



Riley County Health Department: Hispanic Outreach Team Project

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Master of Public Health: Physical
Activity Emphasis

Major Professor: Dr. Katie Heinrich



Graduate Committee

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Outline

- Terms
- Overview
- Background
- Project Description
- Results
- Discussion
- Conclusion
- Competencies
- Acknowledgements
- References

Terms

- **Health Literacy:** “the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions” (Manganello, 2008, p. 840)
- **Hispanic:** having connections with Spain and Spanish culture and tradition (Anwar, 2015)
- **Latino:** “the way that Latin Americans are connected to one another via their common history of colonization” (Anwar, 2015)
- **Limited English Proficiency (LEP):** those who cannot speak, read, write, or understand English at a comfortable level that allows them to interact effectively with healthcare providers (Zun et al., 2006)

Overview- Riley County Health Department (RCHD)

- Hispanic Outreach Project Team
 - Determine needs, barriers to access, and awareness of health department-related services for Spanish speakers and LEP individuals
- Importance
 - Health literacy for public health and health promotion
 - Miscommunication between patient and provider
 - Language barriers



Background

- Health Literacy
- Public Health's Role
- Framework
- Language Barriers
- Hispanic Population in Kansas
- Manhattan, KS Spanish-speaking Population

Health Literacy

- Rise in minority populations of whom many do not comprehend or speak English (Zun et al., 2006)
 - known to have LEP
- By 2025, the US Hispanic population should increase from 31 million to 59 million (Carillo et al., 2011)
- Hispanic population barriers regarding healthcare services
 - lack of access to healthcare information
 - knowledge of services in Spanish



Public Health's Role

- Patients who lack health literacy
 - Hard to complete medical forms
 - Cannot understand prescription medication instructions
 - Difficulty comprehending provider instructions (Rowlands, 2012)
 - Cannot read/comprehend messages from health media, campaigns, or educational programs (Rowlands, 2012)

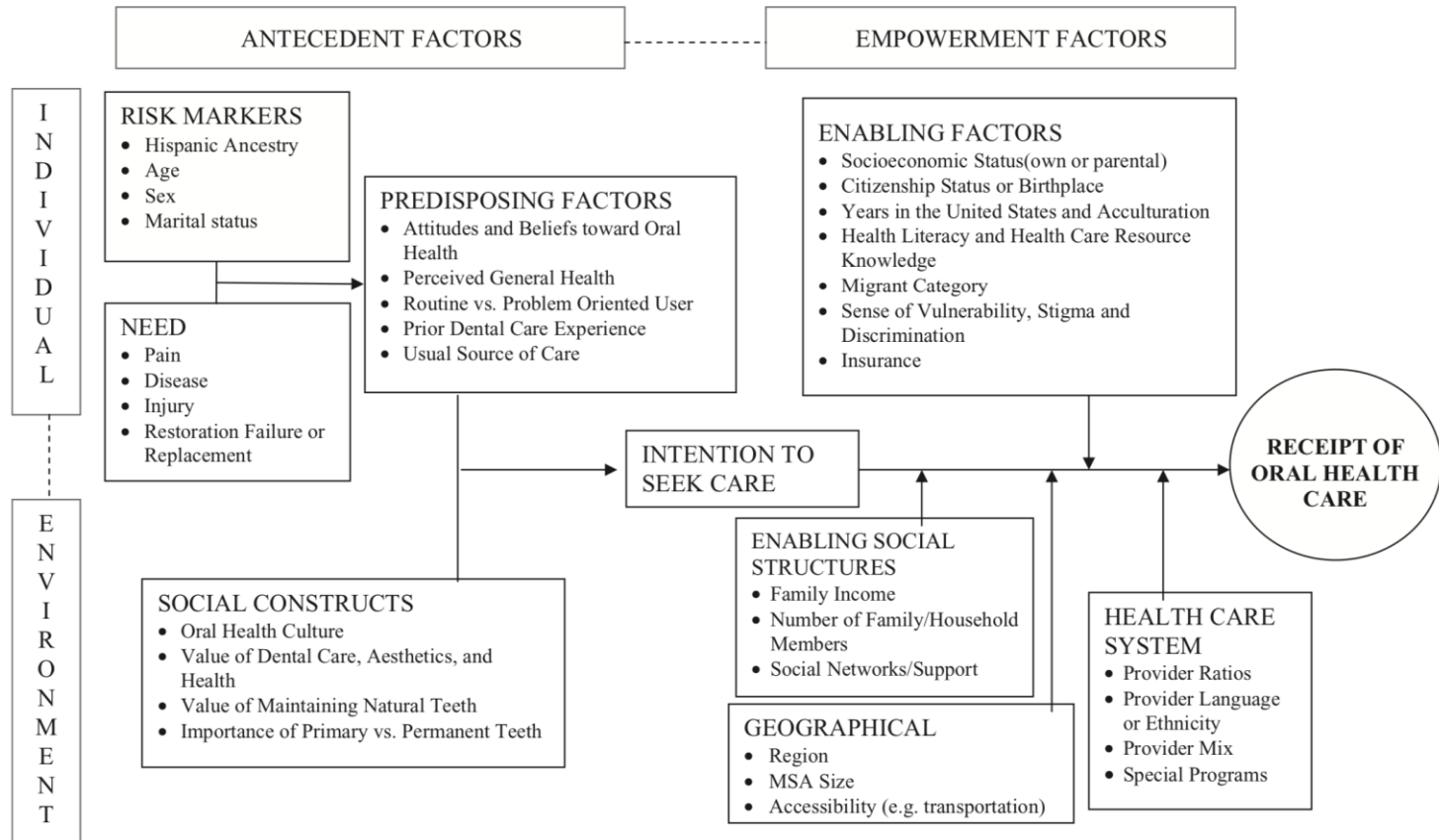


Framework

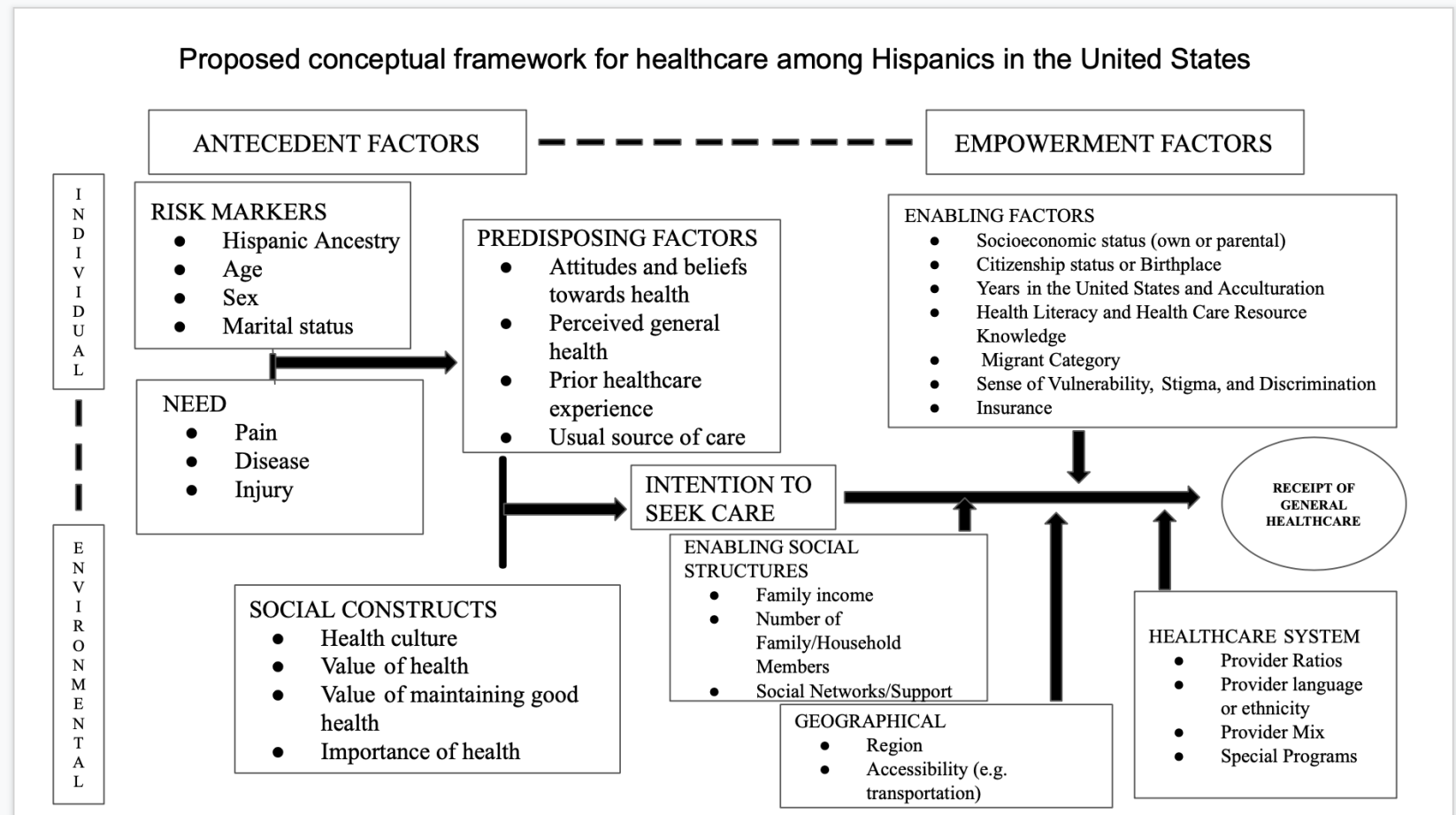
- Mejia and colleagues (2008) proposed a conceptual framework for the receipt of oral health care among Hispanics in the United States
- Proposed framework → tailored to support health literacy in overall health care among Hispanics
 - focuses on constructs that are part of the individual and their social environment (Mejia et al., 2008)

Original Framework

Proposed conceptual framework for the receipt of oral health care among Hispanics in the United States



Tailored Framework



Tailored Framework

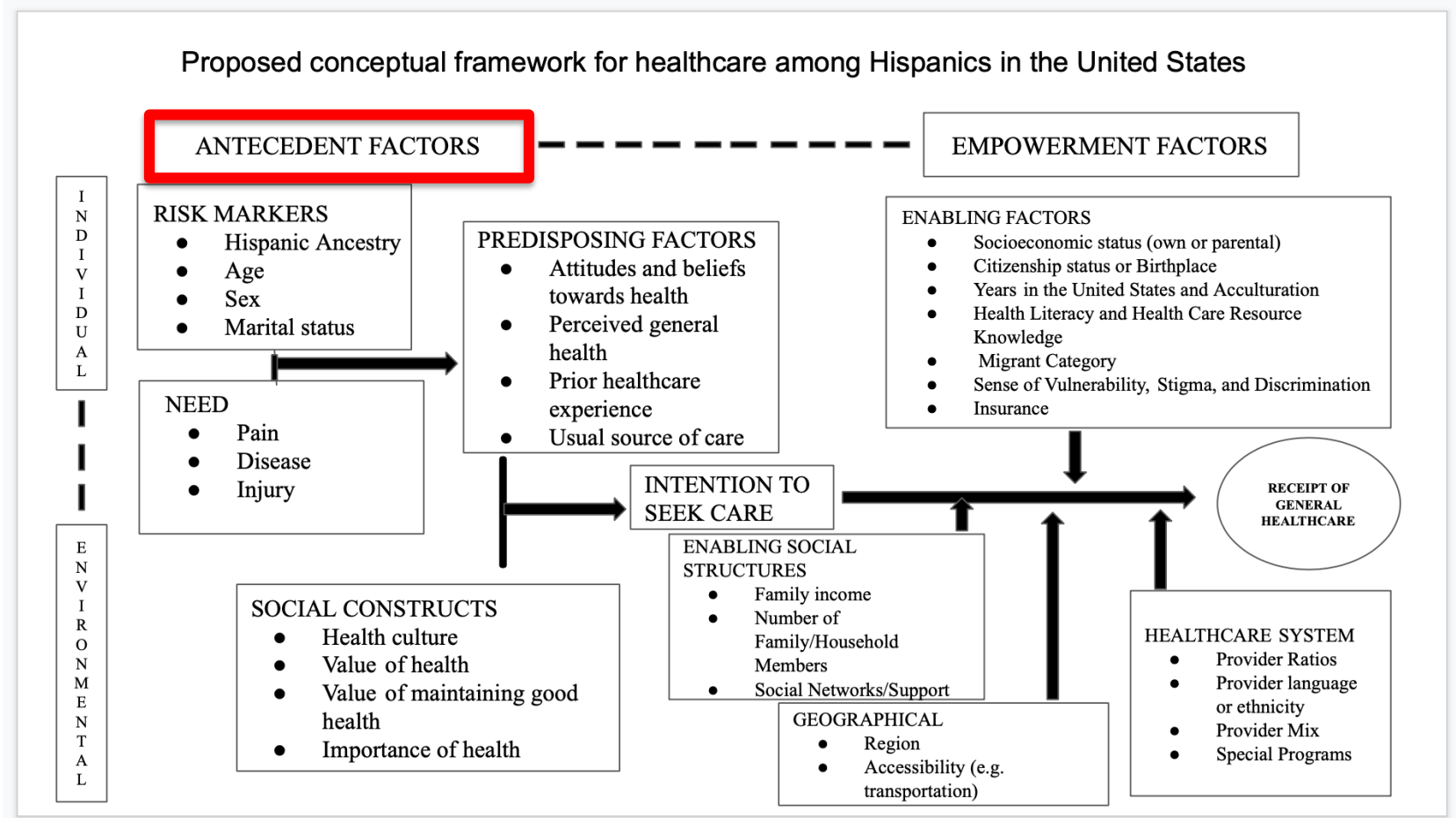
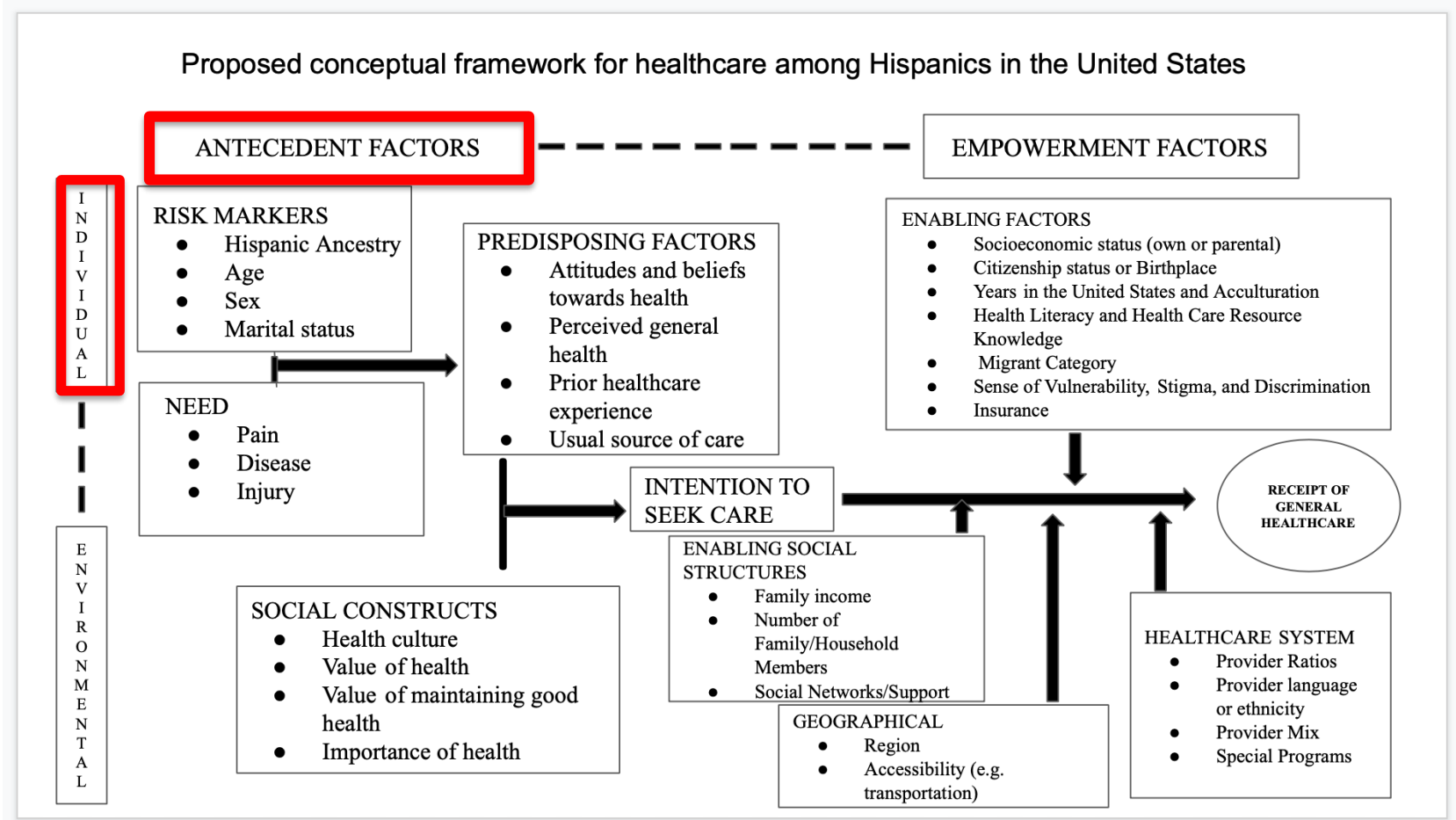
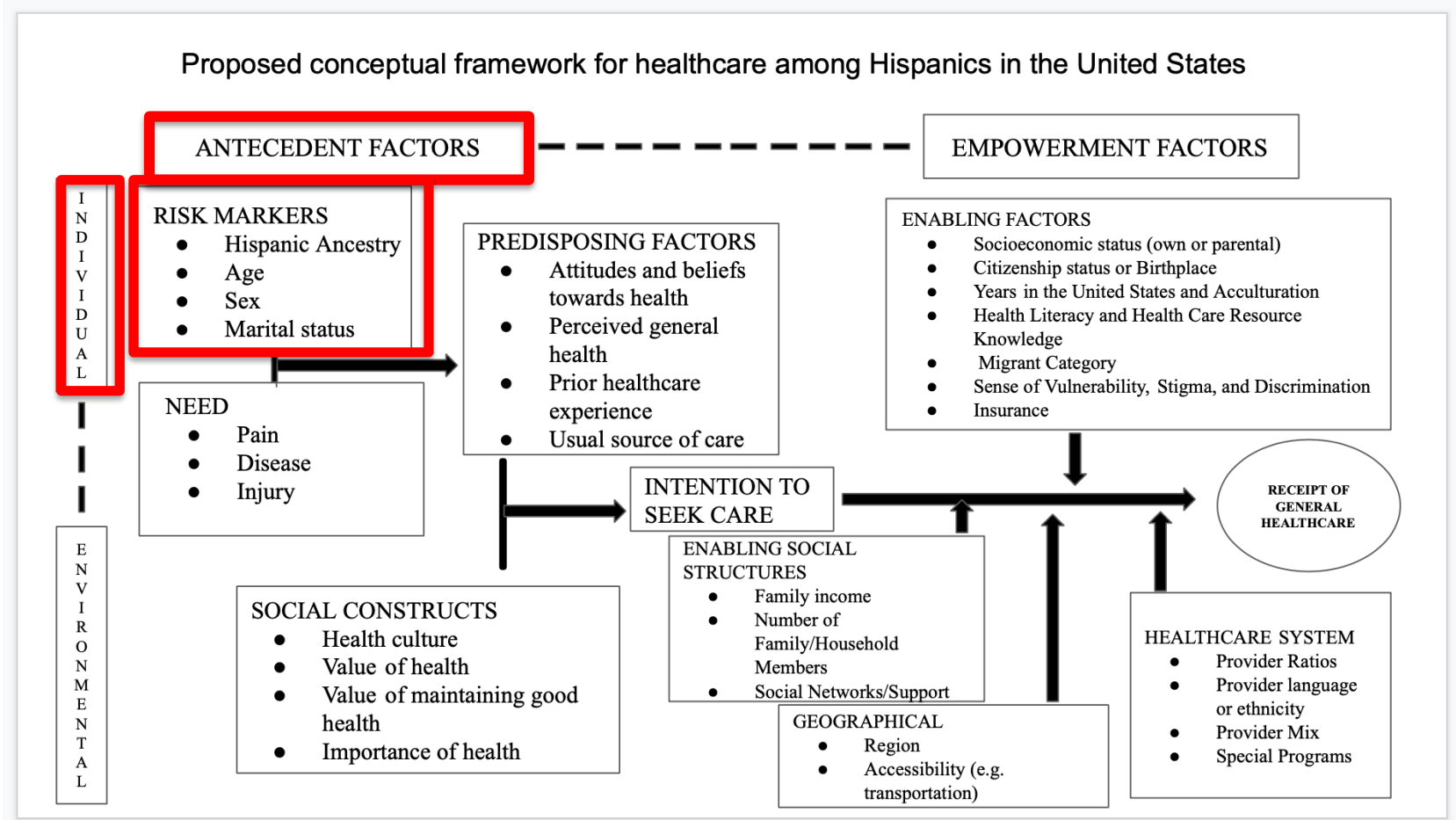


Figure 1. Proposed conceptual framework for healthcare among Hispanics in the United States (Mejia et al., 2008)

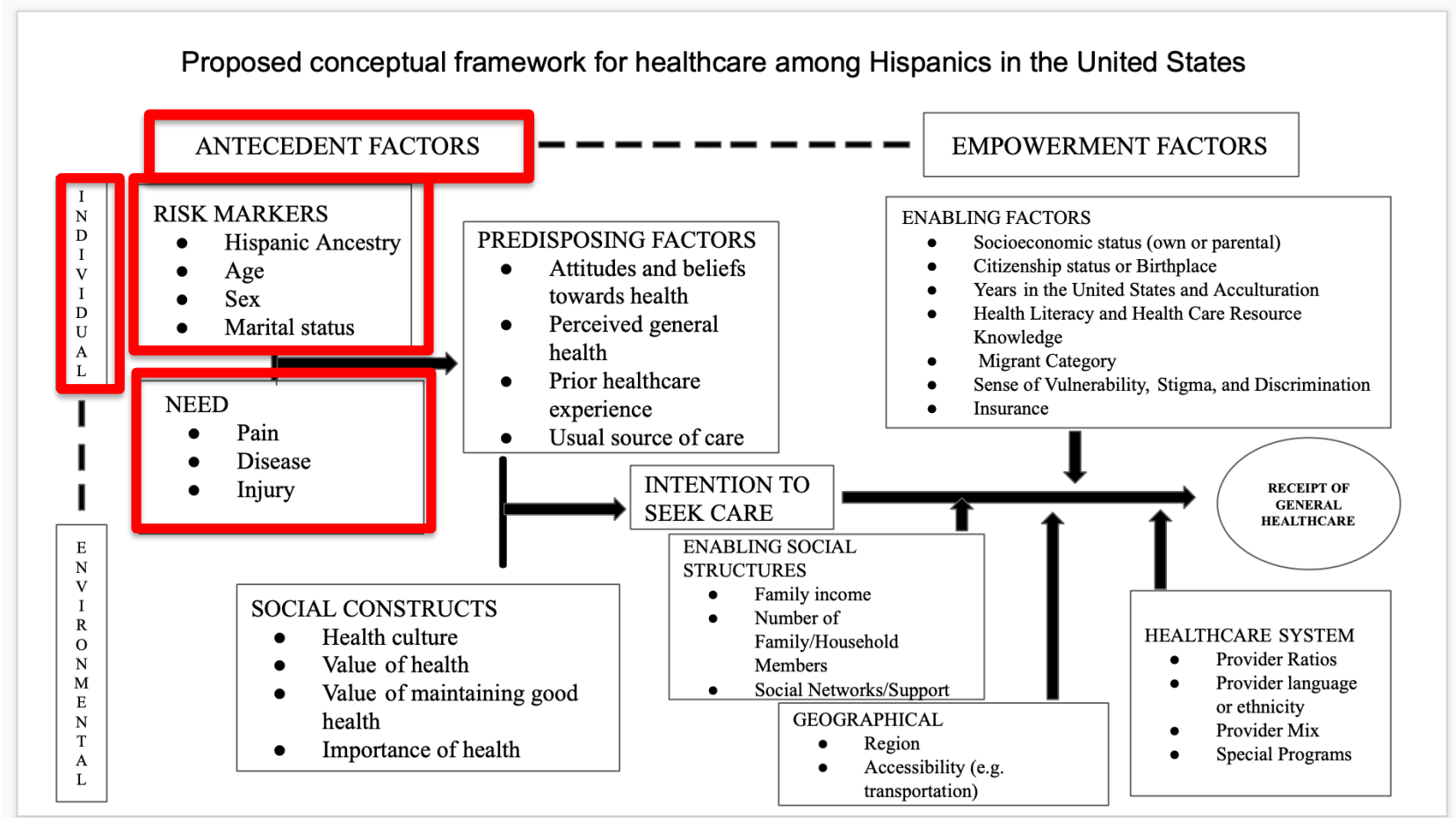
Tailored Framework



Tailored Framework



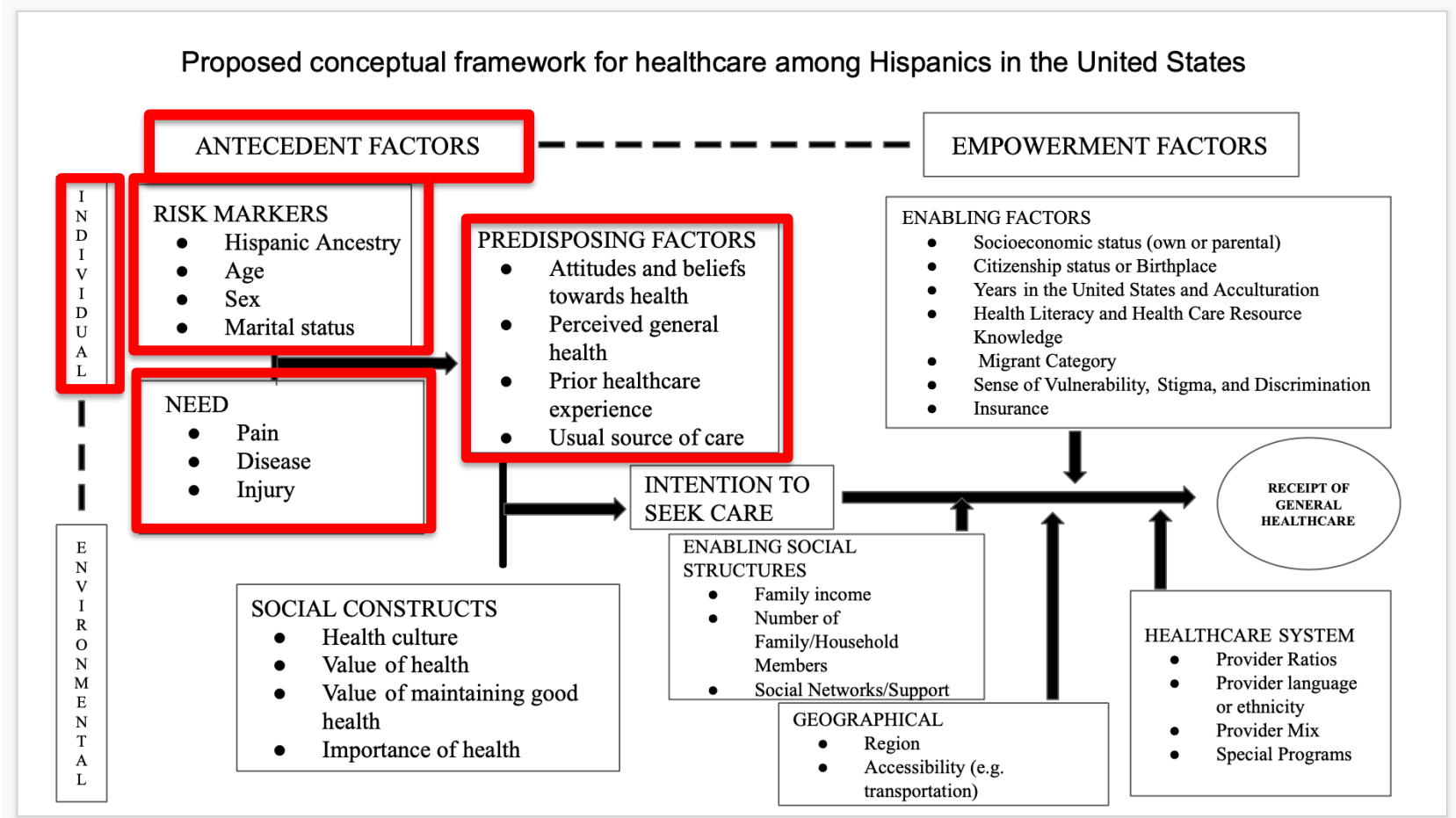
Tailored Framework



Antecedent Factors

- Individual
 - Antecedent Factors
 - Risk Markers
 - Age
 - Sex
 - Marital Status
 - Need
 - Pain
 - Disease
 - Injury

Tailored Framework



Antecedent Factors Cont.

- Predisposing Factors
 - Attitudes and beliefs towards health
 - Perceived general health
 - Prior healthcare experience

Tailored Framework

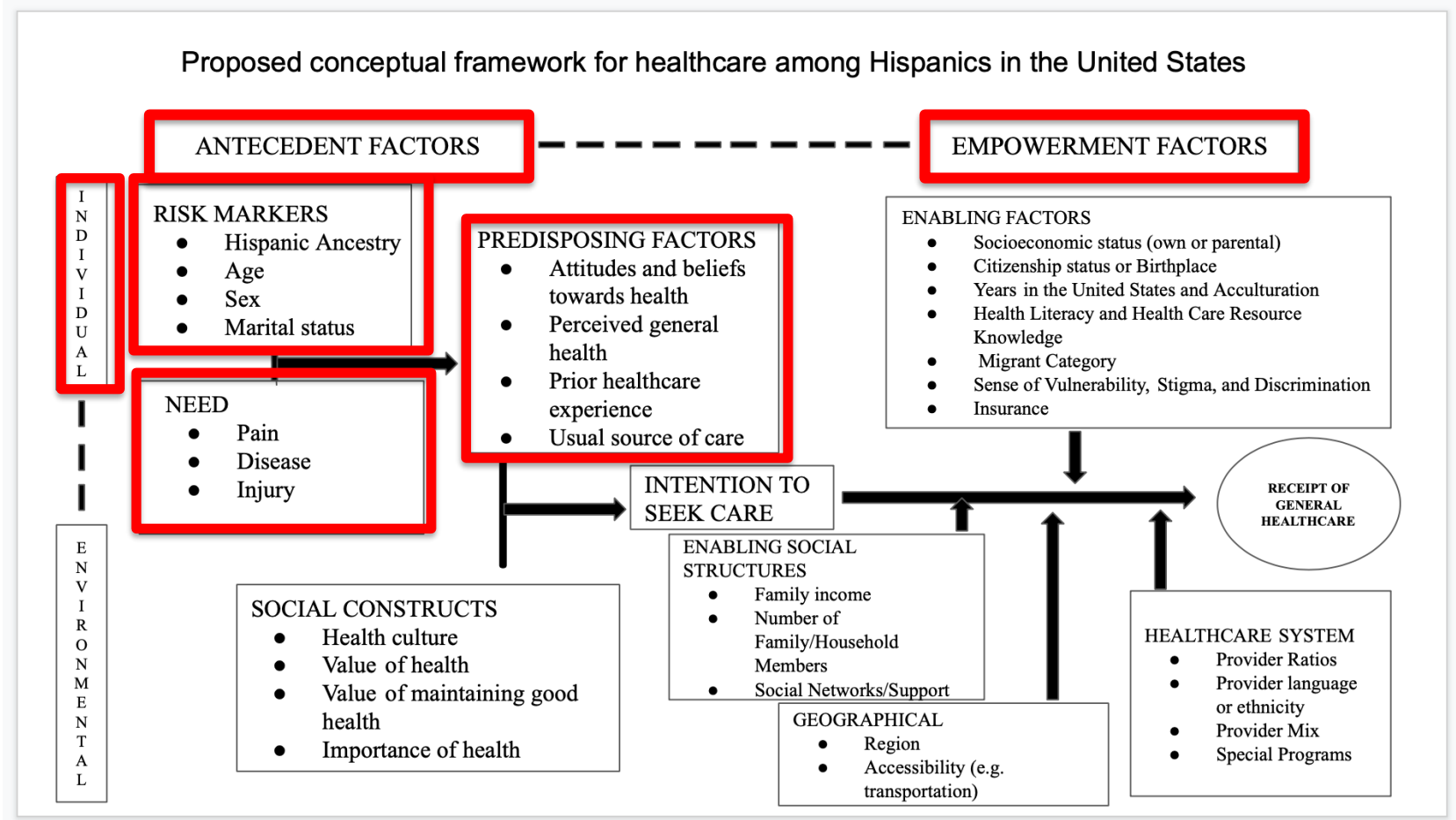
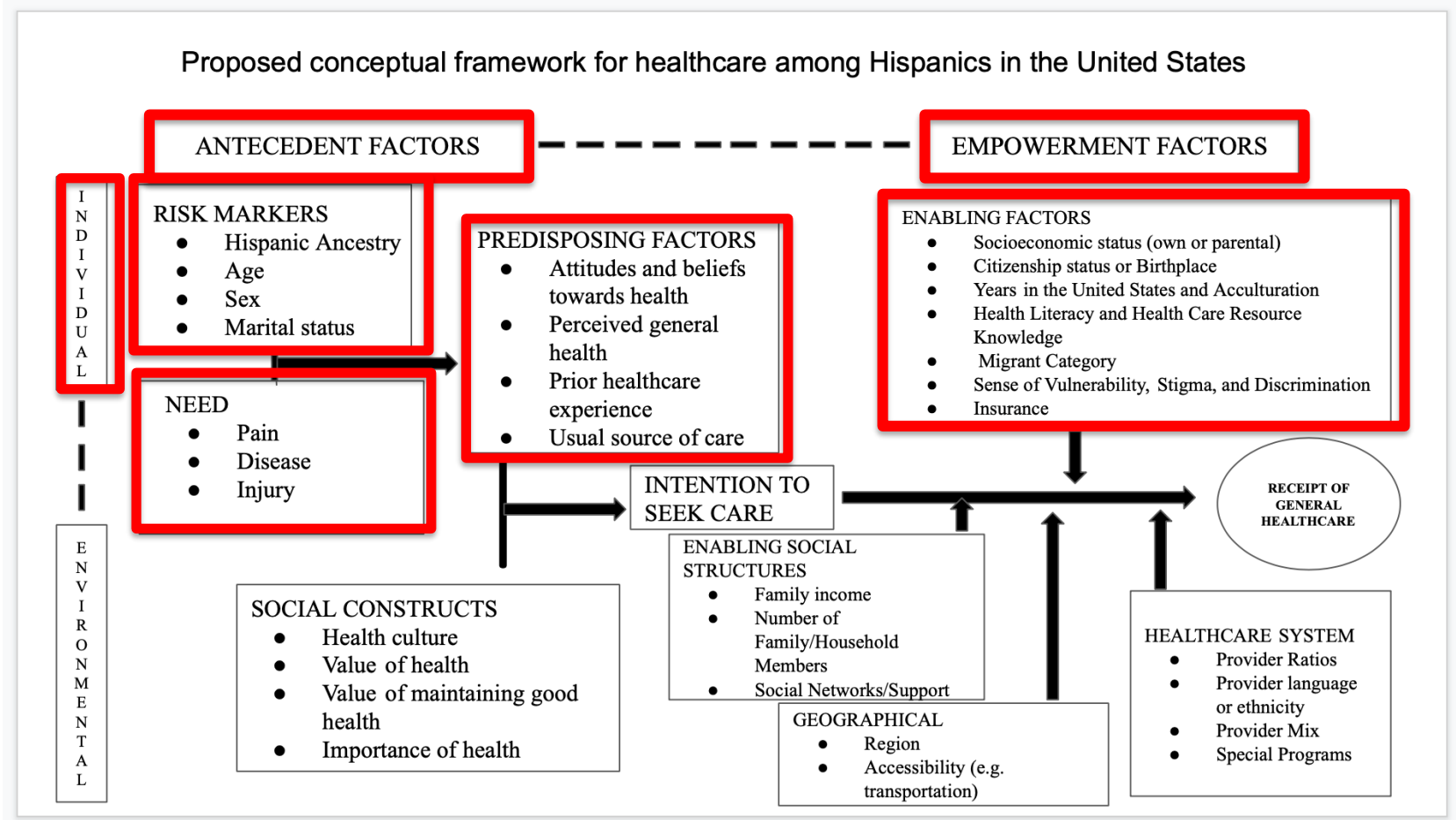


Figure 1. Proposed conceptual framework for healthcare among Hispanics in the United States (Mejia et al., 2008)

Tailored Framework





Empowerment Factors

- Enabling Factors
 - Socioeconomic status
 - Citizenship status
 - Health literacy and healthcare resource knowledge
 - Years in the United States

Tailored Framework

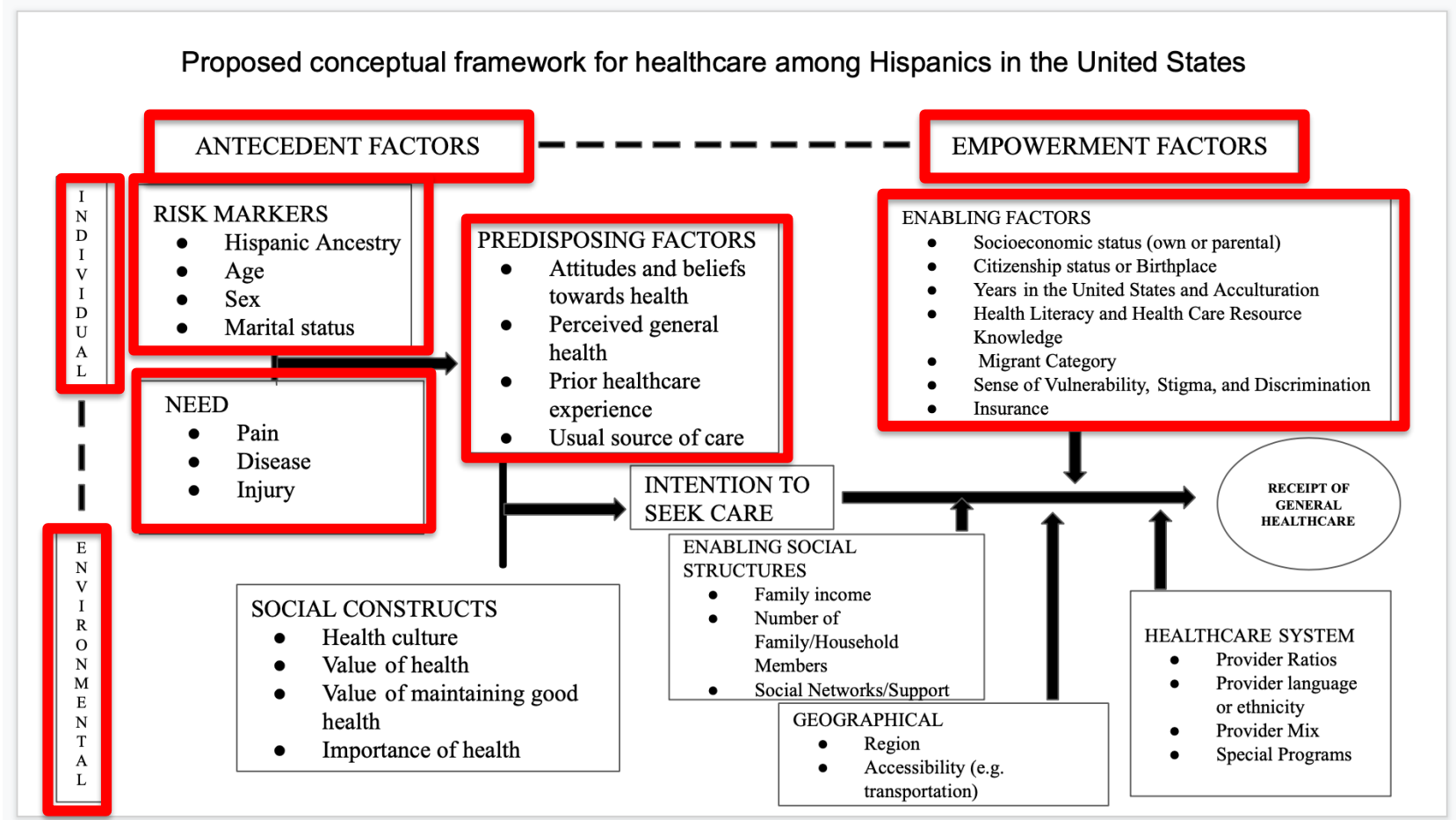
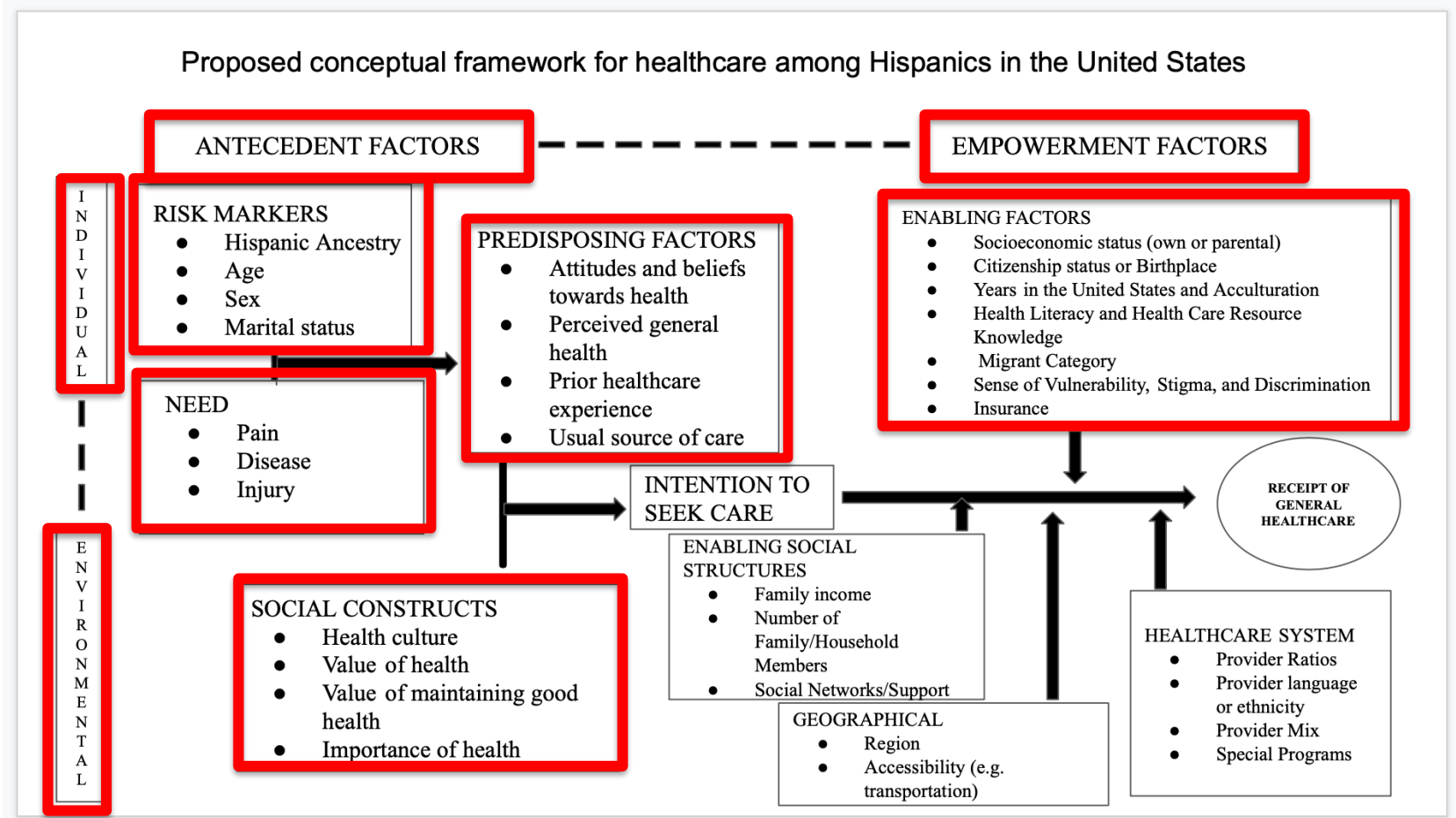


Figure 1. Proposed conceptual framework for healthcare among Hispanics in the United States (Mejia et al., 2008)

Tailored Framework



Environmental Factors

- Social Constructs
 - Health culture
 - Value of health
 - Value of maintaining good health
 - Importance of health

Tailored Framework

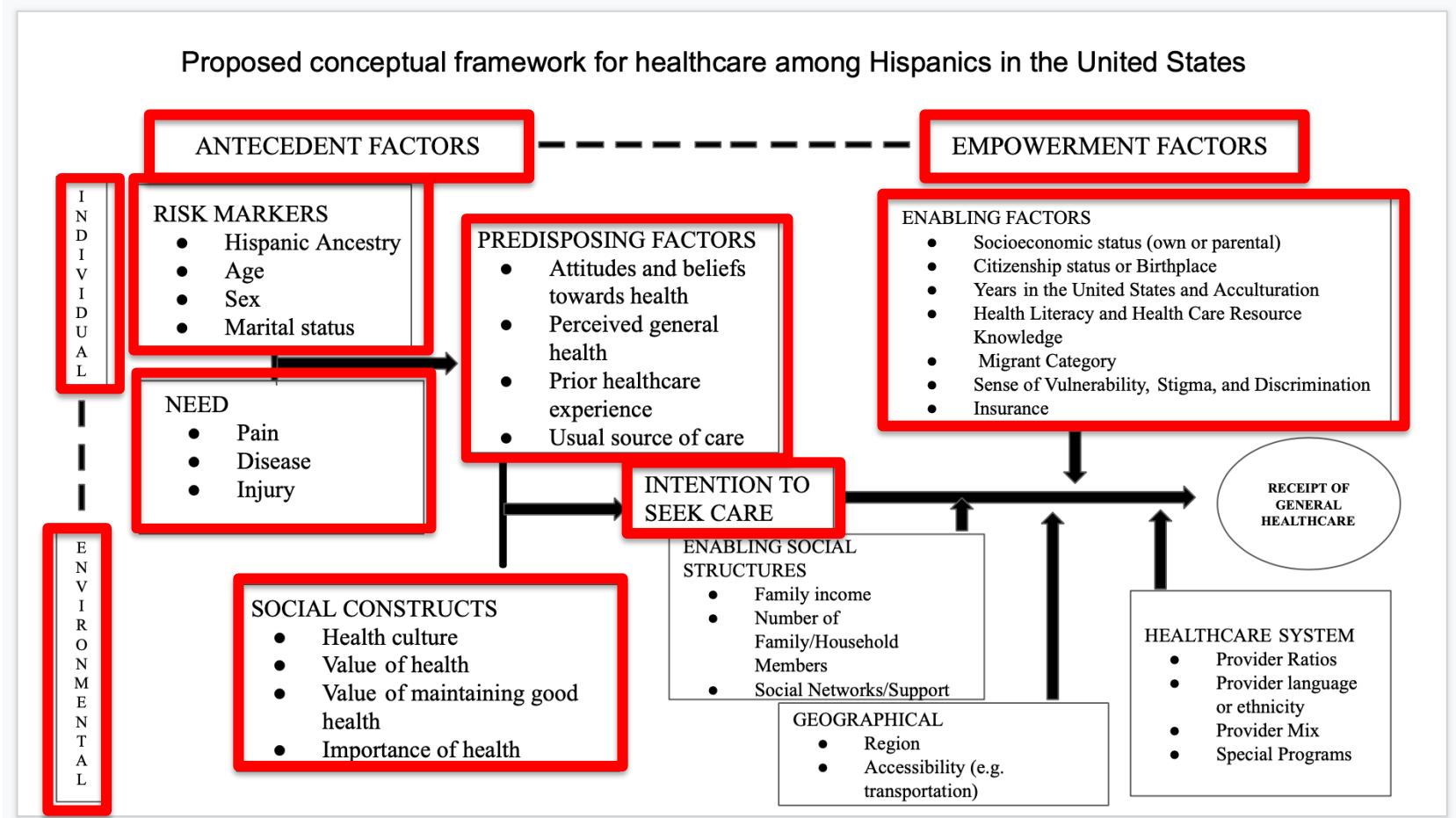
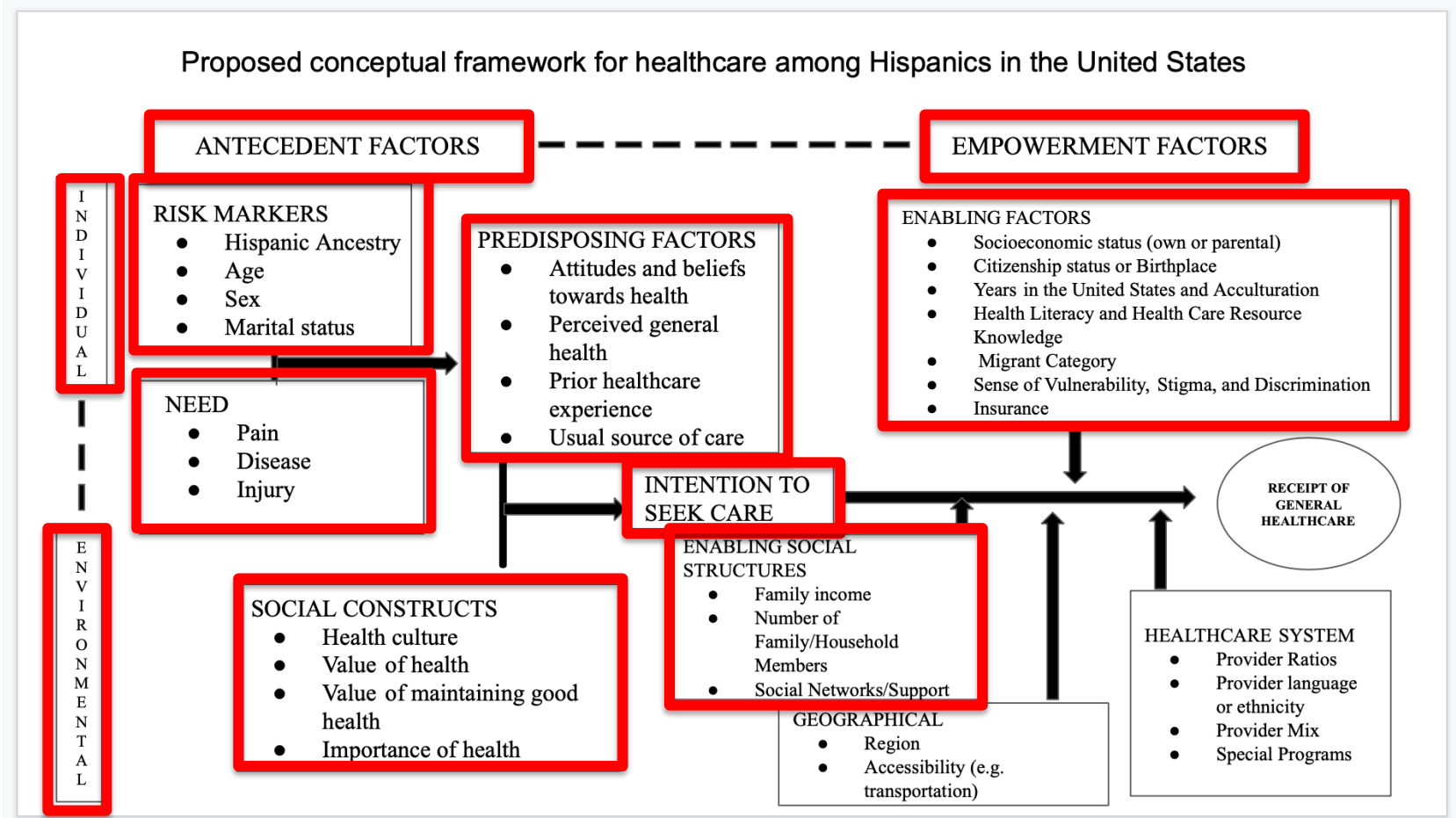
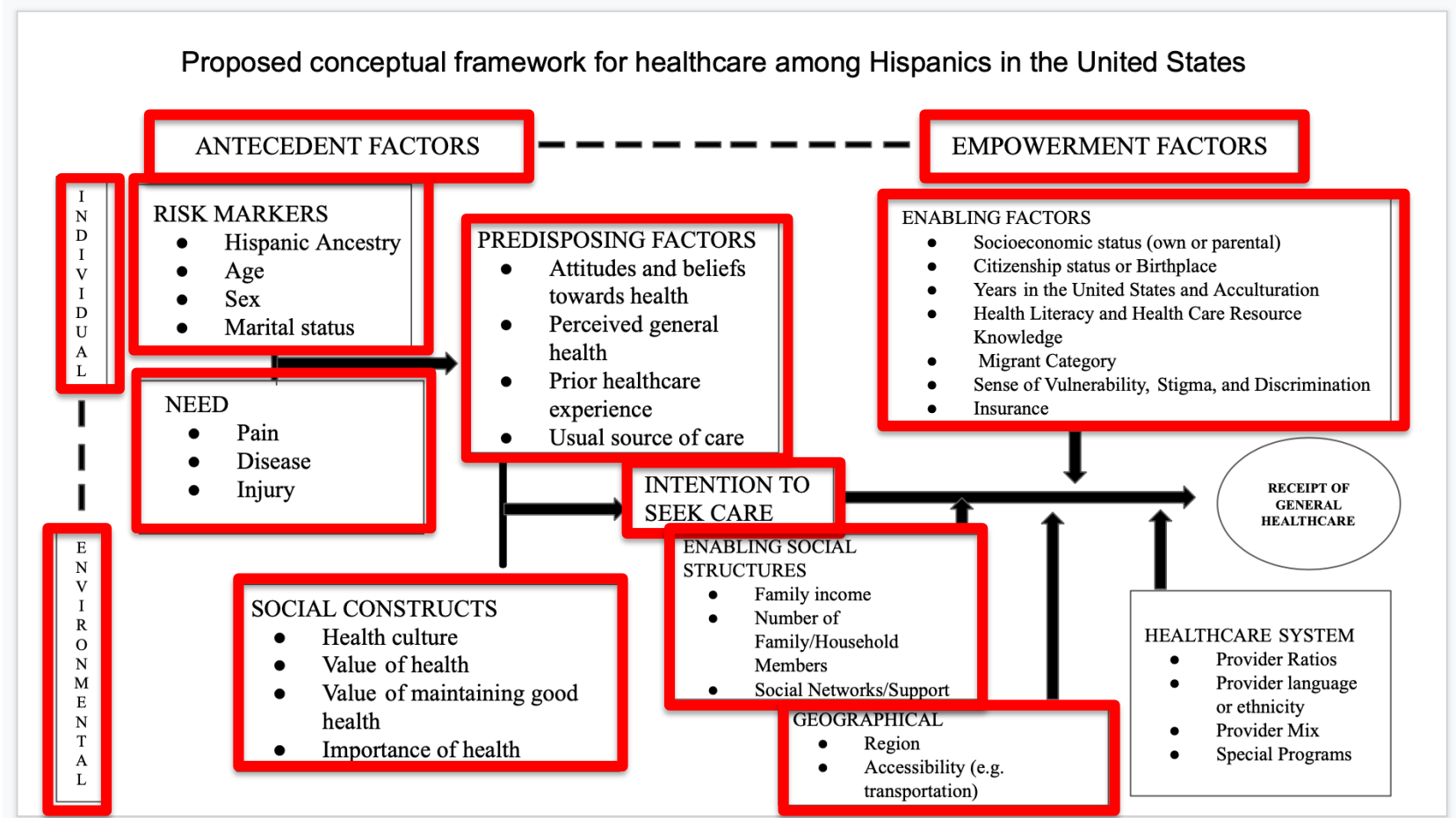


Figure 1. Proposed conceptual framework for healthcare among Hispanics in the United States (Mejia et al., 2008)

Tailored Framework



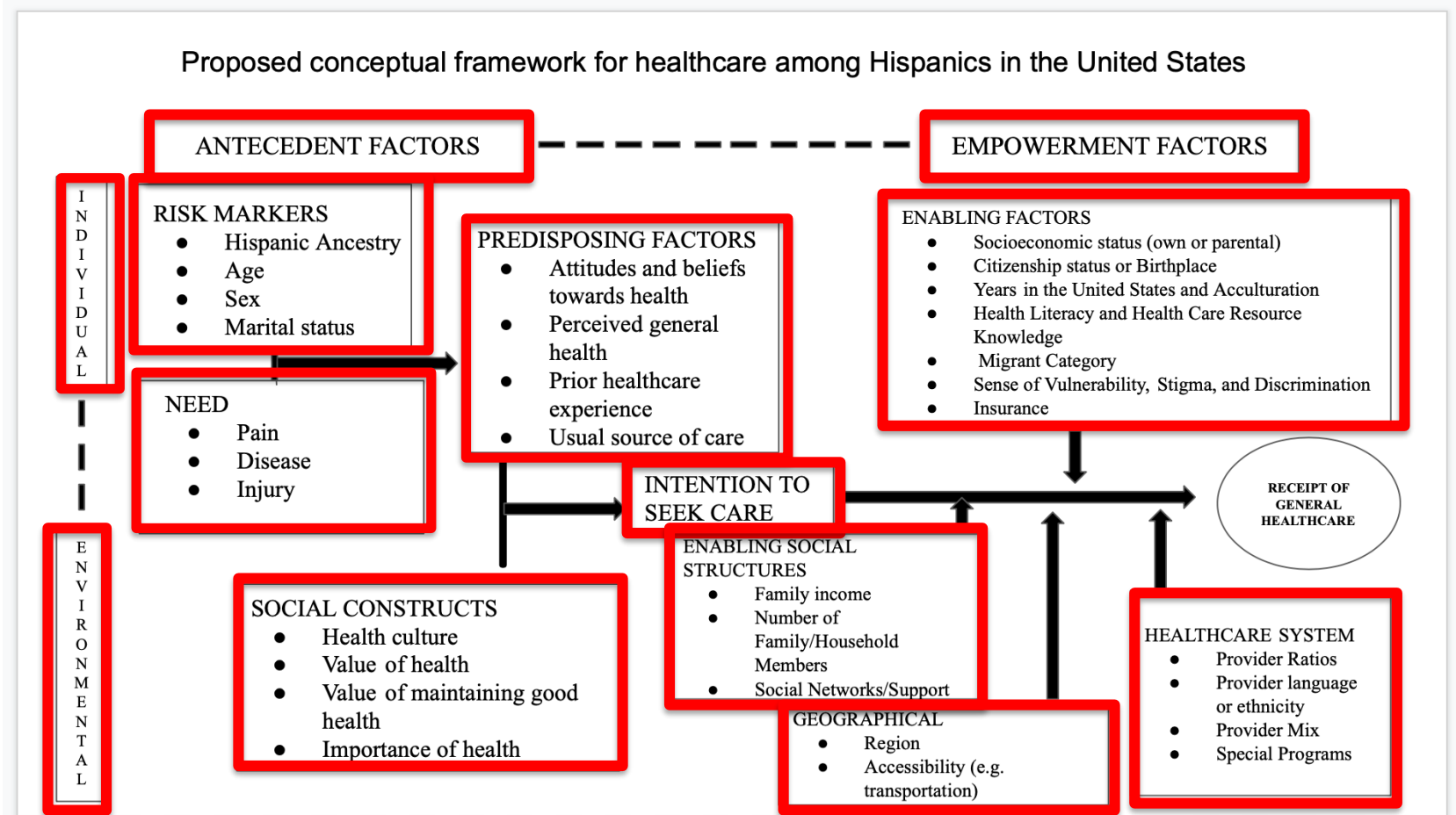
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Environmental Factors Cont.

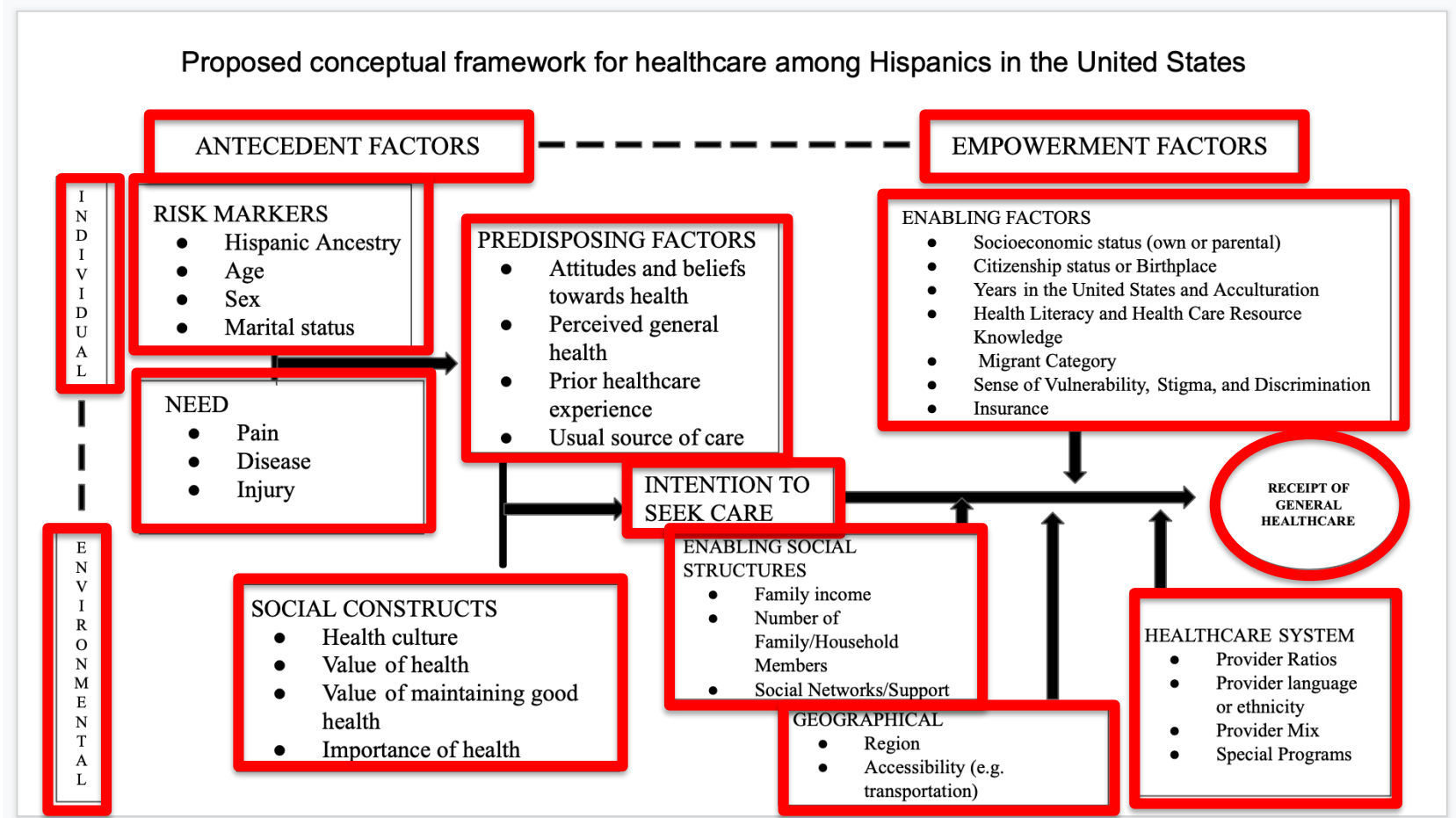
- Intention to seek care
 - Enabling Social Structures
 - Family income
 - Number of family/household members
 - Social network/support
 - Geographical
 - Region
 - Accessibility

Tailored Framework



- 
- Healthcare System
 - Provider language or ethnicity
 - Provider ratios
 - Special programs
 - Receipt of General Healthcare

Tailored Framework



Language Barriers



Jeff, and Jeff Altman. "Jeff." *Jeff Altman The Big Game Hunters Blog*, 14 Aug. 2017, blog.thebiggamehunter.us/recruiting-with-google-video-no-bs-hiring-advice-radio/.

- Lack of healthcare information
 - Unintelligible instructions
 - Patient/provider miscommunication (Hu et al., 2013)
- Patients with LEP
 - delay seeking health care
 - lack confidence and experience
 - confusion with health care
 - unaware of interpretation and services provided (Harari et al., 2008)
- Delays to seeking healthcare contributes to greater health disparities among the Hispanic population (Harari et al., 2008)


Language barrier

Leads to delay in seeking health care

- “He was scared to go to the ER alone because he could not communicate. He finally found me via another friend. I know a little English. By that time, his hand was swollen, infected, needed an operation. The doctor asked why he didn’t come sooner. He said that he didn’t have anybody to come with” (Respondent 44)
- “I wanted to go to the doctor for my stomach pains, but I didn’t go. I was afraid, afraid because I don’t speak any English.” (Respondent 43)

Leads to lack of confidence and confusion when care is sought

- “We speak basic, limited English at work. But, when you go to the doctor, you barely understand their language. You are already dazed in the hospital or emergency room and sometimes you don’t understand what they are telling you. Really, it is necessary to have a person that can speak your language for you to understand clearly what they are asking you.” (Respondent 14)



Unaware of interpreter services

- “They do not request an interpreter because they do not know that this service exists, at no cost. One women that I helped asked me if she had to pay something and I said, ‘no, nothing.’” (Respondent 27)

Hispanic Population in Kansas

- Kansas- Hispanic/Latino population has grown rapidly over the past 20 years and is continuing to increase (Showstack et al., 2019)
- Western Kansas
 - >50% Hispanics/Latinos (Showstack et al., 2019)
- Latinos have the lowest health literacy rates of any race/ethnic group in the US (Showstack et al., 2019)
 - 15.7% of Kansas Hispanics have low health literacy (Chesser et al., 2016)
- Hispanic health outcomes in Kansas have been poor and keep trending lower (Showstack et al., 2019)

Manhattan, KS Spanish Speaking Population

- Manhattan, Kansas population is 7% Hispanic and 82.5% Caucasian (US Census Bureau, 2019)
- Kansas State University campuses 7.3% of Hispanic/Latino students
- Difficult to find Spanish health care interpreters



★ Designed by TownMapsUSA.com

"Map of Manhattan Kansas KS." *Map of Manhattan, KS, Kansas*, townmapsusa.com/d/map-of-manhattan-kansas-ks/manhattan_ks.

Project Description



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- **Products**

- Spanish Survey
- Infographic
- Survey Report

- **Survey created on Qualtrics**

- **Tasks**

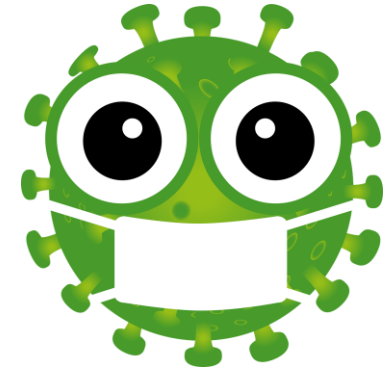
- Develop survey questions
- Evaluate Riley County resources
- Contact different Kansas health departments
- Institutional Review Board (IRB; Approval #10213)
- Post about the survey on different social media platforms
- Analyze survey results
- Develop a presentation of the survey results

Project Description Cont.- Survey

- Open for 8 weeks
- 41 Questions
 - demographic information
 - ways they obtained healthcare and health information
 - awareness of RCHD programs
 - improving connections with the RCHD
 - barriers to accessing RCHD programs and services
 - other healthcare barriers
- Inclusion criteria → Riley County residents, identify as Hispanic, & technology access

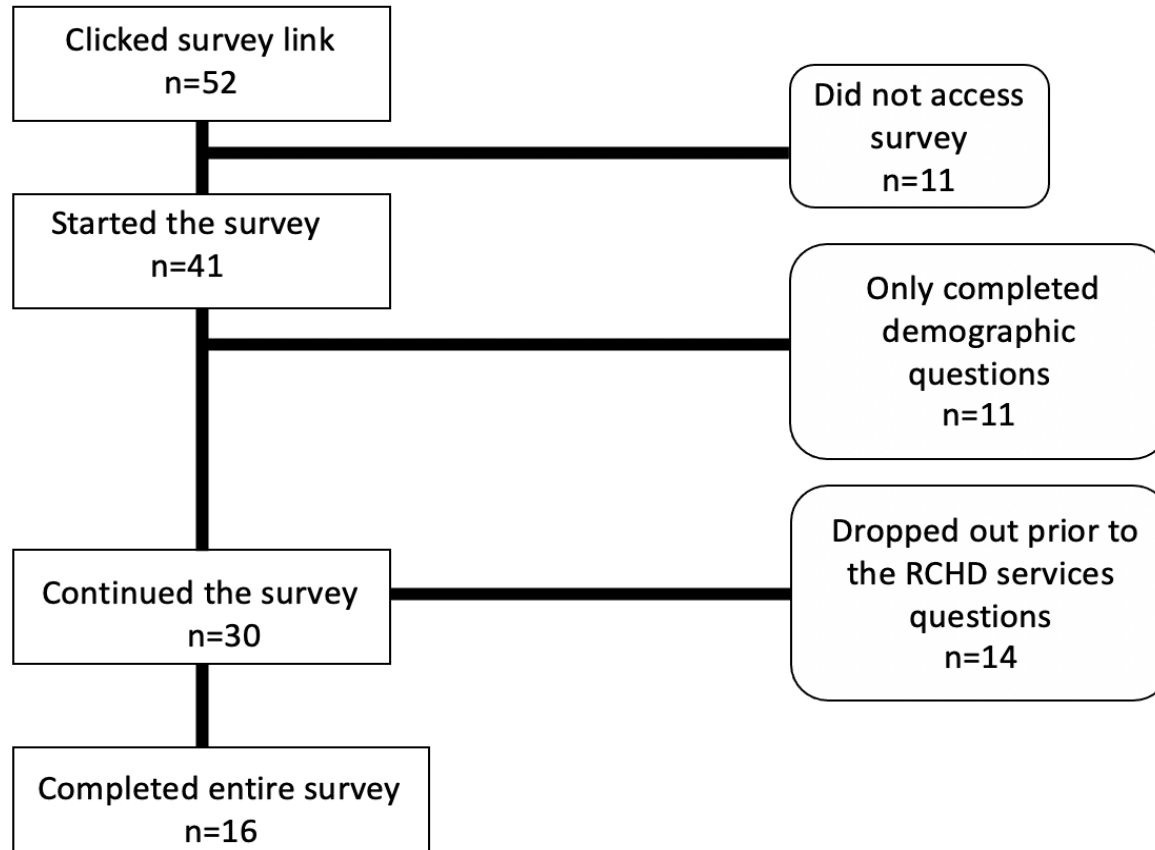
Additional Products Developed

- Translated health promoting COVID-19 posters developed by KSU MPH students from English to Spanish
 - Posters were then shared online
 - <https://www.k-state.edu/mphealth/>



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Results



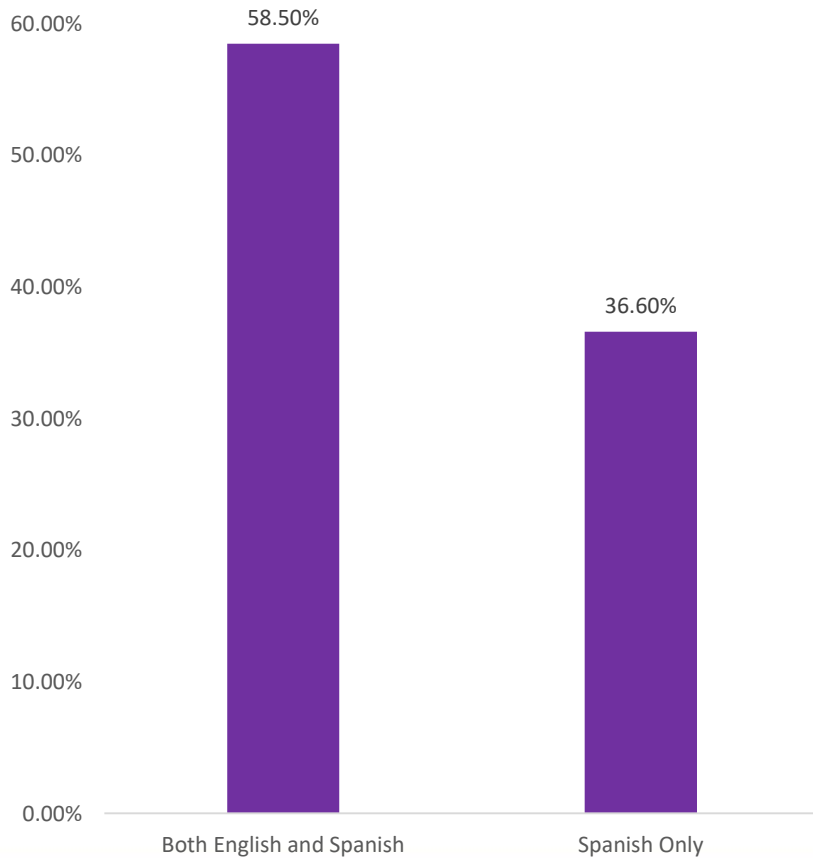
Flow diagram showing participant survey engagement.

Results Cont.

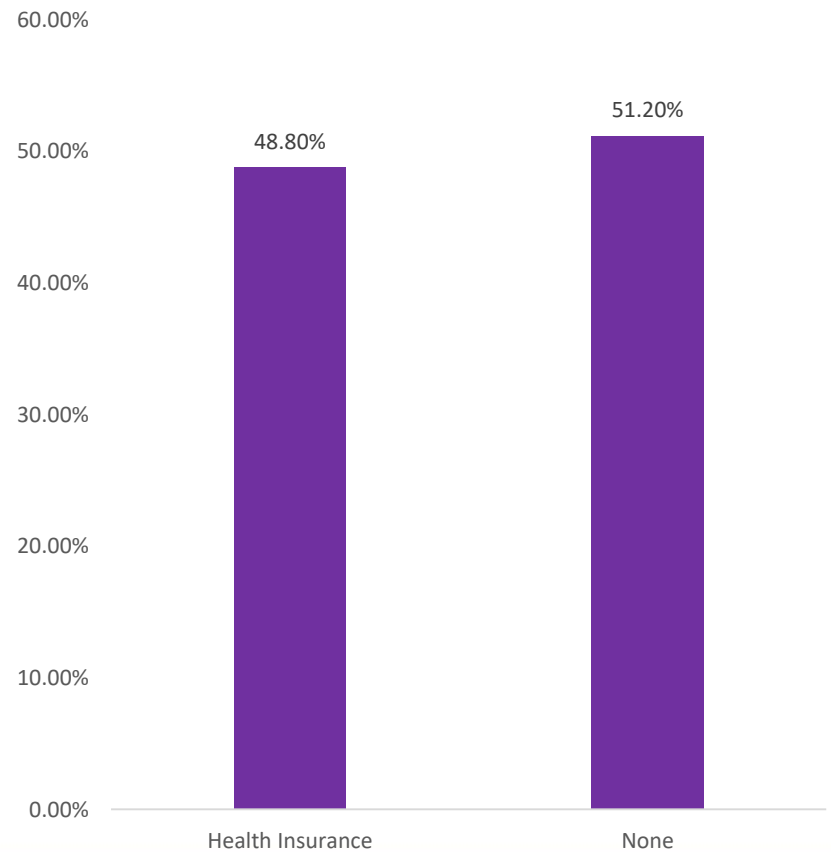
- Demographics (n = 41)
 - Most participants were females (75.6%, n = 31)*
 - 61% (n = 25) Hispanic
 - 34.1% (n = 14) White Hispanics
 - 4.9% (n = 2) Afro Hispanic
 - Education (majority)
 - 29.3% (n = 12) received a bachelor's degree
 - 26.8% (n = 11) had only taken some university classes
 - Employment
 - 63.4% (n = 26) currently employed
 - 37.5% (n = 15) not currently employed

Results Cont.

Most Comfortable Language to Speak



Health Insurance



Results Cont.

Received health information from*

- 22.1% (n=15) → doctor or health professional
- 20.6% (n=14) → the internet
- 14.7% (n=10) → health department
- 14.7% (n=10) → friends or family

Least preferred method of receiving health information*

- 21.9% (n=14) → word of mouth
- 20.3% (n=13) → bulletin boards

Most preferred method of receiving health information*

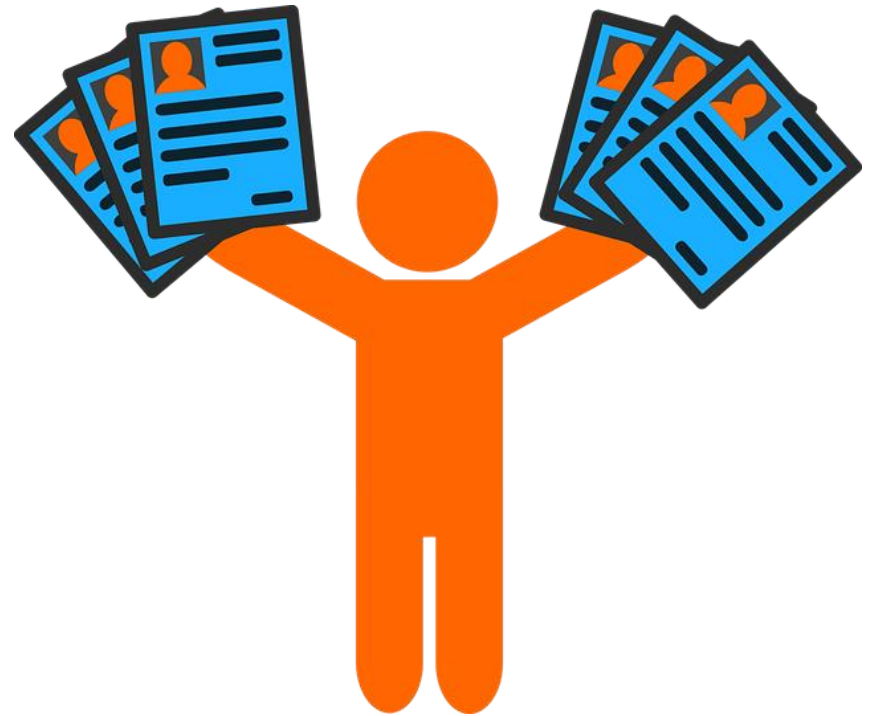
- 34% (n=19) → e-mail
- 14.3% (n=8) → text messaging

Knowledge of RCHD services

- 80% (n=24) → did not know
- 20% (n=6) → did know what services the RCHD offered

Results Cont.

- Only 16 participants completed RCHD-specific questions
- Most familiar RCHD services
 - vaccinations
 - dental care
- Relationship improvement between the RCHD and Hispanic community in Riley County
 - more RCHD promotion around town
 - hosting virtual events
 - providing more information in Spanish about services



Infographic

TAKEAWAYS FROM THE HISPANIC OUTREACH SURVEY

*The survey was conducted online.
It opened on August 26, 2020 and closed on
October 19, 2020.*

The survey was available for a total of 54 days.

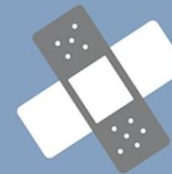
Survey made by: M. Ramirez, S. Scavone and A. Preczewski

1 DEMOGRAPHIC INFO OF THOSE WHO COMPLETED THE SURVEY

Of 46 total responders, only 16 filled the whole survey.

Among the 16 people who finished the survey:

- the age average was 30 years old,
- there were 13 women and 3 men,
- the average time it took to complete the survey was 22.5 minutes, with a maximum of 80 minutes and a minimum of 5.5 minutes.



Infographic Cont.

2

AWARENESS OF RCHD PROGRAMS

The RCHD services that survey participants were most familiar with were

- vaccinations
- and
- dental care

3

IMPROVING RELATIONSHIP WITH RCHD

Participants stated that:

- more RCHD promotion around town,
- hosting virtual events, and
- more information in Spanish regarding services

would help improve the connections between the Health Department and the Hispanic community in Riley County.



Infographic Cont.

4

BARRIERS TO SEEKING HEALTHCARE

The main barriers of access to healthcare for participants who had postponed a visit to a health care professional were:

- a lack of child care options, and
- insufficient money or health insurance that didn't offer sufficient coverage



Table 1. Main barriers to accessing healthcare services in health department (n=16)

Barriers*	# of people who selected response	Respondents' answers in Spanish	Respondents' answers translated to English
Lack of childcare option	3	--	--
Lack of time	0	--	--
Could not ask for time off from work due to fear of not getting paid or fear of getting fired	1	--	--
Other (please explain)	3	<ol style="list-style-type: none"> 1. "idiomas, malas caras" 2. "dinero" 3. "Mi seguro medico no cobre todos los servicios" 	<ol style="list-style-type: none"> 1. Language, lack of good service 2. Lack of money 3. Health insurance that did not cover medications or procedures
None	10	--	--



Table 2. Participants' barriers to accessing RCHD services (n=16)

Barriers*	# of people who selected response
Provider did not speak Spanish (and interpreter was available)	0
Provider did not speak Spanish (and no interpreter was available)	4
I could not feel like I can trust provider	0
Office was not accessible or welcoming	2
Office was not accessible/welcoming and did not offer any information in Spanish	2
Provider did not show awareness/respect toward my culture	1
None	11

Discussion

- Key Findings
 - Lack of knowledge of RCHD services
 - Use these services in the future
 - Most interested in dental programs and vaccinations
- Findings from results
 - Several healthcare barriers
 - lack of childcare options
 - insufficient money or health insurance that did not offer sufficient coverage
 - less likely to be offered health insurance from employment → decreases chances to access healthcare services

RCHD Survey Results

- Main barrier
 - language barrier → RCHD lacked having information in Spanish or have a bilingual employee
- Getting connected to RCHD
 - “Receive information that is precise, clear, and fast”
 - “Visiting a website, researching services, contacting via telephone, and in person”
 - “Promote more”
 - “More information about services in Spanish”
 - “Not using abbreviations”

Strengths/Limitations

- Strengths
 - Cost-effective
 - Targeting a sub population in Manhattan addressing a community health issue
 - Replicability
- Limitations
 - COVID-19
 - Length of the Hispanic survey
 - Lack of incentives
 - Vocabulary used in the Hispanic survey

Conclusion

- Continue with Hispanic Outreach team at RCHD
- Lack of identified barriers due to lack of knowledge about services
- Important to provide more language services and translated materials
- Community health problem in Manhattan, Kansas
- More involvement from the community and healthcare coalition members



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MPH Foundational Competencies

Number and Competency	
3	Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate
7	Assess population needs, assets and capacities that affect communities' health
19	Communicate audience-appropriate public health content both in writing and through oral presentation
20	Describe the importance of cultural competence in communicating public health content
21	Perform effectively on interprofessional teams

Competency 3

Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate

- Analyzed qualitative data using Microsoft Excel from the Hispanic survey that was taken by Hispanic LEP individuals
- Analyzed quantitative data → Functional Intensity Training (FIT) Laboratory
 - Supplement use among voluntary firefighters



Competency 7

Assess population needs, assets and capacities that affect communities' health

- Assessing population needs → Hispanic survey
- Goal → determine healthcare barriers, needs, attitudes, awareness of RCHD services, and the use of RCHD services and past experiences
- MPH 720 and MPH 802
 - address the communities' health in general

Competency 19

Communicate audience-appropriate public health content both in writing and through oral presentation

- Presentation for the health coalition
 - survey results, barriers, needs, awareness, and next steps
- MPH 720 and MPH 818
 - identify the causes of social and behavioral factors that affected the health of individuals and populations with specific emphasis on underserved populations

Competency 20

Describe the importance of cultural competence in communicating public health content

- Infographic
 - providing a concise summary of the Hispanic Outreach project
- Translated COVID-19 posters
 - language adjusted making the information more understandable to Spanish speakers and LEP individuals
- MPH 720 and MPH 818
 - assignment presentations

Competency 21

Perform effectively on interprofessional teams

- Attended meetings
 - collaborate and discuss ideas
- Strengthened communication and teamwork skills
- MPH 720 and MPH 818
 - Worked on group projects with other students

MPH Physical Activity Emphasis Area Competencies

MPH Emphasis Area: Physical Activity

Number and Competency		Description
1	Population Health	Investigate the impact of physical activity on population health and disease outcomes.
2	Social, behavioral and environmental influences	Investigate social, behavioral and environmental factors that contribute to participation in physical activity.
3	Theory Application	Examine and select social and behavioral theories and frameworks for physical activity programs in community settings.
4	Developing and evaluating activities and interventions	Develop and evaluate physical activity interventions in diverse community settings.
5	Support evidence-based practice	Create evidence-based strategies to promote physical activity and communicate them to community stakeholders.

Competency 1

Population Health

- Focus: Hispanic population health
- Determine healthcare barriers
- KIN 612
 - impact of physical activity on population health as we had a project where we needed to write a policy to increase physical activity levels for a specific population
- MPH 754
 - learned about disease outcomes in different populations

Competency 2

Social, behavioral and environmental influences

- KIN 610
 - learned how beneficial it is to implement physical activity programs for certain populations to increase physical activity levels
- KIN 805
 - needs assessment for physical activity behaviors among Hispanic college students at Kansas State University
- MPH 818
 - learned about behavioral influences and theories

Competency 3

Theory Application

- KIN 805
 - discussed different theories
 - completed a project → create own theory that would help increase physical activity levels for a certain population (Hispanic students)
- MPH 818 and KIN 612
 - discussed theories
 - applied these theories with assignments to promote physical activity



Competency 4

Developing and evaluating activities and interventions

- FIT Lab
 - evaluate physical activity interventions
- KIN 805
 - Hispanic KSU students as my target population and developed an intervention that will increase their physical activity levels



Competency 5

Support evidence-based practice

- Evidence-based practice
 - to help create the Hispanic survey
- Every course
 - Used evidence-based practice in all projects and assignments

Summary

- Strengthened research skills
- Perspective in healthcare barriers in Hispanic population
- Public health issue
- Strengthened my passion for Hispanic health
- Stronger desire to help lower the healthcare disparity



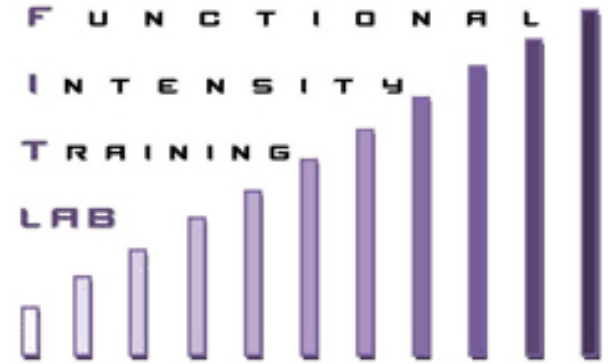
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Acknowledgements



References

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Questions?



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Possible Answers to Questions

- differences between oral and written limited English proficiency
 - Oral language proficiency is not a good predictor for word-level reading skills in English (Geva, 2006).
 - People's ability to speak English as a second language
 - Variation depending on ones own culture → recognizing variation
 - Maybe one can gain knowledge through pictures
 - Every one is different
 - Could not find a standard LEP level in the adult Hispanic population

Percent of healthcare providers who have the ability to speak Spanish or are bilingual

Top 10 non-English languages spoken by multilingual physicians nationally

1. Spanish	36.2%
2. Hindi	13.8%
3. French	8.8%
4. Persian/Farsi	7.6%
5. Chinese	5.2%
6. Arabic	4.1%
7. German	3.7%
8. Russian	3.0%
9. Italian	2.7%
10. Hebrew	1.9%

How my demographics compared to the state of Kansas

- Health literacy data were extracted from the state-specific module of the BRFSS telephone survey
- most respondents had moderate health literacy (61.1%)
- high health literacy (31.4%)
- low health literacy (7.5%).

Doctor's perspective

- Have practice in cultural competence & more empathy
- What is **evidence-based practice**
 - interpreting information on previous research findings and seeing if they did provide evidence in their findings. Did it work?
 - Evaluate the evidence

Vocabulary

- Transcriptions were finalized by my partner and chose the higher vocabulary

Stats

- Analyzed quantitative data using descriptive statistics
 - Frequency counts → analyzed on Qualtrics
 - Used this method because we had a small sample size
 - If we had a big sample size → independent sample T-test
 - As the purpose of this project was to identify and describe healthcare barriers

Possible Theory

- Health Belief Model
 - 1- perceived barriers of recommended health action
 - 2- perceived benefits of health action
 - 3- perceived susceptibility of disease
 - 4- perceived seriousness of the disease
 - We didn't use questions that could be applied for a theory but e asked questions that was part of the framework that was discussed
 - Future research can ask risks to see what theories could be used