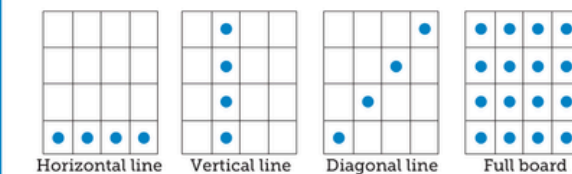
Players mark their board(s) by placing their markers (beans) on the image of the card that is called.

The Caller

Nominate the Lotería "Caller." The Caller shuffles the cards prior to play. They then draw a card from the top of the deck and shout it out to the group.

How to win:

- The first player to fill a line of four (horizontal, vertical, or diagonal) must yell out "LOTERÍA!"
- You can also play to complete the full board.



Horizontal line Vertical line Diagonal line Full board

SCAN THE QR
CODES ON THE
BACK OF THE
CARDS TO LEARN
ABOUT THAT TOPIC!
Original game design by Pima County
Health Department!



Design and implement a culturally and linguistically appropriate (CLAS) intervention in partnership with community members.

Diseñar e implementar una intervención cultural y lingüísticamente apropiada (CLAS) en colaboración con los miembros de la comunidad.



JOHNSON COUNTY
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PROJECT GOALS & OBJECTIVES

Demonstrate proficiency in multi-stakeholder collaboration across JCDHE and external partners.

Demostrar destreza en la colaboración con múltiples partes interesadas, tanto dentro de JCDHE como con socios externos.



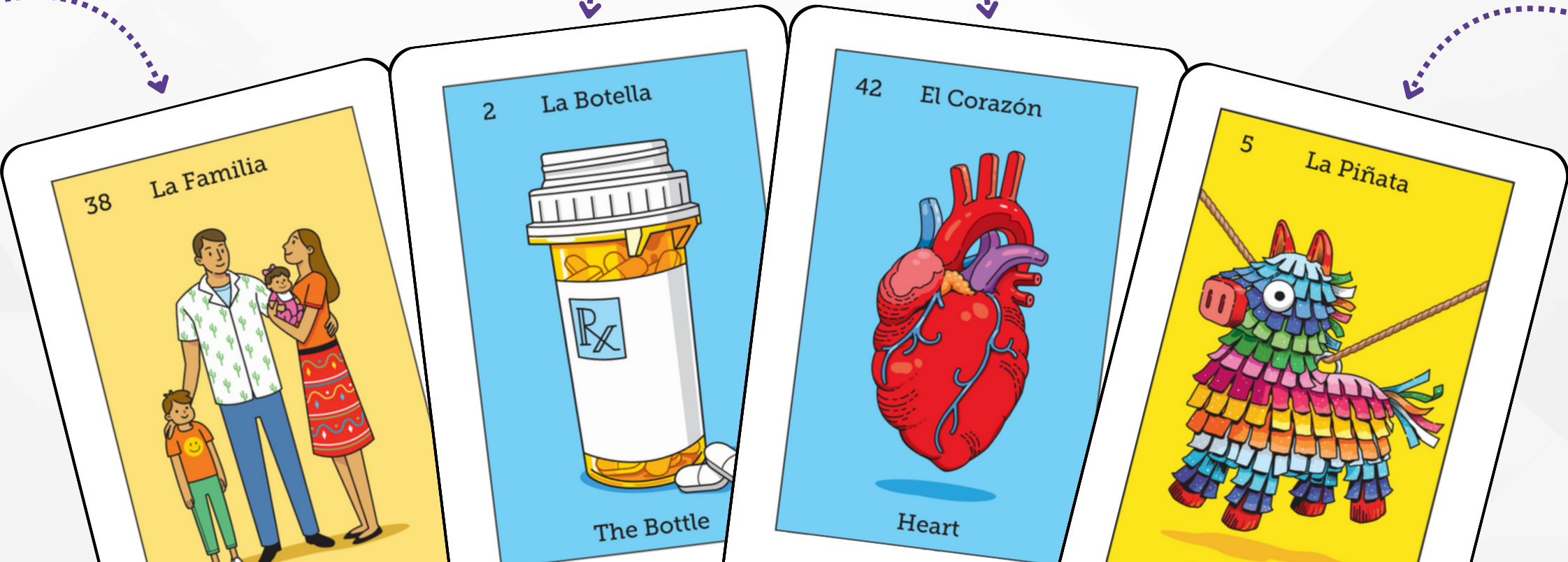
JOHNSON COUNTY
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Apply epidemiological methods to characterize population needs and justify the intervention.

Aplicar métodos epidemiológicos para caracterizar las necesidades de la población y justificar la intervención.



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Health & Environment



Evaluate the intervention's effectiveness using an IRB-approved, mixed-methods approach.

Evaluar la efectividad de la intervención mediante un enfoque de métodos mixtos aprobado por un IRB (Junta de Revisión Institucional).



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METHODOLOGY

A COMMUNITY-CENTERED PROCESS

Data

- Analyzed JCDHE clinical (Patagonia) & interpreter (Propio) data.
- Identified the disparity and necessity.
- Provided clear, evidence-based justification for the intervention.

Partnership

- Formed partnerships with El Centro, JoCo DEI, JoCo Parks and Rec, and Olathe School District.
- They suggested design ideas and validated all cultural and linguistic content.
- This ensured authenticity and relevance.

Design

- Designed 54 bilingual cards, boards, and materials in Canva.
- Coordinated with JCDHE Print Shop for production.
- Partnered with JCDHE Web Team to build the Digital Lotería Health Resource Index.

Evaluation

- Developed a bilingual REDCap survey/consent.
- Obtained IRB approval with a personal identifier exemption to protect privacy and build trust.
- Analyzed survey data to measure usability, intent to use, and trust.





THE DELIVERABLES: A MULTI-PLATFORM TOOLKIT

The Physical Game

Over 100 sets created: 54 custom cards, 11 game boards, instructions, and promotional materials.

The Digital Resource Index

A permanent, bilingual JCDHE website linking each card to live service information.

Patagonia and Propio Data Analysis Report

Excel-based descriptive analysis of Patagonia clinical-service data and Propio interpreter utilization.

Community Distribution and Evaluation Package

The bilingual REDCap survey and response analysis after community event distribution.

33 El Bebé

The Baby

37 El Cerebro

The Brain

36 La Vacuna

The Vaccine

JCDHE offers education and support for new and expecting parents, helping babies get a healthy start.

JCDHE ofrece educación y apoyo a padres nuevos y futuros para que sus bebés tengan un comienzo saludable en la vida.

JOHNSON COUNTY Health & Environment

You Are Not Alone. Mental health matters at every stage of life, from childhood and adolescence through adulthood.

No Estás Solo. La salud mental es importante en todas las etapas de la vida, desde la niñez y la adolescencia hasta la edad adulta.

JOHNSON COUNTY Health & Environment

Immunizations help prevent severe illnesses, are proven to be safe, and work to keep kids in school and adults at work!

Las vacunas ayudan a prevenir enfermedades graves, son seguras y mantienen a niños en la escuela y adultos en el trabajo.

JOHNSON COUNTY Health & Environment

Health Lotería

Board #7

33 El Fútbol

32 La Bandera

23 El Termómetro

24 El Cubrebocas

38 Alimentación Saludable

30 Las Trabajadoras Comunitarias de Salud

33 El Bebé

32 El Corazón

39 El Taco

41 El Cigarrillo

42 El Corazón

40 El Salvador

48 La Bicicleta

49 El Murciélago

50 La Biblioteca

51 La Tormenta

Health Resources

Recursos De Salud

jocgov.org/loteria

JOHNSON COUNTY Health & Environment

¡Juega Lotería de Salud! Donde la tradición se une con el bienestar

Play Health Lotería! Where tradition meets well-being

Escanea el código QR o sigue el enlace URL para saber más!

¡Escanea el código QR o sigue el enlace URL para saber más!

JOHNSON COUNTY KANSAS

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Home > All Departments > Health > Digital Health Lotería Resources

Digital Health Lotería

Welcome to Health Lotería, a fun new way to learn about the valuable health services and community resources available right here in Johnson County!

Based on the beloved traditional Mexican game of chance, this special edition was created by the Johnson County Department of Health and Environment in partnership with El Centro. Instead of featuring traditional figures like "El Gallo" or "La Dama," each card in our game showcases an important service, health concept, or local resource that can help you and your family stay healthy, safe, and connected.

This game is more than just fun — it's a take-home resource library. We encourage you to play with your friends and family, and afterward, take a moment to look at the back of the playing cards. There you will find a brief description of each topic in both English and Spanish. Play, learn and share this knowledge to help build a healthier community for everyone!

Scroll through the cards below and click on the links for further information.

Explore the Digital Health Lotería

1. La Muerte / The Death

Kansas City's Day of the Dead Weekend is an annual event to deepen your connection to the community and lost loved ones.

El Fin de Semana de Día de Muertos en Kansas City es un evento anual para conectar más con la comunidad y seres queridos perdidos.

Day of the Dead Weekend

2. La Botella / The Bottle

The county offers safe and effective methods of drug disposal to minimize pollution and ensure high-quality water.

JCDHE ofrece métodos seguros y efectivos para desechar medicamentos para minimizar la contaminación y garantizar agua de alta calidad.

Drug Disposal

3. La Dama / The Lady

JCDHE offers health services for women of all ages, including breast and cervical cancer screenings.

JCDHE ofrece servicios de salud para mujeres de todas las edades, incluyendo exámenes de detección de cáncer de mama y cervical.

Early Detection

4. El Diablitto / The Devil

Fight unhealthy habits with exercise, good diet, annual doctor check-ups, and a positive attitude!

¡Combate los hábitos poco saludables con ejercicio, buena alimentación, chequeos médicos anuales y una actitud positiva!

Figure 2. Top-10 Programs by Encounters (Preferred Spanish Patients; 3/21/2023 – 9/2/2025)

Program	Encounters (Approximate)
Colposcopy	100
Mother Baby Outreach	200
Postpartum	300
STI Testing	350
MCH Outreach	400
Early Detection Works	500
Nurse Family Partnership	1200
Family Planning	3800
Immunizations	4200
Maternal Health	6000

Percentage of Propio Translation Services Money Spent by Language and Month, Johnson County Department of Health and Environment, Last 12 Months

Month	% Arabic	% Portuguese	% Spanish	% Other
Nov, 2024	16.5%	18.3%	48.7%	16.7%
Dec, 2024	8.5%	14.9%	56.5%	20.1%
Jan, 2025	13.3%	13.6%	57.0%	16.0%
Feb, 2025	10.4%	13.7%	57.7%	18.1%
Mar, 2025	10.8%	12.8%	54.3%	22.1%
Apr, 2025	11.1%	15.2%	52.3%	21.0%
May, 2025	14.0%	15.4%	52.7%	17.9%
Jun, 2025	11.9%	11.7%	58.2%	18.2%
Jul, 2025	14.2%	9.1%	54.9%	21.8%
Aug, 2025	9.6%	10.6%	54.4%	25.3%
Sep, 2025	11.4%	10.4%	54.7%	23.4%
Oct, 2025	14.8%	7.3%	51.0%	26.8%

JOHNSON COUNTY KANSAS

Health & Environment

Encuesta de Lotería de Salud

¿Alguna vez has experimentado barreras del idioma al intentar acceder a servicios de salud o recursos comunitarios?

SI

No

Reiniciar

Por favor, lea cuidadosamente cada una de las siguientes afirmaciones y responda con su nivel de acuerdo:

	Totalmente de Acuerdo	Algo de Acuerdo	Neutral	Algo en Desacuerdo	Totalmente en Desacuerdo
Yo ya estaba familiarizado(a) con los servicios ofrecidos por JCDHE antes de conocer la Lotería de la Salud.	☐	☐	☐	☐	☐
Creo que el Condado de Johnson necesita recursos de salud y comunitarios más inclusivos.	☐	☐	☐	☐	☐
La información en las tarjetas de la Lotería de la Salud fue fácil de entender.	☐	☐	☐	☐	☐
En el futuro, usaré la Lotería para ayudarme a encontrar recursos e información sobre salud y servicios comunitarios.	☐	☐	☐	☐	☐
Mi confianza general en JCDHE ha aumentado debido a mi experiencia de hoy con la Lotería de la Salud.	☐	☐	☐	☐	☐

Muchos de estos recursos dentro de la Lotería de la Salud son específicos del Condado de Johnson, con la intención de expandirse al Área Metropolitana de Kansas City. Debido a esto, ¿podría compartir en cuál de los siguientes condados vive?

Por favor, comparta cualquier comentario o retroalimentación adicional que tenga sobre su experiencia con la Lotería de la Salud hoy:

Expandir

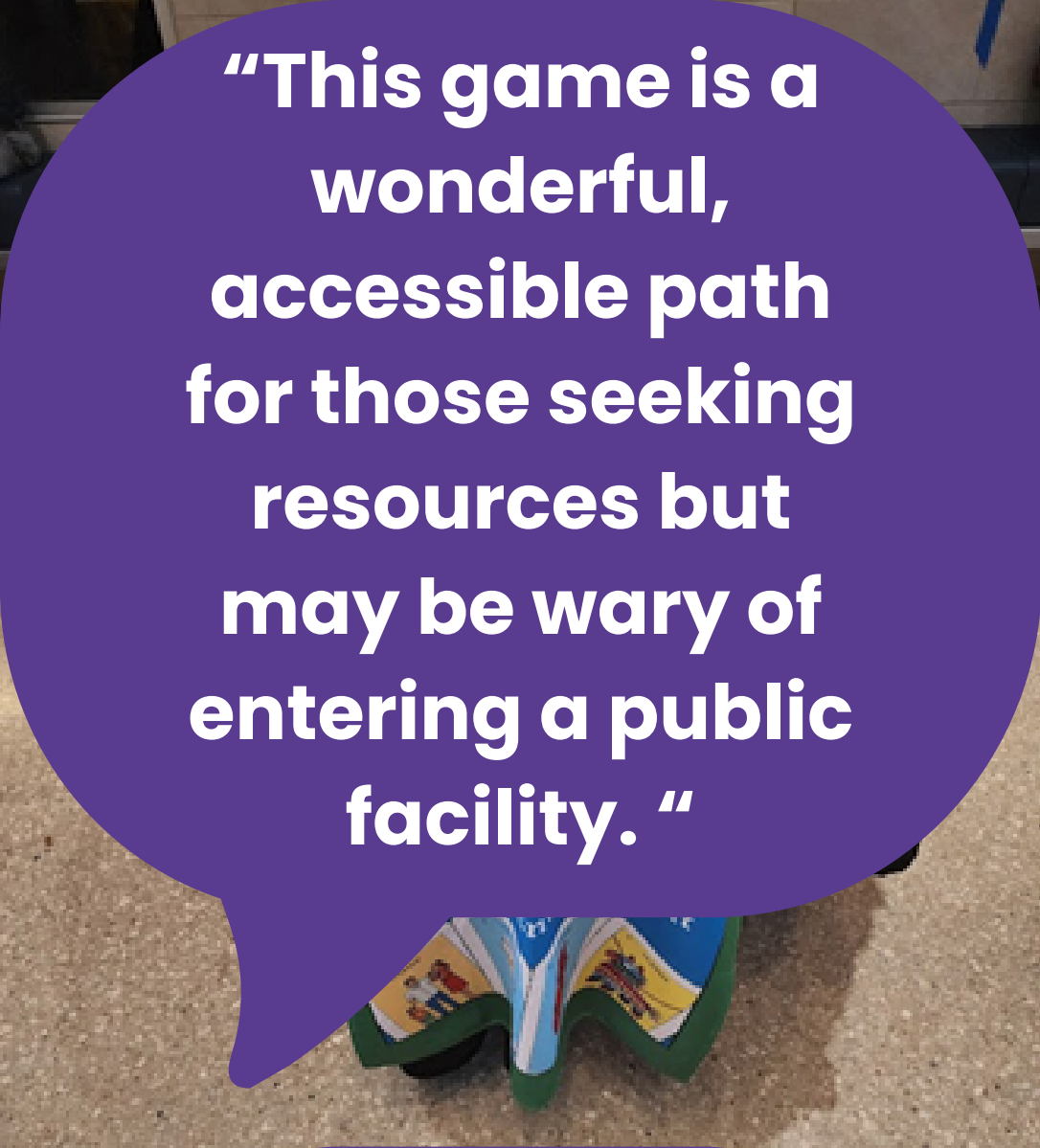
Entregar

Powered by REDCap - Cookie policy

Implementation: Meeting the Community Where They Are

Engaging with the community at cultural events allowed us to listen to participant feedback and see the potential positive impact of Health Lotería.

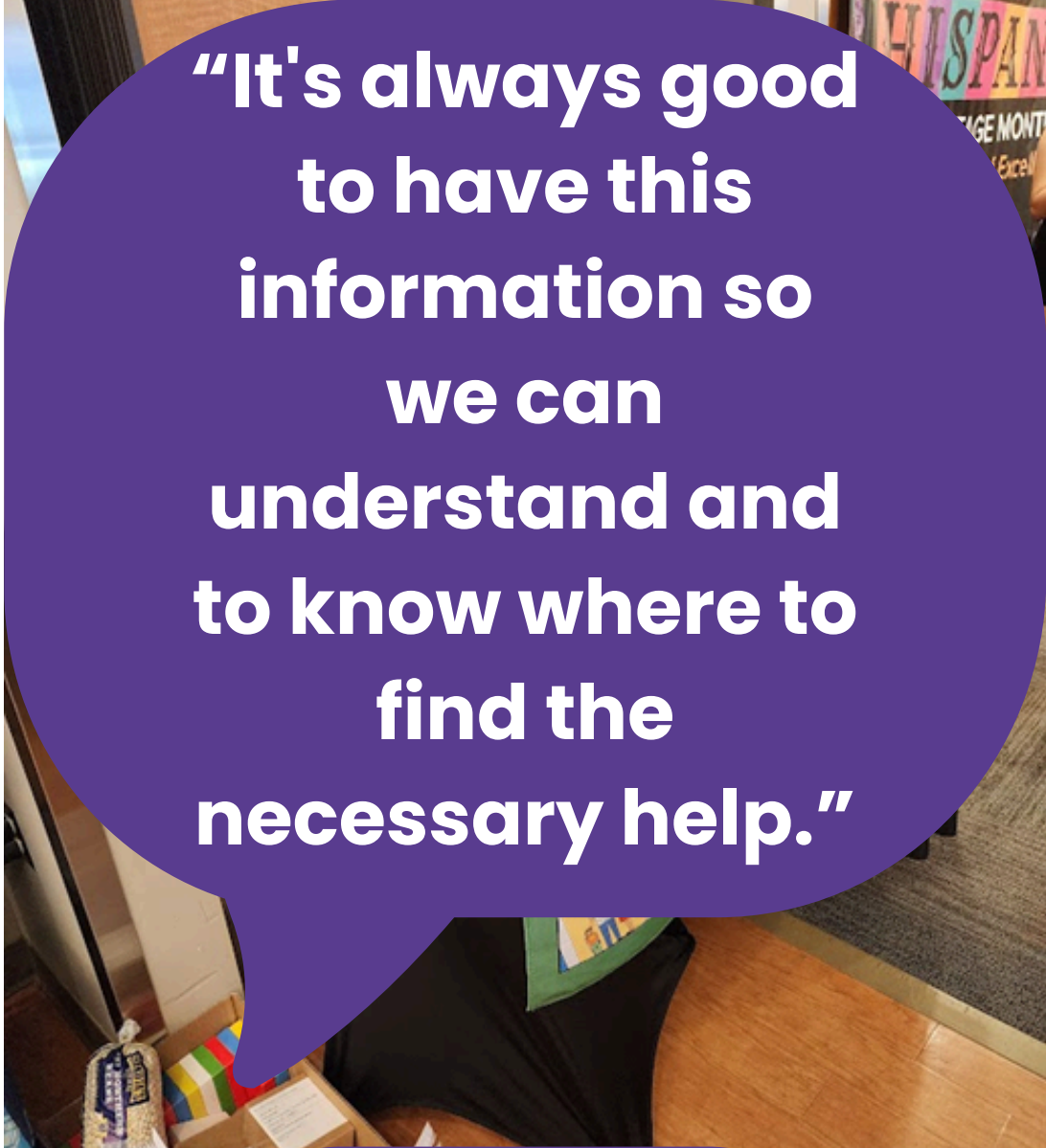




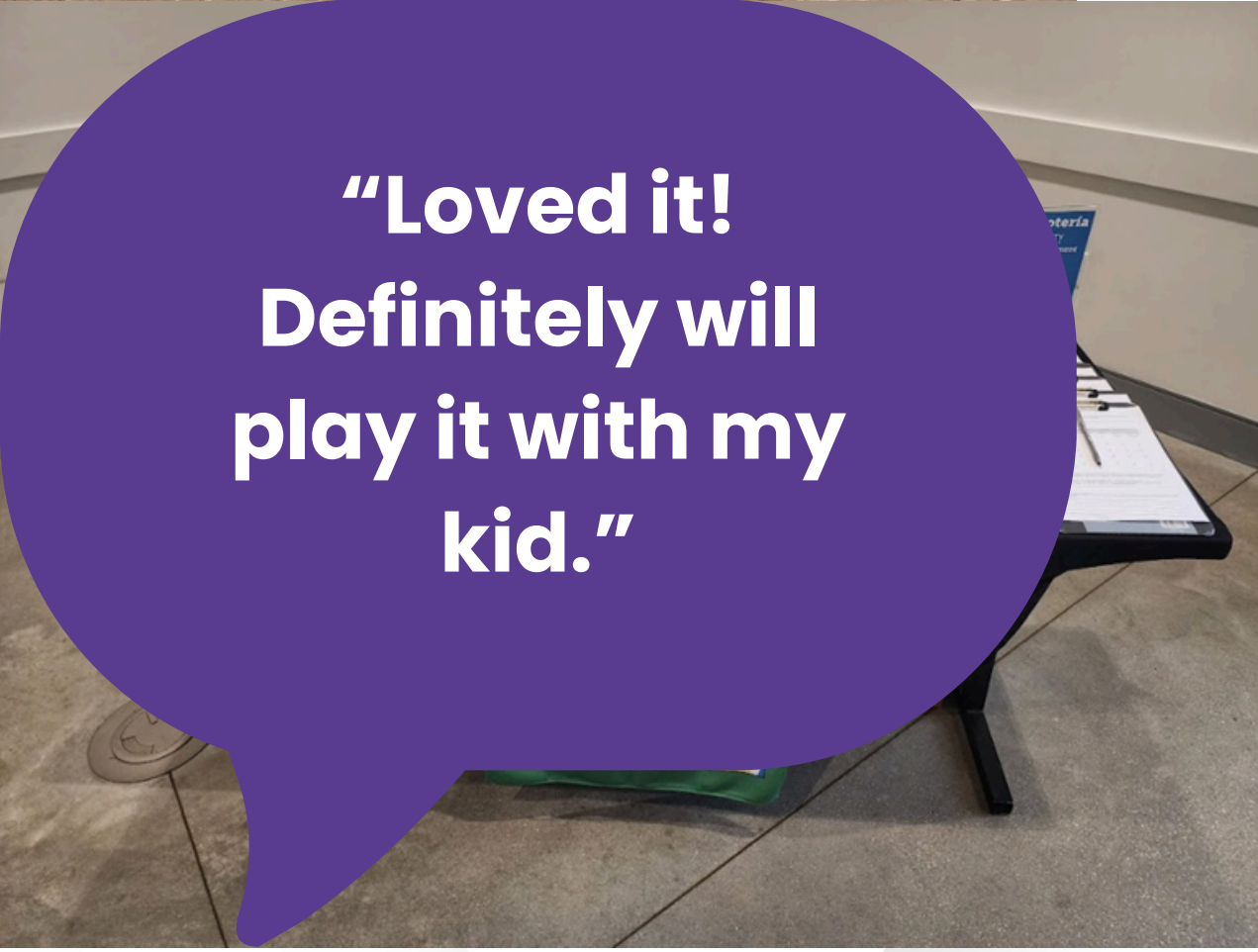
"This game is a wonderful, accessible path for those seeking resources but may be wary of entering a public facility."



"Thank you so much for creating this. It is very creative. As a Spanish teacher, I plan on playing it with my students in class!"



"It's always good to have this information so we can understand and to know where to find the necessary help."



"Loved it! Definitely will play it with my kid."



"I wish you can keep sharing in other languages to support other communities."



"I think this is a great resource to engage with all the family."

RESULTS:

WHO WE REACHED

County of Residence	Number of Respondents	Percentage
Clay County	1	1.3%
Jackson County	4	5.3%
Johnson County	59	78.7%
Shawnee County	1	1.3%
Wyandotte County	9	12.0%
Prefer Not to Answer	1	1.3%
Total	75	100.0%
Preferred Survey Language		
English	22	29.3%
Spanish	53	70.7%
Total	75	100.0%
Have you ever experienced language barriers when attempting to access health and community resources?		
English-Preference: Yes	7	9.3%
English-Preference: No	15	20.0%
Spanish-Preference: Yes	32	42.7%
Spanish-Preference: No	21	28.0%
Total	75	100.0%
Community Engagement Event		
Olathe Schools College Planning Night	16	21.3%
Arts & Heritage Center Hispanic Heritage Festival	37	49.3%
Olathe Schools Hispanic Excellence Awards	4	5.3%
El Centro Health Fair	18	24.0%
Total	75	100.0%

100 Health Lotería Games Distributed.

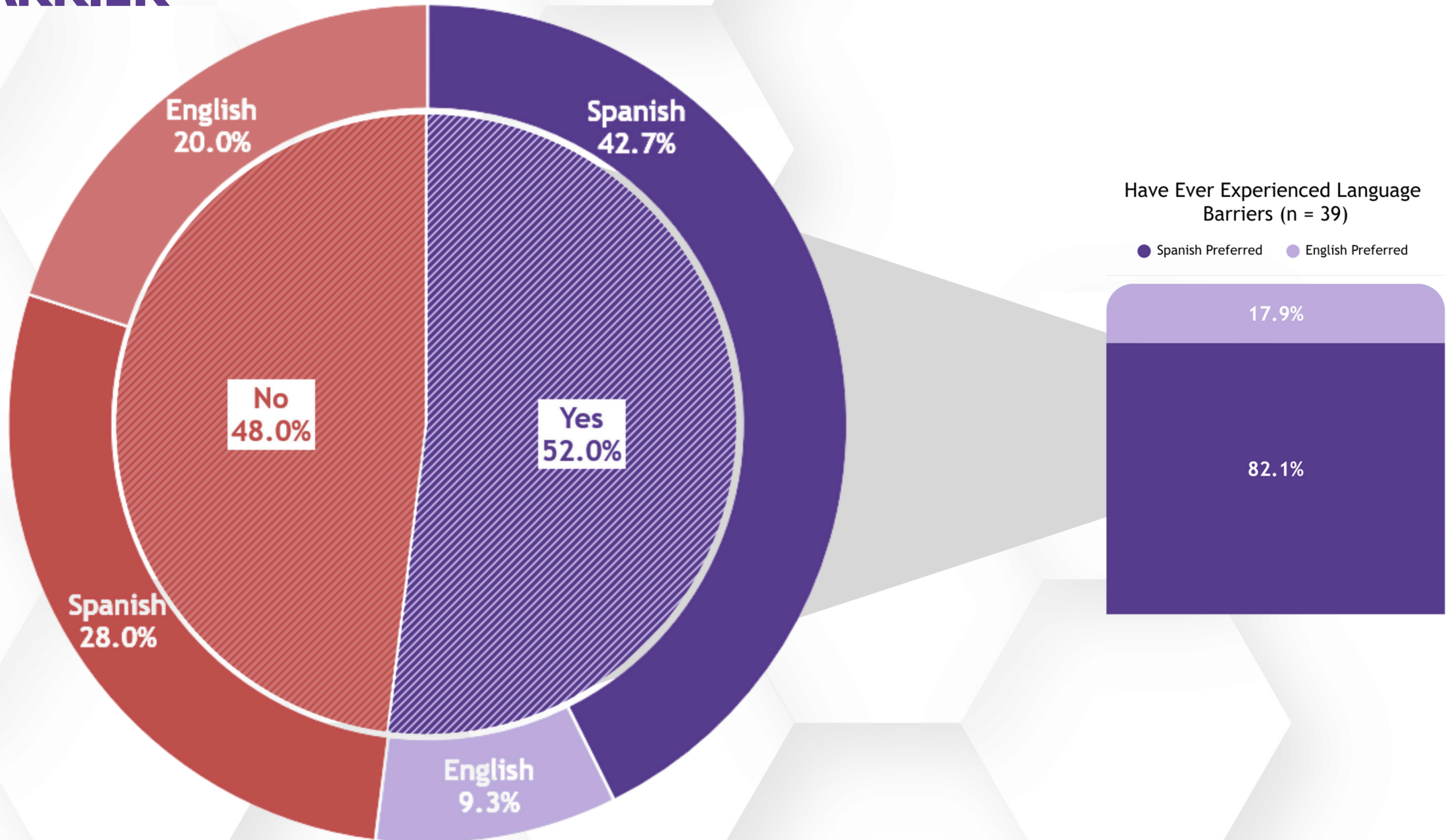
75 Health Lotería Surveys Collected.

79% of our respondents were Johnson County residents.

71% of all respondents chose to take the survey in Spanish.

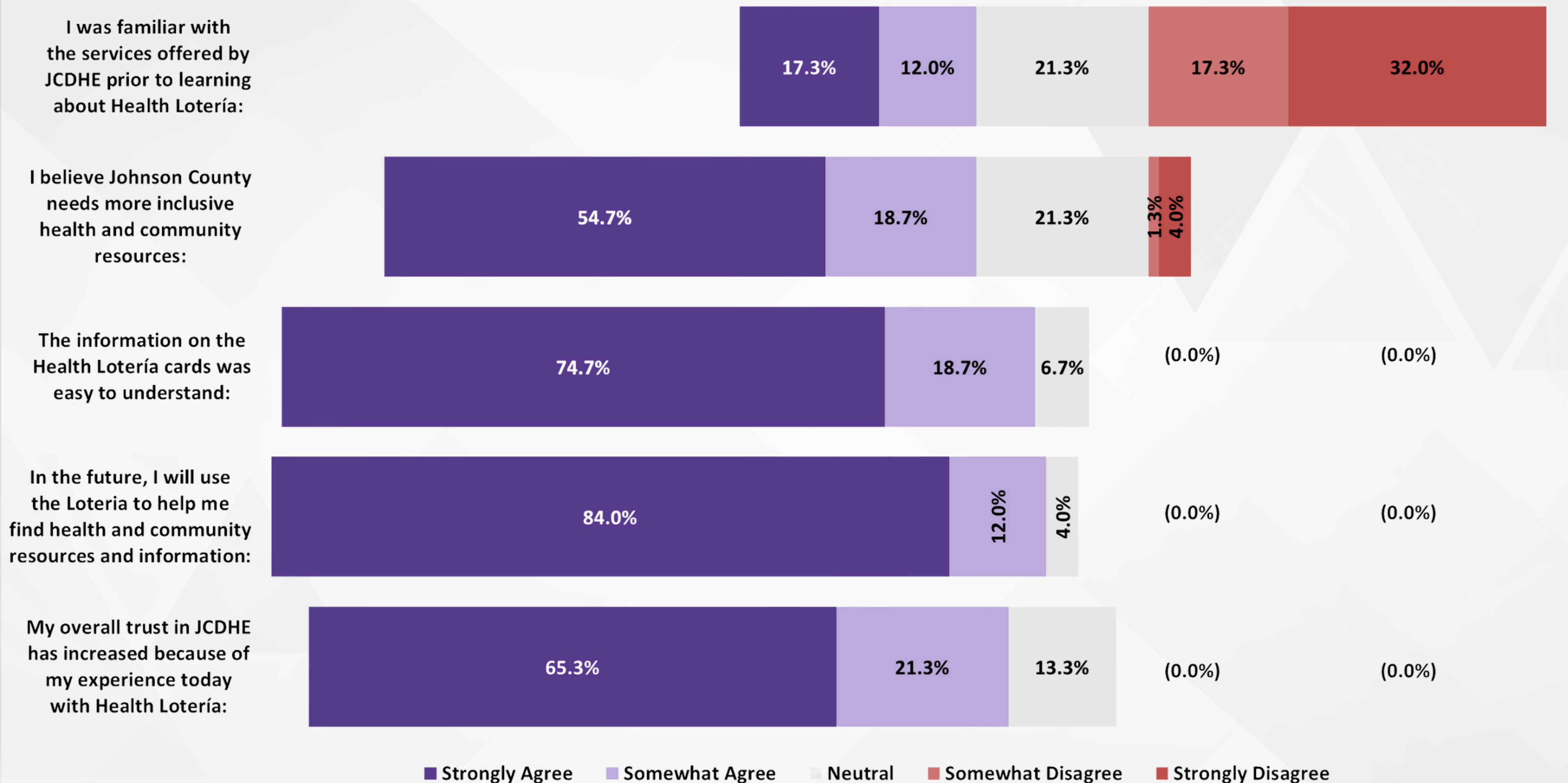
RESULTS: THE BARRIER

HAVE YOU EVER EXPERIENCED LANGUAGE BARRIERS WHEN
ATTEMPTING TO ACCESS HEALTH AND COMMUNITY RESOURCES?



RESULTS: LIKERT RESPONSE

Survey Responses for All Respondents



RESULTS: LIKERT RESPONSE

Survey Responses for All Respondents

Familiarity: 49%

were unfamiliar with JCDHE services.

Necessity: 73%

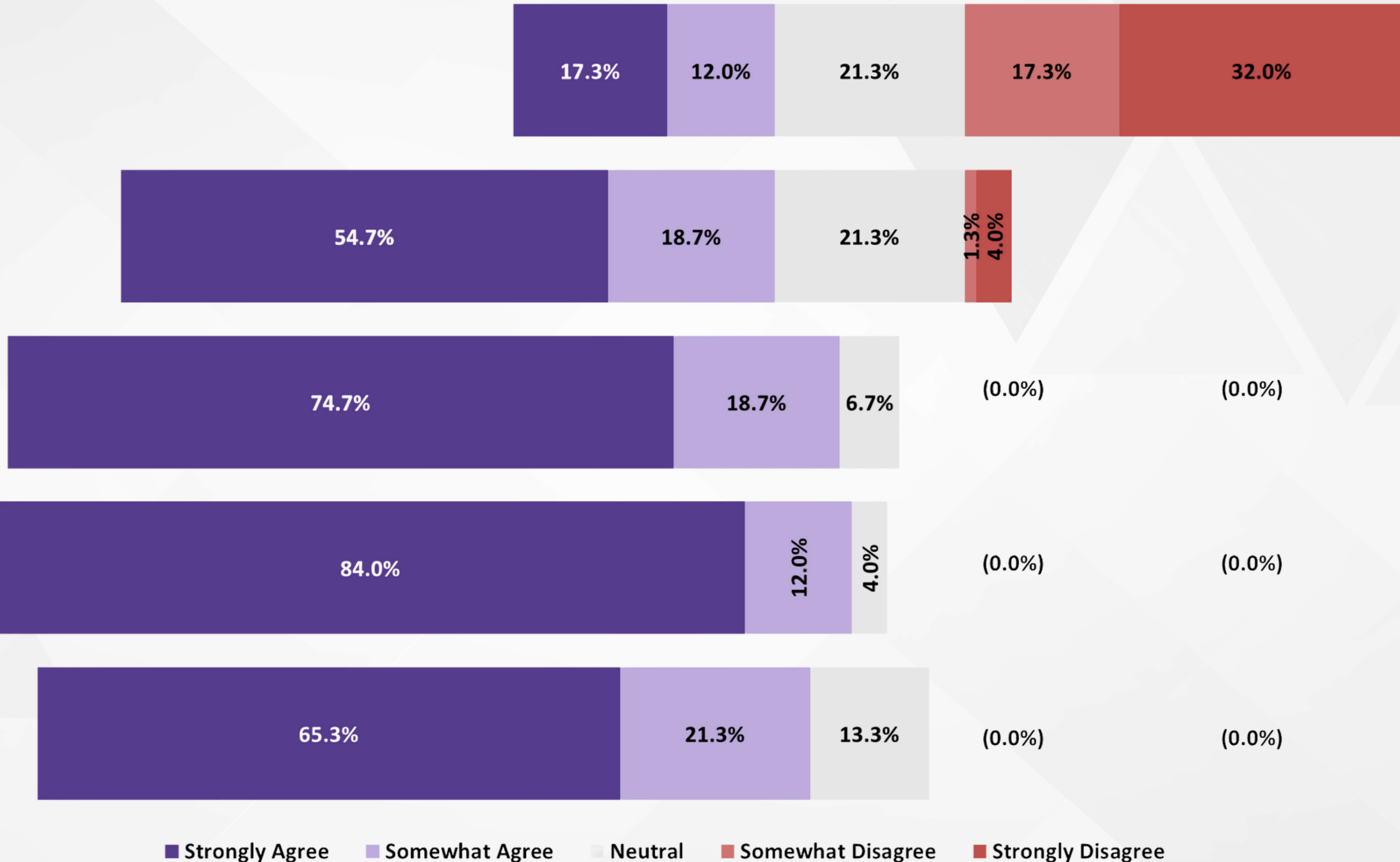
agreed "Johnson County needs more inclusive resources."

Usability: 93%

found the cards "easy to understand."

Intent: 96% "will use" the Lotería to find resources in the future.

Trust: 87% agreed their "trust in JCDHE increased."



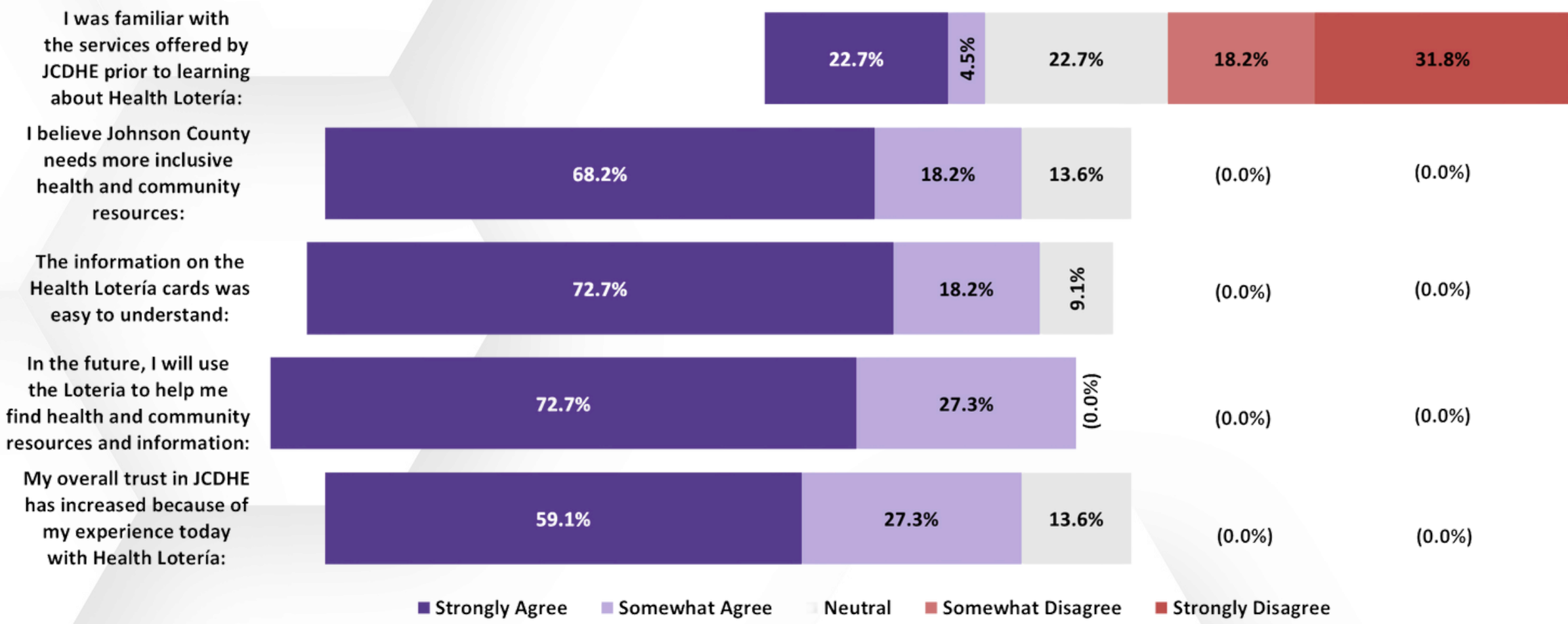
RESULTS: BY LANGUAGE

86% reported increased trust in JCDHE.

100% agreed they would use the Lotería in the future!

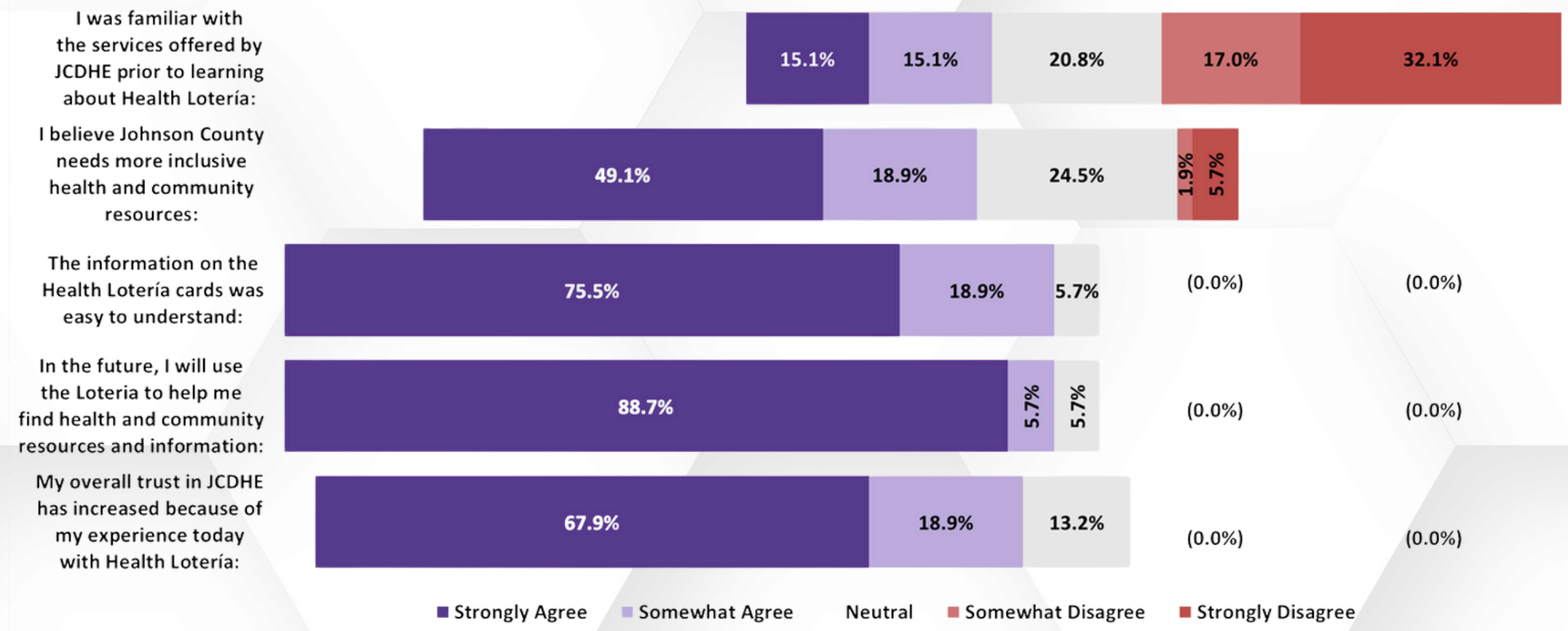
ENGLISH

Survey Responses for Respondents Indicating English for Preferred Survey Language



SPANISH

Survey Responses for Respondents Indicating Spanish for Preferred Survey Language



76% Strongly Agreed it “was easy to understand.”

89% Strongly Agreed they would use the Lotería in the future!

87% reported increased trust in JCDHE.

LIMITATIONS & QUALITY IMPROVEMENT

Sampling:

Used event-based convenience sampling (not generalizable); includes potential for selection and response bias.

Trade-offs:

The implied consent process prioritized trust and access over collecting detailed identifying demographic data.

Data Streams:

Clinical (Patagonia), interpreter (Propio), and survey data are complementary and contextual, not a matched cohort.

Accessibility:

Identified practical barriers (e.g., vision/reading); future events can be improved with simple aids (e.g., magnifiers).

Scope:

Evaluation focused on immediate, self-reported outcomes (trust, intent), not long-term, measured behavior change.

5

La Piñata



The Piñata

10

Documentos
Oficiales



Vital Records

12

El Pasante



The Intern

26

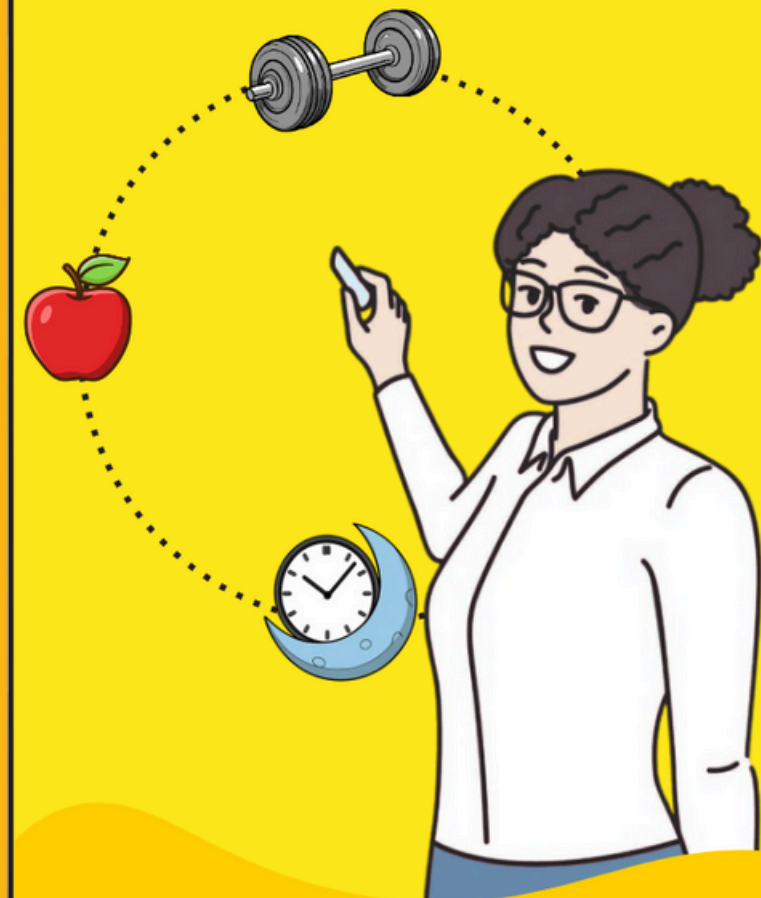
El Viejito



Older Adults

53

Las Promotoras
de Salud



Health Promoters

DISCUSSION & LESSONS LEARNED

Lesson 1: From "For the Community" to "With the Community"



Lesson 2: The Process **Is** the Intervention



Lesson 3: **Representation** Can Be More Powerful Than Translation

FUTURE DIRECTIONS & SUSTAINABILITY

Sustain:

A Permanent Digital Resource



Expand:

Funding for 900+ More Games



Iterate:

Community-Driven Improvements



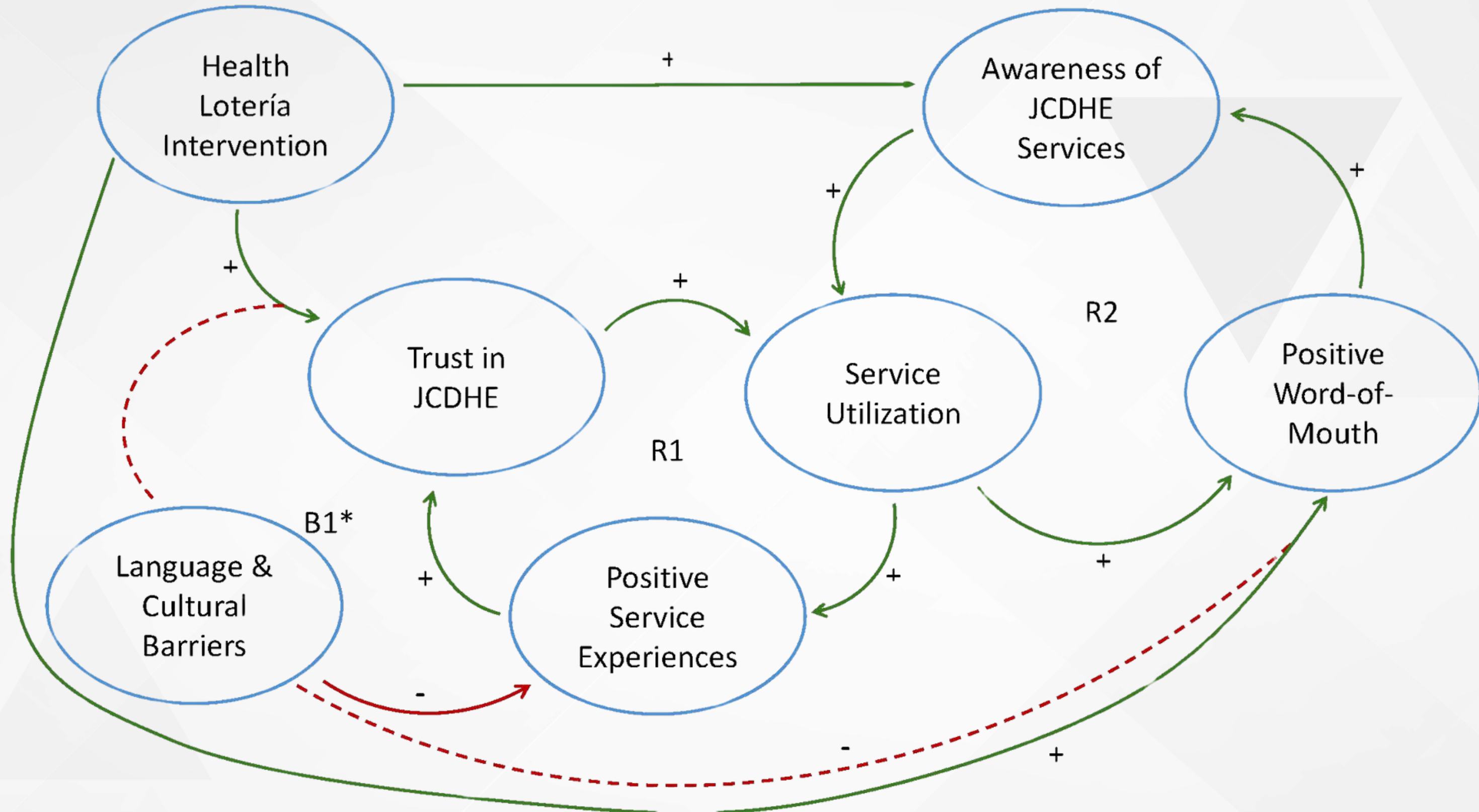
MPH EMPHASIS AREA COMPETENCIES

#	Infectious Disease and Zoonoses Competency	Description
1	Pathogen/pathogenic mechanisms	Evaluate modes of disease causation of infectious agents.
2	Host response to pathogens/immunology	Investigate the host immune response to infection.
3	Environmental/ecological influences	Examine the influence of environmental and ecological forces on infectious diseases.
4	Disease surveillance	Analyze disease risk factors and select appropriate surveillance.
5	Disease vectors	Investigate the role of vectors, toxic plants and other toxins in infectious diseases.

MPH FOUNDATIONAL COMPETENCIES

#	Competency	Fulfilling Products
1	Apply epidemiological methods to the breadth of settings and situations in public health practice.	• Patagonia and Propio Data Analysis Report
3	Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate.	• Patagonia and Propio Data Analysis Report • Community Distribution and Evaluation Package
8	Apply awareness of cultural values and practices to the design or implementation of public health policies or programs.	• Health Lotería Game Set and Promotional Materials • Digital Health Resource Index Website • Community Distribution and Evaluation Package
9	Design a population-based policy, program, project, or intervention.	• Health Lotería Game Set and Promotional Materials • Digital Health Resource Index Website;
19	Communicate audience-appropriate public health content, both in writing and through oral presentation.	• Health Lotería Game Set and Promotional Materials • Digital Health Resource Index Website;
22	Apply systems thinking tools to a public health issue.	• Health Lotería Causal Loop Diagram

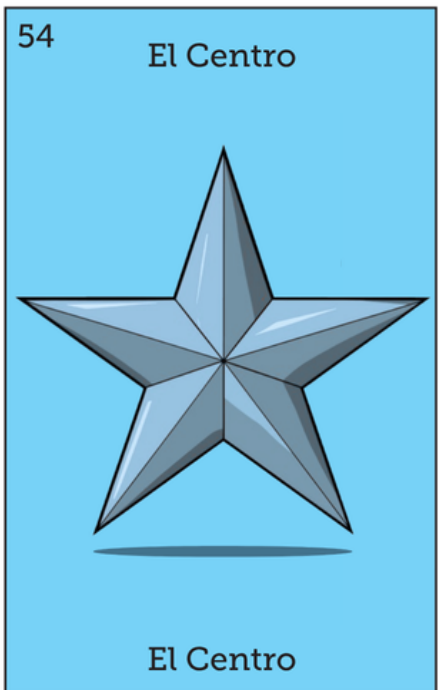
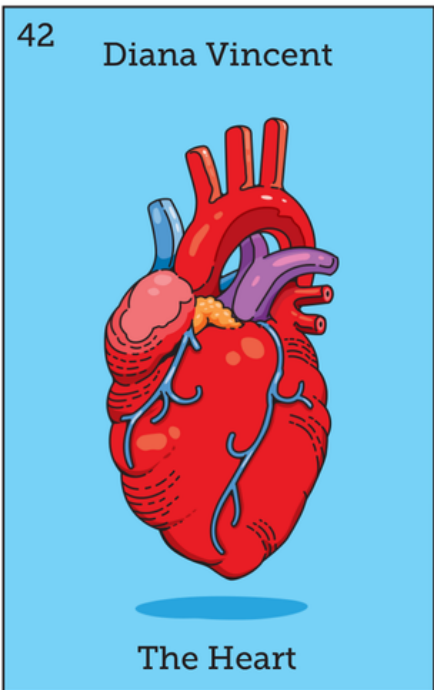
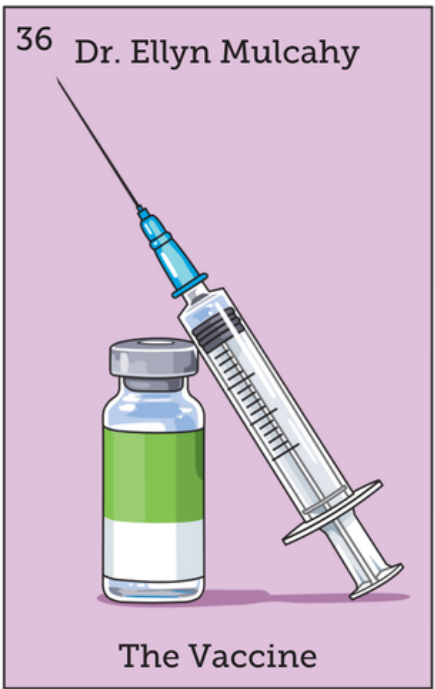
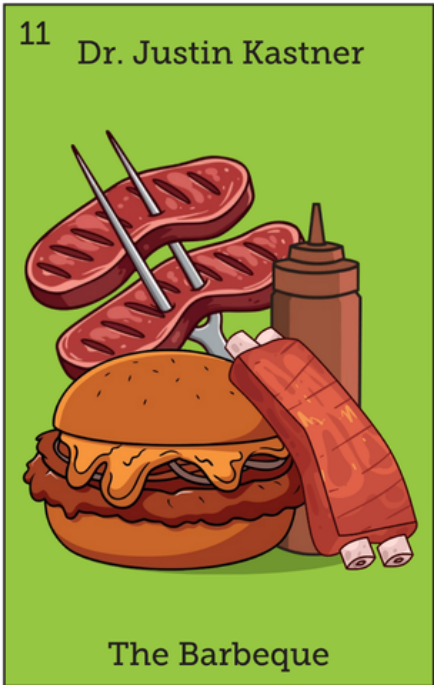
Health Lotería Causal Loop Diagram



*Not a True Feedback Loop, but a balancing force.



ACKNOWLEDGEMENTS



THANK YOU

Questions?



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