Transformation and Quality Strategy (TQS)

Using REALD & SOGI data in TQS projects: Part 1

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Acronyms

TQS = Transformation and Quality Strategy (CCO contract deliverable)

REALD = Race, ethnicity, language and disability

SOGI = Sexual orientation and gender identity

Agenda

- Welcome and logistics – 5 minutes
- Overview of REALD & SOGI data – 5 minutes
- Applying REALD & SOGI data to TQS – 20 minutes
- Q&A – 20 minutes

Overview of REALD & SOGI data

What gets counted, counts!

Who decides who counts? Data systems are not neutral, and data has historically been used to colonize

...lack of adequately disaggregated data impacts communities by making "them invisible when policies are made, resources are allocated, and programs are designed and implemented" (Hasnain-Wynia, et al 2012)

Purpose of the repository

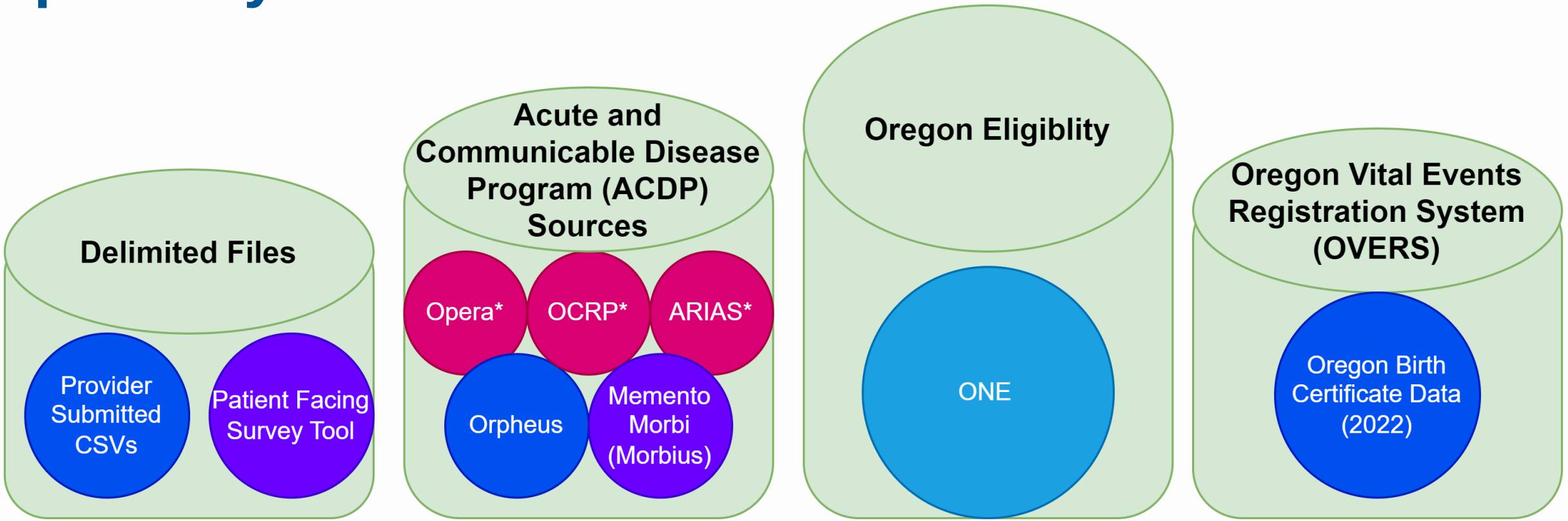
- Provide analysts the highest quality and detailed **R**ace/**E**thnicity, **L**anguage, **D**isability, **S**exual **O**rientation, and **G**ender **I**dentity data possible
  - Reduced missing data
  - Improved data quality
  - Standardized REALD & SOGI measures for reporting (compliant with evolving legislation)

How does the initial repository work?

- Eight (and counting) different data sources are synthesized to produce cleaned and detailed **R**ace/**E**thnicity, **L**anguage, **D**isability, **S**exual **O**rientation, and **G**ender **I**dentity data

- The repository does the work of ingesting records, matching persons, updating records, and calculating standardized variables for reporting

Repository data sources/buckets



- Key ideas
  - Total raw records 40+ million
  - Majority of records come from ONE
  - Some sources are no longer active re: Covid

CCO Data Feed

- Equity and Inclusion Division submits a batch file of all REALD & SOGI data for Medicaid clients 2x a month
- Other system matches names/DOB to MMIS, parses records to CCO mailboxes based on membership identifiers
- CCO mailboxes receive delimited flat file containing latest known/updates of REALD & SOGI data for members

Missingness in the repository vs other sources

CAHPS Sample Frame 2023 - Adult				
CDE_RACE_ ETHNIC	DSC_RPT_GROUP_3	DSSURS Primary	DSSURS Supplemental	REALD
10	Unknown/undetermined	26.3%	18.5%	9.1%

CAHPS Sample Frame 2023 - Child				
CDE_RACE_ ETHNIC	DSC_RPT_GROUP_3	DSSURS Primary	DSSURS Supplemental	REALD
10	Unknown/undetermined	34.9%	24.3%	13.1%

Applying REALD & SOGI to TQS

TQS requirements

TQS projects that use member-level data must:

- ✓ Analyze all aspects of REALD & GI
- ✓ Identify any disparities
- ✓ Include project activities to address those disparities
- ✓ Include policy or programmatic recommendations to address any inequities identified
- ✓ Disaggregate member-level targets and benchmarks by REALD & GI categories
- ✓ Describe a plan for using sexual orientation data when it's available

Small Numbers: Equity Considerations

- ***We need an equity lens to small numbers policies.***
- ***What assumptions about community*** size do we have and how does it impact how we see smaller communities?
- Does the small population number ***resonate what we are hearing from communities?***
- ***Why*** is the population number small?
- **Who** is being erased because of small numbers?
- What is the ***impact of suppression and erasure***?

Examples

TQS Example Exercise

UMPQUA HEALTH ALLIANCE

Research Proposal: REALD & SOGI Data Analytic Institute

I. Title of the Research Topic

Identifying Disparities in Initiation and Engagement in Substance Use Disorder (SUD) Treatment Outcomes Among UHA's Hispanic Member Population

Problem Statement

"A systematic review focusing on disparities in Hispanic or Latinx substance use, service utilization, and treatment…highlights that current rates of alcohol and substance abuse **among Hispanic or Latinx communities are comparable to or surpass other ethnic groups**…

…research also emphasizes that there has been limited availability of interventions that incorporate linguistic and cultural aspects of substance use ***within Hispanic or Latinx populations***."

Goals

"In our research, we aim to capture a higher rate of demographic data completeness to identify more granular race and ethnicity identifiers specifically **within the Hispanic or Latinx ethnicity OMB category**. Our objective is to improve the rate of Hispanic or Latinx members **who initiate and engage in SUD treatment following a SUD diagnosis event**."

Data

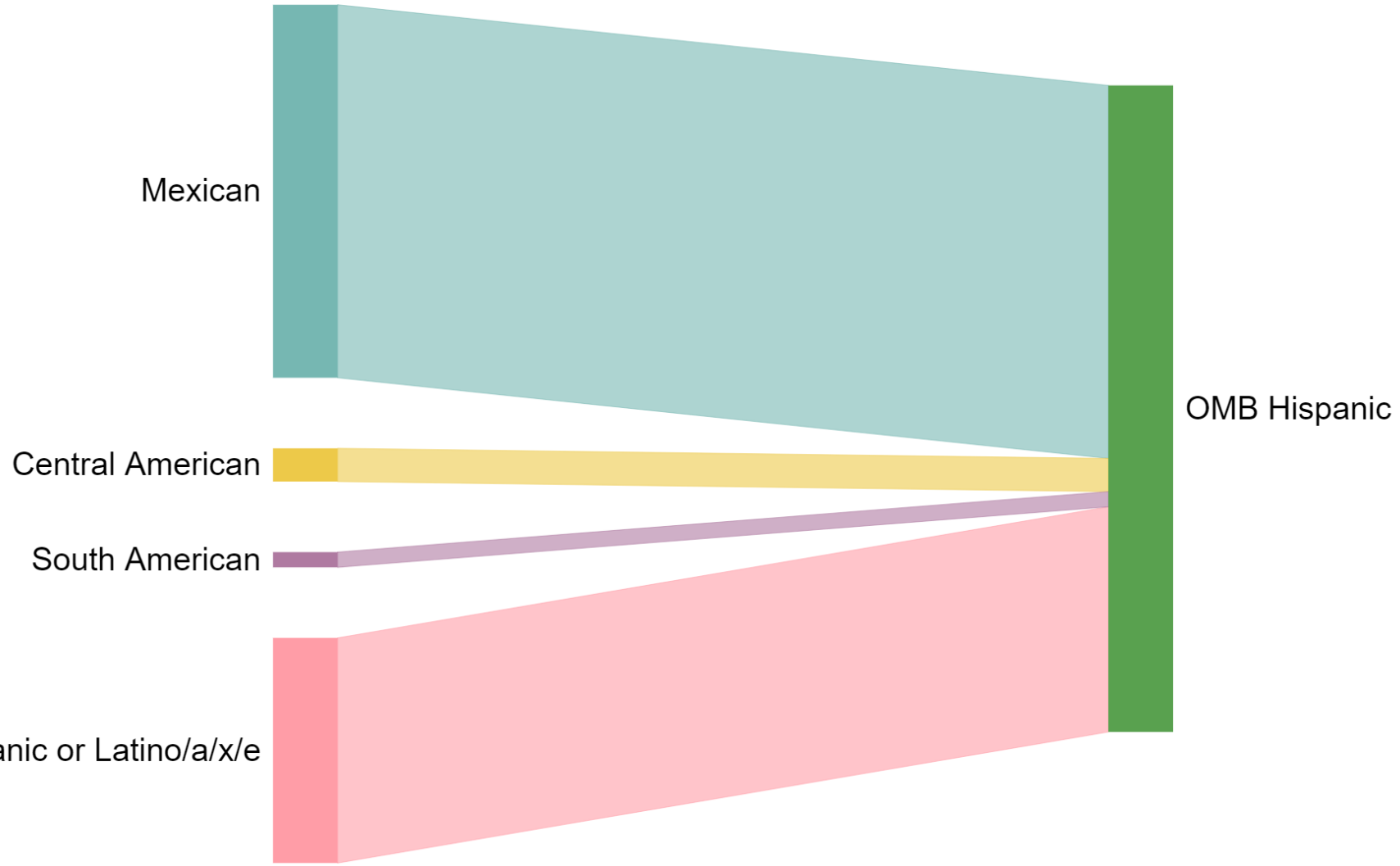
Random sample of 100,000 persons for the initial repository

Further subset that sample by those members whose Primary Race (variable: PriRacGnAdj in CCO Output File) was coded as:

26	Mexican
27	Central American
28	South American
29	Other Hispanic or Latino/a/x/e

Diagram the Demographic Relationship

"Data visualizations will include parent subgroups in an effort to unmask disparities hidden by aggregate categories. **A Sankey diagram will be created to illustrate the flow of data**, providing a better understanding of previous data standards and visualizing the specific racial and ethnic categories that our members identify with"



What else can we learn?

- Using the repository data, we have already provided greater granularity around the sub-populations within the Hispanic population
- From here, one could easily identify and target interventions around these specific subgroups
- While always helpful, it may be more important to understand if certain subpopulations experiences are worse than others

Simulate Outcome Data

- For the sample, we simulate rates of substance use disorder based on previously published academic literature
    - “Past-year substance use disorder (SUD) rates were … **7.5**% for Hispanic or Latino adults..” (Ali et al, 2023)
- For each group, we begin by draw from a binomial distribution with probability of 0.075. We simulate different probabilities to showcase what disparities could look like under different conditions

Methods: Comparative Analysis

Chi2 test of independence "…this test is primarily used to examine whether two categorical variables are independent"

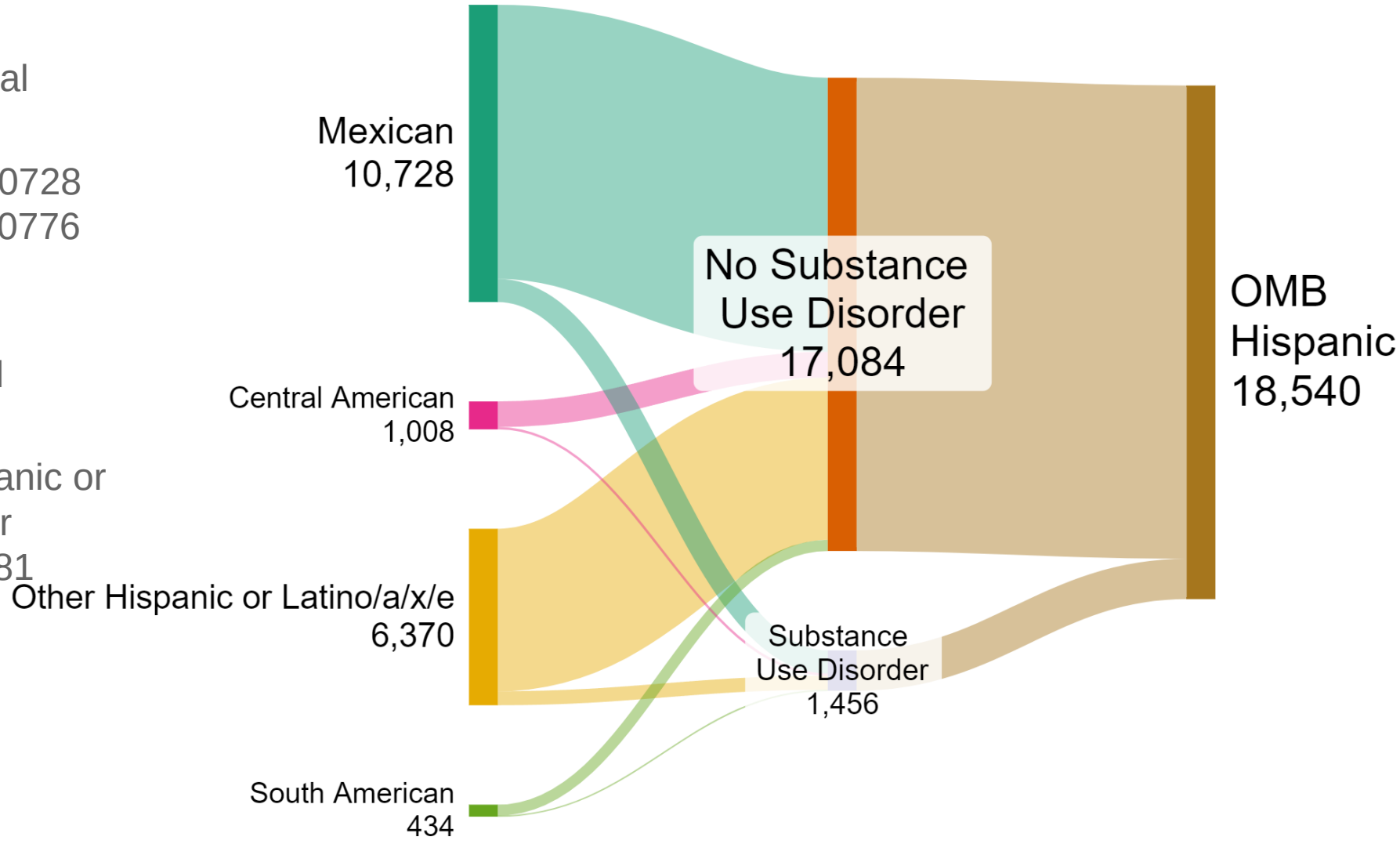
- NULL hypothesis of test: proportion of people with SUD diagnosis is independent of the Race/ethnicity
- Alternative Hypothesis: proportion of people with SUD diagnosis is NOT independent of the race/ethnicity

Binary Logistic Regression.. Used in some cases when modeling binary categorical dependent variables (yes/no)

- Log(P/1-P) = B0 +B1x

Breakdown under Sampled Equal Probability

- SUD composition under equal probability
- 1456 (Total SUD) /18540 (Total Population)= 0.0785 ~=0.075
- 833 (SUD among Mexican)/10728 (total Mexican population)=0.0776 ~=0.075
- 833 (SUD among Central American)/1008 (total Central American)=0.081 ~=0.075
- 506 (SUD among Other Hispanic or Latino/a/x/e)/6370 (total Other Hispanic or Latino/a/x/e)=0.081 ~=0.075
- 35 (SUD among South American)/434 (total South American)=0.080 ~=0.075



Under Equal Probability

PriRacGnAdj	No SUD	SUD	TOTAL
Mexican	9895	833	10728
Central American	926	82	1008
South American	399	35	434
Other Hispanic or Latino/a/x/e	5864	506	6370
Total	17084	1456	18540

Chi2=0.325
p=0.955,
non-significant

Fail to reject null hypothesis of independence

Logistic Regression Estimates (log-odds)

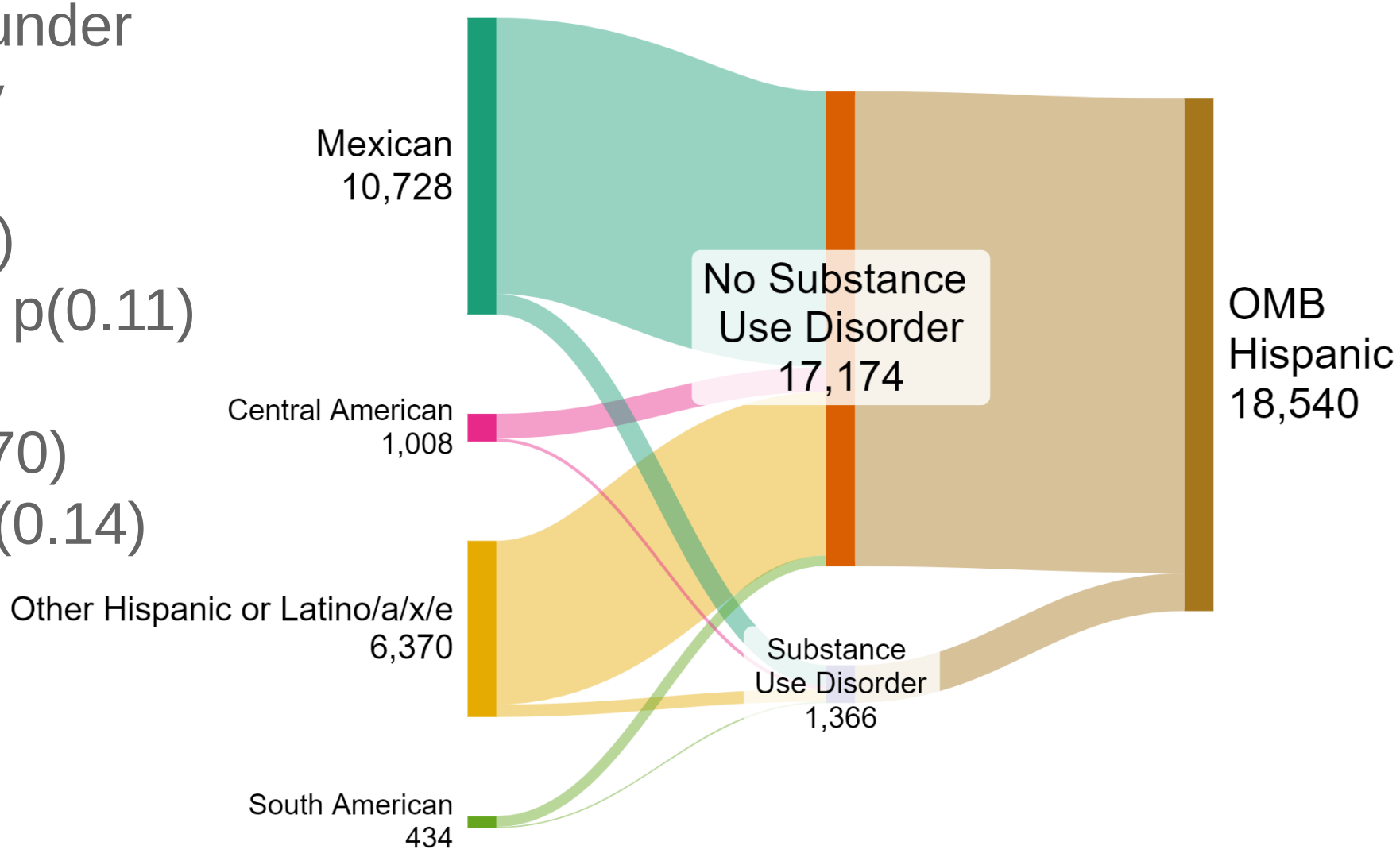
	Estimate	SE	Z	P	
Intercept	-2.53757	0.037052	-68.487	0.000	***
Central American	0.030967	0.124915	0.248	0.804	
South American	0.072463	0.182441	0.397	0.691	
Other Hispanic or Latino/a/x/e	0.009887	0.060543	0.163	0.87	
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1					

No statistically significant disparities observed (consistent with simulated outcome). Note this is disparities *within* the broader Hispanic population, not across other comparative groups (e.g., Western Europeans vs Central Americans)

Unequal Probability

SUD composition under unequal probability

Mexican = p(0.070)
Central American= p(0.11)
Other Hispanic or Latino/a/x/e=p(0.070)
South American=p(0.14)



Under Unequal Probability

PriRacGnAdj	No SUD	SUD	TOTAL
Mexican	9921	807	10728
Central American	904	104	1008
South American	372	62	434
Other Hispanic or Latino/a/x/e	5937	433	6370
Total	17134	1406	18540

Chi2=44.2
p=0.001,***

Reject null hypothesis of independence

Logistic Regression Estimates (log-odds)

	Estimate	SE	Z	P	
Intercept	-2.58663	0.03784	-68.359	0.000	***
Central American	0.52712	0.10641	4.954	0.000	***
South American	0.52521	0.15632	3.36	0.001	***
Other Hispanic or Latino/a/x/e	0.01456	0.06175	0.236	0.814	

Statistically significant disparities observed (consistent with simulated outcome), whereby:

Log odds of SUD==1 for Central Americans is greater than Mexicans

Log odds of SUD==1 for South Americans is greater than Mexicans

No statistically significant disparities are observed between Mexicans and Other Hispanic or Latino/a/x/e people

Future points of consideration (part 1)

Explicitly modeling process of “who initiate and engage in SUD treatment following a SUD diagnosis event” using selection models

- Predict who initiates and engages in SUD treatment following a SUD diagnosis event
- Among universe with SUD diagnosis, **operationalize and predict initiation and engagement with treatment**

Future points of consideration (part 2)

Incorporating more intersectionality

- What demographic (and non-demographic) characteristics *among* those persons who identified as Mexican, Central American, South American, and Other Hispanic or Latino/a/x/e may be relevant for understanding experiences with substance use disorder?
  - Gender identity? Disability? Language?
  - Geography (neighborhood conditions, distance to clinics), Family Dynamics?

Future points of consideration (part 3)

Power of mixed methods and qualitative data

- Focused interviews and outreach **to understand barriers to treatment among targeted populations, following folks longitudinally to identify mechanisms**

Small sample size constraints

- **Understand if your data is a sample or a population and model accordingly**

What might we do with this new information

Under the conditions where we observed (reminder this was simulated data) that Central Americans and South Americans reported elevated levels of SUD compared to the overall “OMB Hispanic” population

- Develop, test, and implement linguistically and culturally specific interventions targeted towards Central American and South American members.
- This can include incentivizing culturally specific SUD providers that would best serve Central American members and South American members
- Developing more specific community engagement strategies (e.g., targeting South Americans as opposed to “all” Hispanic or Latino/a/x/e people)
- Additional interventions based on mechanisms discovered in qualitative research!

Q & A

2024 TQS technical assistance

Guidance documents: www.oregon.gov/oha/HPA/dsi-tc/Pages/Transformation-Quality-Strategy-Tech-Assist.aspx

Webinar series (February)

- ✓ Webinars include general and component-specific lessons learned, changes for the coming year and time for CCOs to ask OHA SMEs questions.
- ✓ Focus: SHCN; REALD data

Office hours (March–June)

- ✓ Allows CCOs to ask questions as they develop and finalize their TQS submissions.
- ✓ Offered monthly (first Thursdays).

Feedback on sample project (June)

- ✓ Each CCO may submit one project for feedback prior to final submission (due June 15, but the earlier the better).

Written and oral feedback for each CCO (by Aug 30)

- ✓ Feedback on strengths and weaknesses in documentation or structure of CCO health transformation and quality work.
- ✓ Written assessment with scores by Aug. 30; optional feedback call with OHA.

Resources

OHA TQS leads:

- ✓ Lisa Bui: Lisa.T.Bui@oha.oregon.gov
- ✓ Anona Gund: Anona.E.Gund@oha.oregon.gov

OHA TQS program coordinator:

- ✓ Laura Kreger: Laura.E.Kreger@oha.oregon.gov

All TQS resources, including the templates, guidance document, and technical assistance schedule are available on the **Transformation Center website**: www.oregon.gov/oha/HPA/dsi-tc/Pages/Transformation-Quality-Strategy-Tech-Assist.aspx

The templates and guidance document are also cross-posted on the **CCO Contract Forms page**: www.oregon.gov/oha/HSD/OHP/Pages/CCO-Contract-Forms.aspx

References

Ali, M.M., Creedon, T., Bagalman, E., Bui, J., Clemans-Cope, L., Winiski, E., Ramos, C., Taylor, K.J., & Allen, E.H. Substance Use and Substance Use Disorders by Race and Ethnicity, 2015-2018 (Issue Brief). Washington, DC: Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. November 13, 2023.

Thank You

Oregon Health Authority