

# 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.

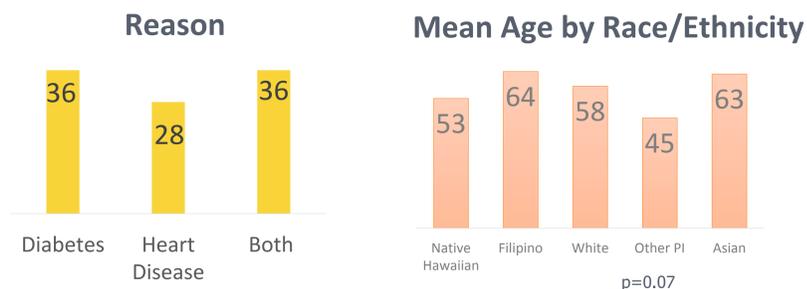
## OBJECTIVE

- 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



## 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

## 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.

## 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.