

TRUST & MEDICATION BELIEFS IN NATIVE HAWAIIANS & PACIFIC ISLANDERS

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IRB Approved



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Disclosure Statement

Cody Porter

Potential conflict of interest: none

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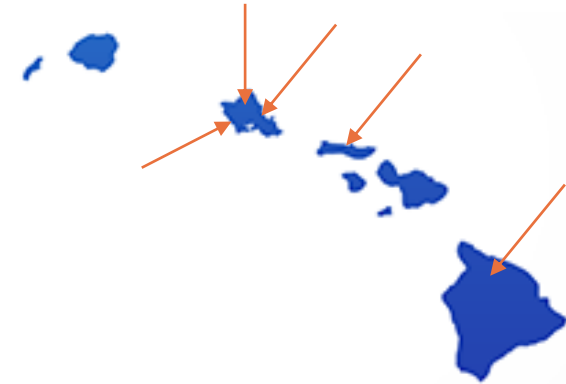
Learning Objectives

- By the end of this presentation, the attendee will be able to:
 - Describe the relationship between health care provider trust and diabetes medication beliefs in Native Hawaiian or Pacific Islander patients.



The Queen's Health System (QHS)

- The Queen's Medical Center – Manamana
 - Honolulu, HI
 - 575 beds
- The Queen's Medical Center – West O'ahu
 - Ewa Beach, HI
 - 104 beds
- Queen's North Hawai'i Community Hospital
 - Kamuela, HI
 - 35 beds
- Molokai General Hospital
 - Kauanakakai, HI
 - 15 beds
- The Queen's Medical Center – Wahiawa
 - Wahiawa, HI
 - Reopen summer of 2024



Pre-Test Assessment Question 1

1. To what extent do Native Hawaiian or Pacific Islander patients trust their providers?
 - a. Completely
 - b. To a large extent
 - c. To some extent
 - d. Minimally
 - e. Not at all



Pre-Test Assessment Question 2

2. To what extent do Native Hawaiian or Pacific Islander patients believe that prescription medications are good for their health?
- a. Completely
 - b. To a large extent
 - c. To some extent
 - d. Minimally
 - e. Not at all



Post-Test Assessment Question 3

3. What is the relationship between provider trust and medication beliefs in Native Hawaiian or Pacific Islander patients?
- a. Positively correlated
 - b. No significant relationship
 - c. Negatively correlated



Background



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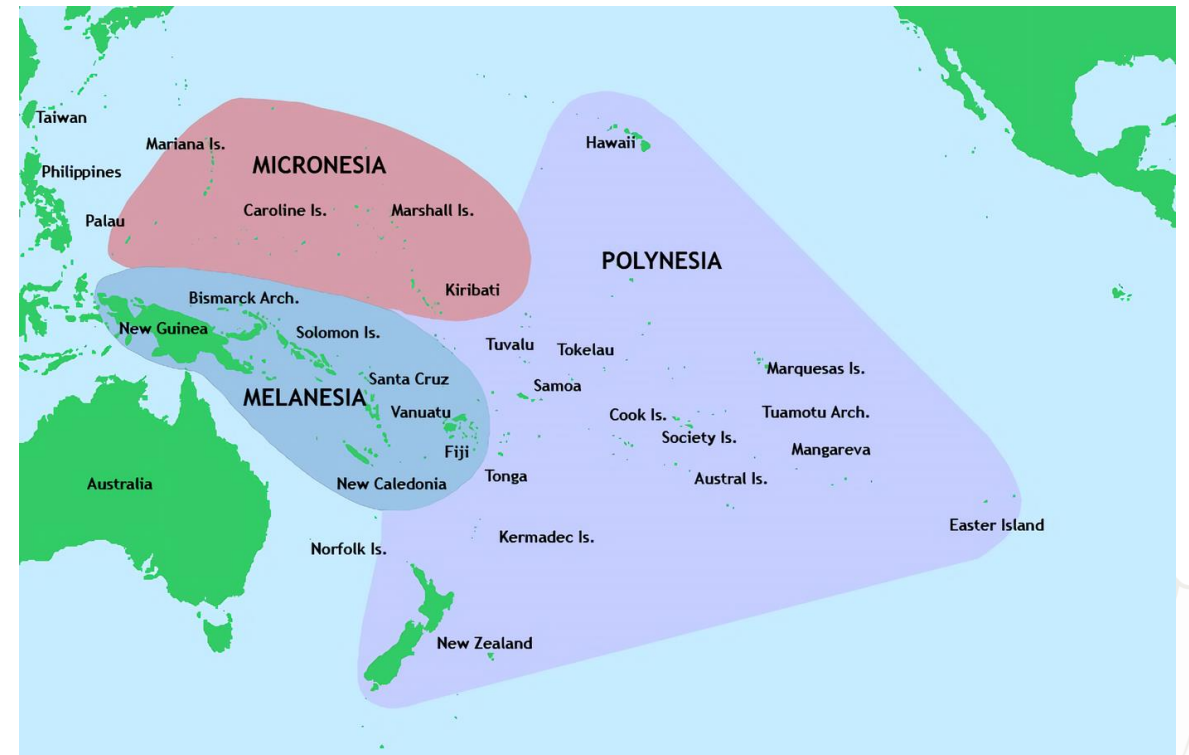
Native Hawaiian & Pacific Islander Populations

- Native Hawaiian (NH) individuals are the indigenous people of the Hawaiian Islands
- Well-established for 800+ years
- 683,000 NH in 1778
- ~24,000 NH per 1920 Census
 - Tuberculosis, chicken pox, polio, measles
- The Queen's Hospital founded in 1859 with a mission to care for the people of Hawai'i



Native Hawaiian & Pacific Islander Populations

- Pacific Islanders (PI) are persons having origins in any jurisdictions of Polynesia, Melanesia, and Micronesia including:
 - Carolinian, Chamorro, Chuukese, Fijian, Guamanian, Kosraean, Marshallese, Native Hawaiian, Niuean, Palauan, Pohnpeian, Papua New Guinean, Samoan, Tokelauan, Tongan, Yapese
- 1.6 million NHPI residents in the U.S. in 2020
 - 27.1% of Hawaii's population



Health Disparities

- Health disparities are the preventable differences in health and health care across racial, ethnic, and socio-economic status
- \$451 billion in lost worker productivity and healthcare expenditures in 2018
- In Hawaii, Native Hawaiian or Pacific Islander (NHPI) populations:
 - Have the highest burden of premature deaths
 - 2.5 times as likely to die from diabetes
 - Higher rates of smoking, alcohol consumption, obesity



Trust and Medication Beliefs

- Lack of trust and poor medication beliefs have been associated with:
 - Lower medication adherence
 - Decreased adherence to lifestyle recommendations
 - Worse health status
- One small study (n=15) found that for among NH patients with cancer, lack of trust with providers limited their interest in participating in clinical trials
- No research in NHPI into the relationship between trust and medication beliefs



Study Objectives

- Identify factors that facilitate provider trust among Native Hawaiian or Pacific Islander patients
- Describe diabetes medication beliefs among Native Hawaiian or Pacific Islander patients
- Identify if there is an association between provider trust and diabetes medication beliefs in Native Hawaiian or Pacific Islander patients



Methodology



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Study Design

- This study involves secondary analysis of qualitative and quantitative data collected as part of the Hawaii HERON pilot study
- Hawaii HERON is a mixed methods study examining barriers and facilitators to clinical trial participation for patients with diabetes



Study Design

Inclusion Criteria	Exclusion Criteria
<ul style="list-style-type: none">• ≥ 18 years old• Hospitalized• English speaking• Diagnosed with T2DM• Identified as either NH, PI, Filipino, or White	<ul style="list-style-type: none">• Critically ill• Medically unstable• Unable to provide written consent

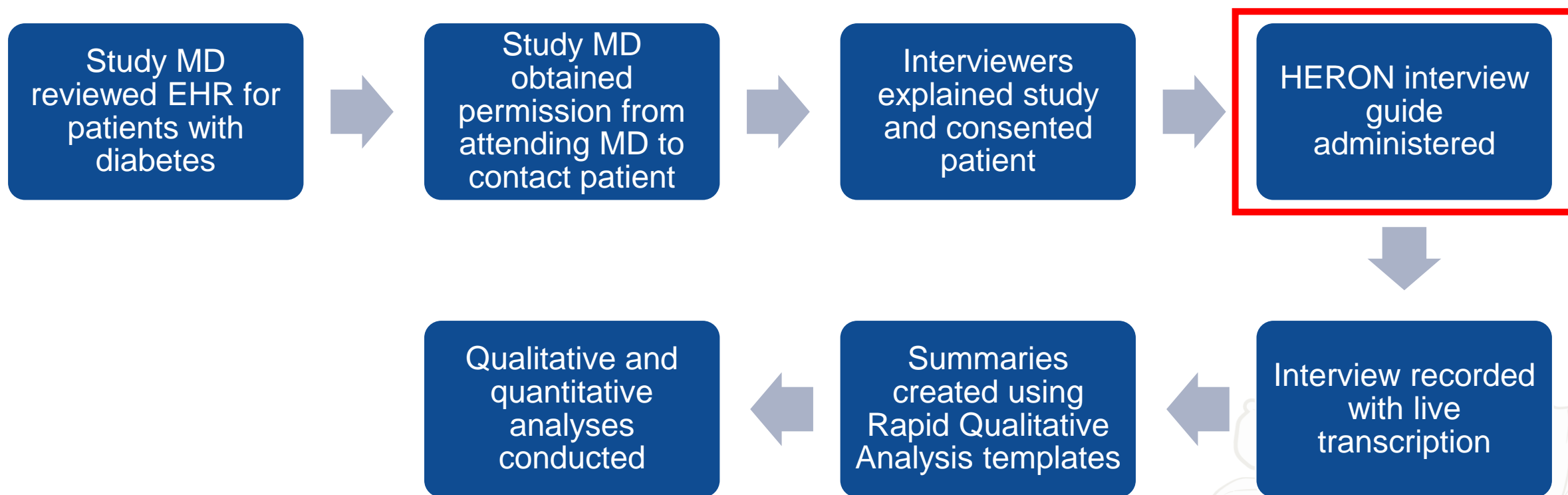


Study Design

- Time Frame:
 - Interviews conducted from January 2024 to March 2024
- Location:
 - Queen's Medical Center Manamana Campus (QMC Punchbowl)
- Study population:
 - Convenience sample of hospitalized T2DM patients
- Collected and analyzed both quantitative (closed-ended) and qualitative (open-ended) data



Study Design



Interview Questions

How would you describe your relationship with your doctors?

Do you trust them to do what is right for your health? (yes/no)

What factors contribute to your trust in your doctors or other health care providers?

How do you feel about diabetes medications in general?

Do you believe that medications are good for your health? (yes/no) Why or why not?



Data Analysis

- Rapid Qualitative Analysis
- Fisher's Exact Test for quantitative dichotomous data



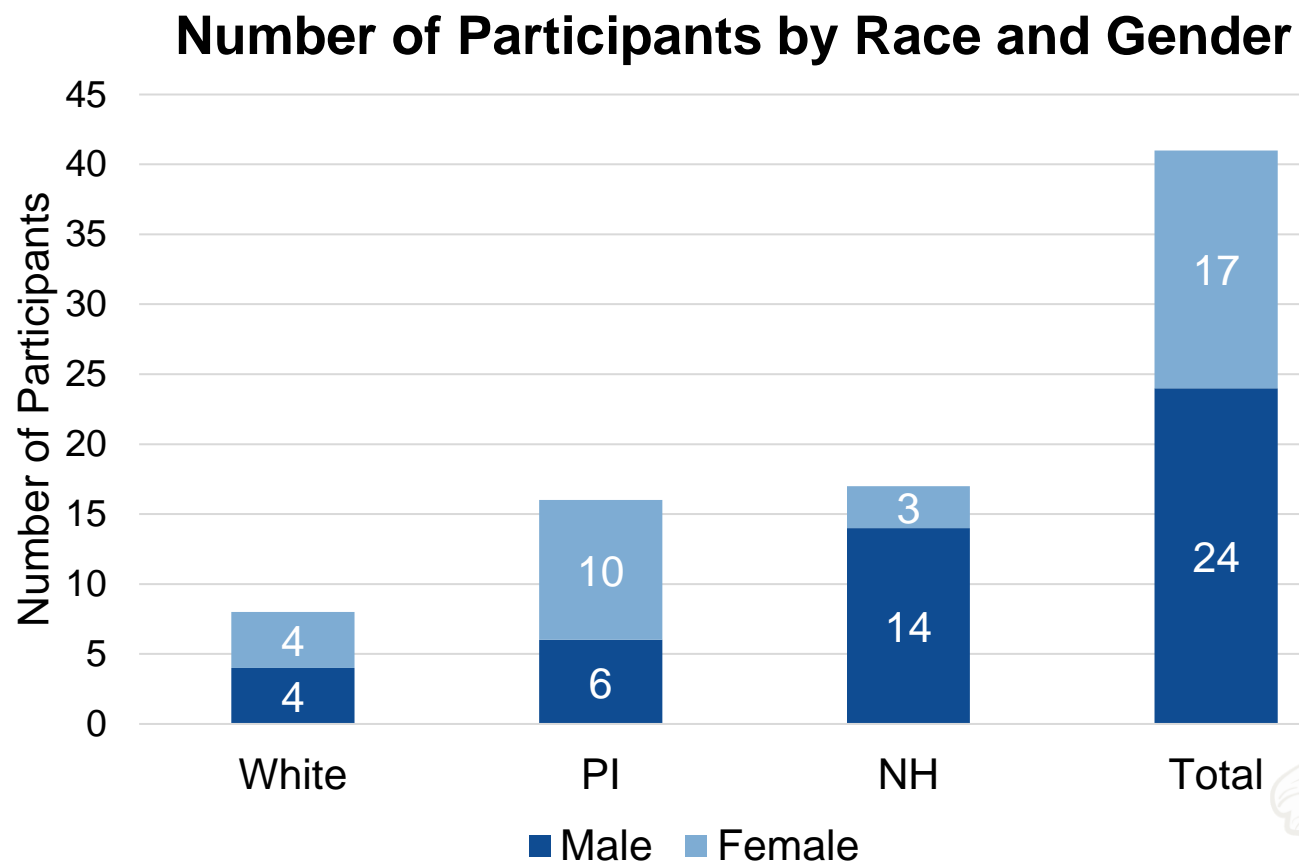
Results



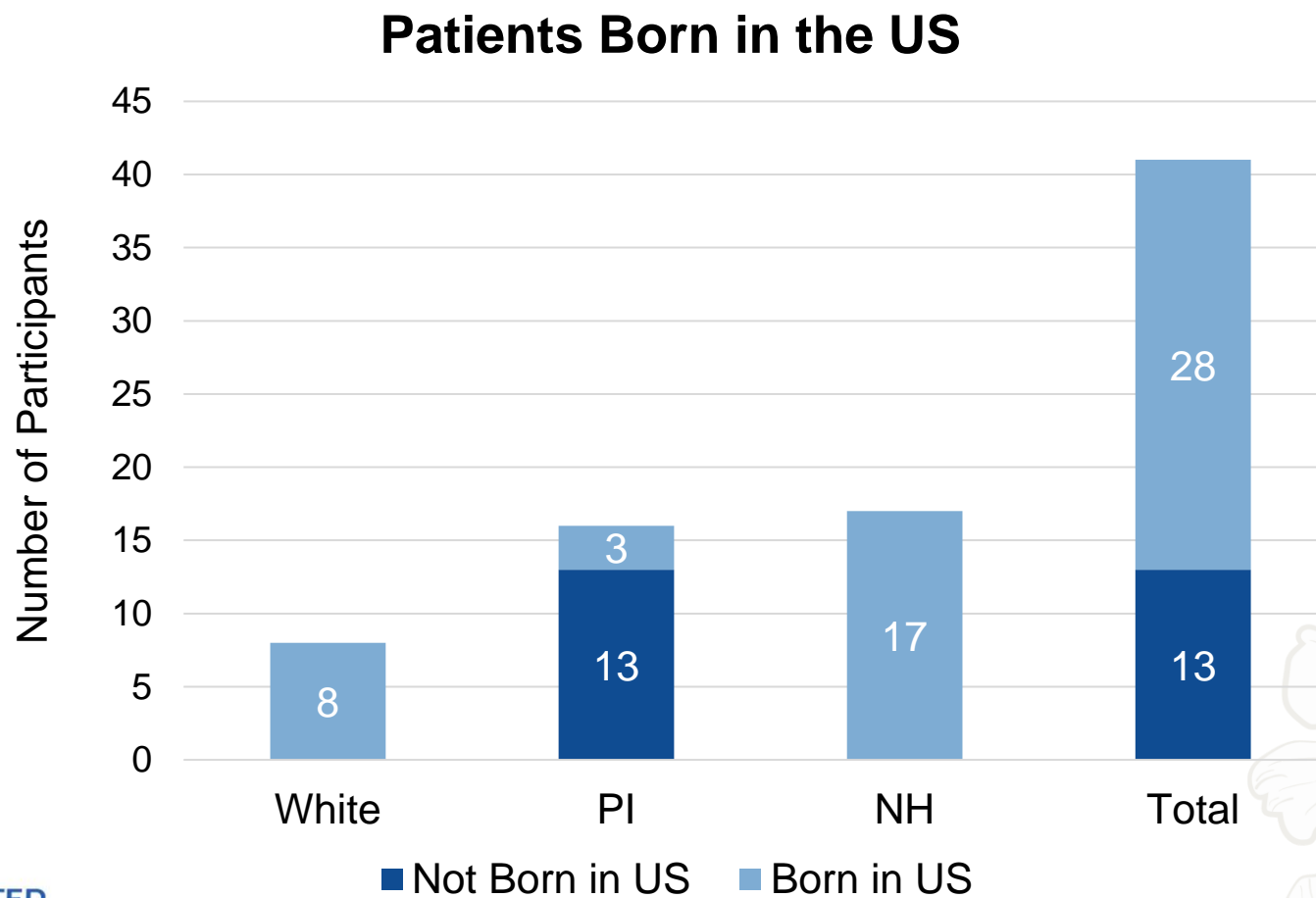
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Study Population



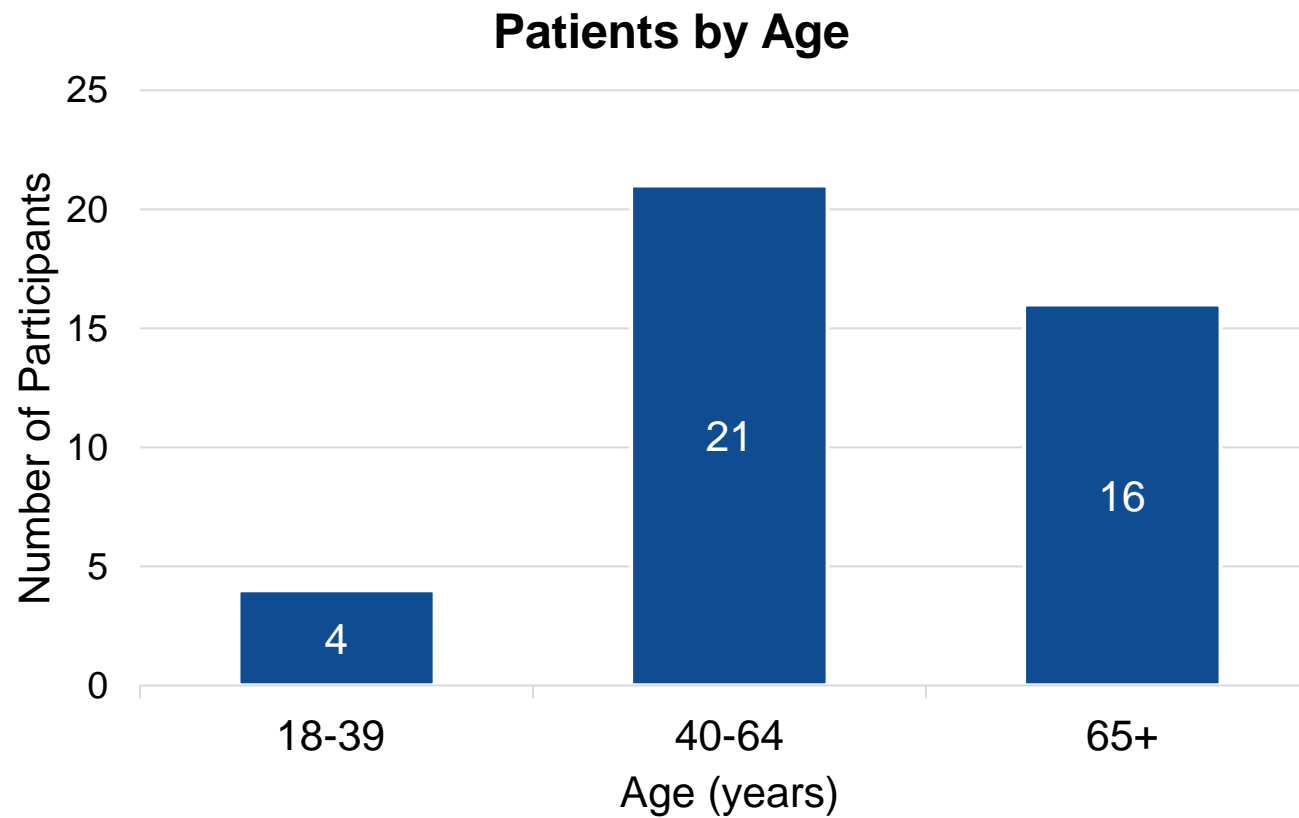
Study Population



PI included patients from American Samoa, Western Samoa, Chuuk, Pohnpei, Guam, and Fiji

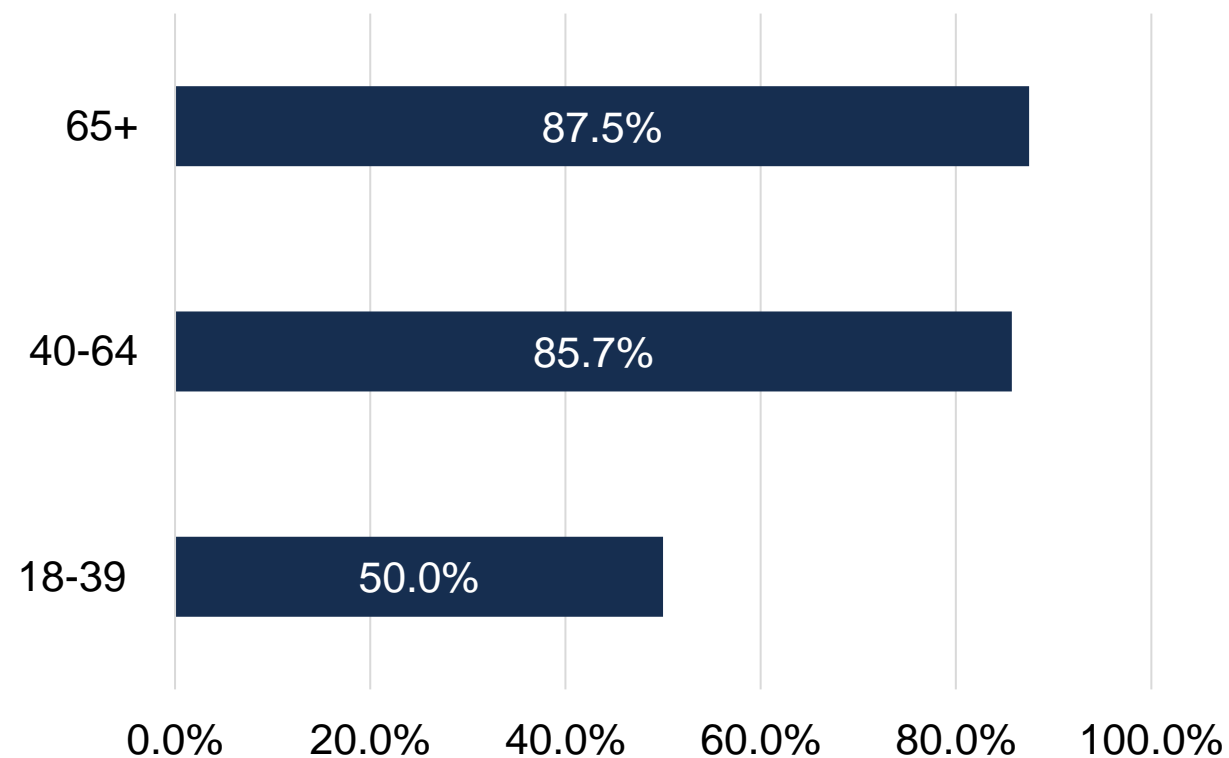


Study Population

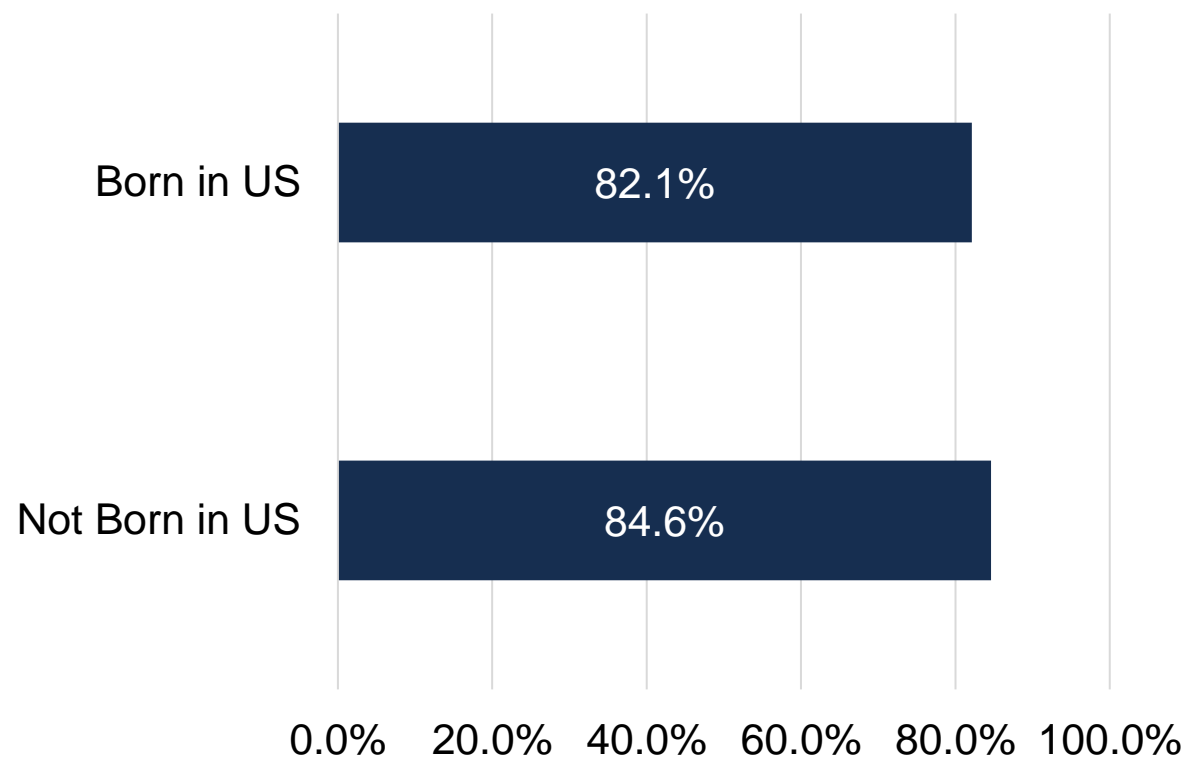


Facilitators & Barriers to Prescriber Trust

Trust MD by Age (% of patients)

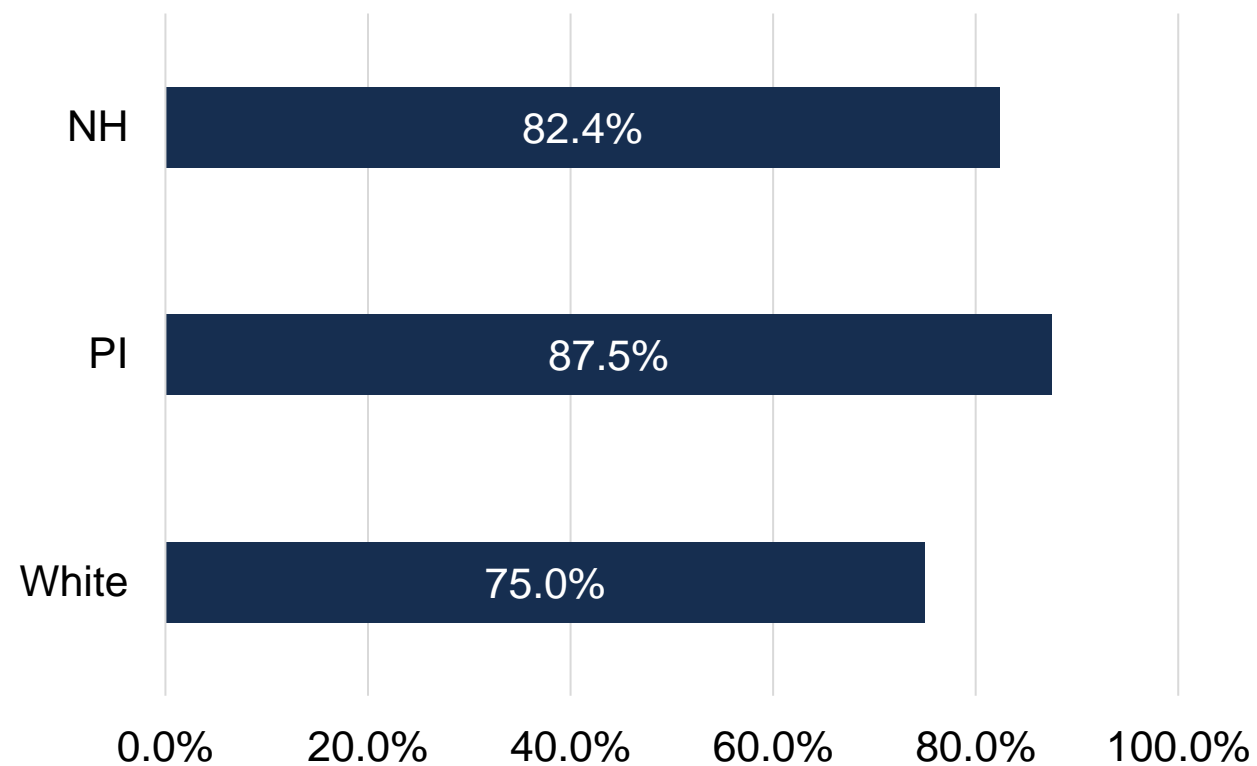


Trust MD by Place of Birth (% of patients)

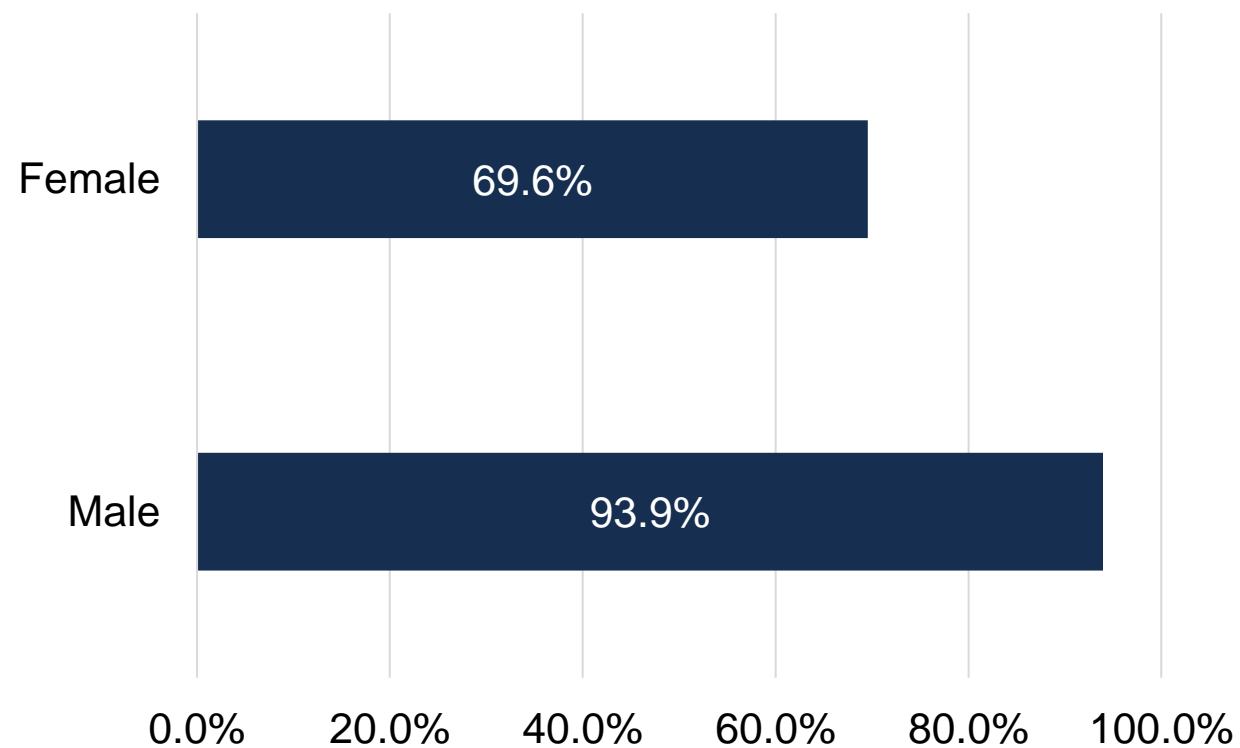


Facilitators & Barriers to Prescriber Trust

Trust MD by Race (% of patients)



Trust MD by Gender (% of patients)



Prescriber Trust: NH Patients

Common facilitators were knowledge, directness, and listening

"If I have a good feeling about him, I'll work with him any way he wants..." (65+ y/o NH male)

"I like Dr. ___ because he is straight up with me...I want them to be direct" (65+ y/o NH male)

"Sometimes I think they overly explain but aren't listening" (18-39 y/o NH female)



Prescriber Trust: PI Patients

Common facilitator was the length of the relationship.

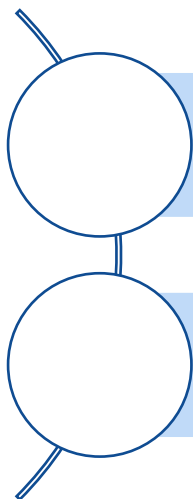
“I trust my doctor because I've been seeing her for 35 years.” (40-64 y/o Samoan female)

“I pretty much grew up going to him my whole life. My kids go to him now... So I would trust him very much” (40-64 y/o Samoan male)

“But I also have thought sometimes I really have that kind sickness...How they know for sure.” (40-64 y/o Samoan female)

Prescriber Trust: White Patients

Common facilitators were knowledge, communication, and honesty



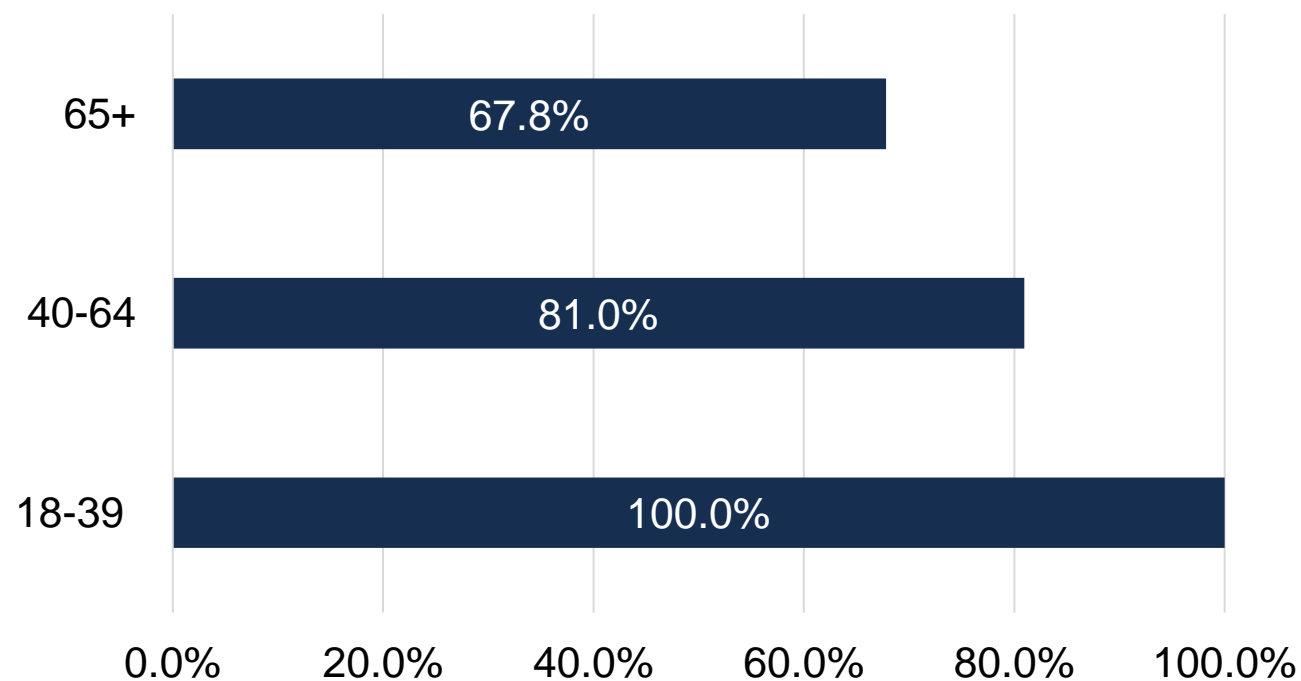
“I just believe in them, they’re in the medical field, they should know what they’re doing” (65+ y/o White male)

“The way they have conversations with myself and my wife ...how honest are they and candid with me ... That matters.” (40-64 y/o White male)

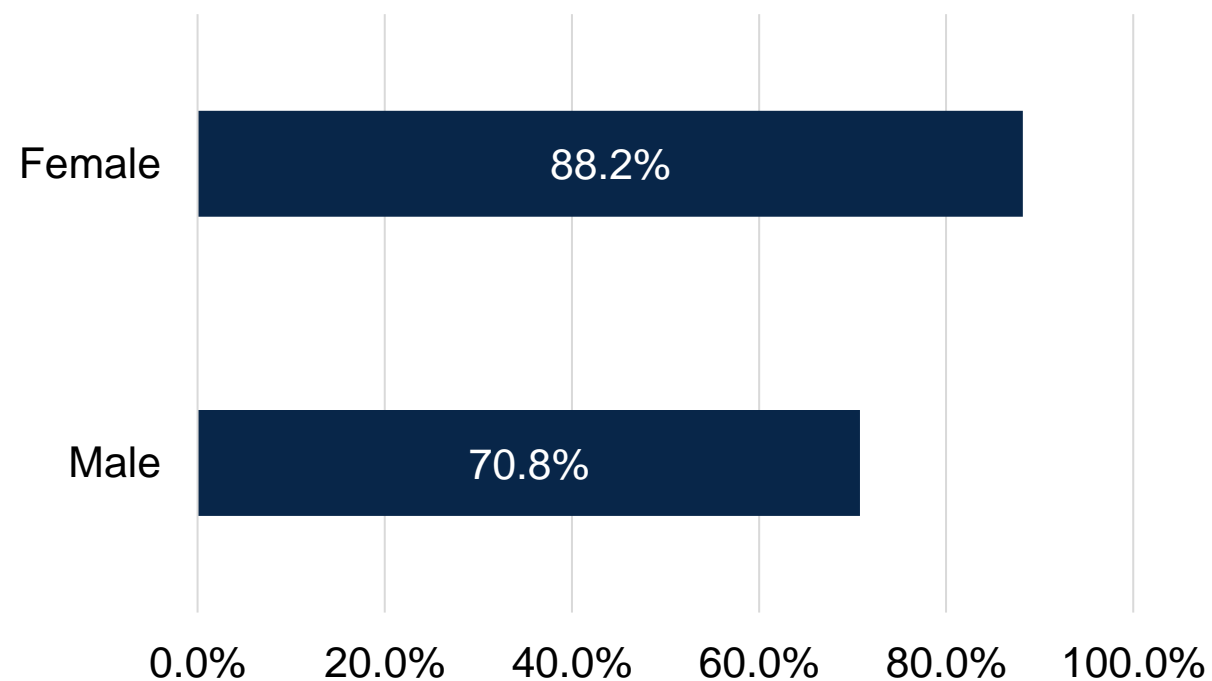


Diabetes Medication Beliefs

Positive Medication Beliefs by Age (% of patients)

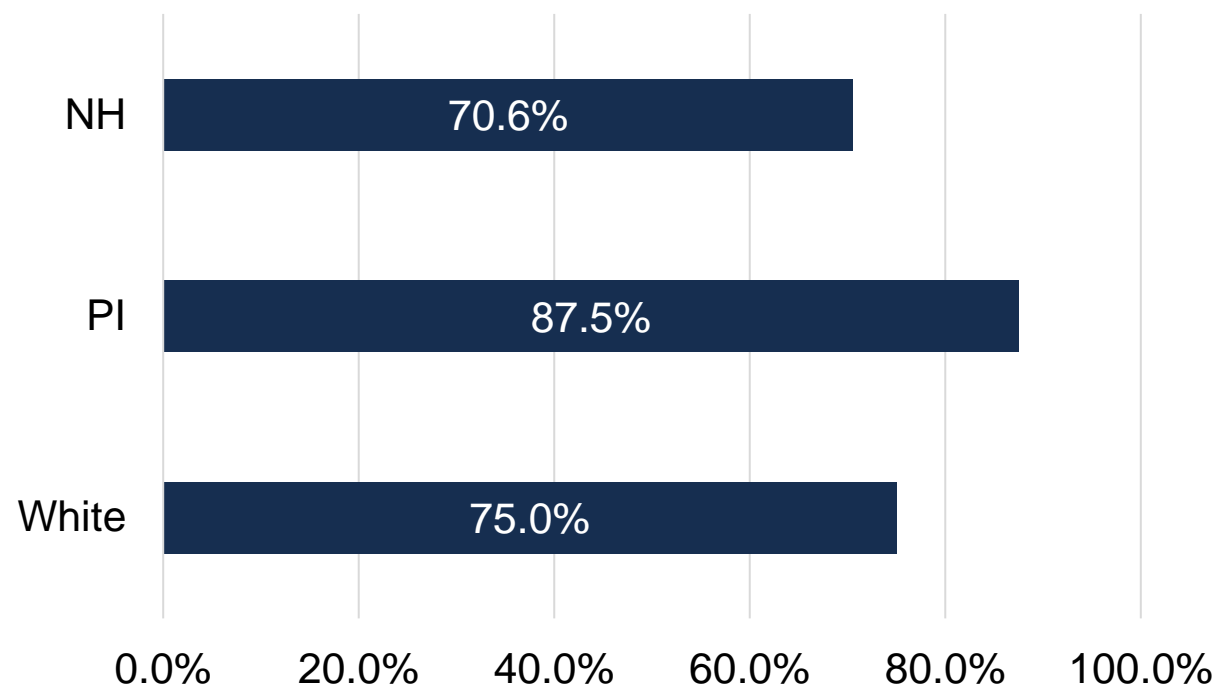


Positive Medication Beliefs by Gender (% of patients)

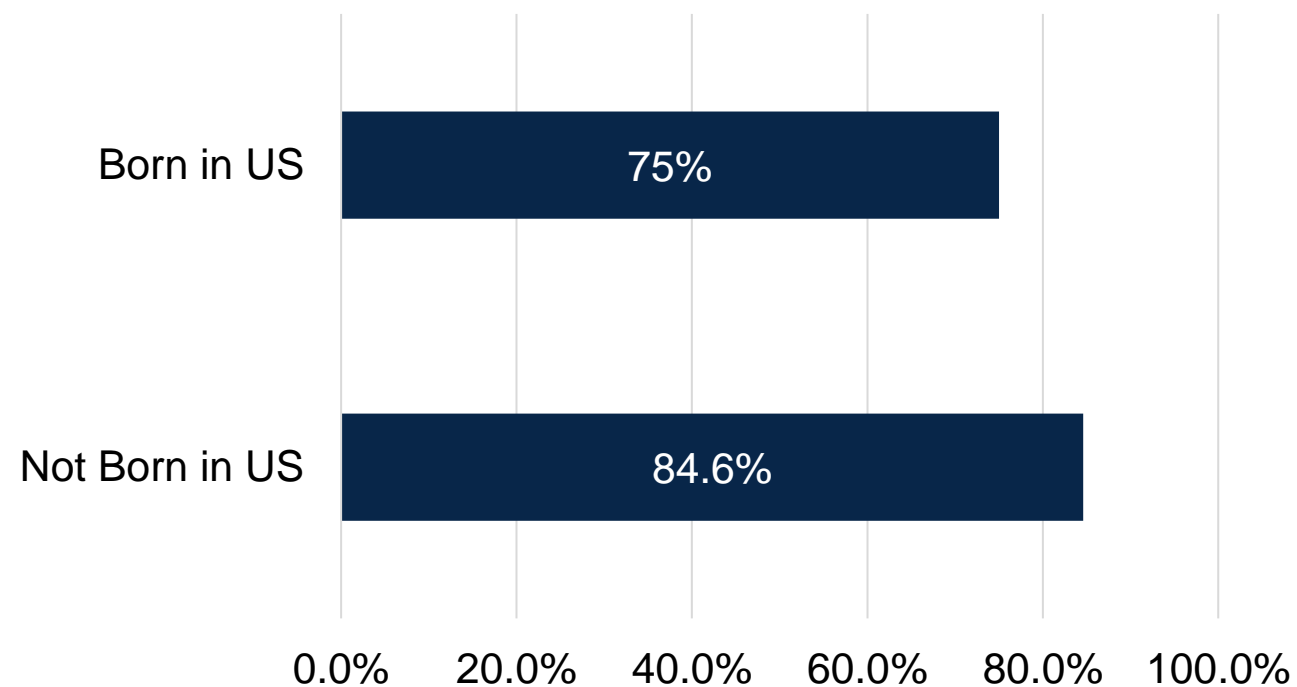


Diabetes Medication Beliefs

Positive Medication Beliefs by Race (% of patients)



Positive Medication Beliefs by Place of Birth (% of patients)



Diabetes Medication Beliefs: NH Patients

Most said diabetes medications are good for health and important.

“I feel that my medicine now that I'm taking really puts me in a good place.” (40-64 y/o NH male)

“I do believe they are good, because it is something that our bodies naturally make and I think if we have to replenish it, thank God we can.”(40-64 y/o NH male)

“Medication is good for you, but ... the more medication you take, the more screwed up your kidneys get ... that's why I have dialysis now” (40-64 y/o NH male)

Diabetes Medication Beliefs: PI Patients

Most said diabetes medications are good for health and important. A few patients also advocated for natural medicine and diet.

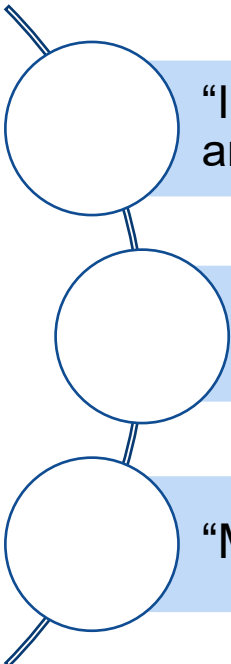
"I love them because I know if I never do, oh, maybe I'm gone. Because my diabetes is so high sometimes." (65+ y/o Samoan male)

"I think it's mainly it's up to the person because if you take your medicine at the same time still breaking the rules, the medications won't work." (40-64 y/o Samoan female)

"would like home remedies...I need to eat apples to be strong, like fruits and vegetables like that. But not really medicine, medicine, medicine." (40-64 y/o Samoan female)

Diabetes Medication Beliefs: White Patients

Most said diabetes medications are good for their health, but diet and exercise are also important.

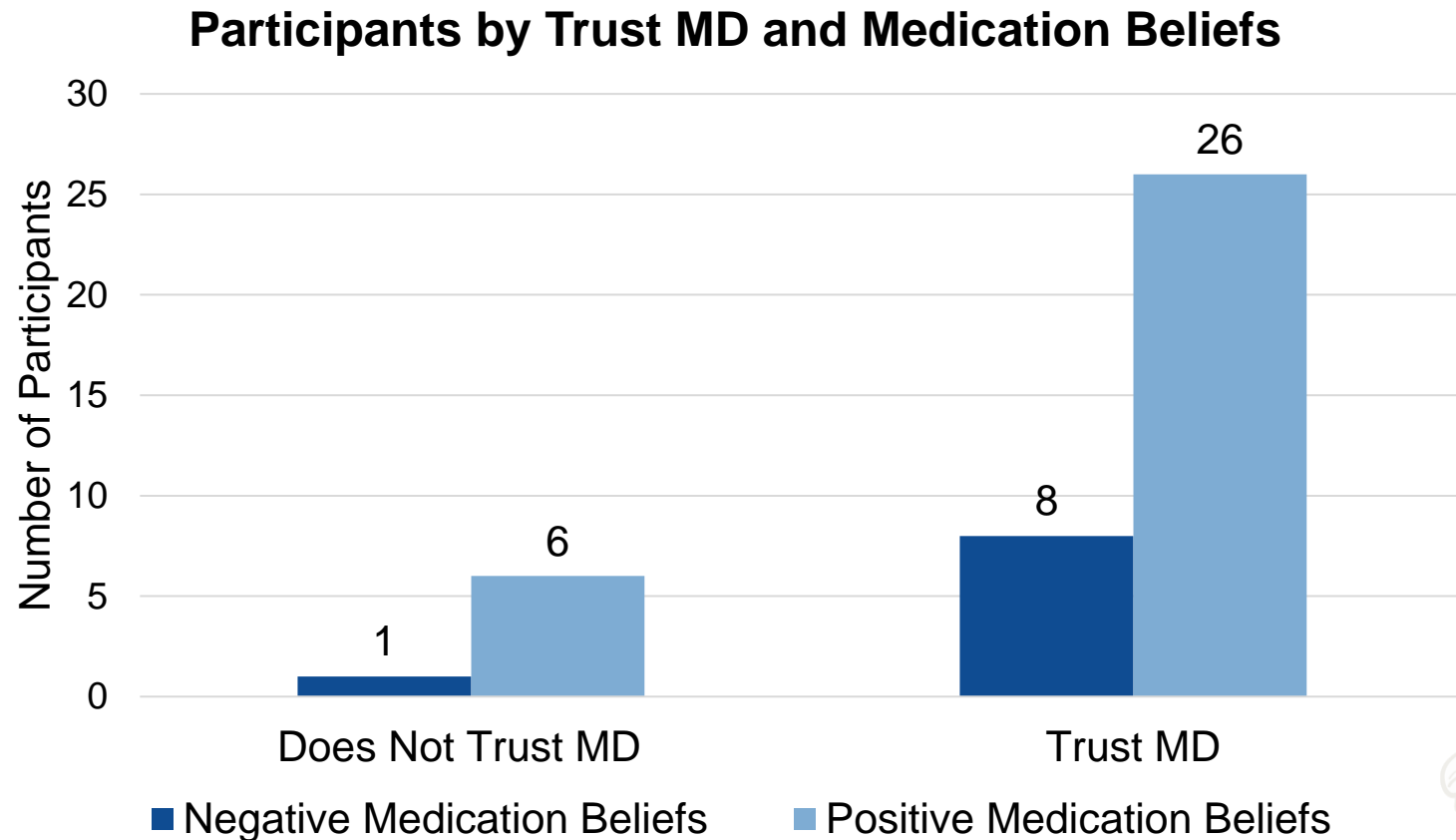


“I think it has to do with exercise and diet, and medicine might help a little bit, they always have, and they’re part of the plan.” (65+ y/o White male)

“Diet and exercise also important” (65+ y/o White male)

“Medications are good but have risks” (65+ y/o White male)

Association between trust and medication beliefs?



Conclusion/Discussion



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Conclusions

- Trust in provider is high across all races
 - Related to listening, length of relationship, honesty, helped them in the past
- Beliefs in medications are positive across all races
 - Life saving, good for health
 - Diet and exercise also important
- Information
 - Wants their health condition and medications to be explained well
 - Transparency important



Conclusions

NH Patients:

- Importance of two-way communication
- Medications are life-saving, but too much could be bad
- Trust in provider was high

PI Patients:

- Length of relationship key facilitator to trust in provider
- Medications are important, but wanted incorporation of natural medicine
- Race with the highest trust in provider and frequency of positive diabetes medicine beliefs

White Patients:

- Importance of honesty and knowledge
- Diet and exercise are needed in combination with medication



Conclusions

- Potential opportunities for pharmacist involvement:
 - Importance of patient education
 - Listen to patients needs
 - Offer transparency
 - Education on healthy diet & lifestyle
 - Importance of continuity of care
 - Importance of medical/pharmaceutical home



Limitations

- May not be generalizable
 - Inpatient population
 - Convenience sample
 - Single hospital in Hawaii
 - Only adult patients with diabetes
 - Only administered in English
- Not powered to show statistically significant differences between ethnic groups as it is a descriptive study
- Not compared against adherence data



Future Directions

- Comparison to likelihood of clinical trial participation
- Ambulatory setting and general population
- Other disease states
- Comparison against adherence data
- Other racial and ethnic groups



Post-Test Assessment Question 1

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Post-Test Assessment Question 2

2. To what extent do Native Hawaiian and Pacific Islander patients believe that prescription medications are good for their health?

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Post-Test Assessment Question 2

2. To what extent do Native Hawaiian and Pacific Islander patients believe that prescription medications are good for their health?

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Post-Test Assessment Question 3

3. What is the relationship between provider trust and medication beliefs in Native Hawaiian or Pacific Islander patients?
- a. Positively correlated
 - b. No significant relationship
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Post-Test Assessment Question 3

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Mahalo



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