Demographics - *A Deep Dive to Understanding & Presenting Demographic Information*

Data Engagement Workshop: October 15, 2020

AGENDA

- Welcome Introductions
- Review of Looker Models & Features
- Hands on Looker Practice
  - Custom Dimension Practice
  - Pivot Table Practice
  - Advanced Demographics Reporting
- Other Resources

DEW Overview

The goal of Data Engagement Workshops is to help staff at all levels enhance their understanding of the data collected in HMIS, how to measure program performance, and how to use data to effectively communicate the success of your programs.

FUN FACT:

- Name
- Agency
- Have you had your 15 minutes of fame yet?

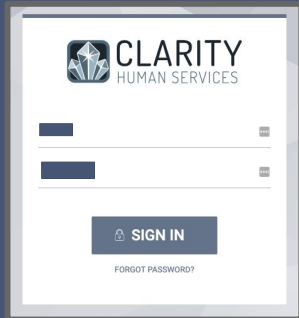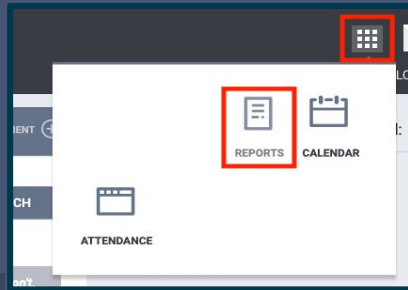*Please log into the training site scc-train.clarityhs.com*
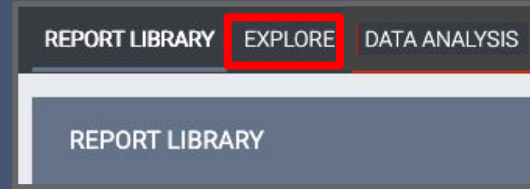
Review Looker Models
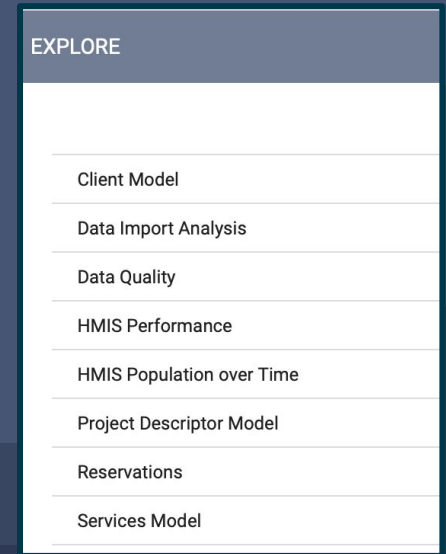
How To Create Custom Reports using Explore

Log in

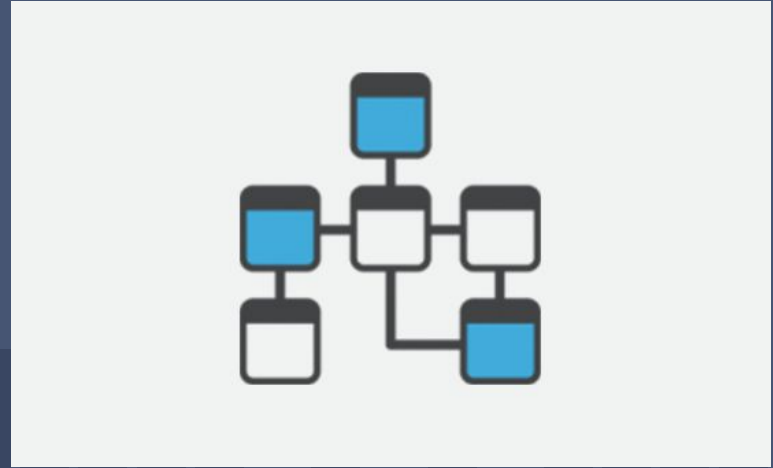Go to REPORTS; use the launch pad, then select reports

Select the **DATA ANALYSIS** Tab

Select the **Looker Model**

What is a Looker Model

- A data model pre-defined set of raw data and data connections that can be used to conduct further analysis

Looker Models available in the Explore Tab

Client Model:
- Clients where only a profile screen was created
- Includes some deleted data
- Assessments like the VI-SPDAT
- Enrollments
- Services

Data Quality:
- Used for analyzing data quality performance for projects
- Covers HUD HMIS data elements
  - Annual Assessment Date - Date the Annual Assessment was completed.
  - Annual Assessment Status - summarizes the status of annual assessments
  - Annual Assessment w/i 30 Days of Anniversary - calculates whether the Annual Assessment was within 30 days of the anniversary date.
- Head of Household Project Start Date - For all Federal reporting, the Annual Assessment due date is the anniversary of the HoH's project start date.
- Targeted Annual Assessment - The date, based on the HoH project start date, when the Annual Assessment was or will be due.

Looker Models available in the Explore Tab

HMIS Performance:
- Most popular, general purpose model
- Must have a project enrollment to be included in this model

HMIS Population over Time
- Longitudinal analysis
- Program evaluators may be interested in this model
- Look at total client population on a given day
- Analyze long term trends in your data
- Must have a project enrollment to be included in this model

Looker Models available in the Explore Tab

Project Descriptor Model
- No client data
- Information about projects and agencies
- System administrators would use this model
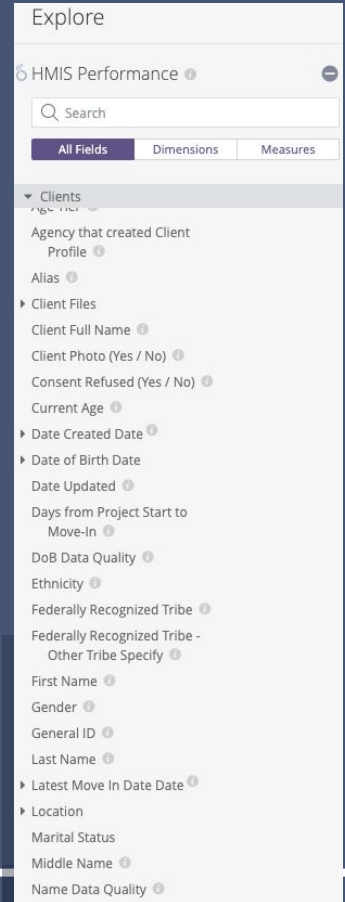- Agency managers may find it useful for staff Looks (without client data)

Services Model
- Use for services that may or may not be connected to a project enrollment
- Must have a service to be included in this model
- Contains many of the same dimensions as the HMIS Performance model
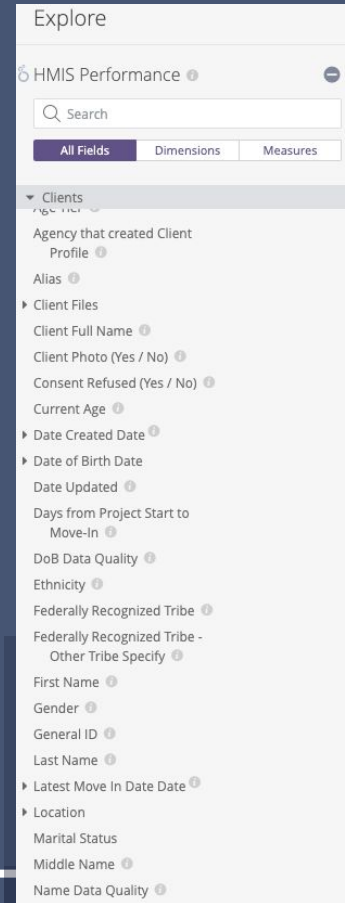
I Chose a Data Model: Now What?

Choosing the Right Fields
- Choosing which data fields to use in your report is one of the first steps
- Depending on the model there can be a few dozen to a few hundred fields to choose from

- Use the Search Bar
- Run the report as you build it to examine each new field
- Choose the field from the correct folder (entry, assessment, update, exit, etc...)

Explore

HMIS Performance ⊖

🔍 Search

All Fields   Dimensions   Measures

▼ Clients
Age Tier
Agency that created Client Profile
Alias ⓘ
▸ Client Files
Client Full Name ⓘ
Client Photo (Yes / No) ⓘ
Consent Refused (Yes / No) ⓘ
Current Age ⓘ
▸ Date Created Date ⓘ
▸ Date of Birth Date ⓘ
Date Updated ⓘ
Days from Project Start to Move-In ⓘ
DoB Data Quality ⓘ
Ethnicity ⓘ
Federally Recognized Tribe ⓘ
Federally Recognized Tribe - Other Tribe Specify ⓘ
First Name ⓘ
Gender ⓘ
General ID ⓘ
Last Name ⓘ
▸ Latest Move In Date Date ⓘ
▸ Location
Marital Status
Middle Name ⓘ
Name Data Quality ⓘ

Other Quick Tips for Building Looks

- If you need client level data always include the Client Unique ID and/or Personal ID

- Be careful to choose the field from the correct folder (entry,assessment, update, exit, etc...)

- The default filter in the HMIS Performance Model "is in the past 1 quarter." This can be changed

Explore

HMIS Performance ⊖

🔍 Search

| All Fields | Dimensions | Measures |

▼ Clients

Age Tier
Agency that created Client Profile
Alias ⓘ
▸ Client Files
Client Full Name ⓘ
Client Photo (Yes / No) ⓘ
Consent Refused (Yes / No) ⓘ
Current Age ⓘ
▸ Date Created Date ⓘ
▸ Date of Birth Date ⓘ
Date Updated ⓘ
Days from Project Start to Move-In ⓘ
DoB Data Quality ⓘ
Ethnicity ⓘ
Federally Recognized Tribe ⓘ
Federally Recognized Tribe - Other Tribe Specify ⓘ
First Name ⓘ
Gender ⓘ
General ID ⓘ
Last Name ⓘ
▸ Latest Move In Date Date ⓘ
▸ Location
Marital Status ⓘ
Middle Name ⓘ
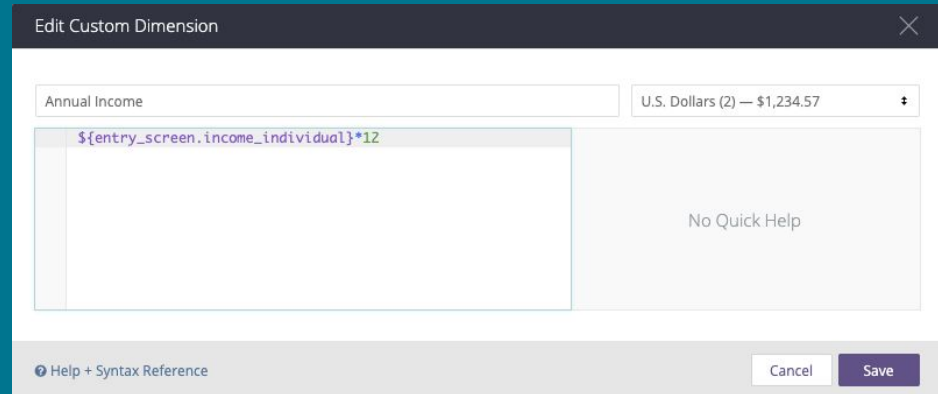Name Data Quality ⓘ

Custom Calculations

- specific instructions for a report, as defined by you.
- can use many different mathematical and logical functions like multiplication and "IF" statements
- Similar to excel formulas
- Calculations consist of a name, formula, and a data type
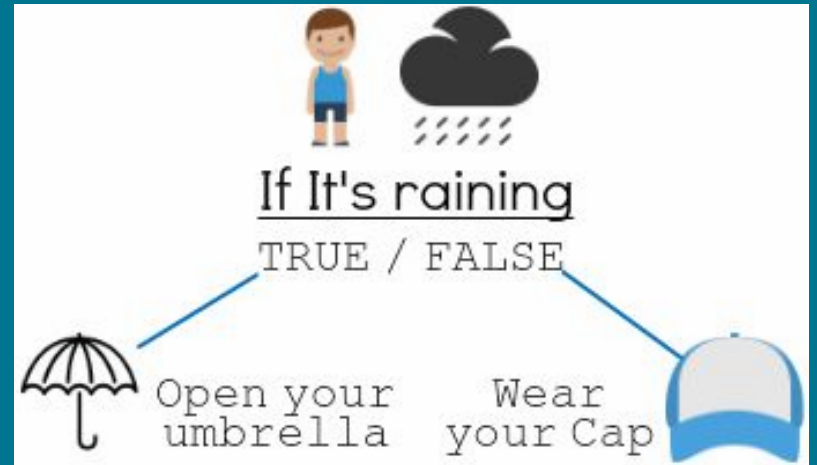
Custom Calculation Example

Convert Monthly to Annual Income

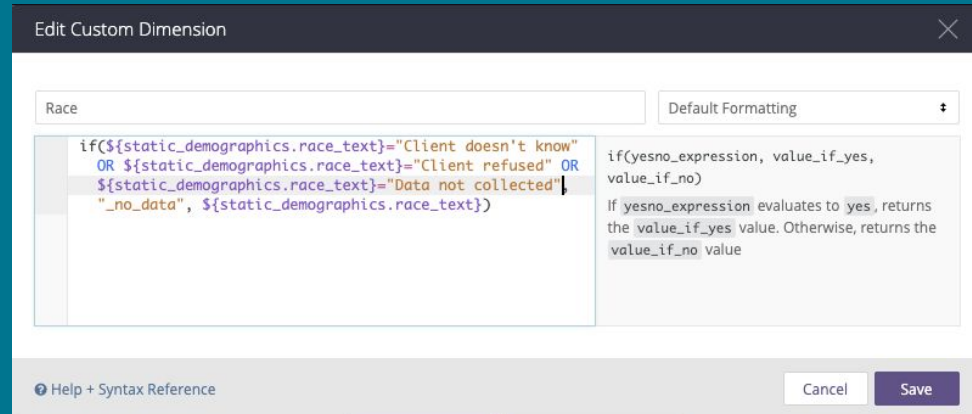Convert a monthly income to annual income by multiplying by 12

Custom Calculation Example 2

Remove unwanted values from the data

Remove unwanted values from the data like "Client Doesn't Know" or "Data Not Collected"

Use an "IF" statement to check for unknown values

Edit Custom Dimension

Race

Default Formatting

```
if(${static_demographics.race_text}="Client doesn't know"
   OR ${static_demographics.race_text}="Client refused" OR
   ${static_demographics.race_text}="Data not collected",
   "_no_data", ${static_demographics.race_text})
```

if(yesno_expression, value_if_yes, value_if_no)

If yesno_expression evaluates to yes, returns the value_if_yes value. Otherwise, returns the value_if_no value

Help + Syntax Reference

Cancel   Save

Hands On Project #1: Consolidate Unknown Values with a Custom Dimension
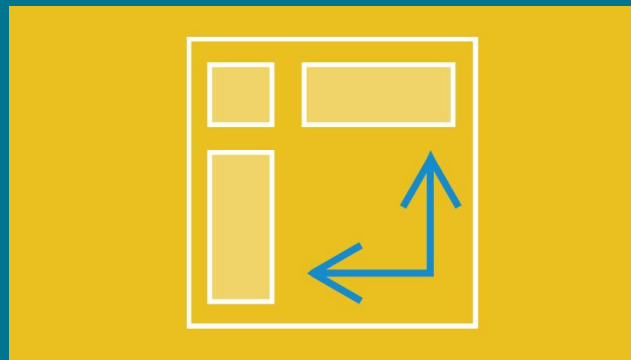
20 min

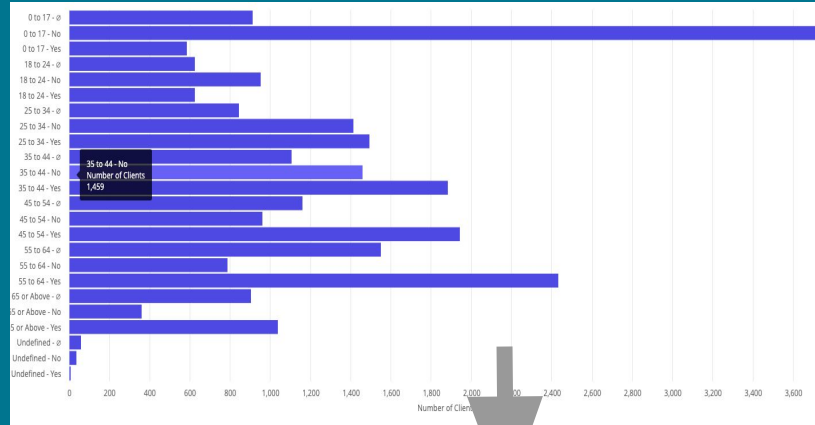# Pivot Tables

What are Pivot Table (aka Cross Tables)

Pivot tables are a unique way of summarizing and combining data values

Pivot tables can be combined with many custom and built in fields in Looker
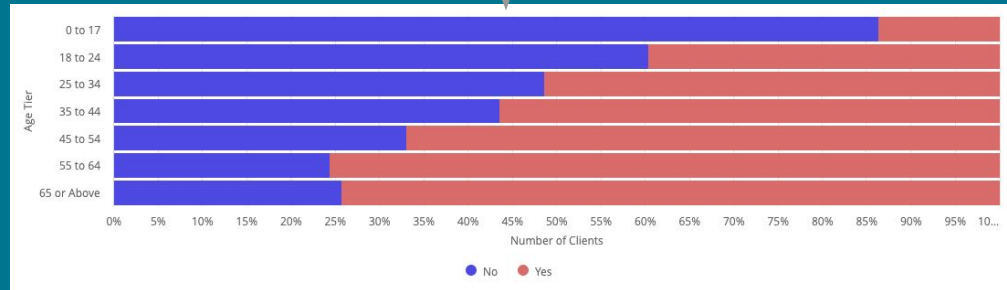
Hands On Project #2: Summarize Demographic Info With a Pivot Table

10 min

Additional Data Analysis Resources

Data Engagement Workshops

- Take place once a quarter
- Previous materials on website

Clarity Connect

- Virtual conference next week, available to anyone
- Network directly with experts, staff, & developers
- connect.bitfocus.com

Looker office Hours

- Every other week
- Announced via email

Additional Data Analysis Resources

Trainings

- Available anytime at training.bitfocus.com

Help Articles

- Available anytime on our help site
- get.clarityhs.help/hc/en-us/categories/115000087827-Data-Analysis

Clarity Help Desk

- sccsupport@Bitfocus.com

Hands On Project #3: Analize Client Counts, and Populations, Across Project Types

30 min

THANKS!

Any questions?

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