#### **Striving for Equity:** Improving Race and Ethnicity Data Collection in a Multiracial Population

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#### How is race and ethnicity data collected now?

- Minimum standards for race and ethnicity data collection remain unchanged since 1997
- 5 race categories: American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Pacific Islander, or White
- 2 ethnicity categories: Hispanic or Latino, not Hispanic or Latino
- No other standardized method of race and ethnicity data collection exists federally in the U.S.

Are you Hispanic or Latino?

O No

Regardless of your answer to the prior question, please indicate how you identify yourself. (Select one or more)

American Indian or Alaska Native Asian Black or African American Native Hawaiian or Other Pacific Islander White



### Why change how we collect data?

- Healthcare inequities are hidden when race, ethnicity, and language (REAL) data is not properly disaggregated
  - High prevalence of fair or poor health status among Filipino Americans in California (Adia et al., 2020)
  - Severe maternal morbidity among American non-Hispanic Black women (Leonard et al., 2019)
  - Disproportionate rate of COVID-19 infection among Pacific Islanders in Hawai'i (Miller et al., 2021)
- No standardized protocol at most healthcare organizations for how, when, and who collects REAL data, which leads to incorrect/incomplete data

### **Other problems?**

- Non-inclusive race/ethnicity surveys lead to incorrect/incomplete data
  - Patients who do not identify with any of the offered racial categories often forego providing racial data (Bhalla et al., 2012)
  - One NYC healthcare system found missing REAL data in 57.9% of its electronic health records (Polubriaginof et al., 2019)
- Over half of hospitals surveyed relied on the visual observations of admitting staff to determine a patient's race (Hasnain-Wynia, Pittman, and Pierce, 2004)

### **Our Goals**

- Improve race and ethnicity data collection at Queen's Medical Center
- Pilot and refine a comprehensive, patient-facing data collection system
- Compare results to information already recorded in patients' electronic health records
- What is the current state of race and ethnicity data collection at Queen's Medical Center? Can we improve it?



# Methods

#### **Development of Pilot Survey**

- Race, Ethnicity, Language, and Disability (REALD): Implementation Guide (Oregon Health Authority, 2020)
  - Open-ended questions
  - Verbally conveying language questions
  - Inclusively constructed race and ethnicity categories
- 50 race and ethnicity categories, instead of just 5
  - 14 questions
- Administered on tablet device using Qualtrics software

Black or African American African American African (Black) Caribbean (Black) Other Black (please specify) Hispanic and Latino/a Hispanic or Latino/a Central American Hispanic or Latino/a Mexican Hispanic or Latino/a South American Puerto Rican Other Hispanic or Latino/a (please specify

Nativa Hawaijan ar Daoifia Ialandar

Native Hawaiian or Pacific Islander Native Hawaiian Guamanian, Chamorro, Chamoru, Chamoru Chuukese Kosraean Pohnpeian Yapese Palauan/Blauan Nauruan Kiribati Marshallese Samoan Tongan Maori Fijian Tahitian Carolinian Other Pacific Islander (please specify)



#### Data Comparison

#### Electronic health record

- and insurance status
- incorrect REAL data in Queen's Medical Center EHRs



Data gathered from electronic health record (EHR): race and ethnicity, age,

Allowed estimation of the percentage of potential missing, incomplete, or

## **Surveyed Population**

- 20 adult women
- OB/GYN in-patients at QMC Punchbowl
- Laboring or postpartum
- English-speaking



# Demographics

State of Hawai'i (U.S. Census July 2019)





Black AI/AN Multiracial H/L

## **Survey Overview**

- in comparison to what was recorded in their EHR
- only one race or ethnicity recorded in their EHR
- 0% of patients had missing or incorrect data recorded in the medical record

80% of patients provided more informative data using our piloted survey

• 72.7% of multiracial or multiethnic patients had incomplete data, with

| EHR                            | Survey                                 |
|--------------------------------|--|
| White, not Hispanic            | Portuguese                             |
| Asian, not Hispanic            | Japanese                               |
| Chinese, not Hispanic          | Chinese/Filipino                       |
| Caucasian, not Hispanic        | Western European                       |
| Japanese, not<br>Hispanic      | Japanese                               |
| Part Hawaiian, not<br>Hispanic | Hawaiian/Filipino/<br>Eastern European |
| Asian, not Hispanic            | Chinese/Japanese/<br>Caucasian         |
| Caucasian, not Hispanic        | Eastern European                       |
| Caucasian, not Hispanic        | Western European                       |
| NH/PI, Tahitian, not           | Tahitian/Chinese/                      |

| EHR                                   | Survey                                   |
|---------------------------------------|--|
| Japanese, not Hispanic                | Japanese                                 |
| Part Hawaiian, not<br>Hispanic        | Hawaiian/Okinawar<br>French              |
| Asian, Other Asian, not<br>Hispanic   | Korean/Japanese                          |
| Part-Hawaiian, not<br>Hispanic        | Native Hawaiian/<br>Chinese/Filipino/    |
| NH/PI, not Hispanic                   | Chinese/Filipino/<br>Samoan/Eastern      |
| NH/PI, not Hispanic                   | Native Hawaiian/Filip                    |
| White, Part Hawaiian,<br>not Hispanic | Swedish/Irish/Scottis<br>Native Hawaiian |
| Asian, Thai, not<br>Hispanic          | Thai                                     |
| Part Hawaiian, Hispanic               | Native Hawaiian/<br>Chinese/Mexican      |
| NH/PI, Samoan, not<br>Hispanic        | Samoan                                   |



### EHR Comparison

Complete, uninformative 35%





### How was REAL data gathered at QMC?

Asked after being admitted 20%

Asked, don't remember when 15%

#### Don't remember being asked 35%

#### Asked at registration 30%

# **Discussion/Conclusions**

#### Limitations

- Only English-speaking participants
- No data from Black/African American or American Indian/Alaska Native patients
- Small sample population

#### So what?

- 1. Development of a more inclusive, patient-facing survey may allow healthcare institutions to collect more informative data from patients
- how, when, and who collects race and ethnicity data from patients
- as ours

2. A standardized protocol needs to be established that clarifies exactly

3. Particular focus should be placed on gathering more complete data from multiracial and multiethnic patients, especially in a community as diverse

#### Now what?

- (a previously established form of patient-recorded REAL data collection)
- data collection
  - - for REAL data collection (Hasnain-Wynia et al, 2006)
- and training, so collaboration and sharing of resources among healthcare **systems** is critical (Lee et al., 2016)

## Comparison of survey responses to parental data on newborn birth certificates

Comprehensive staff training is just as necessary as establishing a new method of

• Cultural insensitivity, anxiety about current political climate, and misunderstandings about why REAL data is collected and how it will be used all contribute to discomfort of healthcare staff when collecting data (Cruz & Smith, 2021)

• Negative patient reactions to data collection can be mitigated by providing staff with scripts, establishing training programs, and creating a standardized protocol

Budgets often prevent hospitals from rolling out new forms of REAL data collection



"Recent advances in health I.T. allow for the *quantification of health disparities in real time* ... Healthcare organizations are thus expected to collect race and ethnicity data *as a part of care itself...*"

- "Health Equity Beyond Data," Cruz & Smith, 2021

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