

Documenting Social and Behavioral Factors: Insights from Potentially Preventable Hospitalizations

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BACKGROUND

- Potentially preventable hospitalizations (PPH) are those that could be avoided with access to high-quality primary care.
- Social and behavioral factors likely play a role in PPH, but may not be adequately captured in the medical record.



STUDY SITE

This study was conducted at Queen's Medical Center, the largest hospital in Hawai'i and the primary tertiary medical referral center for the Pacific Basin.

Health Communication Challenges

- From the EMR we learned:**
 - Health communication challenges are typically invisible in the EMR
- From the questionnaire we learned:**
 - 66% of participants had low health literacy (LHL)

		Tested LHL	
		No	Yes
Self Reported LHL	No	34%	12%
	Yes	16%	38%

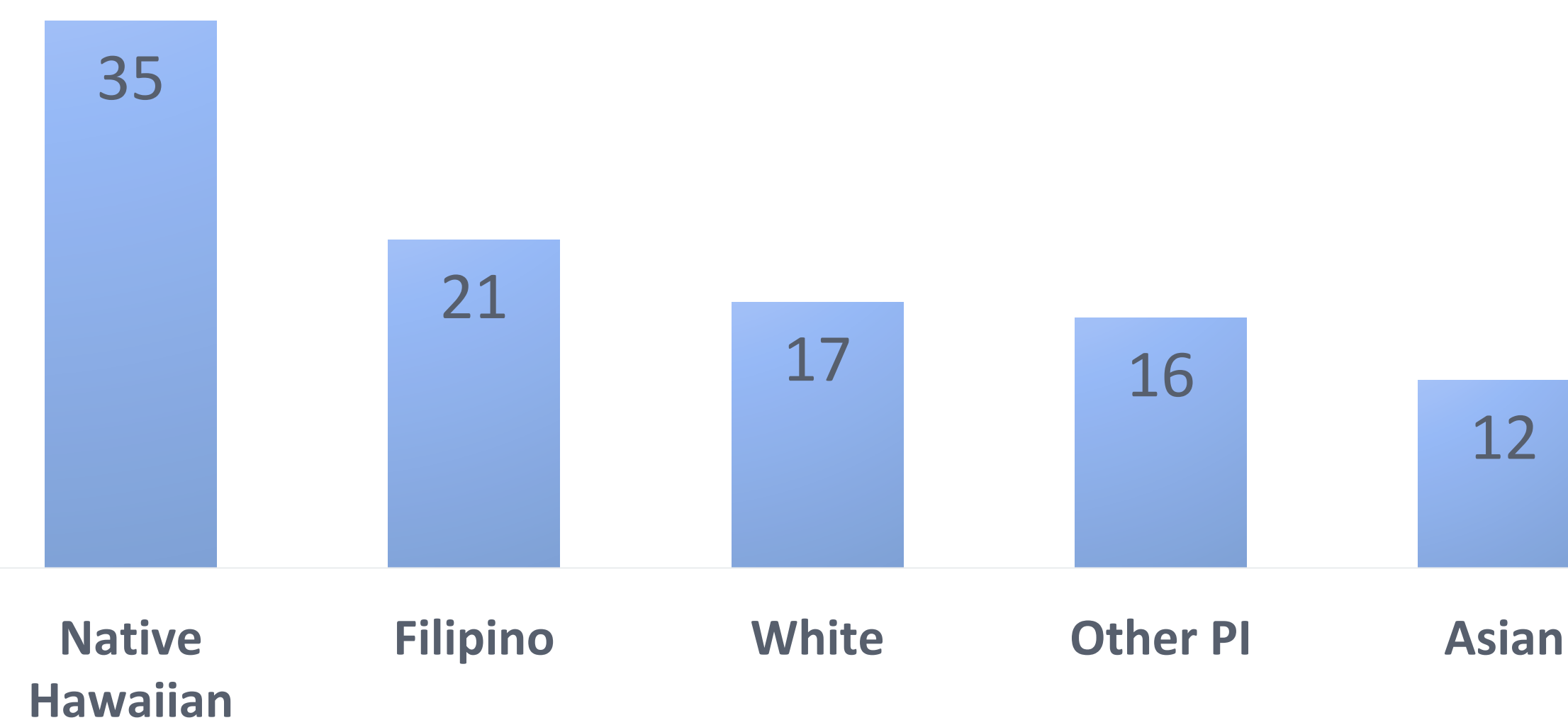
Mental Health

- From the EMR we learned:**
 - 50% had depression in their chart.
 - 33% had substance abuse in their chart.
- From the questionnaire we learned:**
 - 26% reported being sad or blue 30 out of 30 days in the past month.
 - 9.8% reported drinking 4 or more alcoholic beverages on days when they do drink.
- From patient stories we learned:**
 - 23% told of a mental health reason for their PPH.
 - 22% told of a substance use related reason for their PPH.

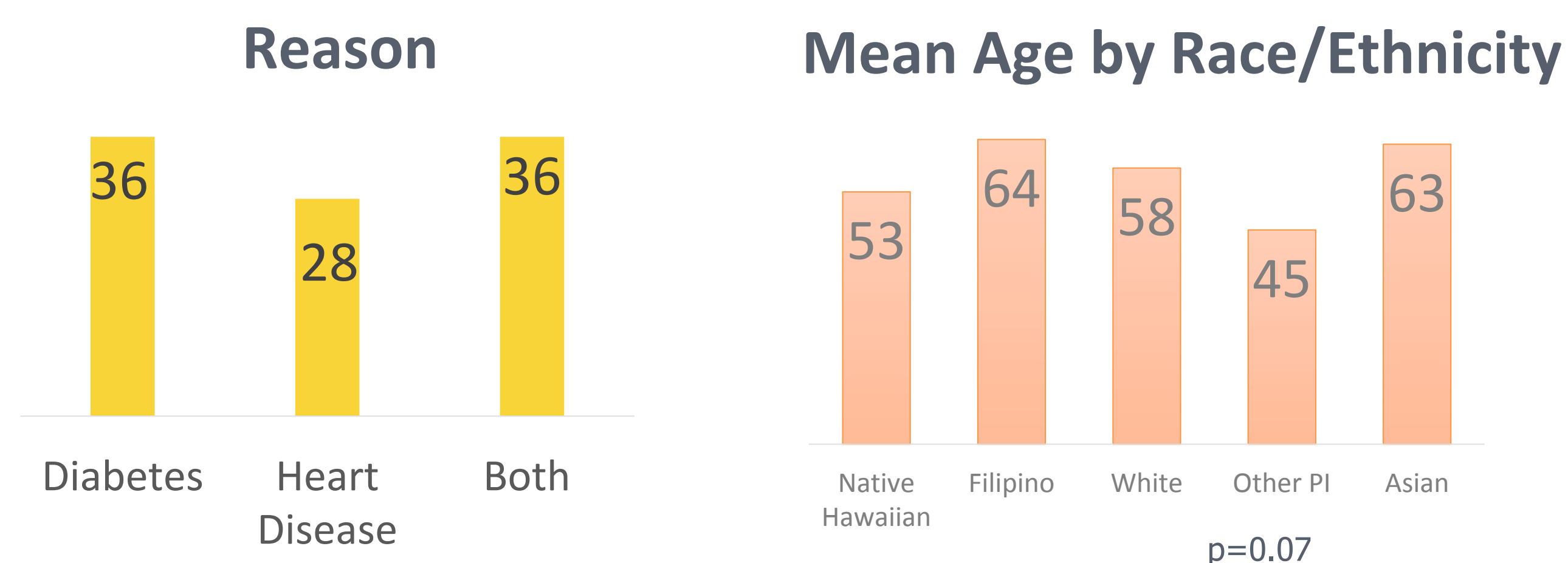
OBJECTIVE

- We performed a mixed-methods study to understand patient perspectives of the factors that lead to their PPH related to:
 - Diabetes
 - Heart Disease

Percent Race/Ethnicity in Sample (N=102)



Hospitalizations



Medications

- From the EMR we learned:**
 - The average number of heart and/or diabetes medications per patient was 4.8 (SD: 2.1).
- From the questionnaire we learned:**
 - 44% of the sample had delayed or skipped medicine
 - 27% due to cost
- From patient stories we learned:**
 - 54% of the sample (including 26.4% of those who did not report delaying or skipping medicine) told a story of a medication-related issue being a factor that precipitated their potentially preventable hospitalization.

METHODS

- From June 2013-February 2016, we identified adults (18+ years) hospitalized with a PPH for diabetes or heart disease
- We collected three types of data:
 - Electronic Medical Record (EMR) data
 - Survey:
 - closed-ended items (e.g., poverty)
 - validated scales (e.g., low health literacy by REALM)
 - Interview
 - eliciting patients' reasons for their hospitalization

SOCIAL FACTORS

- Most (87%) had good access to primary care.

BUT:

- Patients with PPH had many social disadvantages, including poverty (at least 55%), that are typically beyond the scope of acute care assessment and intervention.
- Patients' stories revealed how social challenges impacted their chronic care management, regardless of access to primary care.
- Unstable housing/homelessness (23%), limited their ability to adhere to (and, for some, their interest in following) their prescribed medication and lifestyle regimes, likely leading to their preventable hospitalization.

IMPLICATIONS

- Many contextual factors that explain PPH are unlikely to appear in EMR data, but may need to be assessed and addressed to reduce preventable hospitalizations.
- Better documenting, and then integrating, patient complex social needs into clinical care holds promise for higher quality, lower cost healthcare and better population health.