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Dashboard

Apr 18, 2010 - May 18, 2010
Comparing to: Site



Site Usage

7,649 Visits

25,423 Pageviews

3.32 Pages/Visit

43.64% Bounce Rate

00:04:08 Avg. Time on Site

28.30% % Mobile Visitation

empowOR
outcomes & results
by CSST SOFTWARE, LLC

Strategies for Integrating Data

Getting to Unduplicated Counts

Google Analytics

visits	Bounce Rate
27.27%	43.55%
85.19%	74.07%
56.52%	39.13%
95.45%	40.91%
92.31%	38.46%
85.71%	28.57%
100.00%	16.67%
40.00%	0.00%
0.00%	80.00%

Today...

- Fundamentals to integrating data
- Strategies/methods for integrating data
- Intersection of Operations with Data Management - No wrong door and 2 Gen and data collection & management

But first ... ***why bother?***



Fundamentals when consolidating data across systems

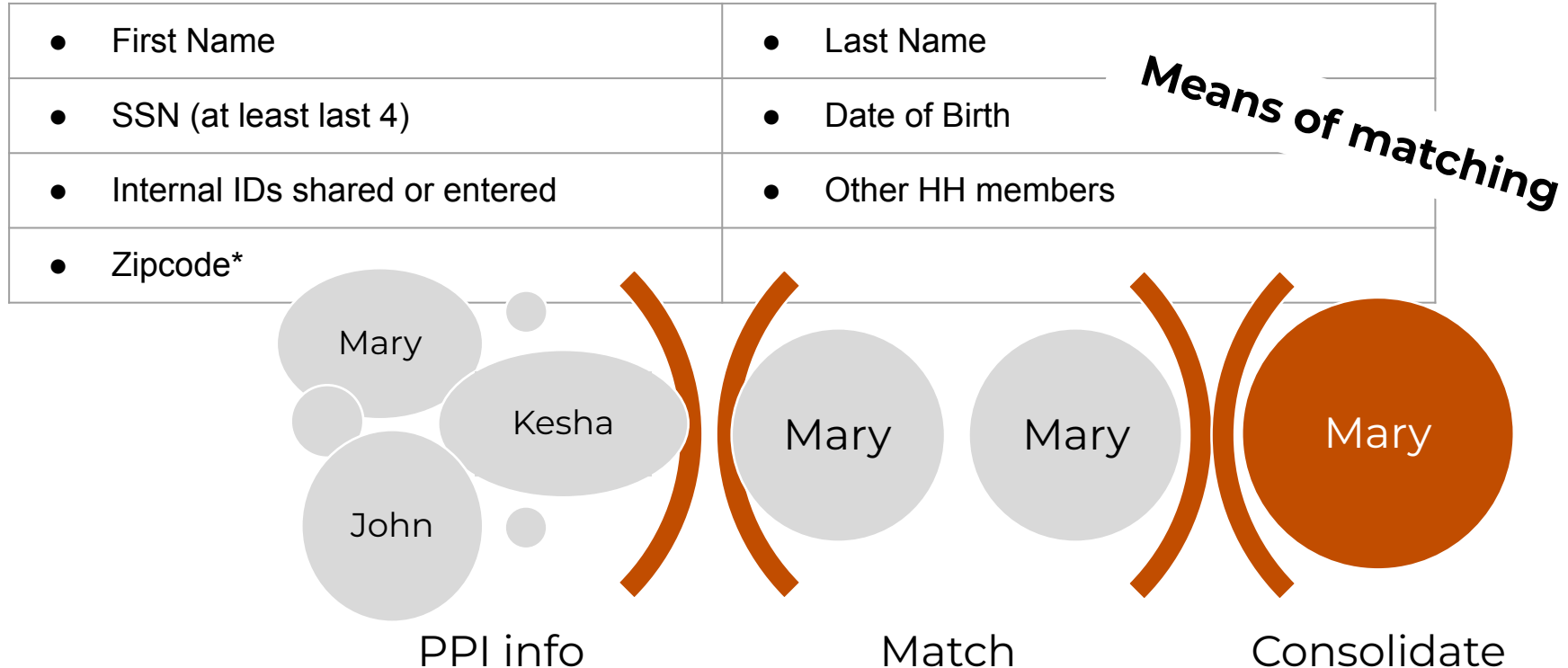
“You have to have data to use data...”

- “Personal Information” is complete
- Accurate
- Someone pays attention

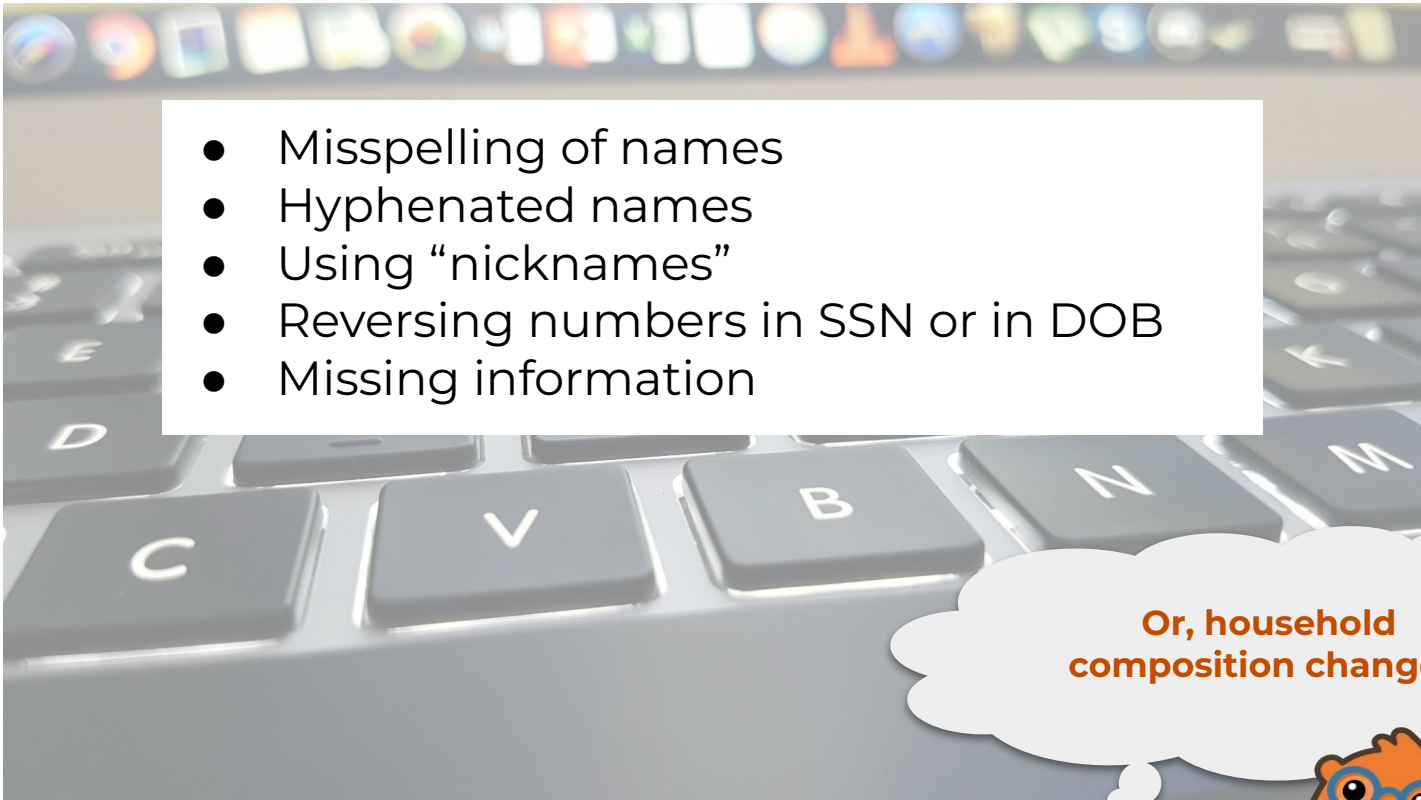
Client Consent*



Fundamentals when consolidating data across systems (cont.)



Common **Issues** ...

- 
- Misspelling of names
 - Hyphenated names
 - Using “nicknames”
 - Reversing numbers in SSN or in DOB
 - Missing information

**Or, household
composition changes!**



Sample Problem

- **I have a large program (i.e. weatherization) that is required to use a funder specified system for client level data, meaning recording detailed information about John Smith HH.**
 - I want to understand how many of these HH are also receiving home repair which is not using that data system OR
 - I want to know how many of the HH that come to us are utilizing more than one program OR
 - I want to know amount of money spent on a House / Unit over the last 5 years in a particular neighborhood including WX OR
 - I want to record information about the WX service or outcome that the funder required system doesn't include OR
 - I want enough information about anyone who we put on waiting list of weatherization so that I can refer them to other programs.

Strategies for **Consolidating Data**

Importing to an agency wide client management system:

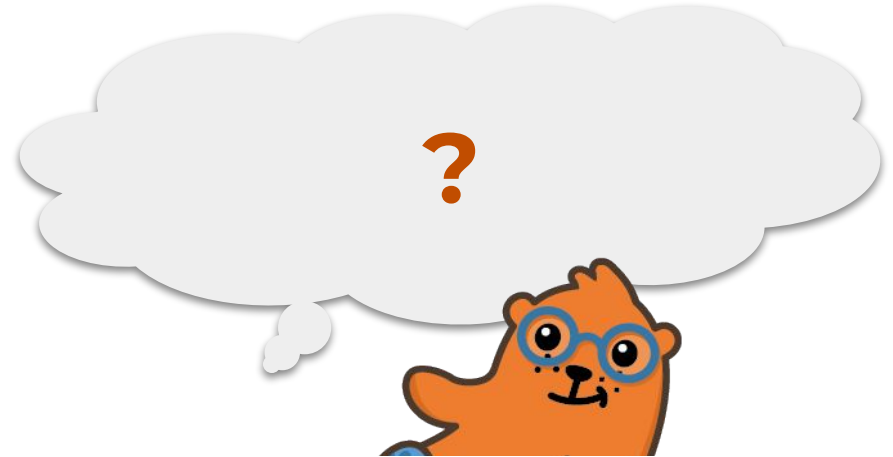
- File transfer or API
- Allows for “transactional” data
- Risk is high (duplicate people) when “Match” process misses people
*(mitigated with API and live human confirmation)
- File transfer won't be ‘real time’

“Data Warehouse”:

- Not transactional (you aren't manually adding data in the consolidated location)
- Risk is lower when match process misses people

Paper:

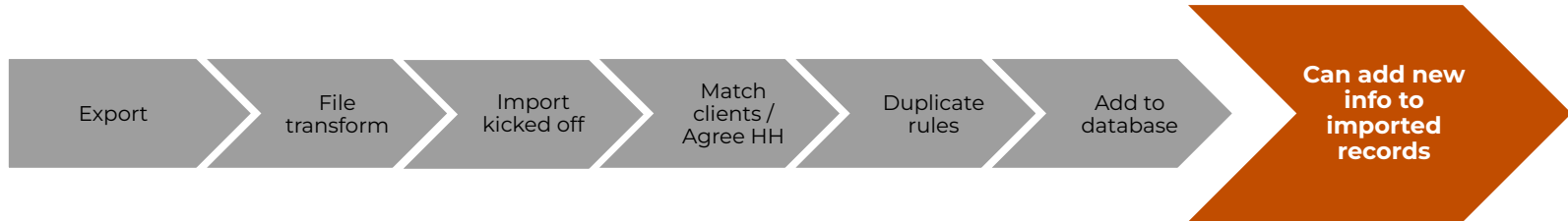
- Hand match



Sample Process - **File Import**



- Agree file type, format, protocol
- Agreement from vendor to allow import (usually trickier)
- Cost to create export files is usually reasonable.

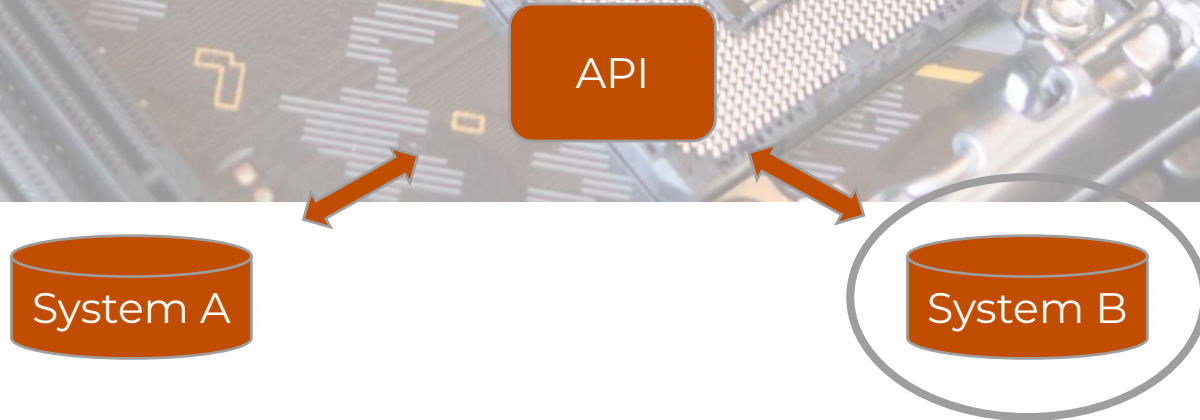


LIHEAP Example

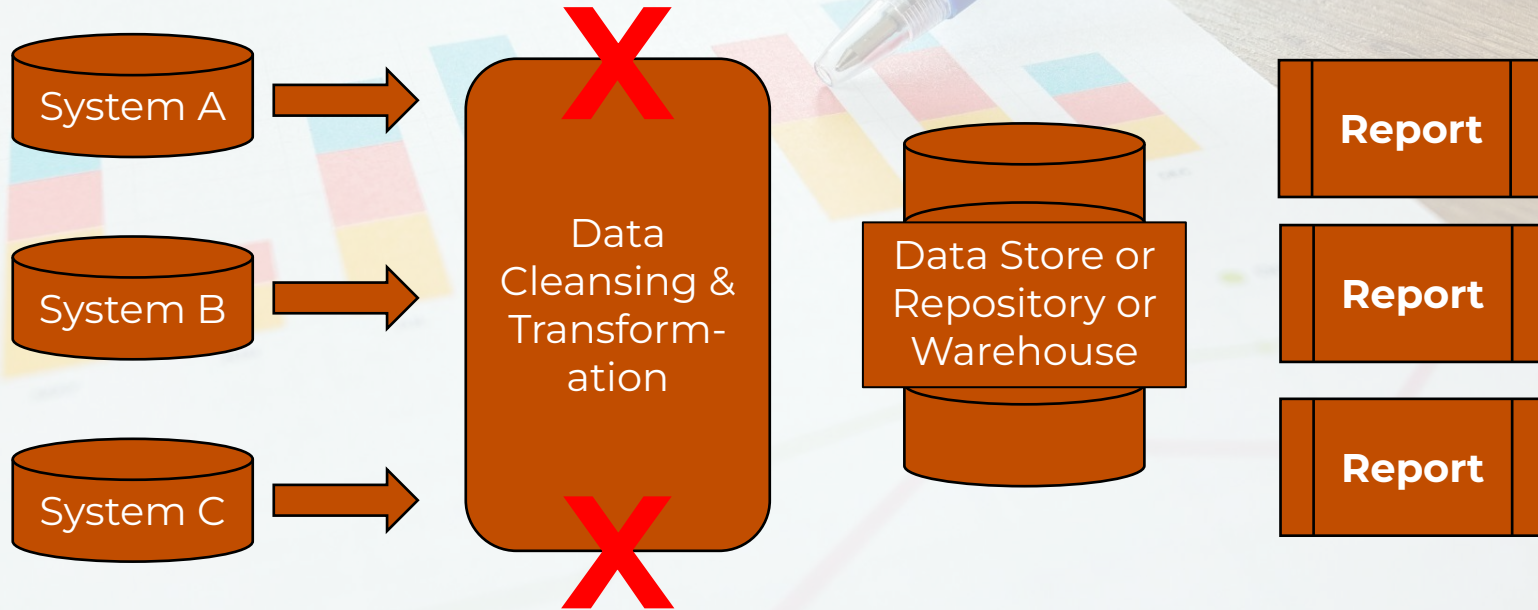
- LIHEAP systems generate **3** files:
 - Applicant - Address, Housing status, etc.
 - HH Members - Race, last 4 SSN, DOB, etc.
 - Program - Enrolled, Denied, etc.

Sample Process - **API (Web Service API)**

- Both systems must be ready to “call” and “consume” data from an API
- Sometimes requires changes to both systems
- Sometimes requires new protocols
- Often done one client or HH at a time (maybe small batches); so more real time; can be done with interaction/approval of staff



Sample Process – “Data Warehouse”



Different purposes use data in **different ways**...

Analysis and Reporting

- Reporting and understanding who you serve, what you do with them, and sometimes what outcome is...
- Using that data for ongoing operational decisions and strategic adjustments
- Using that data to tell the story

Service Integration Strategies

- No Wrong Door and Integrated Referrals
- Two Generation Approaches to Poverty Alleviation
- Bundled Services

You can **integrate** across systems...

Know what the purpose is and the order of priority of those purposes

- If you are passing client level data with the purpose of deduplication and analyzing across programs then...
 - Either full SSN
 - OR
 - DOB , last 4 SSN and name, and likely HHID
- Staff who have capacity and tools to monitor data quality
- Staff who have capacity and tools to monitor combined data
- Don't let the perfect be the enemy of the good!
 - Sometimes you won't pass all information you'd like and sometimes when you pass you're going to have to make assumptions or compromises

What are **data systems** that you might want to combine information from?

Is there one way that seems better than others for your **objective**?



How **standards** can help...



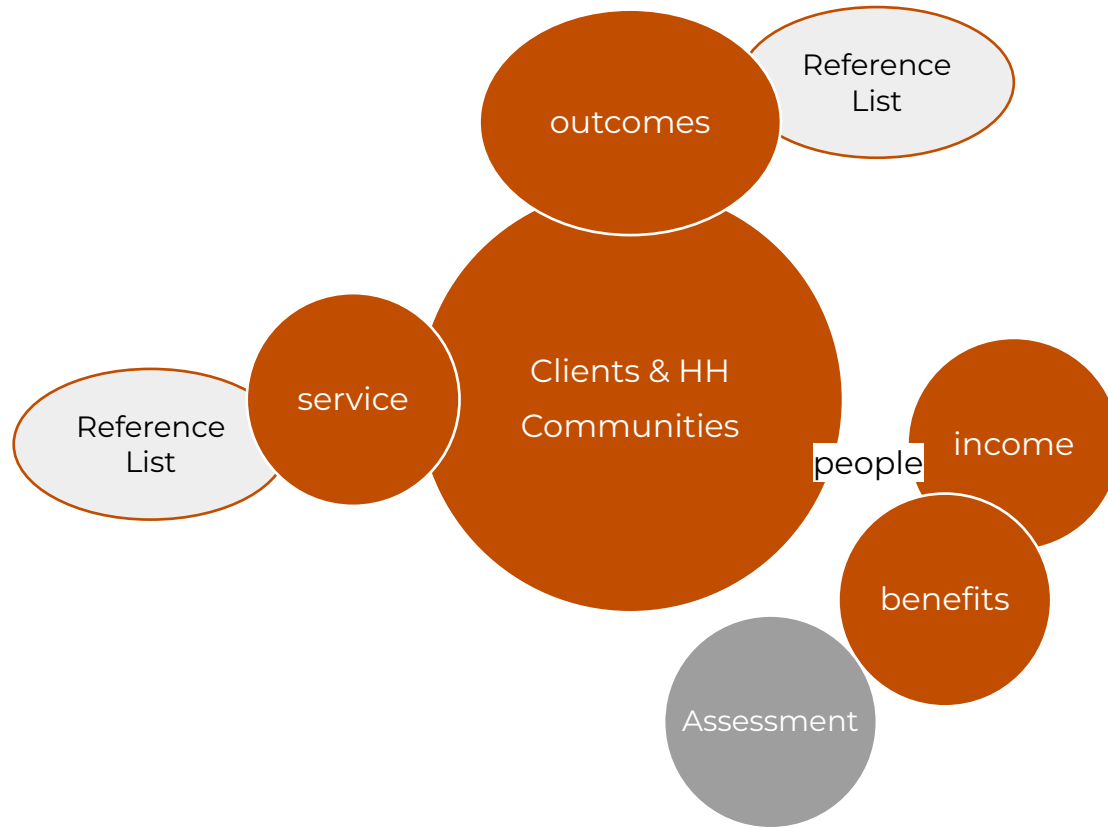
- Consistency lowers risk for vendors: costs currently are born by individual agencies b/c vendors don't have a rule to follow
- Consistency shortens process: part (not all) of costs is agreeing on file format and process rules; a data model and standards can reduce this cost
 - Assumes model is reasonably simple; otherwise costs of exports can go up
- Provides a foundation for advocating with other federal funded programs such as LIHEAP, WX, HMIS related, and even Head Start

Other **standards** that I'm looking at...

- HMIS
- CEDS (educational standards, includes some workforce)
- Housing Counseling
- NHSIA (National Human Service Information Architecture)



CSBG Data Model



Sample Client/Participant File

*DateCreated
*DateModified
*ParticipantID

Name – First, Middle, Last, Suffix
Social Security Number /SSN Last 4 Only

*Date of Birth
*HouseholdID
Race
Ethnicity
Gender
Disabled

Military Status
Health Insurance – Y/ N
Health Insurance Type
Highest Education Completed
Disconnected Youth
Employment Status
Housing Status
Household Type
Override calculation of HH Size –y/n
Household Size



CSBG Employment Status

Employed full time
Employed part time
Migrant seasonal farm worker
Unemployed <6 months
Unemployed >6 months
Retired

Employment Status (RHY HMIS)

Yes/No
FT/PT/ seasonal or day
Unemployed - unable to work
Unemployed not looking
Unemployed looking

CEDS

Records start and end date of
employment and if employed
during program, but not a
FT/PT Status

Example

ClientID	HHID	Fname	Lname	SSN	DOB	Race	Ethnicity	Etc.
134	12	Roger	Test	Xx-4456	1/16/1967	White	Hispanic	
2567	12	Jane	Test	Xx-6734	5/1/1989	Black	Non Hispanic	
56	13	Jimmy	Dean	Xx-1111	11/18/2000	Black	Non Hispanic	
890	13	Joel	Smith	Xx-3421	8/10/1990	White, Black	Non Hispanic	
45	13	Jasmine	Smith	Xx-0912	9/1/2010	Black	Non Hispanic	
9122	9	Grandma	Test	Xx-0456	9/22/1945	Asian	Non Hispanic	

Fname	Lname	ClientID	HHID	SSN	DOB	Race	Ethnicity	Etc.
Roger	Test	134	12	Xx-4456	1/16/1967	Caucasian	Hispanic	
Jane	Test	2567	12	Xx-6734	5/1/1989	African American	Non Hispanic	
Jimmy	Dean	56	13	Xx-1111	11/18/2000	African American	Non Hispanic	
Joel	Smith	890	13	Xx-3421	8/10/1990	Caucasian, African American	Non Hispanic	

Summary – **Stop being our own worst enemy**

- You have to have data to use data
- Know what you want (and then rank importance) and approach things with this in mind
 - File transfer
 - API
 - Data warehouse
- No silver bullet but standards help
- Support capacity building of those with talent for data ...



SALESPERSON	UNITS SOLD
Andy	11
Chloe	15
Daniel	9
Grace	14
Sophia	21

Column Chart

CCAC, Allegany HRDC, Douglas County

ment and bundled services

with data and most with integrating data

model and standards

systems

CSBG reports

- 5 CAAs (public and private) GCCAC, Allegany HRDC, Douglas County CO, Reno CAA, Mohawk CAP
- All doing some level of assessment and bundled services
- All have experience working with data and most with integrating data
- Produce a preliminary data model and standards
- Provide data from different systems
- Produce bundled reports and CSBG reports

Preliminary **List of Issues**

- Field level definitions (i.e. how is HH income calculated, should we include transgender in gender options)
- Who should be included (when does a client become a client)
- If we pass data more than once then are we adding to the data from before or is it an inclusive new data set
 - If we are doing new data each time, then are we trying in the standard to match that up to the person's data from last time (again adding complexity)
- Do we take data from a point in time (i.e. whatever is available at the time of the export) or do we try to maintain history (making standard significantly more complex and expensive to operationalize)
- If we provide specific “choices” in fields like ‘family type’, then do we / can we provide a “mapping” to other common standards like HMIS
- What data is required and what is optional
- Can we write standard in way that is ‘extendable’?