

HMIS Monthly Training

Looker for Beginners



Agenda

1. What is Looker?
2. How to Think Like Looker
3. Looker's Interface
4. Looker Models
5. Exporting Looks

**Questions? Please
use the chat box!**

What is Looker?

Terminology

These terms all refer to the same thing!

Looker

The name of the product, owned by Google.

Explore Tab & Data Analysis Tab

A description of how to access Looker via HMIS.

Data Analysis Tool

Bitfocus' preferred terminology for Looker.

Looker is a tool for *exploring* and *explaining* your HMIS data

Explore

Looker allows you to explore the data your agency has entered into HMIS.

Explain

Using reports and visualizations made with Looker, you can explain patterns in your agency's activities.

How to Think Like Looker

The Data Analysis Process

The Data Analysis Process

1

Data

A collection of facts, numbers, and other details in a raw or unprocessed format.

2

Information

Descriptions of data usually in sentence form that are easy to understand, resulting from the analysis of data.

3

Insight

Patterns gleaned from the information provided by data analysis.

The Data Analysis Process

Data

Client Identifier	Project Start Date	Non-Cash Benefits: SNAP
1	7/1/20	No
2	7/30/20	Yes
3	7/15/20	Yes
4	7/12/20	No
5	7/27/20	Yes
6	7/29/20	Yes
7	7/27/20	Yes
8	7/3/20	No
9	7/9/20	No
10	7/29/20	Yes
11	7/17/20	No
12	7/28/20	Yes
13	7/30/20	Yes

Raw, unprocessed data. Not getting a lot from this.

Information

Project Start Date	No SNAP	Yes SNAP
7/1/20	1	
7/3/20	1	
7/9/20	1	
7/12/20	1	
7/15/20		1
7/17/20	1	
7/27/20		2
7/28/20		1
7/29/20		2
7/30/20		2

The same information in a PivotTable. Most clients already receive SNAP and clients with SNAP benefits enrolled towards the end of the month.

Insight

After a case manager noticed that she worked with clients on food needs toward the end of the month, she had a hunch that there might be a pattern. She investigated HMIS data using Looker and found that most clients who enrolled in July already receive SNAP and enrolled on or after the 15th of the month, 5 days after the last CalFresh disbursement date of the month. The agency will strategize ways to support SNAP recipients with additional food assistance and resource management.

Before you even start the data analysis process, you need to understand the question you want to answer with insight from your data.

“How many clients fled domestic violence into our project last year?”

Who

Clients

Any client? Or clients of a specific demographic such as gender, age, household composition, etc.

What

Fleeing Domestic Violence

Clients who fled a domestic violence situation directly into the project.

When

Last Year

This question looks at clients who enrolled “last year.” Generally you will look at clients who were active at all, enrolled, or exited during a reporting period.

Looker's Interface

Time to follow along!

System

REPORT LIBRARY **EXPLORE** DATA ANALYSIS

Casey Parnis,
System

SEARCH ≡ CASELOAD

Explore

SETUP MANAGE **REPORTS** CALENDAR

A screenshot of a software interface with a dark blue header and a white navigation menu. The header contains the text 'System' on the left, a grid icon in the center, and 'Casey Parnis, System' on the right. Below the header, there are three tabs: 'REPORT LIBRARY', 'EXPLORE' (highlighted with an orange box), and 'DATA ANALYSIS'. The 'EXPLORE' tab is active, showing a white navigation menu with four items: 'SETUP' (gear icon), 'MANAGE' (notepad icon), 'REPORTS' (document icon, highlighted with an orange box), and 'CALENDAR' (calendar icon). On the right side of the header, there is a search icon, the text 'SEARCH', a hamburger menu icon, and the text 'CASELOAD'. Below the header, there is a light gray bar with the text 'Explore'.

Looker Models

“A model is a customized portal into the database, designed to provide intuitive data exploration for specific business users.”

- [Looker's Knowledge Base](#)

EXPLORE

HMIS Performance	OPEN
Client Model	OPEN
Data Import Analysis	OPEN
Data Quality	OPEN
HMIS Population over Time	OPEN
Project Descriptor Model	OPEN
Reservations	OPEN
Services Model	OPEN

Commonly used Looker models

HMIS Performance

- Generally the right choice
- Clients must have an enrollment to appear

Client Model

- Clients *do not* need to have an enrollment to appear


Services Model

- Gives you access to data about services provided

Project Descriptor





- Gives you information about your project setup, bed inventory, and staff

Explore

Run 

HMIS Performance

All Fields Dimensions Measures


- ▶ Custom Fields
 - ▶ Agencies
 - ▶ Bed and Unit Inventory
 - ▶ Client Addresses
 - ▶ Client Assessment Custom
 - ▶ Client Assessments
 - ▶ Client Contacts
 - ▶ Client Field Interactions
 - ▶ Client Notes - Client Level
 - ▶ Client Notes - Enrollment Level
 - ▶ Clients
 - ▶ Coordinated Entry Event
 - ▶ Current Living Situation
 - ▶ Current Living Situation Custom
 - ▼ Enrollments
- FILTER-ONLY FIELDS**
- Reporting Period Filter  
- DIMENSIONS**
- Active in Project 
 - Assigned Staff 


▼ FILTERS (1)

Enrollments **Reporting Period Filter**
Required

is in the past  1 quarters  

▶ VISUALIZATION

▼ DATA RESULTS Row Limit 500 



Select some dimensions or measures.

Dimensions vs. Measures

Dimensions



- An attribute or characteristic used to group data
- Example
 - Clients Unique Identifier
 - Enrollment Project Start Date

Measures



- Ways to group dimensions
- Examples:
 - Count of Clients
 - Average Income Change

How many clients fled domestic violence into our project last month?

Who

How will we identify the clients?

- Clients Unique Identifier
- Clients Personal ID
- Clients Full Name

What

What are we interested in about our group?

- Entry Screen
Currently Fleeing
Domestic Violence

When

What is our reporting period?

- Enrollments
Reporting Period =
anytime
- Project Start Date =
7/1/2019 - 6/30/20
(7/1/20)

Screen Specific Fields

- **Clients:** Generally from Profile Screen
- **Entry Screen:** HUD Standard Fields On Entry Screen
- **Entry Custom:** Custom Fields on Entry Screen
- **Update/Exit Screen:** HUD Standard Fields on Status Update, Annual Assessment, or Exit Screen
- **Update/Exit Screen Custom:** Custom Fields on Status Update, Annual Assessment, or Exit Screen

Clients **Unique Identifier**

Enrollments **Project Start Date** ▼

Entry Screen **Currently Fleeing Domestic Violence**

You can identify a field's section by looking at the non-bold part of the field description once you've added it to the data pane.

▼ FILTERS (2)

Custom Filter

Enrollments Reporting Period Filter

Required

is any time



Enrollments Project Start Date

is in range



2019-07-01



until (before)

2020-07-01



► VISUALIZATION

▼ DATA

RESULTS


Row Limit 500

Totals

Subtotals

	Clients Unique Identifier	Enrollments Project Start Date	Entry Screen Currently Fleeing Domestic Violence
1	A410DE6A7	2020-06-30	⊘
2	A8E31C59C	2020-06-30	Yes
3	9956B8F64	2020-06-25	⊘
4	35EF53C7A	2020-06-23	Yes
5	E76BB03B9	2020-06-18	⊘
6	9956B8F64	2020-06-18	⊘
7	CAA7A925F	2020-06-17	⊘
8	A410DE6A7	2020-06-17	⊘
9	E76BB03B9	2020-06-17	⊘

Exporting From Looker

159 rows · 0.6s · 3m ago Run 

- Save as a Look... ⌘⌘S
- Save to Dashboard... ⌘⌘A
- Download...** ⌘⌘L
- Send... ⌘⌘S
- Save & Schedule... ⌘⌘S
- Merge Results...
- Remove Fields & Filters ⌘⌘K
- Clear Cache & Refresh ⌘⌘⇧↵

Download ✕

File Format Excel Spreadsheet (Excel 2007 or later) ⌵

Results

- With visualization options applied ?
- As displayed in the data table

Values

- Formatted
- Unformatted

Limit

- Results in Table
- All Results
- Remove all sorts from query
- Custom...

Filename octrain_connection_model base 2020-07-29T0956.xlsx

[Open in Browser](#) [Download](#)

Excel Basics

Filtering & PivotTables

AutoSave OFF Clients Fleeing DV - 1

Home Insert Draw Page Layout Formulas Data Review View Tell me

Calibri (Body) 11 A^ A^

General

Conditional Formatting Insert

Format as Table Delete

Cell Styles Format

Sort A to Z

Sort Z to A

Custom Sort...

Filter

Clear

Reapply

A1 fx Clients Unique Identifier

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	Clients Unique Identifier	Enrollments F Entry Screen	Currently Fleeing Domestic Violence															
2	A410DE6A	2020-06-30																
3	A8E31C59C	2020-06-30	Yes															
4	9956B8F64	2020-06-25																
5	35EF53C7A	2020-06-23	Yes															
6	9956B8F64	2020-06-18																

	A	B	C	D	E	F	G	H
1	Clients	Enrollment	Entry Screen	Currently Fleeing Domestic Violence				
2	A410DE6A	2020-06-30		Entry Screen Currently Fleeing Domesti...				
3	A8E31C59C	2020-06-30	Yes					
4	9956B8F64	2020-06-25						
5	35EF53C7A	2020-06-23	Yes					
6	9956B8F64	2020-06-18						
7	E76BB03B5	2020-06-18						
8	E76BB03B5	2020-06-17						
9	CAA7A9251	2020-06-17						
10	A410DE6A	2020-06-17						
11	CDB246AD	2020-06-09						
12	89DD57FB	2020-06-09						
13	771871B11	2020-06-09						
14	3B99C3C83	2020-06-09						
15	AC3CD3DC	2020-06-04						
16	852AA3124	2020-06-04						
17	8076DC01	2020-05-28						
18	AC3CD3DC	2020-05-28						
19	838631AE5	2020-05-28						
20	D5B2F6C34	2020-05-27						
21	477EAC06E	2020-05-27						
22	D175034B	2020-05-22						
23	AC3CD3DC	2020-05-18						
24	CDB246AD	2020-05-08						
25	F92866E21	2020-05-04						
26	D6863203	2020-04-23						
27	B02E6580E	2020-04-23						
28	58A80A661	2020-04-23						

Sort

A Z ↓ Ascending Z A ↓ Descending

By color: None

Filter

By color: None

Choose One

Search

- (Select All)
- No
- Yes
- (Blanks)

Clear Filter

	A	B	C
1	Clients (▼)	Enrollmen (▼)	Entry Sc (▼) in
3	A8E31C59C	2020-06-30	Yes
5	35EF53C7A	2020-06-23	Yes
134	6BC15BC9I	2019-09-30	Yes
135	4F7A69CDI	2019-09-30	Yes
161			

The screenshot shows the Microsoft Excel ribbon with the 'Insert' tab selected. The 'PivotTable' icon is highlighted with an orange box, and a tooltip is visible over it. The tooltip contains the text 'PivotTable' and 'PivotTables'. Below the ribbon, the active cell is A1, containing the text 'Clients Un'. The spreadsheet data is as follows:

	A	B	C	D
1	Clients Uni	Enrollments F	Entry Screen	Currently
2	A410DE6A	2020-06-30		
3	A8E31C59C	2020-06-30	Yes	

The screenshot displays an Excel PivotTable and its corresponding task pane. The PivotTable is located in the range A3:B7 and is configured with the following data:

Row Labels	Count of Clients Unique Identifier
No	5
Yes	4
(blank)	150
Grand Total	159

The PivotTable Fields task pane is open on the right side of the screen. It shows the following configuration:

- FIELD NAME:** Search fields
- Checked fields:** Clients Unique Identifier, Entry Screen Currently Fleeing Domestic
- Filters:** (Empty)
- Columns:** (Empty)
- Rows:** Entry Screen C...
- Values:** Count of Client...

At the bottom of the task pane, there is a note: "Drag fields between areas".

**That was a lot of steps...lets
pivot back to Looker**

Explore

Save Look

1 row · 0.1s · just now

Run



HMIS Performance

Search

All Fields Dimensions Measures

- Custom Fields
- Agencies
- Bed and Unit Inventory
- Client Addresses
- Client Assessment Custom
- Client Assessments
- Client Contacts
- Client Field Interactions
- Client Notes - Client Level
- Client Notes - Enrollment Level
- Clients** 1
- Coordinated Entry Event
- Current Living Situation
- Current Living Situation Custom
- Enrollments
- Entry Custom
- Entry Screen

FILTERS (3) Custom Filter

- Enrollments **Reporting Period Filter** is any time
- Enrollments **Project Start Date** is in range 2019-07-01 until (before) 2020-07-01
- Entry Screen **Currently Fleeing Domestic Violence** is equal to Yes

VISUALIZATION

DATA	RESULTS	Row Limit 500	Totals
Clients Number of Clients			
1			4

Thank you!

If you have general questions please let us know in the chat box!

If you have questions about a specific report you've created, please submit a ticket to the HMIS Help Desk.