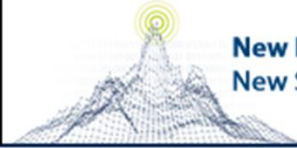


A Practical Take on Improving HMIS Data Analysis and Evaluating Cross-Systems Data

Katelyn Cunningham and Kevin Llangari
Hudson County Division of Housing & Community Development

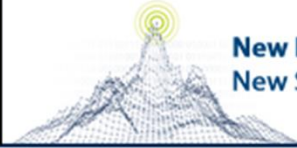




Agenda



1. Who We Are
2. CoC Structure and Previous Data Evaluation Methods
3. Steps Taken to Improve Data Utilization
4. Key Partnerships and Program Initiatives
5. Data Utilization Methodology Moving Forward
6. Key Concepts – Things We've Learned

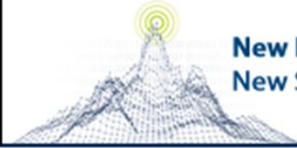


Who We Are

Hudson County Continuum of Care

1. Jurisdiction: Hudson County, New Jersey
2. Total Population: 674,836 (2015)
3. 2017 Point in Time Numbers:
 - 822 total homeless persons, 721 households
 - 184 unsheltered
4. Continuum of Care Funding:
 - Total 2017 CoC Award - \$6,599,004





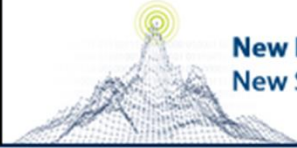
CoC Structure and Previous Data Evaluation Methods



CoC Lead: Hudson County Division of Housing and Community Development

HMIS Lead: NJ Housing and Mortgage Finance Agency

1. Most data work was done through the HMIS Lead or local planning consultant
2. Enabled the CoC to evaluate system performance but prevented targeted solutions or evaluation
3. Prevented anecdotal trends and reports to be verified through HMIS evaluation (example – high number of homeless clients are being served by hospitals and jails)

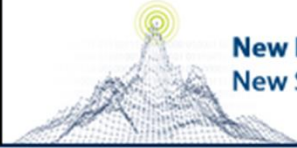


CoC Structure and Previous Data Evaluation Methods



Motivations for Change:

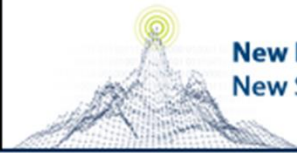
1. HUD was relying more heavily on data
2. To truly evaluate the system we needed to utilize our data more effectively for local planning
3. We had no clear data to help advocate for additional resources and restructuring how current resources are used
4. CoC Planning Funds



Initial Steps for Better Data Utilization:



1. Expanded CoC Lead access to client level data through HMIS
2. Engaged in local partnerships to initiate data sharing
3. Received technical assistance from CSH through the FUSE Initiative (Frequent Users Systems Engagement)

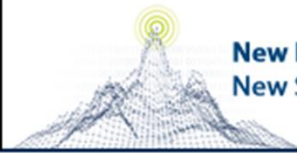


Partnership with Jail



1. Establishing Partnership

- a) Hudson County Correctional Facility
- b) Limited Collaboration prior to FUSE Initiative
- c) Winter Warming Center – Catalyst to Partnership
- d) Analysis of Warming Center Population
 - 28 Center users identified as Frequent Inmates – Analysis of incarceration results were promising (Before and After Warming Center)
 - Initiated Conversation about Permanent Solutions – Gap in Housing and Services

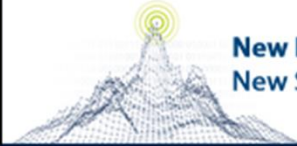


Initiatives Under Partnership



1. Frequent Users Pilot Program - 2014

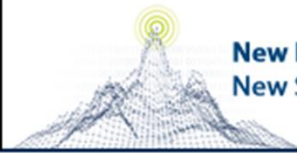
- a) Correctional Facility – Warming Center experience fueled interest to work with us.
- b) Jersey City Medical Center –pursued their own work with frequent hospital users. interested in contributing to the analysis piece of our project.
- c) Data Agreements – [Before](#) and [After](#)
 - Drafting of Data Sharing Agreements
 - Drafting of Client Consent Forms
- d) 27 Among the Most Vulnerable Targeted (HMIS Assessment Scores) – Not Necessarily Frequent Users
- e) Data Collection Process
- f) [One Year Post-Housing Analysis](#) – Promising Results!



System Implications for Frequent Users Pilot



- Quantify the frequency that clients being served through CoC programs were interacting with jail and hospital
- Provided us with the data to use as a stepping stone for future initiatives including:
 - NJ DCA's Housing First Initiative:
 - 500 State Rental Assistance Vouchers for chronically homeless made available statewide
 - Awarded 100 vouchers with commitment from Hudson County to provide service funding for up to 5 years - \$12,000 per client annually

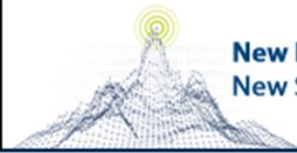


Initiatives Under Partnership



2. DCA Housing First Project – Late 2016 and On-going

- a) Target Population: Chronically Homeless and Incarcerated 2x or more in last 5 years
- b) Data Agreements – most already in place by pilot program, some amendments
- c) Data Collection Process – Identifying Possible Candidates
 - Obtaining access to Jail data from state offices
 - HMIS 2010-2015 dataset + Jail 2010–2015 dataset Matching
 - Matching done through spreadsheet software – difficult and messy, but done.
 - Data Matches vs Client Availability/Outreach - not all matched clients were reachable.
 - No access to post-2015 jail data
 - Review of HMIS client incarceration rates completed manually (Referrals from both HMIS providers and Jail)
 - Primary lesson – we needed an easier way to sort and slice HMIS data



Implications from FUSE Experiences



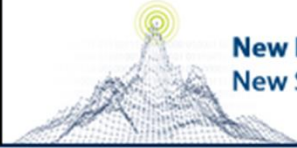
1. Spreadsheet Practicality

- a) General recording of data
- b) Creating and sharing basic charts, graphs, tables
- c) Statistical analysis
- d) Pilot Program evaluation feasible through these basic functions.

Versus

2. Expansion and Growth of HMIS Datasets

- a) Spreadsheet software and HMIS alone weren't enough to efficiently analyze the 2010-2015 Jail and HMIS datasets
 - Constant re-running of HMIS for multiple reasons
- b) Constant Redundancy
 - a) Same kind of evaluation work re-done for DCA that was done under Pilot



Business Intelligence + HMIS



1. Asking any question about HMIS data becomes infinitely easier

a) Slice, Dice, Filter your HMIS data in any way possible

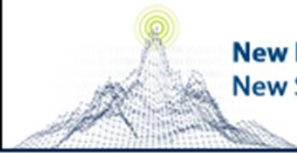
What are the **discharge destinations** of the following *very* specifically defined population:

Single Parent

Females

Ages 21

Discharged from Emergency Shelters
who were Chronically Homeless?

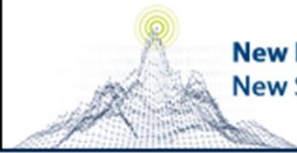


Business Intelligence + HMIS



2. Visualizing and Tracking HMIS data trends becomes easier

- a) Where are emergency shelter clients originating from since 2015?
(HMIS Field: Last Permanent Residence)
- b) How does the average daily amount of people in emergency shelters in January 2018 compare to January 2017?
- c) HUD-Mandated Reports easier to process and review



Business Intelligence + HMIS

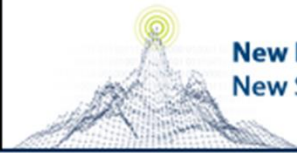


3. Data Modeling

- a) Determine how your CoC wants HMIS data interpreted, sorted and visualized.
- b) Design queries identifying clients across multiple programs.
- c) Link HMIS Data with outside sources for easier data analysis.
- d) All of the above is done once and moving forward, all modeling is automated.

Upkeep Duties

- a) Establish timely imports of HMIS data onto software.
- b) Edit data modeling and visuals accordingly as time passes.



Business Intelligence + HMIS



4. Current Projects



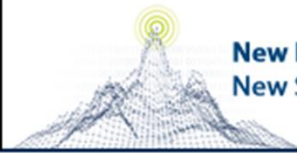
- a) ES + Coordinated Entry Client Crossover – **DONE!**
- Target ES clients that *haven't* been through Coordinated Entry



- b) Regular Subpopulation Needs Assessment Evaluation – **DONE!**
- Youth Homelessness Demonstration Project

5. Near-Future Endeavors

- c) Improved Identification of Recidivism among Subpopulations
- Better targeting of frequently homeless populations
 - Learn about this subpopulation, inform decisions and direction
- d) Establish automated linking of Jail and Hospital Data*
- e) Improve current performance measures used to evaluate programs



BI Software – Getting Started

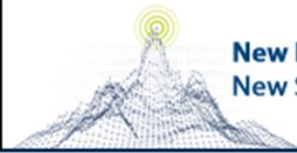


1. Software

- a) A variety software programs available (Paid and Free)
- b) Useful tutorials widely accessible online (locally as well)
- c) Extensive, Active, Helpful BI software community

2. Learning Curve

- a) Spreadsheet experience very useful – reduces learning curve...
- b) But it's still a pretty strong learning curve ☹️
 - Formulas, Database Relationship / Cardinality Rules, Visual Tools, Building Queries, etc. – all requires time and practice
- c) For our HMIS purposes, learning basic data modeling and graphing is enough (for now)
- d) A matter of re-wiring already existing skills



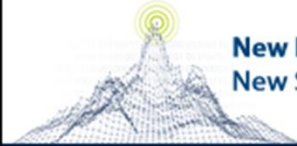
Planning out BI Dashboard



1. Who's going to use the software?
2. What functions will be the most beneficial to dashboard users?
3. What kind of trends do we want to identify, track and analyze?
4. What HMIS data-fields are needed to track these trends?
5. How do we design dashboard in the most functional way possible?
6. Who's going to produce and maintain the dashboard?

Answering these questions will require a lot of back and forth with your office and CoC service providers.

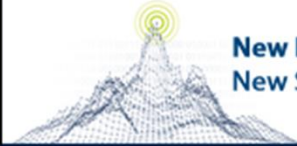
Future Proofing dashboard's foundation - Flexible enough to handle future demands (new data fields, new questions we want answered, etc)



Key Outcomes



1. Able to conduct specific subpopulation evaluations
2. Allowed us to leverage County funding to implement new initiatives which wouldn't otherwise be possible
3. Allows us to provide needs, outcome and service data to public officials or agencies immediately
4. Allows us to show agencies how their data is being used and how important it really is



Questions?



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