

# **Boston's Open Source HMIS Data Warehouse**

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**Increasing Capacity &  
Building Connections:  
Bridging to the Future**

## **Boston by the Numbers**

- Within the City's CoC 2017-2018:
  - 10,080 Single Adults in ES Annually
    - 1,800 on any given night
    - 493 Chronically Homeless single adults on By Name List
    - 270 Veterans PIT Count
  - 1,715 Families in ES Annually
    - 1,075 on any given night
    - 104 Chronically homeless households
    - 5 Veterans PIT Count
  - 9 HMIS Software installations
  - 30+ Service Provider Agencies using HMIS
  - 700+ Users
  - 98% ES Bed Coverage
  - Street Outreach in HMIS



*300 Volunteers join Mayor Walsh to canvas Boston for the Annual Street and Shelter Count.*



**BOSTON'S WAY HOME**  
MAYOR MARTIN J. WALSH

## **Boston's Way Home: An Action Plan to End Veteran and Chronic Homelessness in Boston 2015-2018**

- End Veteran homelessness by the end of 2015
- End Chronic homelessness by 2018
- System Transformation

### *Investments Made in:*

- *Front Door Triage*
- *Rapid Re-Housing*  
\$2.7M City investment since City FY17
- *PSH Development*  
both "Brick & Mortar" and partnerships especially with  
Boston Housing Authority
- **Technology**  
\$400,000 City investment  
Open Source HMIS Data Warehouse  
Open Source Coordinated Access Housing Matching System

### **AN ACTION PLAN** TO END VETERAN AND CHRONIC HOMELESSNESS IN BOSTON: 2015-2018

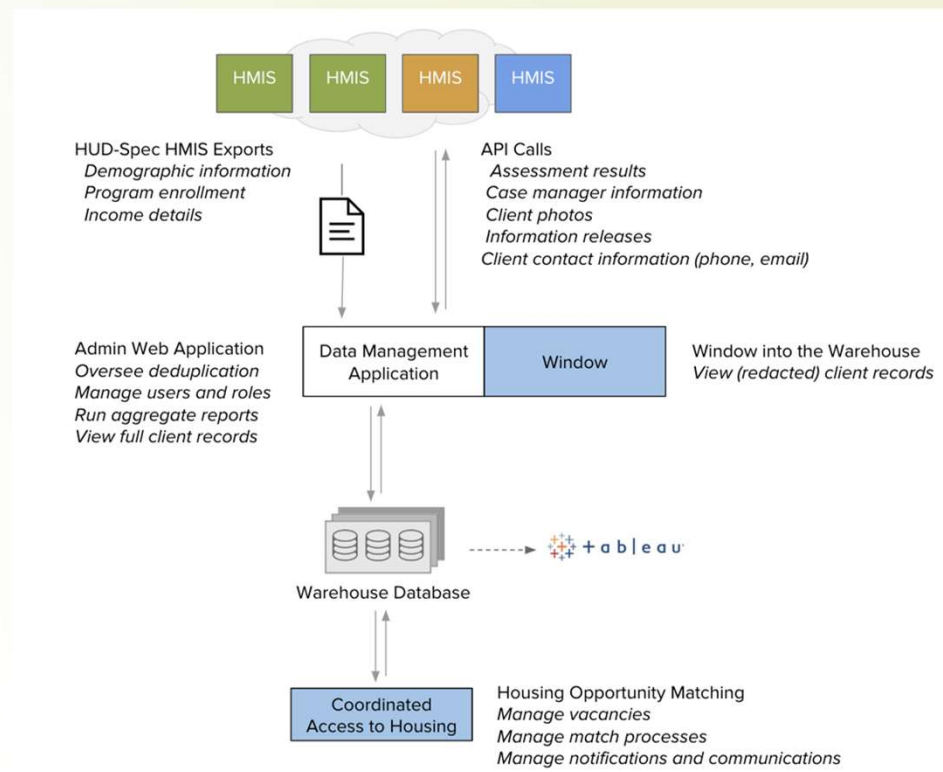


  
2015  
MAYOR MARTIN J. WALSH



## Boston's Warehouse Structure

- **Open Source, GPLv3**
- Hosted Solution
- Software is Free
- Ruby on Rails
- MS SQL Server/PostgreSQL





## What does Open Source Mean?

### Free Distribution



Anyone can access the software, free of charge

- No download or licensing fees
- You may need to pay a consultant for setup/maintenance if you do not have a developer in-house

### Ability to see and modify source code



You can modify the warehouse to suit your needs, or use as-is

- i.e. adding case conferencing features, custom reports

### Ability to share changes



Share your changes back with the original source code

- This gives other CoCs the option to adopt your features if they wish
- Culture of sharing and collaboration vs. siloed custom reports and features



## What does Open Source Mean?

**An Open Source Product and Community allows us to share Best Practices and new ideas with limited resources as all CoCs strive for the same goal, Ending Homelessness across the country.**



## What does Open Source Mean for me? Technical Implementation

You will need:

- **an IT Partner**  
Some options:
  - In-house
  - Partnership with local college or university
  - IT consultant
- **Somewhere secure to host the data**
  - Boston uses AWS
- **To make a “pull request” from the [Github](#)**
  - This is always where the most up-to-date version of the warehouse lives
- **To “spin up” the warehouse**
  - With the help of your IT partner
  - Instructions are included in the Github





## **What does Open Source Mean for me?**

### **Cross-CoC Collaboration**

#### **MA-507 Pittsfield/Berkshire, Franklin, Hampshire Counties CoC**

- Using full warehouse

#### **MA-504 Springfield/Hampden County CoC**

- Using full warehouse
- Built file upload feature
- Added racial equity info to System Performance measures
- Built out Notes function

#### **TX-601 Fort Worth, Arlington/Tarrant County CoC**

- Using full warehouse

#### **Boston Healthcare for the Homeless Program**

- Using platform for Healthcare Data Sharing project
- Built out Notes function

#### **San Diego**

- Using platform to filter and transform data for partnership with Cloudburst

#### **Anthem Indiana and CHIP Indy**

- Using platform to share data with Medicaid





## **Boston HMIS Data Warehouse Demo**

- During the NHSDC presentation, a live demo of the following functionality occurred
- Screenshots of the relevant software features are included for the posted presentation.
- The HMIS Staging environment is the testing and training site which uses anonymized data from our production environment.



# Data Sources

## Data Sources

Name	Short Name	Last Import Run	Visible in Window	Authoritative?
<a href="#">Black Lake</a>	BL	Jul 17, 2017 5:05 pm	✓	
<a href="#">Blue Mountain</a>	BM	Mar 28, 2019 10:13 pm	✓	
<a href="#">Green River</a>	GRDA	Mar 28, 2019 10:12 pm	✓	
<a href="#">Healthcare for the Homeless</a>	Health		✓	✓ ✕
<a href="#">HUD Test</a>	Hud	Jul 6, 2018 11:27 pm		
<a href="#">Orange Peninsula</a>	OP	Jul 17, 2017 5:22 pm		
<a href="#">Silver Island</a>	SI	Jul 17, 2017 4:58 pm		

Each individual Front End Software System is its own data source and quick look at last upload.

Manual Data Upload

## Organizations & Projects

### American Beech Room

Project	Confidential?	CoC Code	Continuum Project	Housing Type	Geocode	Geography Type	Inventory Record?
<a href="#">Services Only</a> <a href="#">Black Cherry Creek</a>	✓	MA-500	✓ Overrides ✕	None	None	None	✕
<a href="#">Black Locust Center</a>	✓	MA-500	✓ Overrides ✕	None	None	None	✕
<a href="#">Pineblu</a> <a href="#">Sycamore Center</a>	✓	MA-500	✓ Overrides ✕	None	None	None	✕
<a href="#">White Oak Center</a>	✓	MA-500	✓ Overrides ✕	None	None	None	✕

### American Beech Room

Project	Confidential?	CoC Code	Continuum Project	Housing Type	Geocode	Geography Type	Inventory Record?
<a href="#">Paper Birch Room</a>	✓	CT-782	✓	Site-based - single site	None	None	✓

### American Hornbeam Center

Project	Confidential?	CoC Code	Continuum Project	Housing Type	Geocode	Geography Type	Inventory Record?
<a href="#">Services Only</a> <a href="#">Red Maple Creek</a>	✓	MA-500	✓ Overrides ✕	None	None	None	✕

## Green River

Last Import Run	Mar 28, 2019 6:12 pm
Date Span	Apr 1, 1987-Mar 21, 2019
Uploads	<a href="#">View</a>
Visible in the Window into the Warehouse?	✓
Import Paused?	✕

Viewable by the following users, regardless of visibility in window

Organization and Program list with high level Project Descriptors.



# Data Sources

## Slippery Elm Creek at Arborvitae Room

Project Type	Emergency Shelter	HMIS Info	
Operating Start Date	Jan 1, 2018	Project ID	1272
Continuum Project	✓	Organization ID	112
Housing Type	Site-based - single site (1)	Data Source	GRDA
Uses Move-in-Date		Tracking Method	Night-by-Night
Project Contacts	<a href="#">View/Edit</a>	Target Population	
Confidential Project?		Household Type	Individuals
Project Data Quality Reports	<a href="#">View Reports</a>	PIT Count	677

## Nightly Census

Slippery Elm Creek (ES) - Arborvitae Room - GRDA



## Funding Sources

FunderID	Source	Grant ID
924	HUD: ESG - Emergency Shelter (operating and/or essential services)	

By Project Quick Look

Project Descriptors

Currently Active Client list in program.

## Geography Records

No sites

## Inventory

InventoryID	Availability	Dates	Unit Inventory	Bed Inventory	HMIS Participating Beds	Child Bed Inventory	Veteran Bed Inventory	Youth Bed Inventory	Youth Age Group
741		Feb 8, 2018 - ongoing	30	30	30				

## Project CoC Records

ProjectCoCID	CoC Code	
1677	VA-682	<a href="#">Edit</a>

## Clients

Displaying clients 1 - 25 of 676 in total

Client	Entry Date	Exit Date
<a href="#">xm Hinds</a>	Sep 17, 2018	
<a href="#">Karl Pfalat</a>	Sep 17, 2018	
<a href="#">Laurence Myers</a>	Sep 17, 2018	
<a href="#">Pasquale Festa Kidman</a>	Sep 14, 2018	
<a href="#">Ettori Gilliam</a>	Sep 14, 2018	
<a href="#">John Cash</a>	Sep 12, 2018	



# Admin Dashboard

## Manage User Accounts

Users Translations Imports Grade Scale TouchPoints

[+ Add a User Account](#)

Manage Roles

Search user accounts...

Active Accounts Inactive Accounts

Displaying user accounts 1 - 25 of 30 in total

Last name	First name	Email	Status	Roles	
Adderly	Kadra	kadra.adderly@boston.gov	Active	dnd_staff, admin	<a href="#">Edit</a> <a href="#">Delete</a>
Anders	Elliot	elliott@greenriver.org	Active	Health Partner Agency Supervisors, Health admin - pilot, Healthcare collaborator - pilot, health agency manager, Health Case Manager, dnd_staff, BHCHP Administrators, admin	<a href="#">Edit</a> <a href="#">Delete</a>
Blackman	Todd	tblackman@greenriver.com	Active	Health Partner Agency Supervisors, Health admin - pilot, Healthcare collaborator - pilot, health agency manager, Health Case Manager, dnd_staff, BHCHP Administrators, admin	<a href="#">Edit</a> <a href="#">Delete</a>
Clark	Peter	peter@greenriver.org	Active	Health Partner Agency Supervisors, Health admin - pilot, Healthcare collaborator - pilot, health agency manager, Health Case Manager, BHCHP Administrators, admin	<a href="#">Edit</a> <a href="#">Delete</a>
Eborn	Megan	megan@greenriver.com	Invitation Expired, Re-create invitation	admin	<a href="#">Edit</a> <a href="#">Delete</a>
Flynn	Jennifer	jennifer.flynn@boston.gov	Active	Front Door Triage, Nurse Care Manager, Health Partner Agency Supervisors, Team Coordinator, Health agency manager, Health Case Manager, dnd_staff	<a href="#">Edit</a> <a href="#">Delete</a>

User account management

User Audit logs

### Jennifer Flynn Audit Log

1 2 3 4 5 ... Next Last

[View Edit History](#)

Action	Item	Item Type	Date	IP Address
edit	Kadra Adderly	User	Mar 29, 2019 4:45 pm	104.129.194.133
show	Kadra Adderly		Mar 29, 2019 4:45 pm	104.129.194.133
index	User List		Mar 29, 2019 4:45 pm	104.129.194.133
index	Client Search		Mar 29, 2019 4:28 pm	104.129.194.133
date_range	censuses		Mar 29, 2019 4:28 pm	104.129.194.133
show	projects		Mar 29, 2019 4:28 pm	104.129.194.133
date_range	censuses		Mar 29, 2019 4:27 pm	104.129.194.133
show	projects		Mar 29, 2019 4:27 pm	104.129.194.133
date_range	censuses		Mar 29, 2019 4:27 pm	104.129.194.133
show	projects		Mar 29, 2019 4:27 pm	104.129.194.133
date_range	censuses		Mar 29, 2019 4:27 pm	104.129.194.133
show	projects		Mar 29, 2019 4:27 pm	104.129.194.133
date_range	censuses		Mar 29, 2019 4:26 pm	104.129.194.133
show	projects		Mar 29, 2019 4:26 pm	104.129.194.133
show	data_sources		Mar 29, 2019 4:25 pm	104.129.194.133
index	data_sources		Mar 29, 2019 4:25 pm	104.129.194.133
show	data_sources		Mar 29, 2019 4:25 pm	104.129.194.133
show	Karl Pialat	Client	Mar 29, 2019 4:22 pm	104.129.194.133
date_range	censuses		Mar 29, 2019 4:21 pm	104.129.194.133
show	projects		Mar 29, 2019 4:21 pm	104.129.194.133

# User Roles

## Manage Roles and Permissions

Permissions <small>Administrative Permission</small>	Roles <small>Displaying all 7 roles</small> <small>+ Add a role</small>						
Search permissions	admin	Cohort only view	dnd_staff	Front Door Triage	HUD Zip Uploader	Organization Manager	Report Runner
<b>Can edit anything super user</b> <small>🔒</small> This permission grants access to all data sources, organizations and projects, regardless of assignment. This should only be given to administrator level users.	✓	✗	✓	✗	✗	✗	✗
<b>Can view clients</b> <small>🔒</small> Allows access to the non-window view of clients. This should only be given to administrator level users.	✓	✗	✓	✗	✗	✗	✗
<b>Can edit clients</b> <small>🔒</small> Provides the ability to merge clients and make other edits. This should only be given to administrator level users.	✓	✗	✓	✗	✗	✗	✗
<b>Can audit clients</b> <small>🔒</small> Access to see who has looked at or changed a client record. This should only be given to administrator level users.	✓	✗	✗	✗	✗	✗	✗
<b>Can view censuses</b> Access to the nightly census dashboard, only at the aggregate level	✓	✗	✓	✗	✗	✗	✗
<b>Can view census details</b> <small>🔒</small> Ability to "drill down" on census reports and see who was where on a given day	✓	✗	✓	✗	✗	✗	✗
<b>Can edit users</b> <small>🔒</small> Ability to add and edit user accounts for all users	✓	✗	✓	✗	✗	✗	✗
<b>Can edit roles</b> <small>🔒</small> Ability to add and remove roles and assign permissions to all roles	✓	✗	✓	✗	✗	✗	✗
<b>Can audit users</b> <small>🔒</small> Access to the audit logs for users	✓	✗	✓	✗	✗	✗	✗
<b>Can view full ssn</b> Ability to see the full Social Security Number for clients	✓	✗	✓	✗	✗	✗	✗
<b>Can view full dob</b> Ability to see the Date of Birth for clients	✓	✗	✓	✗	✗	✗	✗



# User Roles

## Viewable Entities

⚠ Clients with records in specified data sources will be visible in the window to this user, regardless of data source visibility settings if they belong to a role with the "Can see clients in window for assigned data sources" permission

User Roles Data Access Assignments Reports & Cohorts

### Roles

- ☐ Hud zip uploader
- ☐ Report runner
- ☐ Front door triage
- ☐ Organization manager
- ☐ Cohort only view
- ☐ DND staff
- ☐ Admin

### Permissions Granted

User currently has no permissions

Set permissions for  
Orgs, Projects,  
Reports, or By  
Name List

## Viewable Entities

⚠ Clients with records in specified data sources will be visible in the window to this user, regardless of data source visibility settings if they belong to a role with the "Can see clients in window for assigned data sources" permission

User Roles Data Access Assignments Reports & Cohorts

Data Sources	Organizations	Projects	CoC Codes
No Data Sources selected.	No Organizations selected.	No Projects selected.	No CoC Codes selected.

Send an invitation

## Viewable Entities

⚠ Clients with records in specified data sources will be visible in the window to this user, regardless of data source visibility settings if they belong to a role with the "Can see clients in window for assigned data sources" permission

User Roles Data Access Assignments Reports & Cohorts

### Reports



### Cohorts





Data Quality: Project Data Quality



NHSDC Chronic Cohort



Send an invitation



# HUD Reports

## HUD Reports

System Performance Measures

Point in Time (PIT)

Longitudinal System Analysis

Housing Inventory Count (HIC)

Data Quality

Annual Homeless Assessment Report

System Performance Measures Point in Time (PIT) Longitudinal System Analysis Housing Inventory Count (HIC) Data Quality Annual Homeless Assessment Report

PIT - FY 2018	Last Run	Status	Completed In
PIT - 2018	Jan 9, 2018 12:01 pm	Complete	less than a minute
PIT By Project - 2018			

Filters have been added to run the reports by project, by subpopulation or with a racial equity lens.

### Report Result: HUD System Performance FY 2018 - Measure 1

#### Queue Report

PROJECT	COC CODE	* START DATE
<input type="text"/>	MA-500	Oct 1, 2017
PROJECT GROUPS	MA-500	* END DATE
<input type="text"/>		Sep 30, 2018
SUB POPULATION	RACE	
<input type="text"/>	All	
	ETHNICITY	
	All	
DATA SOURCE		
<input type="text"/>		

[+ Queue Report Run](#)

CoC Level HDX reports are available for the HMIS Lead. Boston requires all projects to use their front end system for APR and CAPER reporting

#### Report result for HUD Data Quality Report FY 2017 - Q2

Limits  
Report Start: Oct 1, 2017; Report End: Sep 30, 2018; CoC Code: MA-500  
Started:  
Mar 29, 2019 10:09 am  
Runtime:  
less than a minute  
Progress  
Complete

[Download CSV](#)

Name - Client Doesn't Know/Refused	1	▲
Name - Information Missing	21	▲
Name - Data Issues	16	▲
Name - % of Error Rate	3.16	
SSN - Client Doesn't Know/Refused	42	▲
SSN - Information Missing	81	▲
SSN - Data Issues	89	▲
SSN - % of Error Rate	12.63	
DOB - Client Doesn't Know/Refused	7	▲
DOB - Information Missing	46	▲
DOB - Data Issues	27	▲
DOB - % of Error Rate	6.6	
Race - Client Doesn't Know/Refused	12	▲
Race - Information Missing	53	▲
Race - % of Error Rate	9.33	

Reports provided on screen with the option to download the CSV as well as client back up details.

Subpopulations may include Veterans, Youth, Families with children or other locally defined metrics.





# Custom reports - Project Data Quality

## Project Data Quality Report for White Ash House at Hawthorn Place

### Report Parameters

Reporting Period  
Jan 1, 2019 to Mar 31, 2019

### Project Descriptors

Project Descriptor Completeness				
Operating Start Date	CoC Code	Funder	Information Date	
Oct 1, 2016	KY-500	Mens Inn	Oct 16, 2017, Oct 13, 2017	
Geocode	Geography Type	Unit Inventory	Bed Inventory	
250282	Urban	365 units	365 beds	
Housing Type				
Site-based - single site				
Project Type				
Emergency Shelter				

### Overview

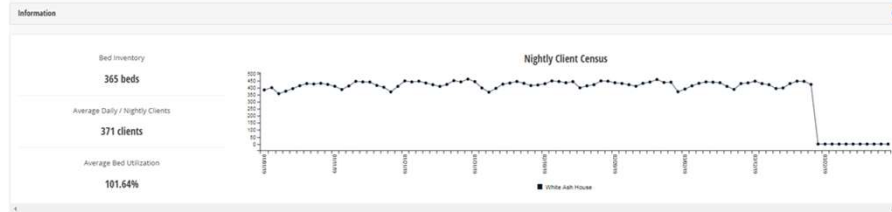
Enrolled Clients	Active Clients	Enterers	Exiters
<b>1780 clients / 1710 households</b>	<b>1489 clients / 1433 households</b>	<b>773 clients / 779 households</b>	<b>492 clients / 561 households</b>
were enrolled in the project during the reporting period.	were active in the project during the reporting period.	entered the project during the reporting period.	exited the project during the reporting period.

### Data Quality Summary

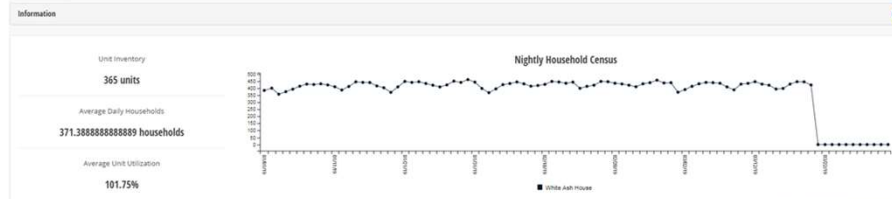
Percent of Enrolled Clients Active	Bed Utilization	Unit Utilization
No issues	No issues	No issues
Project Descriptor Completeness	Data Completeness	Timeliness
No issues	No issues	No issues
DOB on or after entry date	No service in the final month of enrollment	Service after exit
3 clients	330 clients	No issues
Incorrect Household Type	Enrollments with no service	
No issues	289 enrollments with no service	

# Custom reports - Project Data Quality

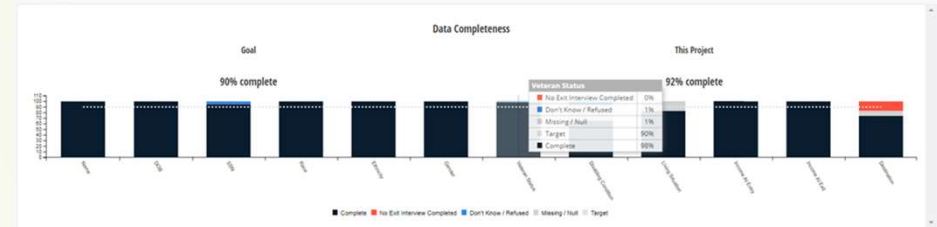
## Bed Utilization



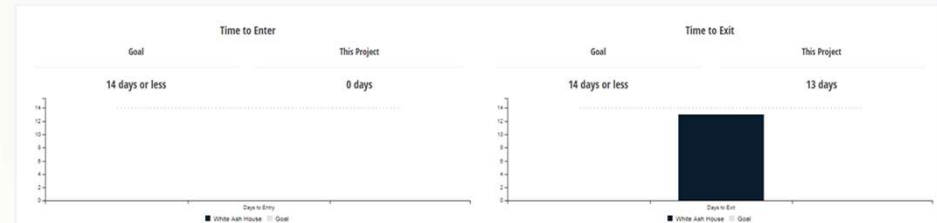
## Unit Utilization



## Completeness

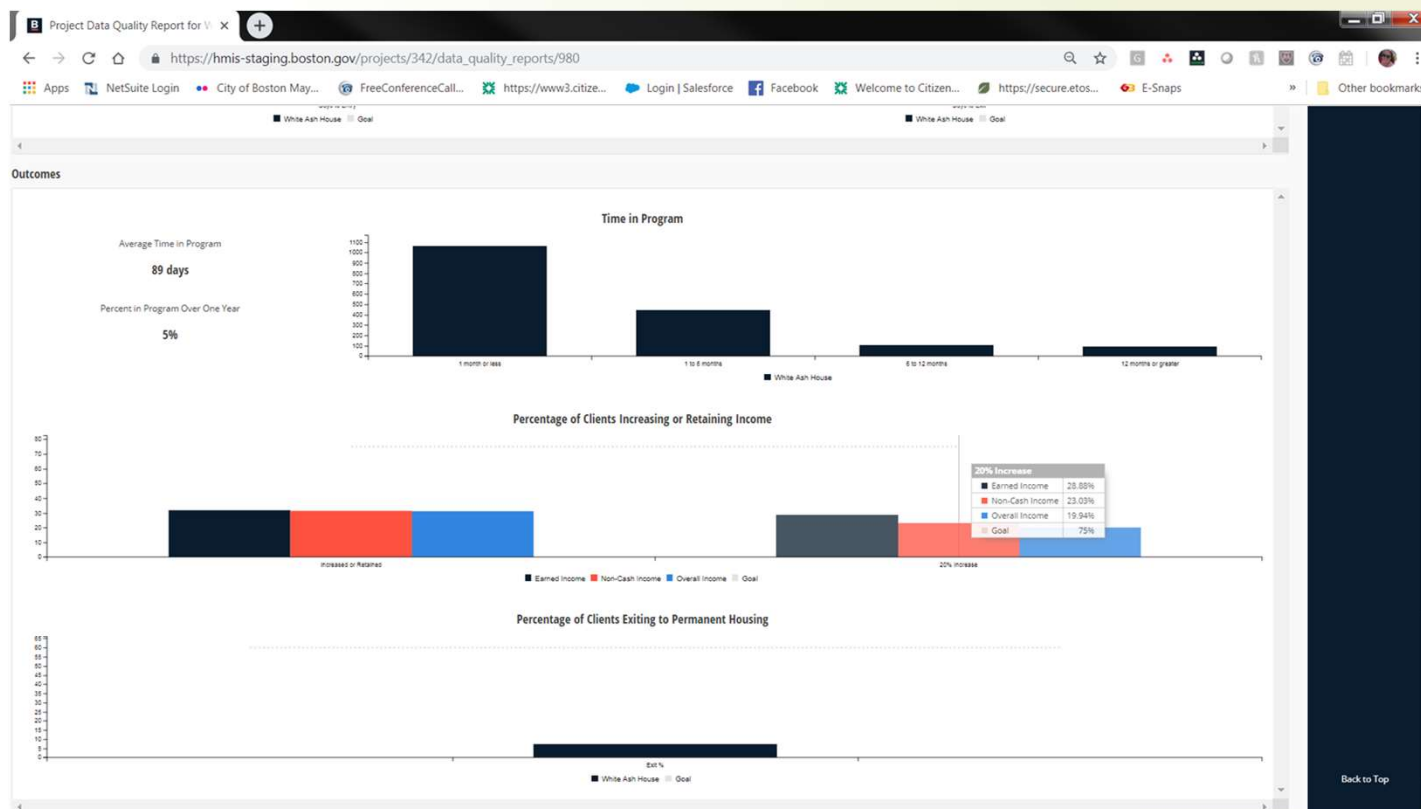


## Timeliness





# Custom reports - Project Data Quality





# Custom reports - Rapid Re-Housing Dashboard

## Rapid Rehousing Dashboard

Project \*  
All

Subpopulation \*  
All

Household type \*  
All

Start date \*  
Feb 1, 2019

End date \*  
Feb 28, 2019

Update

### Overview

<b>Enrolled Clients</b> 319 clients were enrolled in the project during the reporting period.	<b>Clients Enrolled in Pre-Placement</b> 173 clients were enrolled in the pre-placement project during the reporting period.	<b>Clients Enrolled in Stabilization</b> 161 clients were enrolled in the stabilization project during the reporting period.
<b>Clients Entering Pre-Placement</b> 31 clients entered Pre-Placement during the reporting period.	<b>Clients Exiting Pre-Placement</b> 25 clients exited Pre-Placement during the reporting period.	<b>Clients Entering Stabilization</b> 14 clients entered Stabilization during the reporting period.
		<b>Clients Exiting Stabilization</b> 22 clients exited Stabilization during the reporting period.

### Time in Program

Time in Pre-Placement for Leavers  
**78 days in project**  
average days in Pre-Placement

Time in Stabilization for Leavers  
**122 days in project**  
average days in Stabilization

Overall Time for Leavers  
**140 days in project**  
average days in program

Time in Pre-Placement for Stayers  
**295 days in project**  
average days in Pre-Placement.

Time in Stabilization for Stayers  
**471 days in project**  
average days in Stabilization.

Overall Time for Stayers  
**364 days in project**  
average days in program.

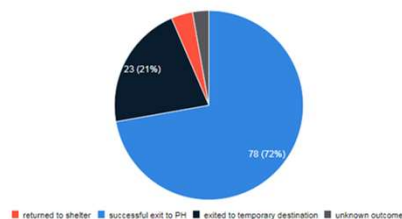


# Custom reports - Rapid Re-Housing Dashboard

## Outcomes

### Destination at Stabilization Exit

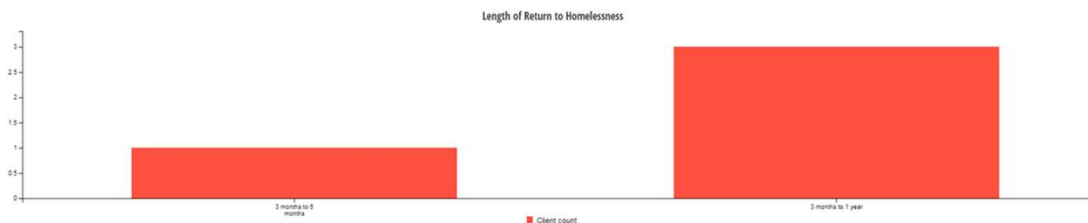
A **successful exit to permanent housing** is defined as an exit to permanent housing with no subsequent returns to homelessness. A **return to homelessness** is defined as any subsequent night in an Emergency Shelter or on the street, either directly after exiting Stabilization, or after exiting to a permanent housing destination. An **exit to another institution** is defined as an exit to another institution such as a hospital or detox center with no subsequent returns to homelessness. An **unknown exit** is defined as an exit to an unknown destination with no subsequent return to homelessness.



### Returns to Homelessness from Permanent Housing

Clients that returned to homelessness some point after successfully exiting Rapid Rehousing to a permanent housing destination.

**4 clients (4.88%) returned to homelessness**  
of the 82 who exited to permanent housing from the reference program





# Custom reports - First Time Homeless

## First-Time Homeless

Clients who first received a residential service in the period from Jan 1, 2019 to Mar 29, 2019

Jan 1, 2019 Mar 29, 2019 ☒ Emergency Shelter ☒ Transitional Housing  
☒ Street Outreach ☒ Safe Haven

All Clients Added



Displaying clients 1 - 25 of 720 in total

Last Name	First Name	Age at entry	Veteran Status	Date of First Service	Project Type	Project	Organization	Data Source
Campbell	Melvyn	34	No	Jan 1, 2019	Emergency Shelter	White Spruce Home	Hawthorn Place	GRDA
Dempster	Torne	21	Yes	Jan 1, 2019	Transitional Housing	Scarlet Oak Hotel	Paper Birch Creek	BM
Kazanogious	Linda	42	No	Jan 1, 2019	Emergency Shelter	White Ash House	Hawthorn Place	GRDA
Milonaka	Gordon	55	Yes	Jan 1, 2019	Emergency Shelter	White Ash House	Hawthorn Place	GRDA
Reilly	Tracy	36	No	Jan 1, 2019	Emergency Shelter	White Ash House	Hawthorn Place	GRDA
Whitty	George	32	No	Jan 1, 2019	Emergency Shelter	White Ash House	Hawthorn Place	GRDA
Albertson	Roy	67	No	Jan 2, 2019	Emergency Shelter	White Ash House	Hawthorn Place	GRDA

This report pulls all clients who have had an outreach contact, emergency shelter bed, or transitional housing for the very first time during the reporting range. These clients may have received support services or other assistance previously.



# Client Dashboard

The screenshot shows a web browser window with the URL <https://hmis-staging.boston.gov/clients/67119>. The page title is "BOSTON DND WAREHOUSE [STAGING]". The main heading is "ENDING VETERAN & CHRONIC HOMELESSNESS IN BOSTON". Below this, there's a message: "You have successfully signed in." and a "Track Issues" button. The user profile section shows "Steven A Bodrov" and "Stephen Michael Bodrov". The dashboard tabs include "Dashboard", "History", "Chronic", "Notes", "CAS Readiness", "Files", "Relationships", "Merge", and "Health". The main content area displays client information for Stephen Michael Bodrov, including a photo, "Last Seen" (8 days ago), "Last Seen Location" (Silver Maple Center), "Days in Last 3 Years" (299 homeless, 153 literally homeless), "Enrolled in" (YES, SO), "Homeless Span" (May 28, 2008 to Mar 21, 2019, 691 in total ES, SO, TH, and SH), "Veteran:" (Yes), "Disabled:" (No), "Preferred Language:" (Unknown), "Consent Form" (Full HAN Release), "CAS" (Long-term Stayer, Chronically Homeless & in CAS View in CAS), "Cohorts" (Vets list, My new list, NHSDC Chronic Cohort, Currently Homeless with 270 days+), "Document Readiness" (View File Uploads), and a table with columns "File" and "Uploaded".

This Administrator view is a full 360° view of clients across the CoC. Providers who are part of the *Boston Homeless Assistance Provider Network* have access the "Window into the Warehouse". This window is a read only pared down view that is expandable to the provider with ROIs





## Client Dashboard - Agency Demographics & Special Populations

Stephen Michael Bodrov :: Boston x

https://hmis-staging.boston.gov/clients/67119

Apps NetSuite Login City of Boston May... FreeConferenceCall... https://www3.citize... Login | Salesforce Facebook Welcome to Citizen... https://secure.etos... E-Snaps Other bookmarks

**Demographics**

ID	Name	SSN	Age	Gender	Race	Ethnicity	Veteran Status
Washburn	Stephen Bodrov	859-71-3309	Apr 29, 1991 (27)	Male	White	Non-Hispanic/Non-Latino	Yes
CRDA	Steven Bodrov	859-61-3309	Mar 29, 1991 (27)	Male	Native Hawaiian or Other Pacific Islander	Hispanic/Latino	No
BM	Steven Bodrov	859-61-3309	Mar 29, 1991 (27)	Male	White	Hispanic/Latino	No
CRDA	Steven Bodrov	859-61-3309	Mar 29, 1991 (27)	Male	Native Hawaiian or Other Pacific Islander	Hispanic/Latino	No
CRDA	Steven Bodrov	859-61-3309	Mar 29, 1991 (27)	Male	Native Hawaiian or Other Pacific Islander	Hispanic/Latino	No
CRDA	Steven Bodrov	859-61-3309	Mar 29, 1991 (27)	Male	Native Hawaiian or Other Pacific Islander	Hispanic/Latino	No
BM	Stephen Bodrov	859-61-3309	Apr 29, 1991 (27)	Male	White	Non-Hispanic/Non-Latino	Yes
Heard	Stephen Bodrov	859-71-3309	Apr 29, 1991 (27)	Male			Yes
BM	Stephen Bodrov	859-71-3309	Sep 13, 1993 (85)	Male	White	Non-Hispanic/Non-Latino	Yes

**Special Populations**

Program Entry Date	Veteran Status	Disabling Condition	Domestic Violence	Currently Fleeing?	Pregnancy Status	Due Date
11/29/2018	Yes	Yes	No			
07/06/2018	Yes	Yes	No			
04/02/2016	No	Yes	No			
04/02/2016	No	Yes	No			
08/01/2015	No	Yes	No			
10/15/2014	No	Yes	No			
06/08/2014	No	Yes	Yes		No	
06/08/2014	No	Yes				
12/12/2013	No	Yes	Yes		No	
12/12/2013	No	Yes				
11/21/2013	No	Yes	No		No	

The surprising thing we have found is the updating of client demographic information when the information is available across providers. They may see that others use William instead of Billy, or update that typo in a Date of Birth.



# Client Dashboard - Enrollments & Assessments

Stephen Michael Bodrov : Boston

https://hmis-staging.boston.gov/clients/67119

11/26/2009 No Yes No

Residential Enrollments New Episode

Program Name < Agency Name	Entry	Exit	Most Recent Day Served	Days Served	Homeless / Adjusted Days	Months Served	Household Members
Totals: 977 691 / 747 37							
<b>BU</b> <b>ES</b> Quaking Aspen Inn < Paper Birch Creek	Feb 20, 2019	Feb 26, 2019	Feb 25, 2019	6	0 / 6	1	
<b>BU</b> <b>TH</b> Silver Maple Center < Paper Birch Creek	Nov 29, 2018		Mar 21, 2019	113	113	5	
<b>BU</b> <b>TH</b> Sassafras Place < Paper Birch Creek	Jul 6, 2018	Feb 20, 2019	Feb 19, 2019	229	146 / 229	8	
<b>GRDA</b> <b>SO</b> Shadbush Hill < Eastern Redcedar Hill	Apr 2, 2016			0	0 / 0	0	
<b>GRDA</b> <b>SO</b> Black Walnut Hill < Hawthorn Place	Apr 2, 2016	Aug 31, 2016	Aug 31, 2016	153	152 / 152	5	
<b>GRDA</b> <b>SO</b> Shadbush Hill < Eastern Redcedar Hill	Aug 1, 2015	Oct 7, 2015		0	0 / 0	0	
<b>GRDA</b> <b>SO</b> Shadbush Hill < Eastern Redcedar Hill	Oct 15, 2014	Dec 9, 2014		0	0 / 0	0	
<b>GRDA</b> <b>SO</b> Shadbush Hill < Eastern Redcedar Hill	Jun 8, 2014	Jul 22, 2014		0	0 / 0	0	
<b>GRDA</b> <b>ES</b> Eastern White Pine House < Eastern Redcedar Hill	Dec 12, 2013	Mar 22, 2014	Mar 17, 2014	11	11 / 11	4	
<b>GRDA</b> <b>SO</b> Shadbush Hill < Eastern Redcedar Hill	Nov 21, 2013	Mar 19, 2014		0	0 / 0	0	

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## Assessments

Assessment Type	Collection Date	Location	Staff
<b>Triage Assessment</b>	Feb 8, 2018	Triage	Virgie Aufderhar
<b>Project Annual Assessment</b>	Mar 30, 2018	99 Tier 1 PRA (E1)	Raoul Streich

Stephen Michael Bodrov : Boston

https://hmis-staging.boston.gov/clients/67119

Program Name < Agency Name

**BU** **TH** Eastern Cottonwood Creek < Paper Birch Creek

Assessments

Assessment Type

**Triage Assessment**

**Project Annual Assessment**

Contact Information

No contact information on file

Services — Aggregated Bed Register

Year of Service Start

2019

2014

2013

**PROJECT ANNUAL ASSESSMENT < HUD ASSESSMENT (ENTRY/UPDATE/ANNUAL/EXIT)**

Only answered questions are shown

**PAGE #1. Universal Information**

A-1. at what point is this data being collected?

Automated didactic database

A-2. project start date (the date the project entry assessment is recorded should match this date)

Sharable contextually-based complexity

A-3. what is the client's relationship to the head of household?

Robust didactic system engine

A-4. continuum code - hud-assigned coc codes for this project's location

Horizontal zero tolerance artificial intelligence

A-33. is the client currently in permanent housing?

Balanced well-modulated conglomeration

A-35. housing move-in date

User-centric composite hierarchy

**PAGE #2. Living Situation**

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With ROI, the assessment data can be accessed,  
without ROI it shown that the assessment was taken.



# Client Dashboard - Bed Nights

Services — Aggregated Bed Register

Year of Service Start	Bed Starts
2019	1
2014	8
2013	6
2010	14
2009	10
2008	2

Zip Code of Last Permanent Address

Services — Full Bed Register

Date of Service	Locations
02/20/2019	<b>BM</b> Quaking Aspen Inn
03/17/2014	<b>GRDA</b> Eastern White Pine House
03/16/2014	<b>GRDA</b> Eastern White Pine House
02/11/2014	<b>GRDA</b> Eastern White Pine House
01/29/2014	<b>GRDA</b> Eastern White Pine House
01/26/2014	<b>GRDA</b> Eastern White Pine House
01/25/2014	<b>GRDA</b> Eastern White Pine House
01/04/2014	<b>GRDA</b> Eastern White Pine House
01/02/2014	<b>GRDA</b> Eastern White Pine House

Zip Details

Program Entry Year		Primary City	State	Last Permanent Zip	Label
2018	<b>BM</b>	Brantfurt	MI	40717-2813	A
2016	<b>GRDA</b>	Bernierfurt	ID	31749	B
2015	<b>GRDA</b>	Boyershire	AL	82999-6544	C
2014	<b>GRDA</b>	West Lessie	NC	98335	D
2014	<b>GRDA</b>	Clairburgh	CT	44842	E
2013	<b>GRDA</b>	Bentonmouth	ID	44842	E
2013	<b>GRDA</b>	Willview	VA	44842	E
2013	<b>GRDA</b>	East Nia	MD	44842	E

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# Client Dashboard - Income & Disability

## Income and Benefits

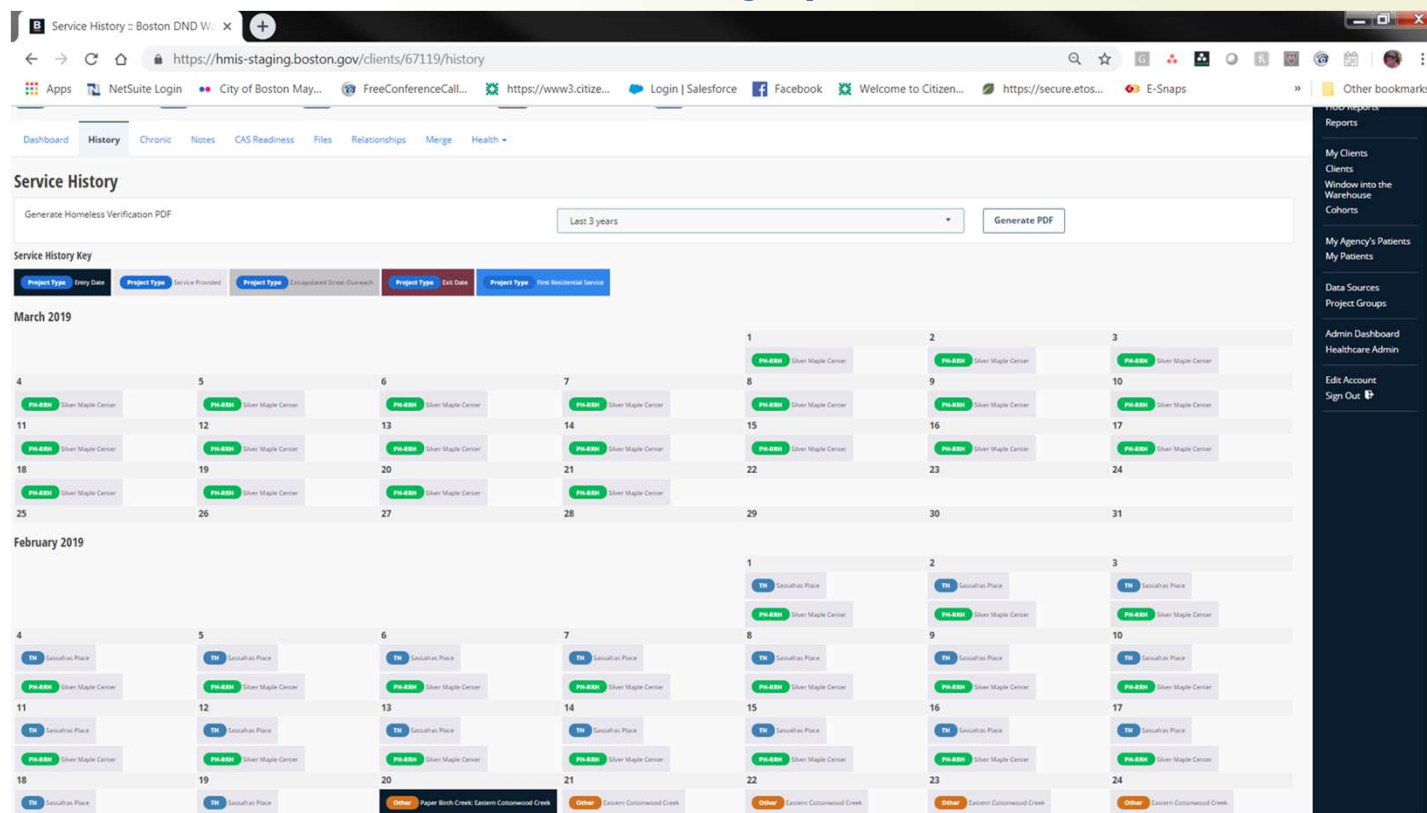
	Program Entry Date	Collection Date	Source	Amounts	Total	Collection Stage
BM	11/29/2018	Nov 29, 2018	VADisabilityService	\$1589.00	\$1589.00	Project entry
BM	07/06/2018	Jul 6, 2018	VADisabilityService	\$1569.00	\$1569.00	Project entry
BM	07/06/2018	Aug 6, 2018	VADisabilityService	\$1569.00	\$1569.00	Update
BM	07/06/2018	Feb 20, 2019	VADisabilityService	\$1569.00	\$1569.00	Project exit
GRDA	06/08/2014	Jun 8, 2014	SSDI	\$1200.00	\$1200.00	Project entry

## Disability Types

	Program Entry Date	Substance Abuse	Mental	Physical	Developmental	HIV/AIDS	Chronic Health Condition	Indefinite and Impairs?
BM	11/29/2018	Alcohol abuse	No	Yes	No	No	No	Not Specified
BM	07/06/2018	No	No	No	No	No	No	Not Specified
GRDA	04/02/2016	Alcohol abuse	No	No	No	Data not collected	No	✓ Yes
GRDA	04/02/2016	Alcohol abuse	No	No	No	Data not collected	No	✓ Yes



# Client Dashboard - History (Calendar of Services)



An invaluable tool to find clients when a housing opportunity is available. Providers can communicate and provide alerts for when the client comes back for services.



Sponsored by the National Human Services Data Consortium

# Client Dashboard - Health

A pilot program with Boston Healthcare for the Homeless, electronic medical record data and MassHealth (Medicaid) billing data is available along with homeless history and services.

## Appointments

### Upcoming Appointments

Upcoming Appointments at BHC MCINNIS HOUSE and BHC KIRKPATRICK HOUSE are not shown.

Date	Appointment	Doctor	SA
06/15/2019 10:00 AM	Appointment at BHC JYP DENTAL Note: Honey Locust Inn	Frances Harold	BHC
06/08/2019 8:15 AM	Office Visit at BHC JYP DENTAL Note: Red Pine Home	Natasha Butler	BHC
06/07/2019 8:45 AM	Office Visit at BHC JYP DENTAL Note: American Beech Room	Frances Harold	BHC
06/06/2019 1:00 PM	Appointment at BHC JYP DENTAL Note: Yellow Birch House	Marcus Hunter	BHC
04/26/2019 6:00 PM	Appointment at BHC PINE STREET MEN'S CLINIC Note: Sugar Maple Creek	Marcus Hunter	BHC

### Past Appointments

Date	Appointment	Doctor	SA
03/28/2019 1:00 PM	Appointment at BHC KIRKPATRICK HOUSE Note: White Ash Hill	Marcus Hunter	BHC
03/28/2019 12:30 AM	Facility Care at BHC MCINNIS HOUSE	Natasha Butler	BHC
03/27/2019 12:30 AM	Facility Care at BHC MCINNIS HOUSE	Marcus Hunter	BHC
03/26/2019 12:30 AM	Facility Care at BHC MCINNIS HOUSE	Marcus Hunter	BHC
03/25/2019 12:30 AM	Facility Care at BHC MCINNIS HOUSE	Natasha Butler	BHC
03/24/2019 12:30 AM	Facility Care at BHC MCINNIS HOUSE	Marcus Hunter	BHC

## Problems

Onset Date	Last Assessed	Problem	Comment
Oct 11, 2019	Oct 11, 2019	Left upper quadrant pain	
Jan 23, 2019	Jan 23, 2019	Pain of left hand	
Jan 14, 2019	Jan 10, 2019	Cataract of both eyes	
Jan 8, 2019	Jan 8, 2019	Toe pain, bilateral	
Dec 24, 2018	Dec 24, 2018	Grouped skin lesions	
Dec 10, 2018	Dec 10, 2018	SOB (shortness of breath)	
Nov 26, 2018	Dec 17, 2018	Pneumonia	
Oct 25, 2018	Oct 23, 2018	Cellulitis of left leg	
Sep 12, 2018	Sep 12, 2018	Hepatic encephalopathy (HE)	

## Medications

Start Date	Ordered Date	Medication	Instructions
Dec 25, 2018	Dec 25, 2018	ALBUTEROL SULFATE 2.5 MG/3 ML (0.083 %) SOLUTION FOR NEBULIZATION	
Dec 24, 2018	Dec 24, 2018	nicotine, polacrilex, (COMMIT) 2 mg lozenge	Apply 1 lozenge to mouth or throat or every two hours as needed smoking cessation
Dec 24, 2018	Dec 24, 2018	hydrocortisone 1 % cream	Apply to right arm and right neck/pannus twice daily
Dec 24, 2018	Dec 24, 2018	clotrimazole (LOTIMIN) 1 % cream	Apply to rash on abdomen and scalp twice daily
Dec 24, 2018	Dec 24, 2018	nystatin (MYCOSTATIN) 100,000 unit/gram powder	Apply to pannus and skin folds twice daily
Dec 24, 2018	Dec 24, 2018	doxycycline hyclate (VIBRA-TABS) 100 mg tablet	Take 100 mg by mouth 2 (two) times daily Take 1 tab bid x 2 days then d/c
Dec 24, 2018	Dec 24, 2018	white petrolatum-mineral oil cream	Apply to left lower leg two times daily
Dec 24, 2018	Dec 24, 2018	ALBUTEROL SULFATE 2.5 MG/3 ML (0.083 %) SOLUTION FOR NEBULIZATION	





## Client Dashboard - Health

**Implementation**   **Baseline**

### Cost

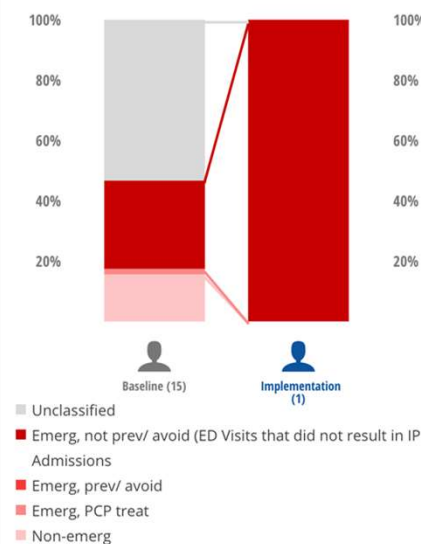
Total Cost	Months	Cost PMPM
<b>\$22,840</b>	<b>4</b>	<b>\$5,710</b>
\$102,035	18	\$5,669
		Variance: 1%

### Utilization Metrics

ED Visits (Avg ED visits/month)	IP Admits (Avg IP admits/month)	Average Days to Readmit
<b>0.5</b>	<b>0.0</b>	<b>N/A</b>
0.8	0.0	104
-38%	Variance N/A%	N/A%

- ED Visits that did not result in IP Admissions
- Acute IP Admissions only (i.e. no SNF/Rehab/Respite/Psych)
- For readmits, average only for those who had at least two acute admissions and had at least one readmit within 30 days

### ED Visit Severity (NYU Algorithm)



*Emergency department utilization analysis by patient. A goal of the initial pilot project was to reduce emergency service costs.*



# Cohorts - By Name List & Case Conferencing Functionality

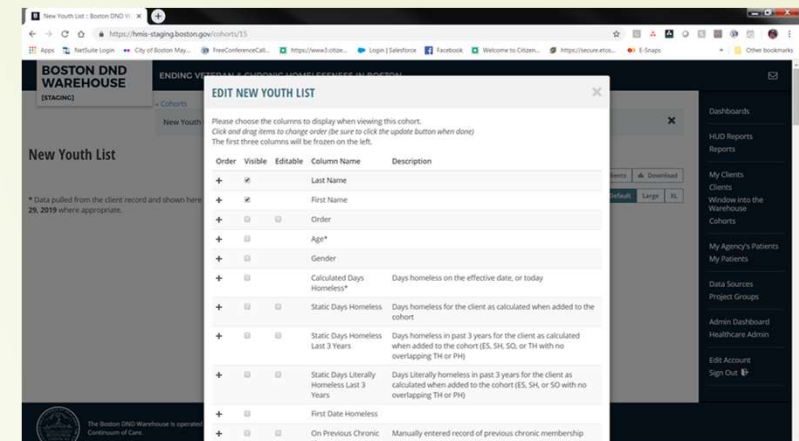
[STAGING]

**Cohorts** Edit Cohort Columns

Cohorts Inactive Cohorts

Search by cohort name... Search Filter Sort

Name	Effective Date	Clients
Chronic 2018	Jan 30, 2018	10
Cohort Training	Aug 16, 2018	0
Currently Homeless with 270 days+		298
My new list		533
NHSDC Chronic Cohort	Sep 14, 2018	47
Primary list	Jan 31, 2018	17
RRH	Feb 1, 2018	67
Vets list		54
Your By-Name list		144
Youth Test	Feb 1, 2018	125



The warehouse has the ability to auto generate By Name Lists (Cohorts) directly from the data with the specific parameters, subpopulations, or other CoC specific criteria.



# Cohorts - By Name List & Case Conferencing Functionality

## Add Clients to New Youth List

Adding clients to the cohort can be done using any of the following forms. All clients must have at least one source record that is visible in the window. Once you've identified the clients you would like to add, click "add selected clients" on the right.

Search clients

Pick from chronic lists

Pick from HUD chronic lists

Pick from an active population

☐ Heads-of-household only
 

Show

Clients active within a date range

Add by Warehouse ID

Add Selected Clients

Found 234 matching clients

Check All	Last Name	First Name	DOB	SSN	Gender	Veteran	Days Homeless	Days Homeless in Past 3 Years	Days Literally Homeless
<input type="checkbox"/>	Gam	Elizabeth	Oct 1, 1994 Age: 24	XXX-XX-1595	Male	No	26	26	26
<input type="checkbox"/>	Sarandon	Tommy	Apr 6, 2000 Age: 18	XXX-XX-2277	Male	No	121	119	119
<input type="checkbox"/>	Bodrov	William	May 24, 1999 Age: 19	XXX-XX-6570	Male	No	90	90	90
<input type="checkbox"/>	Gilliam	Griffin	Dec 12, 2000 Age: 18	XXX-XX-8544	Male	No	32	32	32
<input type="checkbox"/>	Feldon	Robert	Mar 3, 1994 Age: 25	XXX-XX-6868	Male	No	77	73	73
<input type="checkbox"/>	Saurel	Jill	Dec 8, 1994 Age: 24	XXX-XX-5401	Male	No	117	115	115
<input type="checkbox"/>	Lucas	David	Apr 19, 1996 Age: 22	XXX-XX-6059	Male	No	59	59	59

New Youth List - Boston DND V...

https://hmis-staging.boston.gov/cohorts/15

BOSTON DND WAREHOUSE

[STAGING]

ENDING VETERAN & CHRONIC HOMELESSNESS IN BOSTON

Cohorts

New Youth List was successfully updated.

New Youth List

Edit

Edit Visible Columns

Import

Changes Report

Re-Rank

Show Inactive Clients

Add Clients

Download

Active Clients

\* Data pulled from the client record and shown here will be pulled using the effective date Mar 29, 2019 where appropriate.

Text size: Default Large XL

Cohort: 234 clients; 234 active.

Row	Alerts	Last Name	First Name	Age*	Gender	Static Days Homeless Last 3 Y...	Case Manager	Last Seen
1		von Horned	Barbara	22	Female	235		Baswood Hill: Mar 20, 2019; Slippery Elm Creek: Jul 30, 2018
2		deKaleche	Sol C.	18	Male	271		White Ash House: Mar 19, 2019
3		anonymous	Henry	19	Male	181		Scarlet Oak Hotel: Mar 21, 2019
4		Zonca	Ed	21	Male	362		White Ash House: Jan 30, 2019; White Spruce Home: Mar 2...
5		Zanuck	Tom	20	Male	114		White Spruce Home: Jan 15, 2019
6		Yanne	Gladys	19	Male	336		White Ash House: Mar 20, 2019
7		Wrye	Robert	24	Male	4		White Spruce Home: Mar 12, 2019
8		Woods	Aimur	19	Male	325		White Ash House: Feb 20, 2019; Eastern White Pine House: J...
9		Winters	John	18	Male	261		Red Pine Creek: Mar 21, 2019
10		Winninger	Tevah	22	Male	142		White Ash House: Mar 19, 2019
11		Widenhahn	Mel	19	Male	3		White Ash House: Mar 18, 2019

These lists are used weekly, for more info on how the Cohorts are used, please check out the **From Bednights to Cohorts to Housing** presentation by my colleague Ian Gendreau also at the 2019 Spring Conference

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Sponsored by the National Human Services Data Consortium

# Thank you and Happy Spring!!!



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