



Telling Your Story with Data and What to Do When You Don't Have Data

May 17, 2023



Data: Why Does it Matter?

Data for Equity = Data Equity = Health Equity

In order to tackle some of the most complex issues facing us today, our nation first needs complete, accurate, and disaggregated data to give us a full understanding of who is impacted and how situations are evolving. Data are necessary, even though not sufficient, to advance equity and justice.

Data is at the Heart of a Healthy Democracy and Healthy Communities

The U.S. Constitution places the census at the core of our democratic system of government by calling for a count of the nation's population every 10 years. The census and the related American Community Survey provide information that is the cornerstone of knowledge about the American people.

Census data shape the future of our community and define our voices in Congress. It determines how more than \$1.5 trillion in federal government resources are distributed each year; where schools, roads, and hospitals are built; how many congressional seats are apportioned among the states; and allocates political representation in Congress, statehouses, and local legislative bodies.

Data: Why Does it Matter?

When You're Not Counted, You Don't Count

When communities are missed in the census, they are deprived of equitable political representation and access to critical resources. Ensuring a fair and accurate census must be regarded as one of the most significant civil rights issues facing the country today.

- Black people, Latinos, and Native Americans were undercounted during the United States 2020 national census.
- People who identified as white and not Latino were overcounted as well as Asian Americans (unclear about Pacific Islanders).

Where Are We in the Fight for Data Justice?

OMB Statistical Policy Directive No. 15

The U.S. Office of Management and Budget (OMB) is currently in the process of revising Statistical Policy Directive No. 15: Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity (Directive 15), which sets forth the minimum categories that federal agencies must use when they collect information on race and ethnicity.

- 1. Adoption of a combined race and ethnicity question format.**
- 2. Addition of a new category for persons of Middle Eastern or North African (MENA) origin that is geographically based and separate from the White category.**
- 3. Requiring the collection of more granular data for all minimum race and ethnicity categories.**

Where Are We in the Fight for Data Justice?

SOGI Indicators Not Included (Yet!)

Congressional leaders and LGBTQ advocates are calling on the U.S. Census Bureau to finally begin asking Americans about their sexual orientation and gender identity. They want to see the SOGI questions added to the 2030 census forms.

- While the 2020 census omitted the SOGI questions, it did include updated questions asking about same-sex households. The question asking how people living in the same household were related included the options "same-sex husband/wife/spouse" or "same-sex unmarried partner." In 2010, the options on the census form were the generic terms "husband or wife" or "unmarried partner."
- The census bureau [recently released](#) the responses to that question on the 2020 census form. It found there to be 1.2 million same-sex couple households in the United States, the first time the demographic data had exceeded a million.

What to Know About Data Research

Data Storytelling: Theory and Practice

Conducting a Needs Assessment



Data Storytelling: Theory and Methodology

Types of Data

Quantitative (Numerical)

Discrete

Discrete data is information that can be counted.. Typically, it involves integers—whole numbers, rather than fractions (ie: the number of students in class)

Continuous

Continuous data is data that can take any value and can be infinitely broken down into smaller parts. It differs from discrete data in that it can change its value (ie: weight)

Binary

Binary data is represented or displayed in a binary choice (ie: right or wrong, up or down)

Nominal

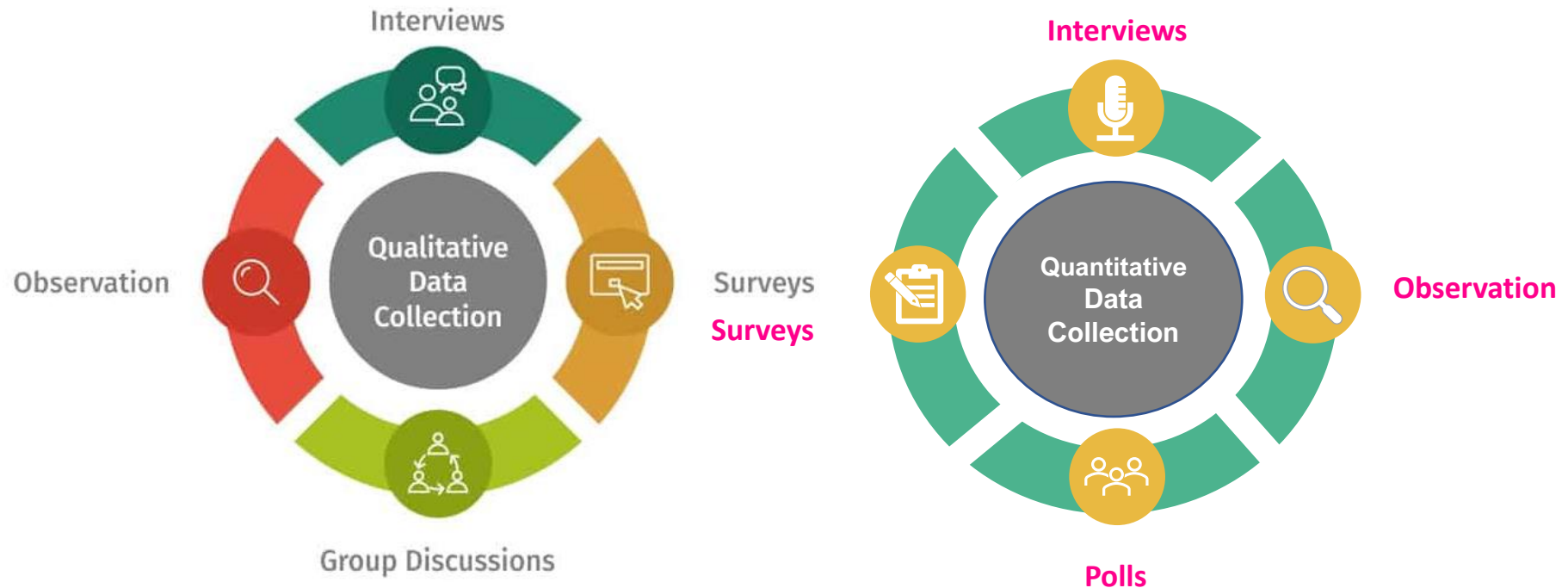
Nominal data, also called “named” or “labeled data,” or a “nominal scale,” is any type of data used to label something without giving it a numerical value (ie: racial groups)

Ordinal

Ordinal data is qualitative data categorized in a particular order or on a ranging scale (ie: please rank your top choices)

Qualitative (Categorical)

Data Storytelling: Theory and Methodology



Data Collection: Survey Do's



DO: Keep it short, simple and well-sequenced



DO: Make it accessible. You have a responsibility to eliminate barriers



DO: Know your community and plan accordingly



DO: Beta test and monitor real time results

Data Collection: Survey Don'ts



DON'T: Under-sample
your population



DON'T: Mix results



DON'T: Ask the wrong
questions



DON'T: Bite off more
than you can chew

What to Know About Data Storytelling

Data Storytelling: From Good to Great



1. Use Narrative

Use a narrative structure in data stories.

Stories generally follow a common arc – the protagonist faces a challenge, goes on to resolve it, then returns to normalcy. An example of this arc is the Hero's Journey.

2. Choose the Right Format

Select the format that most appropriately displays your data. The easiest way to determine your data visualization format is to understand where you'll present it.

3. Declutter

- Remove chart borders
- Remove gridlines or axes
- Clean up axis labels
- Label data directly (as opposed to using a legend)
- Remove data markers
- Use special effects (bold, underline, italics, shadows) sparingly

4. Make it Relevant

Your data story should be based on some level of knowledge your audience already has but is accompanied by new information

Data Storytelling: From Good to Great



5. Only Include Good Quality Data

Your story is as good as the data it contains. That's why you should make sure to only use data from reputable sources



6. Level Up

How can you make data storytelling more engaging? Turn passive viewers into active participants in your story.



7. Use Templates

Work smarter not harder. Leverage existing assets and customize them for your needs.



8. Be Focused

One of the easiest ways to cut down on the noise and be concise is to use lists and bullets.

Data Storytelling: Declutter



Data Storytelling: Focus

How quickly can you see the bear in the trees in each of these illustrations?



Source: The Functional Art by Alberto Cairo

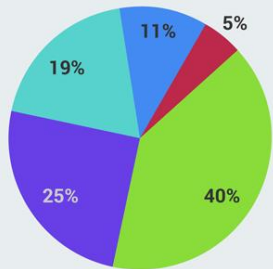
756**3**9506847**3**
65866**3**0**3**7576
860**3**72658602
8465891078**3**0

Data Storytelling: Choose the Right Format

Survey Results

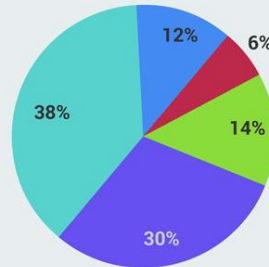
PRE: How do you feel about doing science?

■ Bored ■ Not great ■ OK ■ Kind of interested ■ Excited



POST: How do you feel about doing science?

■ Bored ■ Not great ■ OK ■ Kind of interested ■ Excited



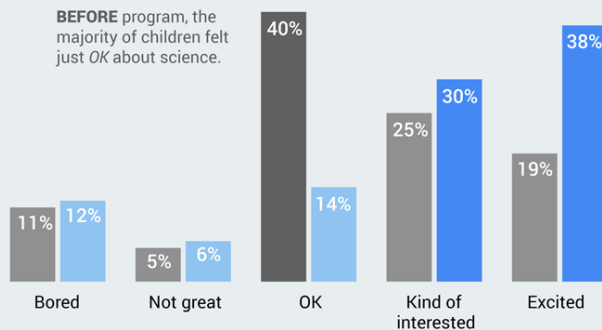
Source: Storytelling With Data by Cole Nussbaumer Knaflic

Before

Pilot program was a success

How do you feel about science?

BEFORE program, the majority of children felt just OK about science.



AFTER program, more children were *Kind of interested* & *Excited* about science.

Source: Storytelling With Data by Cole Nussbaumer Knaflic

After

Data Storytelling: Provide Context

2021

How Do Big Tech Giants Make Their Billions?

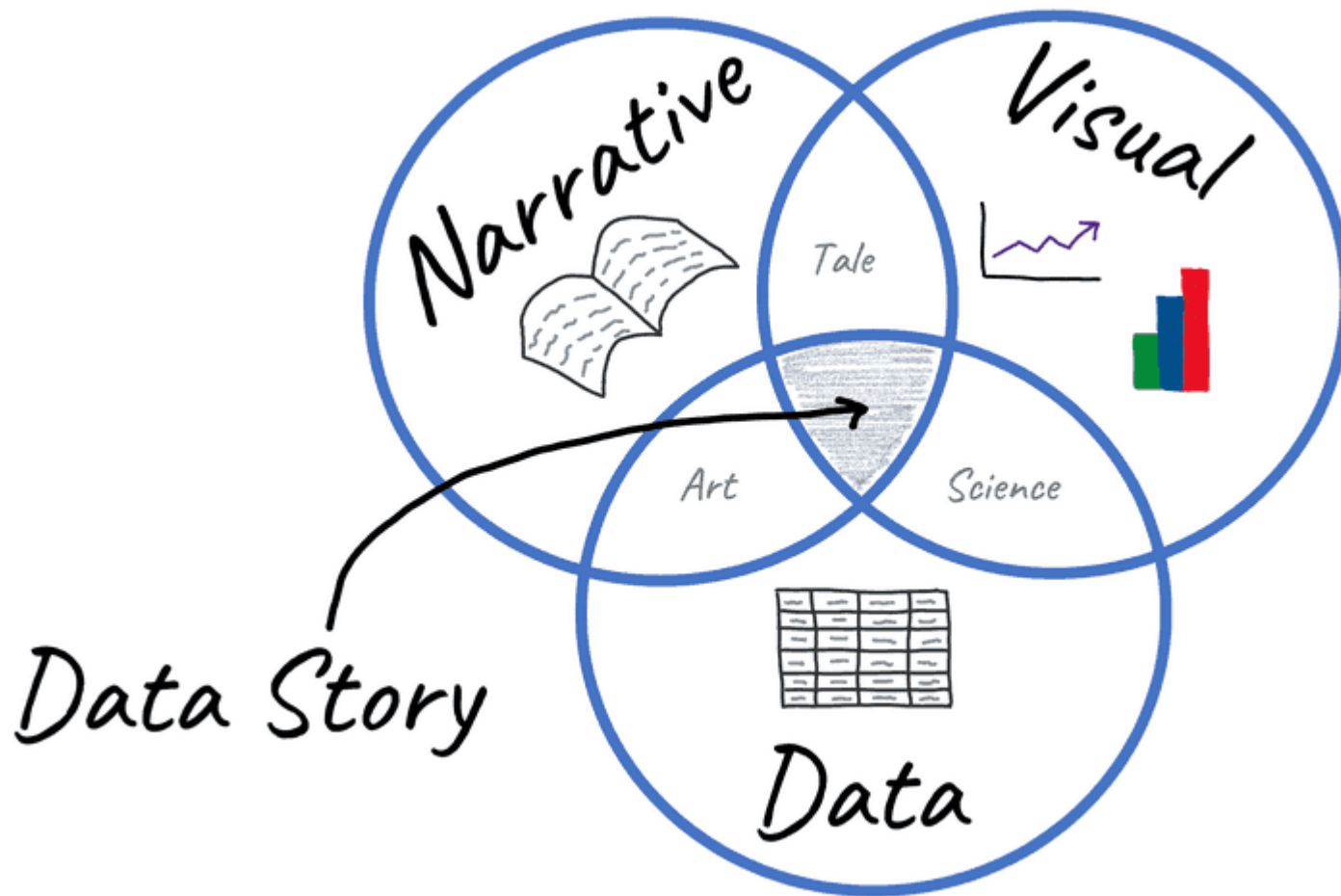
A REVENUE BREAKDOWN OF TECH'S LARGEST COMPANIES

In 2021, the Big Five tech companies generated more than **\$1.4 trillion** in revenue—that's more than Mexico's entire GDP.

Where does big tech make their money? We dug through each company's 2021 10-K reports to find out.



Data Storytelling: Art + Science



Common Practice

Advance OC

Data dashboards
are just the tip of
the iceberg.

data dashboard

data
collection

data
centralization

data
visualization

data
synthesization

data
intelligence

Data Curation

**Truly actionable data is
more than data collection
and reporting. It is the
process of curating data and
operationalizing data
intelligence.**

Thank You!

Contact us:

info@advanceoc.com

OC Equity Map

[www.advanceoc.com/
orange-county-equity-
map](http://www.advanceoc.com/orange-county-equity-map)



Ada Hand, HB Mobile Home Residents Coalition

Katie Kalvoda, Advance OC

Kelita Gardner, Second Baptist Church

Ualani Hoopai, Pacific Islander Health Partnership

Moderator:

Cleola Payne, Institute for Healthcare Improvement

Pacific Islander Health Partnership

Ualani Ho'opai
Executive Director

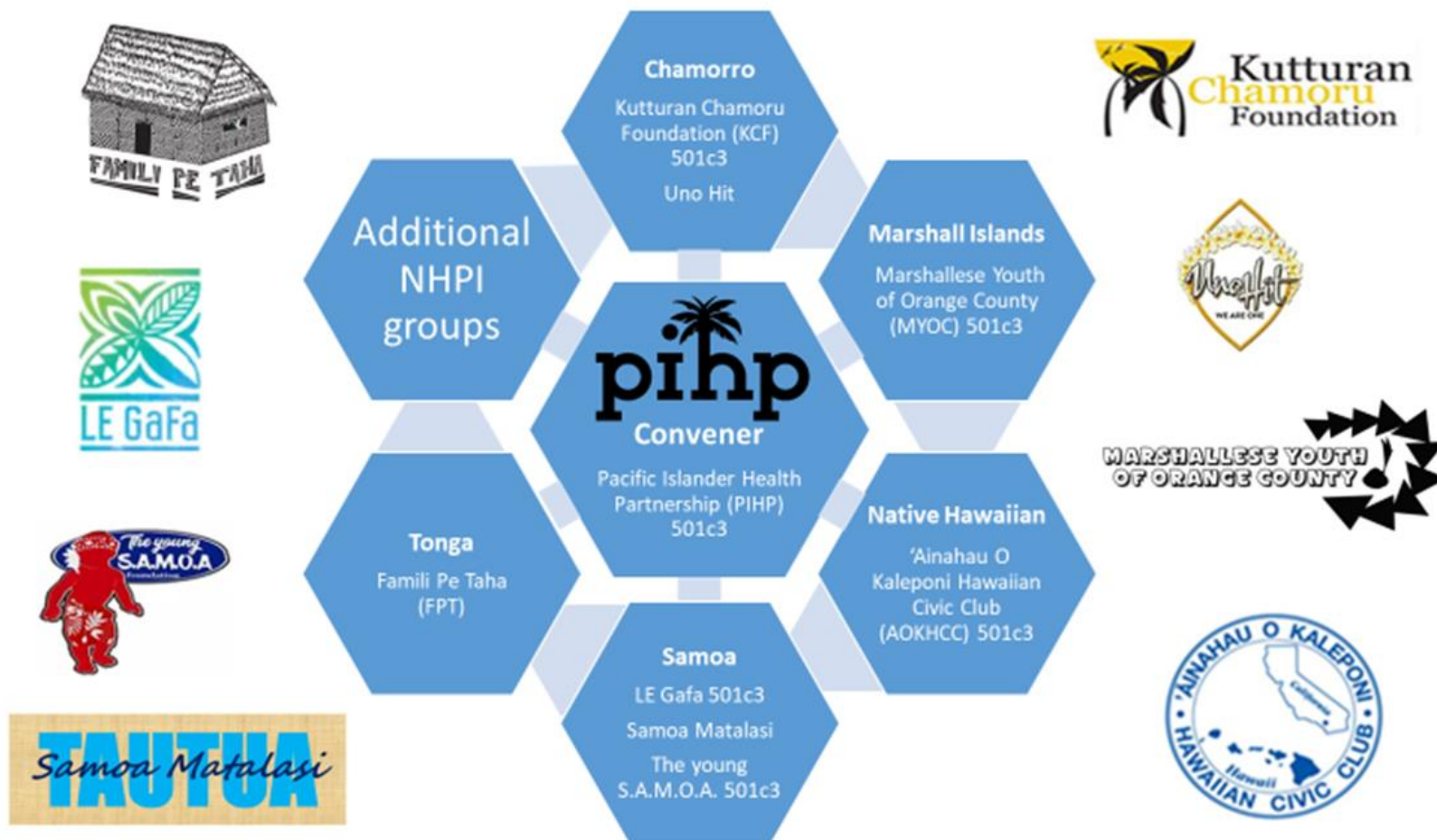


Who is Pacific Islander Health partnership?

- ❖ Founded by Jane Ka`alakahikina Pang & Victor Kaiwi Pang
- ❖ Based in Santa Ana , California (Orange County)
- ❖ Established in 2003
- ❖ NHPI populations of focus are:
 - Chamorro
 - Native Hawaiian
 - Marshallese
 - Samoan
 - Tongan
- ❖ Rooted in strong traditional cultural values:
 - Aloha - Compassion
 - Kōkua – Assist/Support
 - Kuleana – Honor to serve
 - Mālama – To care for
 - Lōkahi - Unity
- ❖ Special programs for kupuna (elders) and `ōpio (youth)



Pacific Islander Health Partnership

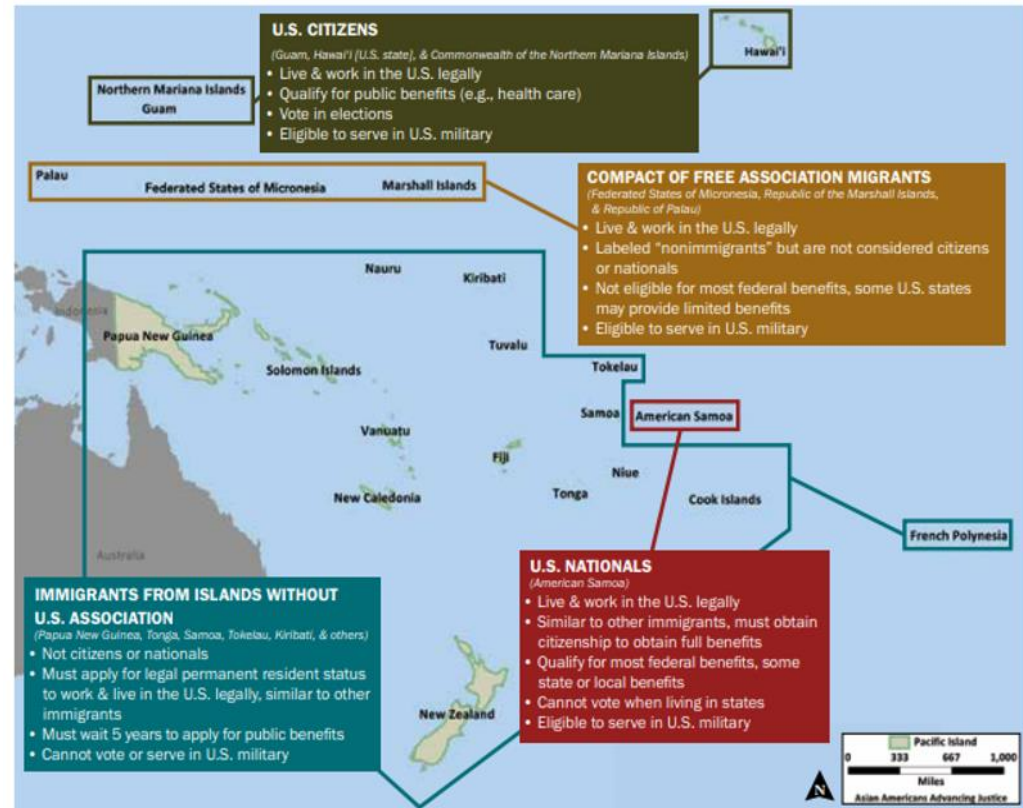


Who are Native Hawaiians and Pacific Islanders (NHPIs)?

We Are...

1. Citizens
2. Legal Permanent Residents
3. Nationals
4. Compact of Free Association Migrants (COFA)
5. Undocumented Immigrants

U.S. Immigration Status by Pacific Island of Birth



U.S. Citizenship and Immigration Services, National Immigration Law Center, U.S. Department of the Interior, Office of Insular Affairs; Hawai'i's Appleseed Center for Law and Economic Justice; APIAHF "Access to Health Coverage for Pacific Islanders in the United States." Note: Smaller islands not labeled on map. Information provided on the chart is generalized information based on islands of birth. The information above may not be true for all immigrants born on these islands. Native Hawaiians living in Hawai'i are indigenous people and not immigrants. As indigenous people, Native Hawaiians qualify for other federal benefits through programs such as the Hawaiian Homes Commission Act.

Please evaluate your breakout session!



Session Titles:

- *Telling Your Story with Data of When You Don't Have Data Yet*